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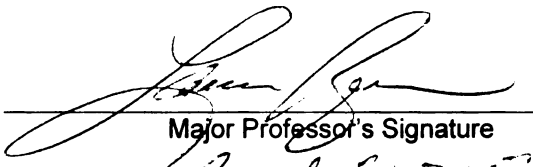

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# SAVING THE OCEANS VIA THE MARKET: SOCIAL MOVEMENTS IN THE MARKETPLACE

By

Jason Konefal

A DISSERTATION

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ABSTRACT

SAVING THE OCEANS VIA THE MARKET: SOCIAL MOVEMENTS IN THE MARKETPLACE

By

Jason Konefal

A series of political, economic and socio-cultural changes over the course of the last quarter-century has transformed opportunities for social movements. On the one hand, opportunities for the use of state-centered campaigns have declined, as the regulatory capabilities of states have weakened. On the other hand, opportunities to bring about change through the market have emerged with the development of buyer-driven commodity chains, economies of quality, and the politicization of consumption. An outcome of these changes is that an increasing number of social movements have turned to the market to achieve their objectives. This dissertation examines the current use of market-based campaigns by social movements. My analysis is structured around four research questions. First, what are the factors driving the shift by social movements from state-centered to market-based campaigns? Second, what are market based-campaigns, what kinds of strategies are used in such campaigns, and how are they implemented? Third, what are the objectives of market-based campaigns? Fourth, how has the use of market-based campaigns evolved with time? To answer these questions, I present data from a qualitative case study of the sustainable seafood movement. The sustainable seafood movement is made up of marine and ocean conservation organizations that have embraced market-based campaigns over the last decade. As the sustainable seafood movement has largely staked its future on the use of market-based campaigns, it is an ideal case study for examining the contexts, strategies, goals, and evolution of social

movement's use of market-based campaigns. My findings indicate that while market-based campaigns may be an incrementally effective approach at this time, they also present several challenges for social movements. In concluding, I discuss ways that social movements might begin to overcome these challenges.

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LIST OF ABBREVIATIONS

British Columbia – BC

Coastal Alliance for Aquaculture Reform – CAAR

Convention on International Trade in Endangered Species – CITE

Environmental Defense – ED

Exclusive Economic Zone – EEZ

Global Aquaculture Alliance – GAA

Marine Stewardship Council – MSC

National Environmental Trust – NET

National Ocean and Atmospheric Administration – NOAA

National Resource Defense Council – NRDC

Global Aquaculture Alliance – GAA

Polychlorinated biphenyls – PCBs

World Wildlife Fund – WWF

## Chapter 1. Introduction

Social movements are a necessary part of any system of democratic governance (Goldstone 2004; Ibarra 2003; Offe 1985). Active, robust, and diverse social movements are necessary if environmental, health, and communal interests are to be included in political processes (Bartley 2003; Bridge and Jonas 2002; McCarthy and Prudham 2004; Newell 2000). However, the political, economic, and socio-cultural changes of the last quarter-century have transformed opportunities for social movements to be an active force in society. On the one hand, opportunities for the use of state-centered campaigns have declined, as the regulatory capabilities of states have weakened. In other words, the traditional strategy by social movements of pressuring the state to implement policies may no longer be an effective approach. On the other hand, new opportunities are emerging for social movements to use the market to achieve their objectives (Bailey et al. 2003; Gereffi et al. 2001; Konefal and Mascarenhas 2005; Newell 2000; O'Rourke 2005). The outcome is that social movement organizations are increasingly bypassing the state in favor of market-based approaches.

While social movements have used market-based campaigns for some time, the current use of them is qualitatively different. In the past, market-based campaigns were largely associated with appeals for consumer boycotts of commodities produced in manners unsafe for or unfair to workers or which were themselves unsafe by dint of their consumption. For example, while the United Farmer Workers' agitated for great government oversight and more equitable government policies, their grape boycotts asked consumers to stop eating grapes until farm workers had better working conditions and fairer wages. These days many market-based campaigns seek permanent shifts in

consumptions patterns as both a carrot and stick to induce changes in production, and often make little or no effort to change the structure of government policy or intervention.

Three changes are central. First, market-based campaigns have become the most prominent and widely-used kind of campaign for many social movement organizations, whereas previously they were often secondary to state-centered campaigns (Bailey et al. 2003; Newell 2000; O'Rourke 2005). Second, the diversity of ways in which movement organizations use the market has increased (Newell 2000; O'Rourke 2005). As this dissertation illustrates, movement organizations have developed a variety of market-based campaigns and strategies beyond just that of boycotts or buycotts. Third, the objectives of market-based campaigns are also different from their earlier use. While policy change remains a secondary goal, shifting the marketplace and pressuring producers are often more primary objectives.

