Commodity Sector Activation Strategies and Recommendations for the West Coast Groundfishery

WILDERNESS MARKETS

changing tastes

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Changing Tastes, a values-driven consultancy firm that provides business strategy and culinary consulting to Fortune 500 companies, growth stage restaurant and hospitality businesses, investors, and the philanthropic sector.

Wilderness Markets develops impact investment opportunities in critical ecosystems spanning agriculture to fisheries. We have extensive experience building sustainable supply chains across geographies that achieve social, environmental and financial outcomes.

Walker Bernardo is a strategy consulting practice with expertise in Risk Management, Big Data and Analytics, and Business Development.

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Changing Tastes, Wilderness Markets & Walker Bernardo. 2018 Commodity Sector Activation Strategies and Recommendations for the West Coast Groundfishery.

Overview

The West Coast Groundfishery is a remarkable example of both the success and challenges facing the sustainable seafood movement. The recovery of its stocks following a federal declaration as an economic disaster in 2000 represents one of the most successful environmental recovery stories among the world's larger commercial fisheries. The main impediments to a still elusive economic recovery for the artisan harvesters who work the fishery – once numbering nearly 11,000 boats – also exemplify the challenges facing sustainability improvements in the global seafood industry overall, along with many other industries that sell into commodity markets, including many other types of food.

When the Groundfishery was declared a federal disaster in 2000, its customers began to switch to other readily available types of whitefish as substitutes, farmed Asian tilapia and wild caught Alaskan pollock. During the intervening 15 years, these products have become firmly entrenched in the U.S., with the marketplace now considering many types of whitefish to be generally similar, devoid of many differentiating attributes, and easily substituted for one another. That is to say, a commodity market.

As with most fisheries with effective management and enforcement, harvesters working the West Coast Groundfishery now operate under a higher cost structure. This includes ongoing expenses for monitoring, investment in more sustainable operating practices and licensing required under the successful fishery management program, and also the voluntary cost some have incurred for eco-certification. So, for harvesters to even just recover to a similar economic state, their catch must be sold at higher prices.

But selling into a commoditized market means that a seller is not in control of the price. Instead, the price is controlled by the market and its assembly of buyers.

This dynamic is common across commodity markets including food, energy, and minerals. It is especially the case when substitution is at work, meaning one commodity competes against another. For instance, when an energy plant can use natural gas or coal, the price of coal and natural gas begin to impact each other. When coal is high, there is an incentive for the energy plant to switch to natural gas or to find a substitute.

Because substitution is a major feature of commodity markets, there's also little or no benefit for buyers to have more information beyond basic function and price. The seafood industry today features only sparse preservation of identity across global supply chains. Place and means of production, names of producer, and other attributes do not create value in a commodity market.

In the U.S. food marketplace, substitution on the part of buyers is especially challenging for protein. A buyer can even elect to move from one source of whitefish to another or to other ingredients like shrimp or even chicken or pork. So, producing a commodity often results in a firm focusing on costs, because they have little to no influence on price, even if they are different from competitors or use different production practices. As a commodity producing firm grows, it adds production and stays focused on reducing the unit cost for a delivered product.

Then consider the further changes in business strategy dynamics when a commodity begins to decline in popularity. This is what has happened to finfish — and notably canned tuna — relative to other sources types of protein. The firm producing the commodity likely has pressure to be more profitable but has little to no influence over the sale price. Making the case for investing to improve production practices or traceability in a declining commodity is difficult, especially for a high-volume producer. The investment would need to be recaptured over a large number of future transactions — perhaps over a longer time for smaller producers — and if the market is indeed declining, the prospects for new investments are indeed dim. Adding costs for sustainability practices does not fit soundly inside this common business strategy.

The challenge is even greater for smaller producers who have less efficient economies of scale across a smaller product volume.

These are the obstacles that the artisan harvesters working California's recent recovered West Coast Groundfishery now face as they and their harvest enter a market now served by commoditized products and producers. These artisan harvesters now have to work within a commodity market to secure recognition — including higher prices and greater preferences— for their product. They also now operate under a higher cost structure and investment in more sustainable operating practices and licensing required under the successful fishery management program as well as the voluntary cost some have incurred for eco-certification.

In short, the sustainable seafood challenge is to take a product that might otherwise be perceived as a commodity, or at least as a product for which there are many ready substitutes and near replacements in the marketplace and differentiate that product so that it can earn greater market acceptance including higher retail prices and be preferred by more buyers than other substitutes.

These obstacles are similar to the those that make it especially challenging for an NGO, government, or even an activated group of consumers to move a high-volume commodity seafood producer to invest in processes or technology that increase costs in exchange for environmental goals. Commodity producers have few economic degrees of freedom and will resist or minimize the push to adopt new and more expensive production processes, unless those processes can result in higher product prices.

Importantly, there are proven strategies for overcoming these obstacles by segmenting commodity markets to both increase the market recognition and value for products produced by artisans or produced in more sustainable ways. This process is at the core of branding and marketing efforts and there are several proven strategies for achieving this type of market activation and effectively segmenting commodity markets. These include:

Attribute	Producer Standards
Origin	Unique Place of Production Specific Ingredients (allowed and disallowed)
Production Practices	Defined Production Processes (allowed and disallowed)
Crafted	Handmade, crafted or capacity constrained
Social Concern	Quality Assurance (and exclusion of substandard products)

For food, both standards and marketing claims focus on what matters most to consumers: flavor and quality. This can encompass both superior flavors as well as those that are new, scarce and worth seeking out.

For many highly valued food products, market segmentation strategies are the main method that enables them to be set apart as higher valued products. U.S. consumers regularly see messages about why Wisconsin cheese is better than cheese in general, why Champagne from France is the best (and superior to Prosecco, Cava, or Napa sparkling wine), why Colombian coffee is superior regardless of what brand uses it, and many others. In these everyday examples, we are being propositioned with a carefully designed story about the product and its origin and or its processing that also emphasizes the attributes most important to consumers, which often feature better or unique flavor and quality.

Effective commodity market segmentation efforts also usually include a mix of voluntary, private and public standards that ensure product quality and uniqueness which all serve to increase benefits to producers. And in many instances, these strategies also drive improvements in sustainable production and traceability among larger companies that produce commodity products.

Our report offers case studies and guidance for how to *activate* buyers' ability to recognize more sustainable products sold into commodity markets. It is intended to assist to the harvesters working the West Coast Groundfishery, the actors working to support their success, and the larger sustainable seafood movement which faces similar challenges in markets around the world. This includes:

Keys to Activating Commodity Markets drawn from across the food sector and other industries.

Case Studies of several successful efforts to unlock U.S. marketplace for other commoditized food types and reward small producers and those using more sustainable practices.

These cases look at the results as well as the means and most effective actions of actors from producer groups, NGOs and government trade and marketing groups in a diverse set of high-volume products including chicken, oil, coffee and bourbon.

Guidance for working in currently commoditized seafood markets and specific advice for those working to promote the West Coast Groundfishery's harvest and harvesters.

Part I: Keys to Activating Commodity Markets and achieving Recognition of Sustainable Products by Segmenting Commodity Markets

Small producer and producer groups, NGOs and government-backed trade agencies all have achieved successes in activating buyers by segmenting commodity markets. The keys are using a flexible mix of voluntary, private and public tools and standards that ensure product quality and uniqueness of products from a specific place or group of producers. These are coupled with marketing activities that tell the story of the product and why they should be sought out and highly valued. These stories and descriptions form the basis for how the product is positioned in the market and focus on the attributes that matter to consumers and business decision makers in consumer facing channels that decide what merchandise they are offered.

These same tactics also have been used by larger companies who have chased after the market recognition achieved by smaller producers and, in doing so, also revised how they do business and focus both on better practices and "smaller" production. Getting larger companies in commodity markets to segment their product lines around higher quality product and place of origin is similar to the changes that NGOs often request these companies make through other engagement efforts.

Recently, there has been a race to create "craft" or small batch products in everything from beer to soap and perfume. Smaller batches are perceived as more desirable by the consumer (even if the processing controls are not explicitly in place). Even Small batch kettle potato chips even have carved out a market. Outside of the technical aspect of small batch production, craft items suggest a human element, such as an artisan that cares for the product. That is valuable to consumers and helps differentiate the item from commodity products.

This type of positioning also allows for the rational setting of prices. Products of higher perceived or demonstrated value or limited supply can achieve higher price points.

Successful efforts regularly happen outside of the food sector. Consider handmade cigars. By describing cigars through a manufacturing process, value is added. For decades, consumers have generally valued the work and implied quality of a craftsman. Does a hand-rolled cigar smoke or taste differently? Perhaps a careful chemical assay can identify differences. But for most buyers, the process of making it by hand and the dedication to the people who make it, has created a new value proposition for the consumer, one of artisan production, care and commitment to quality. That raises the value of the marketed product.

Creating success through differentiated products serves to fuel new waves of competition. At its best, this involves bigger companies that produce commodity products electing to adopt new production methods or segmenting their own products in smaller batches based on place of origin, producer or production methods.

Worse is when competing producers mimic and fraudulently trade on the value created by a differentiated product. Fraud also has been a substantially present in the global seafood industry and driven simply by the ability to substitute for more expensive products, not just "craft" ones.

So, in efforts to elevate a commodity product through differentiation, it is important to focus on attributes that can be used to describe the product, signal and demonstrate quality, and its limited availability, which can also further restrict or limit imitation, *or* if desired can be used to encourage imitation in ways that require meaningful changes in the practices of larger companies.

For instance, we regularly received messages that Parmesan Cheese has a unique flavor (and is produced in just five provinces of Italy), that Merino sheep produce softer wool (than all other more common breeds), and that Swiss watches are manufactured to more exacting standards (because they are assembled in Switzerland with key components manufactured there).

Each of these simple claims touches on several of the key types of marketing claims (origin, production practices, uniqueness through limited or exclusive supply, commitment to quality) and each claim also features specific elements that prevent easy substitution or duplication by others. Each also has worked to get larger producers of cheese, clothing and watches to provide investment to specific producer communities to increase production.

There are clear examples of how producers have benefited from using any of four attributes as the basis for both production standards and marketing efforts to create value in commoditized markets. They are:

Attribute	Producer Standards
Origin	Unique Place of Production Specific Ingredients (allowed and disallowed)
Practices	Defined Practices
Crafted	Handmade or crafted, capacity constrained
Social Concern	Fair treatment of workers

Successfully Applying these Attributes to Commoditized Markets also requires a simplicity of claim and the old adage, "*Less is more*," has never been more relevant. Product quality claims and stories should focus on a single attribute that is intrinsic and self-evident in the differentiated product and also already valued by the consumer or the market overall.

We now look at ways in which each attribute has been applied to commodity products before looking at several case studies from the food sector that have used this approach to increase market recognition including:

- Providing viable and predictable small and artisan producers.
- Bringing critical supply of better produced products to market.
- Increased market expectation of sustainable and socially responsible practices.
- Increase interest in using the product and willingness to pay more.
- Creating a business case for commodity producers to improve practices.

Origin

Perhaps the most commonly used attribute for product differentiation is that of origin or in the case of food, *terroir*. Origin has many qualities that allow it to be successfully used in product differentiation. Origin also is unique and prevents others from outside of a specific geographic area to encroach on associated market recognition.

Origin as an attribute is often protected by laws or trademarks. In the well-known case of Champagne among other geographic origin-specific items in Europe, the European Union works to successfully restrict the use of an origin name and label with in the Union by law and globally through engagement with the World Trade Organization. In a commoditized market, origin also implies a limit to the extent of the area dedicated to production and implies a sense of limited availability and uniqueness.

Consider the rise of the Vidalia onion. Both its commercial name and one its main attributes come from the area around Vidalia, Georgia where it is grown. This means onion growers in other places cannot market their onions as Vidalia, even if they use the same genetic onion stock.

In the case of Vidalia onions, the Georgia State Department of Agriculture permits production to a select region of the state under a license.[1] Onion producers in the Vidalia growing region also formed the Vidalia Onion Committee to manage the use of the name and ensure minimum quality for the crop among all producers in the region that use the mark. Origin can also be reinforced with a trademark, as is the case in Vidalia onions, making it possible to sue a fraudster for mislabeling a product. Origin can be reinforced, delineated, and controlled by either a private or public legal body and use of trademarks and registration allows for easy identification of infringement and fraud.

The origin attribute also enables produces to tell a simple story. The story can center on the climate, soil, history, or even people of the place of origin, such as the Chimayo peppers of northern New Mexico which share the name of the town where they are grown. While genetically similar to Aleppo and shishito peppers among others, the combination of place, production and drying method, climate, people and history all support a highly valued, unique pepper that is impossible to replicate in another region.

Sparkling wine producers in the Champagne region of France have perfected this approach. The origin is tied to climate and soil, location and land ownership. By that definition, nothing else can be Champagne. To support the claim and ensure quality, a Champagne AOC producer group established producer standards to mandate the use of traditional grape varieties used and adherence to specific agriculture and production practices including fermentation, bottling and aging, and labelling standards. The producer group also monitors quality and decides whether or not producers can declare a "vintage" year which indicates good quality and raises prices, and generally are declared three or four times each decade.

Following action by the French Government and European Union in 2003, the WTO recognized the uniqueness of Champagne and allowed only this label to lawfully be used to describe product from select vineyards of France. Producers from other places of origin that attempt to are not able to export their wines to other countries.

Advertising campaigns and the widespread availability of champagne help reinforce the origin attribute and story. And consumers generally need signaling and reminders that they are buying the real, authentic products of specific origin. The origin must become part of the brand, if not the brand entirely just as they have for Delftware china. Here, the product is entirely sold based on the attribute or origin. The origin not just the place of manufacturing of the china, but the assumed quality and process of the manufacturing.

Key Take-Aways:

- When using origin to differentiate the product, it must become a prominent part of the value proposition, story, brand.
- The origin must be central to the product story and provide an opportunity to elevate the perceived or identifiable quality of the product.
- Origin serves as a formidable barrier to imitation.
- Origin also can lead to large companies investing in producer communities to expand production as they seek sufficient supply to enter new premium categories.

Production Practices

After origin, producers often turn to how the product is made to describe and elevate its desirability. In describing how it is designed, form, manufactured or treated, a producer can create unique points of differentiation and be compensated for unique effort. Consider Apple's message that its products are designed in California. It is a clear message to draw attention away from the fact that it still makes phones in Asia (to keep product costs lower) but leverages the image of creativity in California.[2] Similarly, American Apparel's product claim that its clothes are ethically-made and produced in the U.S. without sweatshop labor provides the clothing company with a point of differentiation.[3]

Another benefit is that process attributes can be flexible. "Designed in California" can be interpreted more liberally than "made without child labor." It allows the firms the ability to pick aspects that are highly tied to their history, culture, and operations. For Apple, they were founded in California. For American Apparel, they operate in shops in greater Los Angeles. Differentiation on process can be unique and specific even to a firm, a producer or producer community that adopts common processes.

A benefit of focusing on process as an attribute is that a manufacturing process can be proprietary or self-defined and do not require accreditation of verification of a third party. Instead, the producer must become the thought leader about that process and must be able to create and sell the process though its own reputation and not look for verification of accreditation from outside parties.

This "go it alone" approach to differentiation also provides a substantial barrier to imitation as no other producer or company can claim to use a proprietary or self-defined process. However, it can cause both small competitors and larger companies involved in commodity production to approximate the same process and reduce the extent or differentiation, which can also serve to drive improvement for their processes in order to stay competitive.

Key Take-Aways:

- Specific design or production processes or treatments are hard for competitors to replicate.
- Defining the product processes or treatments make it unique to a company, producer or producer community's history, location, or culture.
- This approach relies on a producer becoming the leader for the standard and best practice, and not look to third parties for accreditation or verification.

Crafted

Crafted, or handmade, is an attribute that include a production practice as well as a relationship to other people that is not necessarily present in all design and production processes.

It's basis for differentiation builds upon the affinity we have for those things made by hand and compared to those made using lesser and more anonymous means, including commodity or industrial production. This is best captured by Adam Smith (author of The Wealth of Nations) when he said in *The Theory of Moral Sentiments*[4]:

> *How selfish soever man may be supposed, there are evidently some principles in his nature, which interest him in the fortune of others, and render their happiness necessary to him, though he derives nothing from it except the pleasure of seeing it.*

In short, even economically driven consumers gain pleasure from seeing the work of other people, engaging with others, or at least seeing that their actions have helped others.

Crafted, or handmade, items build on this most rudimentary of emotions. Buy this item; it was made by a person; your purchase will help that person. It is a powerful message and explains why so many brands have moved to describe items as craft produced, small-batch produced, or handmade.

The assumption (right or wrong) is that a dedicated artisan overseeing the production will make a better product than might come from an industrial or highly mechanized and impersonal process. In commoditized market, crafted products also imply a lower rate of production and some degree of limited availability or uniqueness.

This works in food, clothing, rugs, furniture, and also other items as well as handmade cigars mentioned previously or the handcrafted work to produce a Bentley automobile.

While the Bentley automobile production and brand have gone through several changes in ownership over its hundred-year history — as an independent company and also a division of Rolls Royce and Volkswagen — both its newly made and resold cars have consistently commanded among the highest prices on the world market.

Bentley cars are known for high performance including building cars for auto racing, but other manufacturers and brands also duplicate this approach. Bentley differentiates is products from other cars and even other high-performance luxury cars through craft production. The company notes that it has only 4,000 employees and that cars are made by hand for each customer including allowing customized features. Bentley tells the story of craft used in making and matching wood veneers, hand-working wooden parts, hand painting exteriors, and hand sewing and embroidering leather and fabrics.

This story conveys both human connection and also limited supply. Its success in the market is even more notably today when compared to Tesla, a company also known to makes its high-performance luxury cars by hand, and now penalized in the market for doing so because its aspiration is to produce high volume, commodity cars.

This is in no small part because using a handmade process is often more expensive. The marketing opportunity must outweigh this increase in price, to make it financially viable. Handmade items are often difficult to scale, so there must be an understanding that production will remain small and bespoke. The trade-off is smaller size of market for higher price of the product. Often smaller market and higher priced is a better solution, especially for a small number of artisans.

Key Take-Aways:

- Handmade and other worker-centric attributes must be reinforced through quality. The quality from such artisan attention must be evident or describable through a story.
- Craft is best suited for small market segments and limited production.
- Emphasis is on quality over volume.

Social Concern

Just as consumers are sensitive to the role of workers in the production of quality products including crafted items, they are also concerned about the labor practices in the manufacturing of them. Child labor, forced labor and unfair wage practices, especially in Asia, have been the target of many firms in textiles and manufacturing.

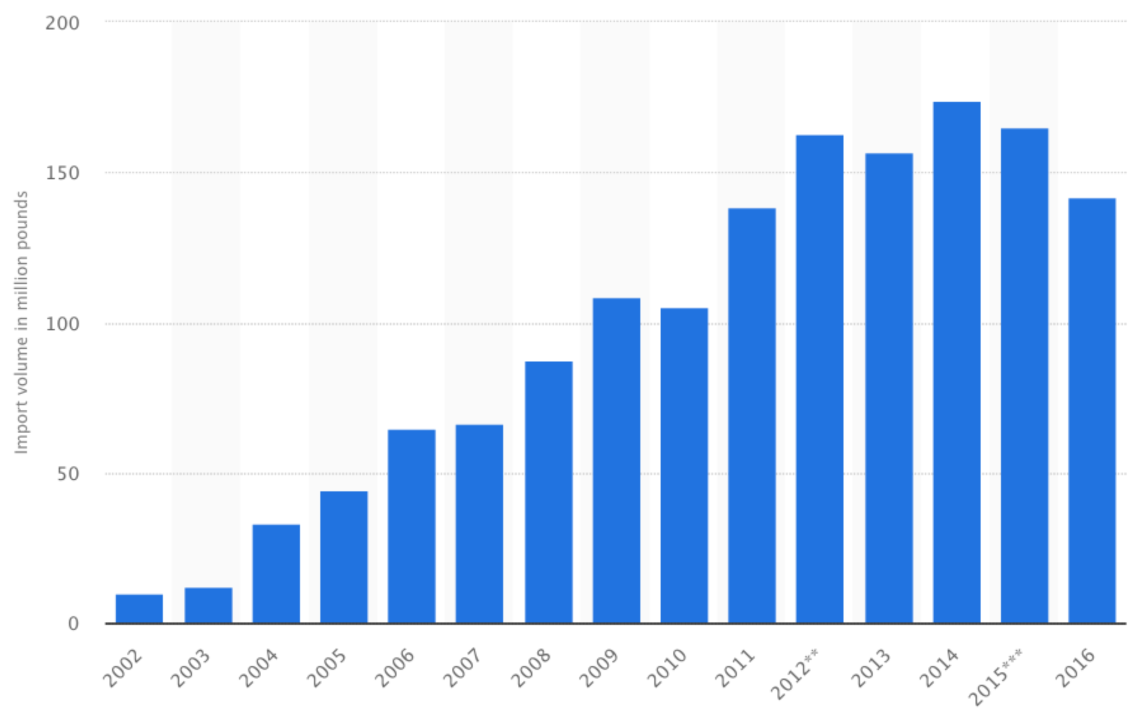
Producers that utilize transparent processes can credibly differentiate based on the attribute commitment to quality and social awareness through fair employment processes and fair treatment of workers.

Consider the marketing messages from Eagle Protect that markets nitrite gloves and protective clothing to food and health firms. Their message is built on ethical labor treatment in all parts of the supply chain.[5]

In Canada, the One Sky campaign promotes diamonds from producers that work outside of the conflict zones of west and central Africa. Diamonds were previously bought and sold based on physical qualities irrespective of where or how they were produced. This additional attribute created a new differentiated market for diamonds that are produced with commitment to fair treatment of labor.[6]

As one of the world's largest furniture producers and retailers, IKEA garners substantial credit in the marketplace because of its attention to labor practices as well as its forestry practices and environmental stewardship commitments. In its story, Ikea takes time to communicate how the products meet social and environment goals.

The manufacturing process becomes a human story as well as a sustainability story about doing right or at least doing the very best possible in a global furniture and household goods market served largely by commodity manufacturers.[7]



*Fair Trade coffee sales have increased dramatically in the US.[1] Statistical data on Fair Trade coffee sold in the US by year. **The total certified volume for 2012 also includes 1.5 million pounds in audit adjustments from 2011. ***Data from 2015 has been estimated by Statista.*

temptations to cut corners and reduce costs or for fraudsters to try and pass off their products without implementing socially responsible labor practices.

The success of the Fair Trade certification – developed by an NGO committed to better conditions for smallholders and workers – occurred in what may be the quintessential commodity food market: coffee.

Coffee is the world's second largest commodity by value after oil and 80% of the world's supply comes from a base of more than 25 million smallholder producers. Historically, it was sold by major brands who aggregated production from smallholder producers, and only the most informed buyers could distinguish the final product, which was often sold ground and in cans. Activating the market through a third-party verification led to market recognition for coffee produced with attention to social concerns. It also created a new market segment that rewards small producers who participate, one that recognizes Fair Trade coffee as preferred to commodity coffee, which still makes up the large majority of the supply.

To protect against fraud and also to establish or raise standards for social or environmental responsibility among larger suppliers, producers seeking to differentiate on this attribute and make claims around social awareness and treatment of labor often seek out third parties for accreditation or verification. It creates a credibility and impartiality that is valuable to the consumer. It increases trust. It shows a seriousness. It demonstrates that producer is not above the expectation of being socially or environmentally responsible and has nothing to hide.

Key Take-Aways:

- Utilizing this attribute and identifying critical social concerns can raise expectations for larger commodity producers.
- Differentiation requires a producer to lead in the development of standards for social and environmental responsibility.
- Credibility increases when producers seek and earn third-party accreditation.
- Certifications can carve out market segments but may not transform markets overall.

Part II: Case Studies of Activating Commodity Food Markets and achieving Market Recognition of Sustainable Products

The sustainable seafood movement faces significant but not unique challenges in gaining recognition in commodity for better products whether that is getting the US market to both prefer and pay for more of the harvest from the West Coast Groundfishery, or improving management and production practices in larger companies that source from fisheries and farms around the world that supply commodity markets for whitefish, tuna, shrimp, salmon and crab.

Implementing more sustainable practices also can require both investment and patience before realizing a return. Investments and delayed returns can come from purchasing better gear, adopting different catch methods or farming methods, additional effort to design management plans, new licensing and monitoring costs including observation and supply chain traceability, transition time before products are brought to market, and higher operating costs from better farming and fishing practices including labor, inputs and changes in yield.

Not every sector or company is well-positioned or inclined to make these investments. Two of the greatest obstacles including companies that have high debt or are "leveraged up," often as a result of mergers or acquisitions or producers working in commodity markets. As we noted, these markets view products as if they can readily be substituted or replaced with other products made in other places, using other standards, and about which little is known. At worst, substitution can occur not just because buyers are lacking information but also through fraud.

The business case for sustainability in the global seafood industry, like many other industries, rests on two pillars.

Environmental sustainability. Better practices will ensure there are fish and seafood available for sale in the future. This part of the case is well established as many wild capture fisheries continue to suffer from overfishing and sometimes even collapse and have the catch significantly reduced, like the West Coast Groundfishery off the west coast of the United States. This case also holds for the vast array of farming and ranching practices that rely on soil and water resources, functioning natural systems, and a relatively stable climate.

Market recognition of more sustainable products and practices. Securing financial incentives for producers that include higher prices for better products, preference for the products over other alternatives, and quicker market acceptance of new products, brands and producers that use better practices. This is true for sustainably raised and caught fish and also for a growing array of other foods and beverages, including those produced locally and traded globally.

Today the domestic and global seafood markets are now commoditized. Both now feature both obstacles including substitution based on fraud. This significantly impairs the ability of NGOs to secure commitments from larger companies to make improvements in processes or traceability and it also makes it more challenging for smaller producers to achieve market recognition.

These circumstances are not unique and both artisan producers and producer groups as well as NGOs have succeeded in activating commoditized markets to recognize differentiated products including those from small producers. This success also has led to improvements in the production and transparency practices of larger producers by proving that market recognition is possible and investment is warranted.

So, we look at three case studies of recent successes in the food sector to activate commoditized markets in the U.S., which are:

Olive oil, where producer groups led the activation of a market where several large global packers controlled a low value commodity market featuring lack of traceability and rampant fraud, to one where origin is highly valued and large companies invested in greater transparency. This also led to the increased demand for olive oil compared to other commodity oils that were previously substituted, like corn and soy.

Chicken, a perishable and often frozen protein like fish and where a commodity market was largely served by six large producers. NGOs led an effort to activate the market to recognize more sustainable practices, including humane husbandry and reduced use of antibiotics.

Bourbon, where small producers worked together to activate the market to recognize crafted products in a market where larger distillers had previously served a commodity market and also relied on commodity inputs, and developing a compelling case for imitation of process, where large blenders now segment their production into smaller batches.

Olive Oil

For centuries, olive oil has been produced in the Mediterranean basin, one of the handful of places in the world with suitable growing conditions. It has been an important part of the traditional diet of tens of millions of people living there.

Until the past half century or so, olive oil was mostly consumed domestically and near to its point of production and sold into domestic and regional markets. Orchards could be large or small, old or new, and olive oil was traditionally marketed by co-operatives and after harvest and pressing to the local communities without the presence of large businesses or organizations. As people moved into larger cities and as international demand for olive oil increased following waves of immigration and the spreading of culinary traditions, especially after World War II, it became necessary to process and package olive oil for long haul shipment. This opportunity triggered the rise of several large companies that bought oil from growers and blended it for sale under their brand name, like Bertolli, Colavita and Filippo Berio and Pompeian. These large brands all had Italian roots but bought olive oil from many varietals and other countries and blended it into their "Italian" olive oil. Indeed, they mixed many other things into the olive oil.

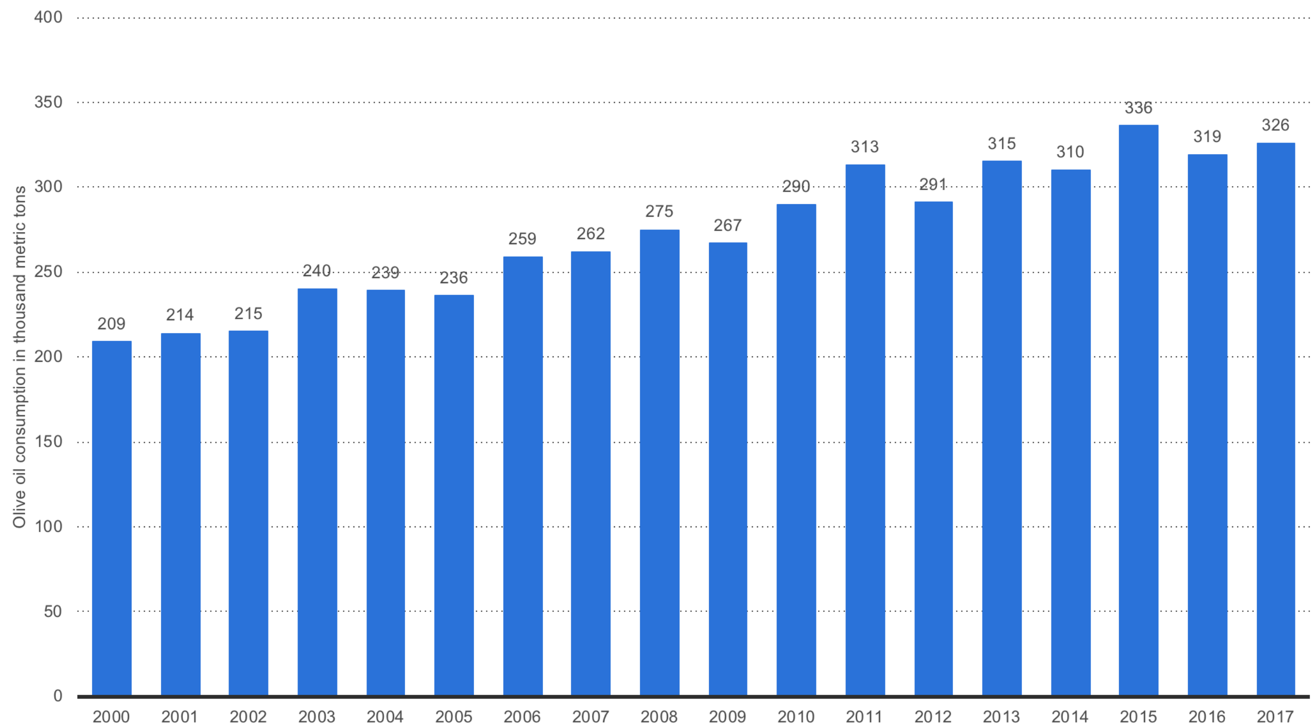
In two seminal studies of olive oil sold in the US, University of California-Davis researchers analyzed a total of 186 extra virgin olive oil samples against standards established by the International Olive Council (IOC), as well as methods used in Germany and Australia.

They found[8]:

> *Of the five top-selling imported "extra virgin" olive oil brands in the United States, 73 percent of the samples failed the IOC sensory standards for extra virgin olive oils analyzed by two IOC-accredited sensory panels. The failure rate ranged from a high of 94 percent to a low of 56 percent depending on the brand and the panel. … Sensory defects are indicators that these samples are oxidized, of poor quality, and/or adulterated with cheaper refined oils.*

A similar scandal rose in Italy in 2008, when it was discovered that 85 oil firms operating in the country were mixing chlorophyll, chemical colorants and flavors with sunflower and canola to the olive oil, in order to reduce the cost of producing their products, which were then fraudulently sold as authentic olive oil. Consumers were cheated financially and also many of the healthy properties of the olive oil were lost. The UC Davis team also reports oil irregularities in Spain. The international market for olive oil was rocked by fraud and demand and price declined, hallmarks of commodity markets where product quality is not recognized. Both consumers and responsible producers needed market recognition for products that were authentic to the origin of olive oil.

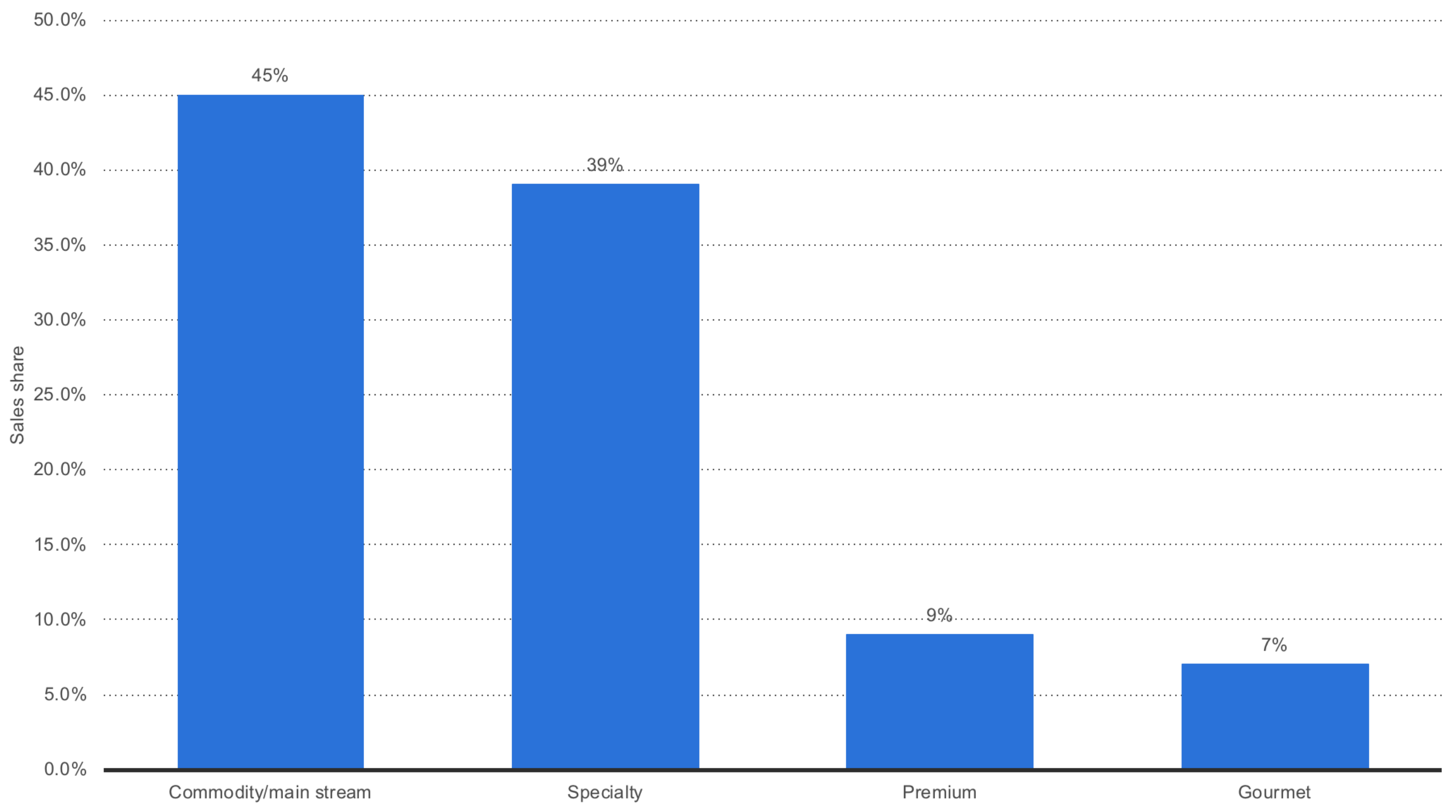
Producer groups and cooperatives, with the backing of national agriculture and export bodies, began to market and offer for sale portions of the olive oil from Italy, as well as other Mediterranean countries, based on a new set of origin attributes: country of origin and varietal, with an emphasis on varietals traditionally grown in that country. These attributes conveyed a simple and intrinsic proposition that these new oils would each have distinctive flavors, each be produced in smaller amounts, and be "pure." That is to say, the information about origin distinguished it from commodity products that were blended and devoid of these attributes, or perhaps even adulterated. It also protected against imitation.[9]



Sales share of olive oil in the United States in 2013, by type

Along with this, producers also have called out traditional processing methods such as extra virgin and cold pressed, both more expensive methods not commonly used to produce commodity blended oils. In a few short years, this effort dramatically changed a commoditized market previously served blended by oils devoid of origin information, including place and varietal. Notably in the U.S, the consumption of olive oil increased and the market also shifted away from global brands which now make up less than half of sales. As of 2017, more than 1,800 Italian olive growers now differentiate their product based on origin.

Today, most of the world's largest companies that sold blended olive oil under their own brand now are implementing supply chain practices to preserve the origin of the oil and launching product lines based on varietal, country and region. Along with the success, the European Union has intervened to stop egregious fraud, prosecuting syndicates accused of selling adulterated olive oil[10] which has been an important step in ensuring the market continues to recognize olive oil based on origin.



Olive oil consumption in the United States from 2000 to 2017 (in 1,000 metric tons)[11]

Key Take-Aways:

- Origin and process are important differentiators for garnering recognition and premium for products in commoditized markets.
- Small producers can effectively establish a place in global commodity markets.

- Steps to prevent imitation are important for developing new market recognition and also can change the practices of larger producers.
- Preventing fraud is important for maintaining recognition.

Antibiotic Free Chicken

Today, five of the six largest poultry producers in the U.S. have either eliminated the use of antibiotics or are on course to do so very shortly, addressing a major public health concern by changing the way commodity chicken is produced in the U.S. The move required substantial changes in production including investing in new equipment and accepting lower yields. This significant shift towards more sustainable practices occurred in a market that was previously commoditized, and that valued few attributes for a boneless skinless breast or a breaded and fried patty or leg, other than price and if it was fresh or frozen.

Commodity chicken also shares many similarities with commodity white fish. Both share a general perception as a healthy protein choice. Chicken also share many supply chain characteristics. Commodity chicken companies mainly ship large quantities in frozen form, both minimally and further processed, which moves through a complex supply chain of producers, intermediaries and end buyers, with a few major aggregating chicken from numerous producers and selling it under their own brands with few attributes. It's also extremely easy to substitute chicken from one producer with chicken from one farm, or produced without antibiotics, nearly indistinguishable from conventional commodity chicken.

Despite the commodity nature of their product and the ease of substitution, these large commodity companies, starting with Perdue, made the investment only after resisting for years direct calls for improvement from NGOs who had assembled both scientific evidence and extensive corporate engagement capability. In response, larger poultry produced cited obstacles of cost, lack of market recognition and production concern along with questioning the science.

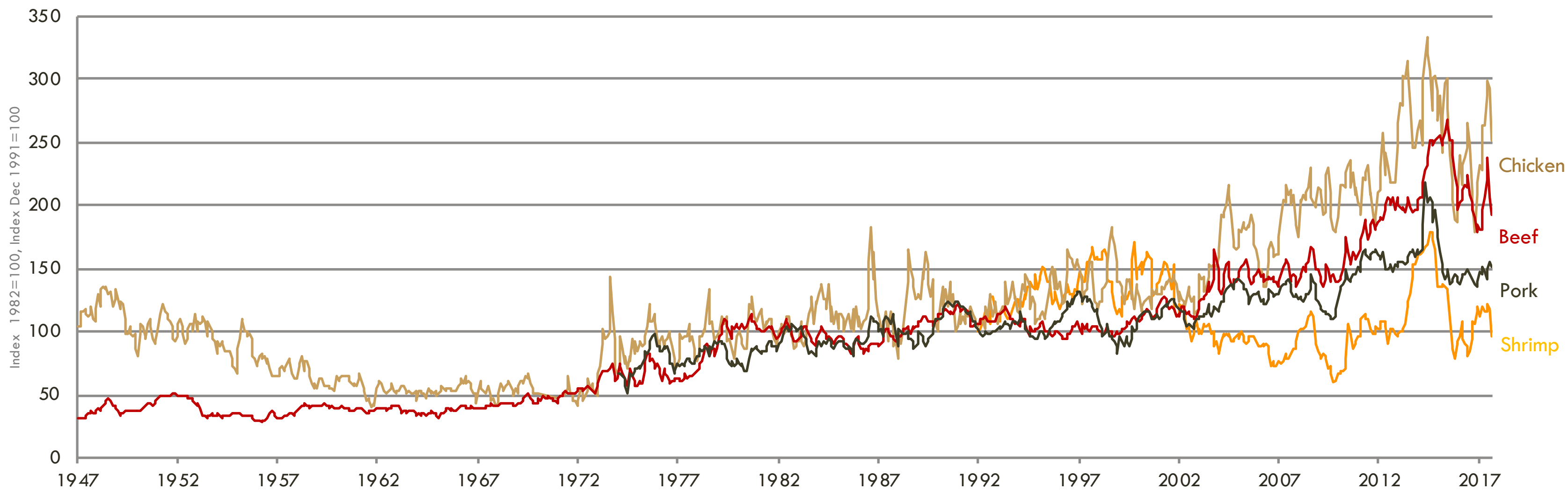
But the additional efforts of NGOs to activate the market to expect better production practices, and initially rewarding smaller producers who adopted them, created a new and more compelling case for investing in sustainable practices and also garnered market recognition for smaller producers committed to more sustainable practices.

The move for the largest companies to produce antibiotic free chicken is largely attributed to a few major users of chicken demanding a shift in production. One of these firms was Panera, a large restaurant company. Success in getting this company to shift expectations came not over use of antibiotics specifically or the risks that this poses to animals and humans, but rather once Panera and other buyers recognized that producing chicken without antibiotics resulted in superior quality and taste. Texture and flavor associated with growth rates and conditions allowed buyers to distinguish antibiotic free chicken from conventionally produced commodities.

Chickens raised without antibiotics were, "by far and away a better tasting product," according to Scott Davis, Panera's executive vice president and chief concept officer. Panera claims the success of this chicken has sparked an ongoing "evolution" at the company to focus innovation on more simplified food items. It expanded its offerings utilize more antibiotic-free chicken not only on salads but also on sandwiches and extended its market expectations to include antibiotic-free roasted turkey on sandwiches and salads; and antibiotic-free ham, sausage, and bacon on select breakfast sandwiches, soufflés, panini, and cafe and children's sandwiches.[12]

For Panera, along with a handful of other buyers, less was more. Simplicity in how chicken was raised told a story of quality and showed their commitment to consumer interests.

Producer Price Index by Protein Commodity



During the early stages, Panera and other early adopters like Bon Appetit Management Company often found it hard to source antibiotic free chicken in sufficient quantity. The biggest suppliers only offered a commodity product. So, they had to search beyond their traditional suppliers and purchase from smaller producers to aggregate enough chicken for their needs. This also enabled smaller producers who raised their chickens without antibiotics to gain substantial market recognition including access to new buyers, preference in purchasing, and higher prices which have dramatically improved the success of Marys, Misty Knoll, Petaluma Poultry and many other regional poultry producers.

Their customers quickly grew to prefer antibiotic-free chicken, too. Less was more for the diner public, too. Once consumers recognized and expected chicken free of antibiotics, the poultry industry was compelled to recognize a market now activated to distinguish between chickens based on how they were produced. This catalyzed a change in willingness at most large companies to now invest in sustainable practices.

Previously, the goal of large companies was to produce cheaper birds to meet American's seemingly insatiable appetite for chicken. Antibiotics prevented flock-wide outbreaks of diseases and enabled more chickens to be produced in a given area. It also made them grow a bit faster. This reduced production costs in a market where the main attributes were price and size.

Once Panera and other restaurants along with their diners saw antibiotic free chicken as a tastier product, then simplicity favored quality. As chicken had been commoditized, large producers had struggled to find any attribute to raise the perceived quality and attainable price of chicken; perhaps some had abandoned that effort altogether. The emergence of new market recognition based on process become welcome news to many large producers.

Although limited supplies of antibiotic free chicken initially meant higher costs for major buyers — forcing Panera to increase prices between $1 and $1.50 for salads made with antibiotic free chicken — the company reported that price increases did not discourage customers but rather increased the attractiveness of the product and its perceived quality. Indeed, Panera saw dramatically higher chicken salad sales once the items were advertised as made with antibiotic free chicken and offered at a higher price. Initial success caused the company to feature it in more menu items and changed reasons that people dined at Panera.[13] Success at Panera led other restaurants such as Chick-Fil-A and Chipotle to make commitments to remove antibiotics from the chicken they served.

The activation of market recognition for sustainable production practices leading to better quality led to dramatic transformation in U.S. market. After decades of chicken being a low-priced protein choice, the price of chicken has risen steadily and faster than pork and beef.

Higher prices are not without downsides. They attract more imitation, in this case the desired change in production practices by most large poultry producers. They also can be difficult to pass on to consumers, as consumers can switch to less expensive substitutes, like beef, pork or shrimp.

But differentiating on process and quality can help protect price levels and allow producers protection from competitors and substitution. Chicken consumption has continued to increase along with price, a remarkable success in a previously stolid market. Smaller producers also have continued to retain market recognition by continuing to innovate on even more humane production practices and maintain differentiation from larger producers that reduced antibiotic use.

Also, in response to the market activation to value antibiotic free chicken and successful efforts to limit substitution of other protein choices, NGO efforts now have led to new moves to reduce antibiotic use in pork, beef, and turkey. The move in market expectations to disfavor this key high-volume commodity production process also has helped to drive market recognition and growth for heritage beef, free-range or pasture cattle and pork, and free-range chickens, all of which create more market recognition for producers that use less intensive production processes, including many smaller producers.

Key Take-Aways:

- Consumers value simple production processes and see them as superior to industrial commodity production practices.
- Sustainable and environmentally-friendly practices are valued by more buyers and consumers when they are tied to product quality, including flavor and texture.
- A change in market expectations and demonstrated willingness to pay more by major buyers was a key to changing the business case for large poultry suppliers
- Small producers gained early advantage from changing market expectations and have been able to retain many benefits despite imitation by larger producers.
- Supply must reach a critical tipping point so that larger commodity producers can be motivated to improve practices and increase supply while lowering prices.

Bourbon

Sustainable seafood advocates regularly promote traceability not only to the place but also the producer and the time, or “trip,” when fish are harvested. Small producers, with very modest support from their lawmakers, have transformed the $7B + global market for whiskey into one that recognizes these attributes as indicators of the highest value products, and along the way changed how global companies work to also increase the level of traceability information available for their products.

The global whiskey market – including traditional American bourbon – began as a local small producer market served by distillers in the Scottish Isles and the moonshiners working the backyards and woods of Kentucky by the Scotts and others who settled there. But after prohibition ended, the U.S. market became dominated by a handful of global brands. These companies produced low cost whiskey using high volume industrial production processes, blending to create a standard “brand” flavor, relying on agricultural commodities such as wheat, rye and corn. The U.S. market shifted decidedly towards buying commodity whiskey marketed under the global brands Crown Royale, Jim Bean, Canadian Club, Johnnie Walker, and Jack Daniels without concern for where they were distilled.

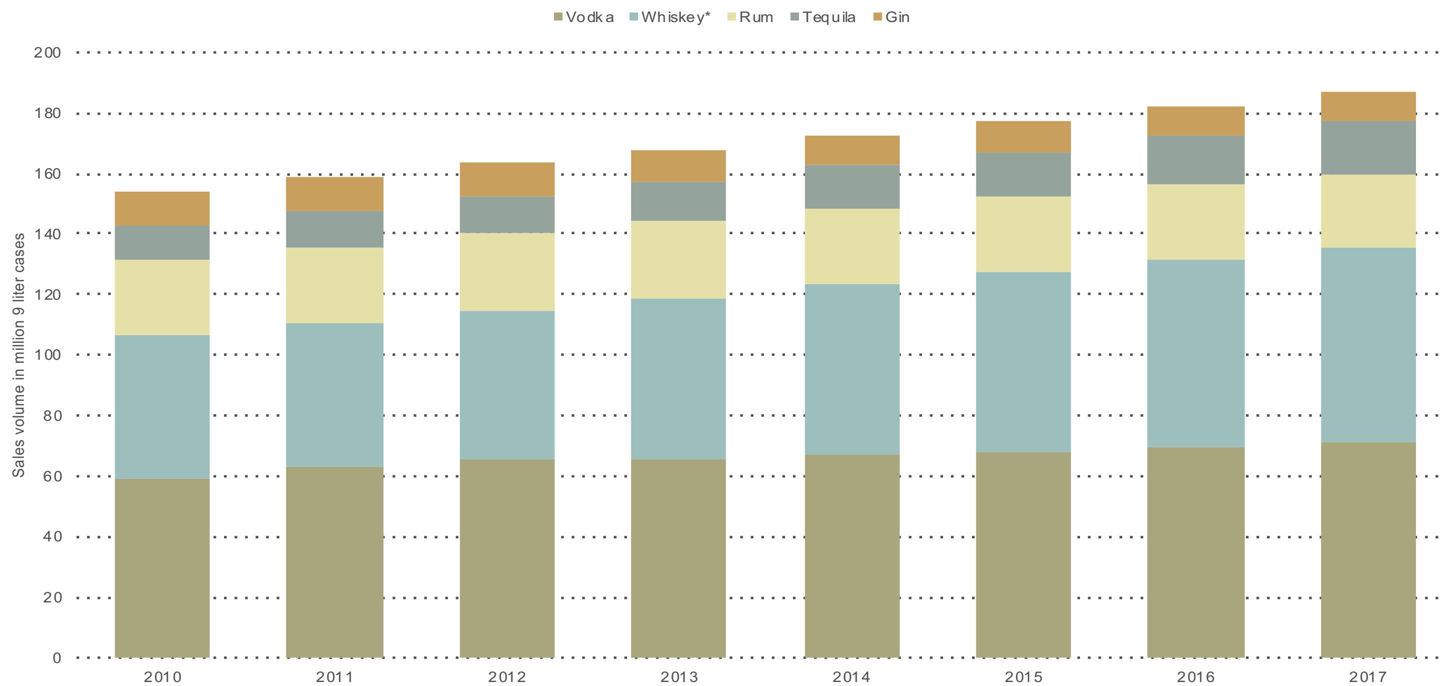
While Bourbon was born in Kentucky, the state’s last bourbon producer ceased operation in 1919, when prohibition began. Then, in the 1990s, producer groups worked with government officials to initiate a deliberate effort to promote new economic opportunities and gain market recognition for bourbon, produced in its original locale according to traditional recipes and processes. In two decades time, these efforts transformed the market for whiskey in the U.S. where 95% of all bourbon is now produced in the state of Kentucky with domestic sales of over $2.6 billion and exports of about $1.6 billion.

The keys to this success included a coordinated effort among small and large producers to agree on a definition of “bourbon” that worked for both parties. U.S. regulators created a legal definition of bourbon implying that it simply had to be produced in the U.S. from corn using some general processes for distilling and aging. Interestingly, the origin of the corn is not defined.

Then, in 2007, the U.S. Senate passed a resolution recognizing it as “America’s spirit,” efforts that supported global exports and protection of the product identity against imitation. In 2008, the Senate passed a revised version of the measure that included the term “distinctive” which protected it against imitation under World Trade Organization rules.

Those measures created a foundation for more effective marketing to drive exports of all bourbon and also shift domestic markets towards bourbon and away from other types of whiskey, like scotch. As the market for Bourbon has grown, the state benefited from the decision by large distillers to make investments to increase bourbon production capacity in Kentucky, which also helped fund marketing efforts to promote the product category overall.

Meanwhile, small producers moved forward with a series of voluntary marketing efforts to gain recognition and further differentiation based on origin and batch, which describes the place, the producer and also the specific time and barrel used for aging, also known as the “batch.” Small batch bourbon is based on limited production of each “batch,” and also a story of craft and bespoke production, although the product may be chemically very similar to commodity products.



Majority of growth in sales in US Spirits industry was in whiskey.
Statistical data on sales volume of the United States spirits industry from 2010 to 2017, by category (in million 9-liter cases)[1]

The move to “batch” based marketing of premium bourbon creates a market perception of scarcity based on the modest volume of any one batch paired with extensive supply, as the additional traceability information can distinguish an endless number of different batches. Literally, every barrel can be its own product and is, in the case of bourbon.

This approach allowed small-scale entrepreneur producers the opportunity to participate in the growing market and compete on different terms against large producers. It is an excellent example of how a craft platform can be used in a growing commodity market.

Once small producers realized market recognition for batch production, larger producers adopted similar practices, launching small brands and relaunching legal labels as well as integrating batch numbering into the product line beginning with more expensive labels. The success of small producers created a compelling business case for investment in more extensive traceability.

Key Take-Aways:

- The craft approach can work to create new opportunities in commodity markets.
- The marketing must involve a story that links the limited production to quality and demonstrates the distinguishing features of the product.
- Commodity markets can be activated to pay more for products defined by limited supply. Traceability can clearly define limited supply products.

Commodity

Small Batch

Small Farmer

Terroir/Taste of Place

Part III: Guidance for Development Market Recognition for Sustainable Seafood and the West Coast Groundfishery

Olive oil, chicken and bourbon along with many other foods like coffee have been treated like global commodities. Over the past several decades, each market has become commoditized, dominated by products sold by large concerns under their own mark and not valuing who, where or how they were produced. All are feature products that are difficult to distinguish from one another and are easily substituted by the customer, or sometimes, through fraud.

Then, each market also has been activated by the work of producers, of NGOs, sometimes with the support of government bodies, to again value these differences. Origin, production practices social concern and products crafted by artisan producers all have been the levers used to create value for small producers that use better practices in these stolid markets and, in doing so, also create a compelling business case for larger commodity companies to imitate them and adopt better practices.

These successes provide useful guidance to NGOs and philanthropies working on sustainable seafood about how to both create markets for better harvested and raised fish and seafood, and also improve the practices of large companies engaged in marketing commodity products. For the West Coast Groundfishery, and other recovered, improving and better managed fisheries, these cases offer even more specific guidance for achieving market recognition.

The case of olive oil — a market once rife with lack of transparency and extensive fraud — shows how origin including varietal can, akin to fish stocks, be used to create opportunities for small producers. The keys include:

- Differentiate based on origin, variety, treatment and production practices and use these to indicate limited supply and unique flavor.
- Support market recognition for individual producers and also those that aggregate their production.
- Addressing fraud through marketing claims that make substitution and misrepresentation very difficult.

Chicken, like fish, is often sold frozen in large quantities. Once scales and feathers, beaks and heads are removed, both are very difficult to differentiate based on production method. Key insights from the success of creating a market expectation for antibiotic free chicken with the intention of changing the practices of larger producers show that key include:

- Focus on how better processes improve product quality, including flavor and texture.
- Premium priced products can survive easy substitution when marketed on taste differences.
- When seeking to promote better processes, leverage consumer preferences for products devoid of industrial additives and processes.
- Buy in from major buyers is most effective in moving large producers when that commitment includes buying from smaller suppliers over the near term to demonstrate market recognition.

The development of market recognition for bourbon as a product from a specific place reveals how much origin, craft handling, and special treatment can matter to consumers. Consumers pay more for the fact that the product is uniquely defined, available in limited amounts, and therefore must be of higher quality. In this instance, both larger and artisan producers came to support common opportunities. The keys are:

- To focus on origin and further differentiate product based on traceability, or batch (the equivalent of "trip" for commercial fishing).
- Treat limited supply to be an advantage in creating a perception of quality.
- Small-scale and larger producers can successfully cooperate in commodity markets.
- Imitation by large producers, if accepted by small producers, can help support a premium market.

The success in creating market recognition for Fair Trade Coffee also shows how social concern can activate the market. For labor issues, third party verification can bring trust to a market known for unethical practices and is most valuable for carving off a part of the market for better products rather than transforming how commodities are produced. We also note that while perhaps not relevant to the West Coast Groundfishery, similar concern for humane treatment of animals can play a role in the sustainable seafood movement overall.

These case studies of market recognition for products that are differentiated by origin, process, artisan production or attention to social concern also reveal a common, distinct strategy for changing the practices of large producers of commodity products. While the business case for investing in traceability and better practices is rarely compelling when selling a commodity, the case for investing in these same practices to compete in a new market segment that is willing to pay more is relatively easier to make. It can transform the practices of large producers and bring investment to increase production, but also brings imitation, or competition, to the small and artisan producers who pioneered the market.

Guidance for Activating the Whitefish Market to Recognize West Coast Groundfish

When applied to the US market for white fish, now served by high volume, low priced farmed fish from Asia and wild capture fish from Alaska, these cases provide specific guidance for securing market recognition for the artisan harvesters again working the California Groundfishery and the many commercially stocks they can offer.

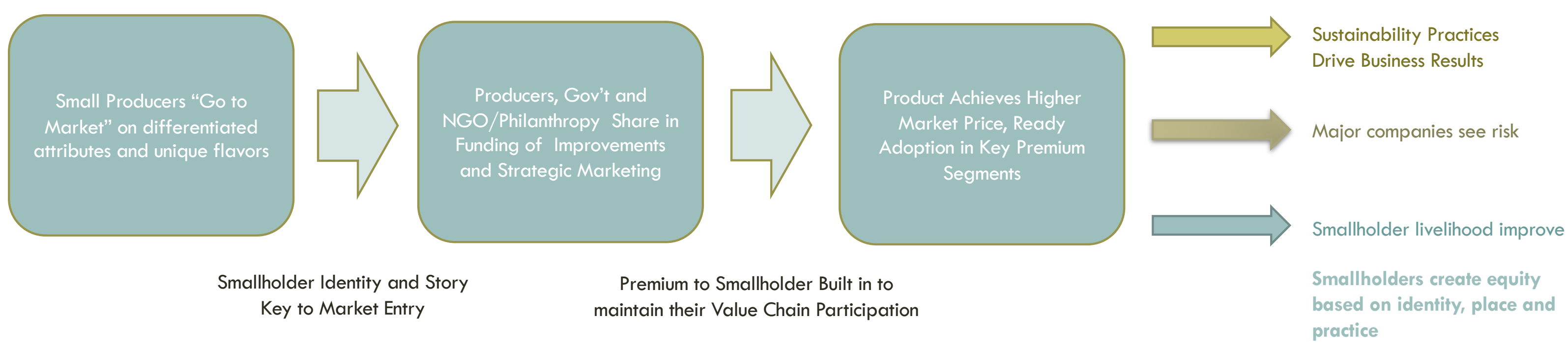
The California whitefish fishery has a unique opportunity to elevate its product from a commodity to a premium product. There are many structural features that suggest this market is worthy of development.

Americans show increasing interest in switching from red meat to fish and seafood and now seek out foods that are local, free of industrial processes and additives, and artisan crafted as well as animal-based foods that are humanely treated. Taste also remains paramount but with keen interest in new flavors. The stocks harvested from the West Coast Groundfishery have many of these qualities.

Creating a differentiated product in a commodity market requires making careful and thought-out strategic decisions. It also involves a dynamic process outlined below

The transformation of market recognition, the product from commodity to premium product, provides a strong opportunity to improve the livelihood of the people involved, to reward the like practices that now sustain the fishery after its recovery, and provide points of differentiation that larger firms cannot imitate.

This is based on a craft story that indicates limited supply, with each of the different stocks representing a distinct product. Marketing the fish, not the fishery, also matches interest in eating quality food and



seeking out flavors, which is also how the major buyers that sell into the consumer market see fish and other foods.

For West Coast Groundfish, the steps to take to achieve this are straightforward and proven and also require substantial effort, clarity decision and consistency of effort over time. Some of them have been proven out in the *West Coast Groundfish Pilot* conducted in 2018. These are:

1. **Develop Capacity** of the harvester community to maintain consistent product quality, agree on acceptable price, and stabilize harvester participation and the value chain and benefit of premium pricing. *We set out specific options and methods to **Develop Capacity** later in this section*.
2. **Select on priority market segments and customers** that match the profile of the fishery, including volume and processing capacity. Prioritize delivering the varieties, formats and products that will meet their needs. For West Coast Groundfish, this means treating each stock or variety separately rather than marketing the fishery's harvest as a whole.
3. **Establish supply chain relationships** to satisfy priority customers including ensuring the "first mile" from ocean to distributor is capable of consistently delivering product. These relationships also should be "ready to scale" as market activation efforts succeed.
4. **Develop the Story** for each variety that is based on the attributes that matter to purchasing decision makers and consumers. These stories should connect to flavor and product quality, as well as origin, and the role of artisan harvesters. *We set out specific options and methods to **Develop the Story** later in this section*.
5. **Support ambassadors that offer a compelling case** for using West Coast Groundfish to culinary professionals who set tastes, influence and make decisions in priority market segments. Engage them to influence peers.
6. **Promote product trial.** Participate in pilots, deliver samples, and take other steps to ensure key chefs and other decision makers have easy access to fish as they consider a longer-term purchasing decision and want to see how their customers respond.
7. **Maintain premium price and positioning** in the face of imitation and competition and reinforce points of differentiation with clients and customers.

Developing story and capacity are the two most critical steps for harvesters in the West Coast Groundfishery. The case studies in this paper as well as the experience of the West Coast Groundfish Pilot provide specific insights and choices for how to do so.

Develop the Story

At first pass, the West Coast Groundfishery appears to have all of the components of a compelling story. It can invoke **Origin, Craft, and Practices**. These elements also are seen in the elevation of bourbon and olive oil.

Origin: Identify and evoke imagery that indicates the unique placement of the fishery right off the coast of California as well as Oregon and Washington. The place can then define the fish and, of course, the fish can only come from that place which indicates limited supply. Special emphasis should be placed on treating each stock separately, convening its limited supply and also the unique flavors and textures of each type of fish.

Also, given the strong interest in local food, emphasizing place as "local" also has a unique value in accessing the California market, the largest state-level market in the US.

Craft: Consumers want to know that their product comes from craftsman and artisans. Feature and showcase the harvesters and their stories. They are part of the story and how their lives, families, and paths are part of making the fishery a success. This also distinguishes these artisans from larger concerns either from other geographies or that may work also harvest the West Coast Groundfishery now that it has recovered.

Practices: With the fishery now managed to sustain the recovery, highlight the specific gear, catch methods, monitoring observation and other practices, with an emphasis on those not present in other sources of whitefish. Special emphasis should be placed on how these practices affect quality, texture and flavor.

The following steps use this story to change market expectations. They also follow those used to activate other food markets:

1. Develop a story that involves **Origin, Craft, and Practices** that provide the market with limited quantities of different types of fish and offer better quality, flavor and texture.
2. Leverage harvesters' personal stories and the unique harvesting practices in the marketing of the product, always tied back to product quality, flavor and texture.
3. Develop product marks or names that describe the unique combination of Origin, Craft and Practice, including the many different stocks, flavors and textures that come from the fish.
4. With limited marketing resources, work through taste makers including culinary and purchasing decision makers who decide how visible and available the product will be made. This includes developing the ability to distinguish and appreciate for production distinction beyond that of the typical buyer or consumer.
5. Work with a relatively small number of established suppliers that are committed to selling your product as a premium product and use supplier relationships to control food fraud.
6. Seek out opportunities for government bodies to recognize and uniquely define the harvest from the fishery.

Develop Capacity

These results of the West Coast Groundfish Pilot clearly demonstrate an opportunity to activate the now commodity market for white fish to differentiate products from the West Coast Groundfishery, and to generate a premium for the product utilizing the attributes identified. The observed results also helped identify the essential capacities that must be developed to achieve this market recognition.

Pilot tests and real world experience are two proven approaches for identifying specific capacity needs as well as confirming where capacity is already in place or can be accessed.

Research into seafood supply chains globally has typically demonstrated that premium value has been captured by processors and middlemen as opposed to harvesters[14]. A range of measures are necessary to ensure that harvesters capture more of the potential "upside" that clearly exists for sustainably sourced, local, wild seafood. The advantage is that these investments have a demonstrated track record of improving the financial outcomes for producers. Two specific measures are the establishment of an appropriate aggregation mechanism or structure to achieve economies of scale and aggregate capital cost effectively; and defining the provenance of the product in a legally enforceable manner.

The work to support the artisan harvesters working the West Coast Groundfishery has already begun, including efforts to raise consumer awareness as well as a pilot to engage culinary and business decision makers and test consumer appreciation for flavor, quality and crafted fish.

To support these efforts and help fishers economically benefit from efforts to improve ecological and social practices, a combination of philanthropies, nonprofits, and business interests have funded efforts to raise consumer demand for sustainable seafood, improve chain of custody tracking, and help fisheries differentiate sustainable products through eco-labels.

While important, most of these approaches either require more investment by harvesters or result in higher production costs without necessarily addressing the unit price of the harvested seafood at the harvester level. In a market where product prices have historically been subject to downward pressure due to the commodity nature of the product and the ease of product substitution such as tilapia and pollock, a decision to invest more resources in additional costs in the absence of any improved price signal or product differentiation opportunity presents a challenge to any participant.

We note that significant effort has been invested in certification and efforts that differentiate products based on sustainability: in many cases, gaining sustainability certification has helped fishing enterprises secure existing customers and break into new markets that care about sustainability. These attributes have been found to be more important and relevant in business to business sales and relationships rather than in direct to consumer or retail sales relationships.

This challenge is further compounded in seafood, where price and market advantages have typically accrued to middlemen and processors as opposed to harvesters[15].

The recently completed pilot supported by the David and Lucile Packard Foundation sought to determine if it would be possible to differentiate California West Coast Groundfish as a product and improve the price to the harvester, thus effectively separating it from the commodity market (or de-commodify the product). For the purposes of the pilot, Pacific Rockfish, specifically Chilipepper Rockfish, was selected from the Groundfish Complex of species.

The pilot identified a market, built supply chain relationships and tested various menu attributes that had been identified as important in seafood menus. Provided by Datassentials, a menu research firm, this research identified “local” and “wild” as key attributes to be highlighted in promoting the Groundfish. This message was woven into introductions with corporate partners, during recipe development workshops with chefs, and marketing materials for end users. At the conclusion of this workshop, a survey of participating executive chefs was undertaken and revealed:

- On average, there was a 54% increase in seafood orders sold DURING the pilot.
- Sixty-seven percent of chefs participating described guest reaction to having WCGF as a menu option as Satisfied (50%) or Delighted (17%).
- As a result of the pilot, 66% of chefs who are currently using imported farmed whitefish said they would very likely replace imported farmed white fish (tilapia, pangasius, etc.) with WCGF.

During the three-month period of the pilot, the project achieved prices that were 42-64% higher per pound than comparably specified “generic” U.S. sourced Rockfish i.e. without the “local,” “wild” attributes. This price was higher than other premium protein choices and also Alaskan pollock and farmed tilapia. In addition, order volumes reached 33% of the orders for similarly specified product for pilot participants within 3 months. This represents a significant market share within a remarkably short period of time. The delivered price of the WCGF pilot rockfish was 110% higher than comparable US sourced MSC Pollock.

Comparison of Protein Prices

Product	Price Per Pound
Pilot – California Rockfish (PBO)	$6.95
Pollock U.S., MSC (PBO)	$3.30
Antibiotic-free chicken (bone in)	$3.92
Other U.S. Rockfish	$4.23-$4.89
“Natural” beef (ground, formed frozen patties)	$5.06
Antibiotic-free chicken breast (skinless and boneless)	$5.55

Wholesale prices as of July 2018

Aggregation

Impact investors report that it is difficult to find fishing and seafood businesses that have a clear legal structure, strong financial track record, business-savvy leaders, strong potential for growth, and triple bottom line outcomes[16],[17],[18]. In many countries, harvesters are often not considered a legal business entity, a condition that effectively excludes them from any economic activity other than as a provider of raw material.

While U.S. harvesters in the California West Coast Groundfish fishery are considered legal business entities (and have established Fish Marketing Associations (FMA), the recently completed pilot noted the lack of the necessary insurance, certifications and experience to effectively promote, sell and deliver product into the supply chain. While the harvesters in this fishery have organized to jointly manage tenure in California through Fish Marketing Associations and the California Groundfish Collective, they have not developed or utilized this capacity to aggregate product, jointly negotiate prices and supply agreements, or distribute costs for cold storage, distribution and other critical investments to achieve economies of scale and pricing power. The fragmented nature of the fishing operations keeps them from achieving economies of scale needed to secure commercial investment and compete effectively in domestic and global supply chains.

Pre-requirements to be an approved vendor in the supply chain:

- The enterprise is legally registered in the state;
- A tax ID or Employer Identification Number (EIN);
- Commercial lability insurance, state health certification and Hazzard Analysis and Critical Control Point (HACCP) certification.

Pre-requirements to be considered for outside impact investment:

- Above, plus:
- A high level of experienced enterprise management and a history of profitability;
- A viable financial plan, including annualized investment returns, financing history, financial projections (profit and loss/balance sheet), and collateral;
- A viable operational plan, including strong customer base, clear value proposition, geographic and business risk mitigation

strategies, scalability, a well-developed and tested business case, firm-level and market-level upgrading strategies and premiums (including certification options), and market analysis.

Aggregation Structures

Disclaimer – this section is a brief summary of potential aggregation options. It does not constitute a recommendation and does not replace the advice of qualified legal and tax counsel familiar with state regulations.

A number of potential legal aggregation structures are available in the United States. Intended to protect shareholders from liability, aggregate capital and achieve a common goal, these entities range from Corporations (both S and C) to Limited Liability Company (LLC) structures, Fish Marketing Associations (FMA) to Cooperatives and each of which have legal, tax and antitrust ramifications for the participants. Determining the optimum option for the harvesters in question will require the balancing of the demands of capital providers, harvesters and existing legal and tax regulations to achieve an optimum outcome. This will require the input of qualified legal attorney and tax counsel familiar with state regulations as they relate to fisheries.

Three sources of capital are typically considered in financing a business. Owners Contributions (inside equity), loans (debt) and outside investors (outside equity). Impact investment options are typically debt or outside equity. Each of these capital options are subject to state (and potentially Federal) regulations regarding use, deployment and repayment.

Corporations and LLC

One of the most common and accepted structures for inside equity, debt and outside equity are Corporations and LLC structures. Advantages of these structures, particularly at an early phase, include limited personal liability, tax advantages, ownership flexibility, management flexibility and flexible profit distributions. However, these forms of entity, while effective and efficient in aggregating various forms of capital in order to achieve a common purpose, may be subject to antitrust considerations if independent harvesters collaborate to fix prices and manage supply of Groundfish. Collaboration under these models will likely require some kind of merger of vessels and harvesters operations. These models are the most familiar to investors. While there may be concerns regarding the overlap of the purpose and mission of the entity, these can be addressed by adopting "B" Corp certification by seeking to balance "profit and purpose[19]".

Fish Marketing Associations

Fish Marketing Associations, established under the Fishermen's Collective Marketing Act (FCMA), provides a limited exemption from federal antitrust law for certain activities of "associations" of "persons engaged in the fishery industry, as fishermen, catching, collecting, or cultivating aquatic products ….". However, that exemption does not protect agreements or information flow between an association of "fishermen" and non-"fishermen" such as fish processors or buyers[20]. Furthermore, while "Fishermen" can include fishing businesses — corporations, limited liability companies, etc. — and not just natural persons, the act is very clear that only fishermen (and, we assume, fisherwomen) may participate. Even one member's failure to qualify as a "fisherman" can potentially destroy the FCMA antitrust exemption for the entire association.

These restrictions, while understandable from an anti-trust perspective, and likely preferable for harvesters, present a significant challenge to outside equity investors who typically link investment to participation in ownership, even if only to safeguard their investment. Should a non-fisherman investor have to take a position as a member, the benefits under the FCMA will cease.

Under these circumstances, the financial strength of the FMA will be dependent upon inside equity investments made by the harvester members. In the absence of adequate inside equity, banks are unlikely to provide loans to support the entity.

Cooperatives

Cooperatives represent a third potential option for aggregation. Typical initial sources of funding for cooperatives are the members themselves and outside equity and debt options are also available to cooperatives, subject to a viable business and state and federal regulations. California in particular has a range of options and regulations to finance entities of this nature. Some of these options may require compliance with securities regulations which, while legally onerous, provide access to outside equity necessary to achieve the economies of scale identified. This model will require a high degree of trust and collaboration between (both harvester and non-harvester) members to be effective.

Relevant Government Interventions

- Ask state governments and federal agencies to specifically define and recognize West Coast Groundfish as distinctive foods and by individual stock and origin to protect product provenance.
- Include fish in local food purchasing mandates for public agencies.
- Support U.S. and other governments efforts to combat seafood fraud and developing traceability programs[21].

Conclusion

The Sustainable Seafood movement – including artisan harvesters and those adopting more sustainable practices – faces the not uncommon challenge of activating commoditized markets. Garnering market recognition including purchasing preference, clear differentiation and higher prices all are important consequences of adopting more sustainable practices.

Absent that recognition and the ability to sell the harvest at a higher price or with less cost and effort, it becomes harder to incur the additional costs for more effective management, monitoring and traceability.

The West Coast Groundfishery is a clear example. Once declared a disaster, the fishery and its stocks of white fish have now recovered and are reopened to commercial fishing. As with most fisheries with effective management and enforcement, harvesters working the West Coast Groundfishery now operates under a higher cost structure. This includes ongoing expenses for monitoring, investment in more sustainable operating practices and licensing required under the successful fishery management program, and also the voluntary cost some have incurred for ecocertification. For harvesters to even recover to the economic state prior to the new requirements, their catch must be sold at higher prices. Meanwhile, the market for whitefish in the U.S. has accepted the substitution of lower priced farmed and wild caught fish from Asia and Alaska.

Garnering market recognition is essential to the economic recovery of the West Coast Groundfishery and its harvester community. This recognition is also critical to the improvement of wildcapture and aquaculture producers in other parts of the world.

The challenge is also not unique to the seafood sector and other efforts in other food sectors – including those facing global price declines, commoditization, lack of traceability and fraud – have succeeded in garnering recognition for more sustainably produced products, deliver more social benefits, and that are traceable back to a specific place or a group of artisans and smallholders. These efforts even have succeeded in driving improvements among large commodity producers that see the value in copying those practices as a knock-on effect.

From those successes and other efforts to activate commodity markets, we find an important set of attributes that can lead to clear market recognition including origin, production practices, craft (or artisan) production, and social concern. Producer groups, NGOs and philanthropies, and government agencies all can effectively initiate these efforts and collaborating among some or all sectors contributes to long term success.

In addition to identifying attributes, there also is a proven, seven-step process for activating commodity markets and securing market recognition. Clear identification of priority customers and market segments and establishing supply chain relationships are equally as important as positioning when introducing new sustainable fish and seafood choices or activating the market to better appreciate those that are already available.

We hope the guidance provided in this white paper contributes to the success of any and all efforts to improve practices in the seafood industry, promote the health of our oceans and the communities that work to provide us all sustainable fish and seafood.

Endnotes

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