This dissertation examines the current use of market-based campaigns by social movements. My analysis is structured around four research questions. First, what are the factors driving the shift by social movements from state-centered to market-based campaigns? Put differently, how have and how are opportunities for social movements changing (McAdam 1999; Schurman 2004)? Second, what are market based-campaigns, what kinds of strategies are used in such campaigns, and how are they implemented? Specifically, I focus on the practices of implementing market-based campaigns, particularly framing and communicative practices. Third, what are the objectives of market-based campaigns? That is, what kinds of changes do movement organizations hope to achieve and how are such changes implemented? Fourth, how has the use of market-based campaigns evolved with time? In other words, as movement organizations

have encountered obstacles and opponents responded to campaigns, how have they restructured and adapted market-based campaigns? The answers to these questions are vital. Given current political and economic conditions, the ability of social movements to continue to be a powerful force in society depends, at least partially, on their effectiveness in using the market and other non-state centered approaches (Bartley 2003; Newell 2000).

In examining the use of market-based campaigns, this dissertation focuses on a single movement, the sustainable seafood movement. This movement is made up of marine and ocean conservation organizations that have turned to the use of market-based campaigns over the course of the last ten years, largely in response to continued failure in the political arena. Today, market-based campaigns dominate the strategies of these organizations and the sustainable seafood movement has gone so far as to stake its future on the use of market-based campaigns. In this context, this movement is an ideal case study for examining the kinds of opportunities, strategies, and goals associated with the use of market-based campaigns by social movements.

In the next section, I provide the backdrop to my study through outlining the political, economic, and socio-cultural changes of the last 25 years. The following section then outlines the analytical framework I used in examining the sustainable seafood movement.

**Contexts: The Milieu of Social Movements**

Political, economic, and socio-cultural landscapes have changed dramatically over the last quarter of a century. The implications of these changes have been wide ranging for social movements, and knowledge of these changes is necessary to understand the context in which social movements operate today. In this section, I discuss four sets of changes that have affected social movements. This discussion sets the foundation for my analysis of the sustainable seafood in the remaining portions of this dissertation.

One set of changes involves states and modes of governance. Neoliberal restructuring and globalization have induced a shift from government regulation towards policies of shared governance. A consequence of which is a decline in the regulatory power of states and changes in how states regulate. A second set of changes involves changes in the organization of the economy. Specifically, with the shift towards more flexible and specialized systems of production and more differentiated markets, economic power has shifted from upstream to downstream actors. The outcome is the development of buyer-driven commodity chains in many economic sectors (Gereffi et al. 1994). A third set of changes involves the increasing importance of risk, emergence of economies of quality, and the politicization of the market. Risk and its avoidance has become an increasingly important social issue, and organizing principle in society (Beck 1992). For the economic sphere, this has meant greater attention to quality and the politicization of the marketplace. A fourth set of changes involves the politicization of consumption. Increasingly, consumption is becoming a means for people to express their political, socio-cultural, and economic values. While I present each of these sets of changes separately, it needs to be emphasized that, in practice, they are all interconnected. In

other words, they are all part of the same process, with cause and effect relationships running in multiple directions between each. However, for analytical clarity, each set of changes is presented individually. In the conclusion of this section, how these changes are driving social movements towards the use of market-based campaigns is discussed.

*Government to Governance: The Declining Regulatory Power of States*

The last three decades have been marked by a series of political transformations. The first was the rise of neoliberalism beginning in the mid to late 1970s. This was followed by political globalization, as the global extension of production and markets created new economic and regulatory demands that increasingly could not be dealt with at the level of the nation-state (Conca 2002; Jessop 2003; Micheletti et al. 2006). The result has been the formation of new supranational governing bodies, such as the World Trade Organization, multilateral governing bodies, such as the European Union, and trade regimes (e.g., North American Free Trade Agreement). Currently, states and regulatory systems are in the midst of another transformation: the shift from government to governance (Barry et al. 1996; Jessop 2002b; Rhodes 1997; Stoker 1998; Swyngedouw et al. 2002). This entails the de-centering of the state and the establishment of multi-actor (e.g., business and non-governmental organizations) regulatory networks, among other things.

Neoliberal restructuring of states is based on the belief that the market is the most efficient means of allocating resources, carrying out social welfare, and social and environmental regulation (Peine and McMichael 2005). In short, the core tenet of neoliberalism is that less government is better. Thus, the promulgation of neoliberal

ideas has led to a rolling back and reduction in the size and functions of many regulatory state bureaucracies (Jessop 2002a). The outcome has been devolution of authority, privatization, and the growing use of the market for social provisioning and regulation (McCarthy and Prudham 2004). This has meant greater power and freedom for corporations. It has also increased the role they play in social provisioning and regulation (Marsden et al. 2000).

The global extension of the economy has further limited the regulatory capacity of states (Conca 2002; Jessop 2003; Micheletti et al. 2006). On the one hand, the increasingly global character of much of the economy constrains the amount of control nation-states have over economic transactions within their borders. It is increasingly easy for companies to shift their operations to different locations to avoid new regulations, or threaten to do so to discourage new regulations.[1] On the other hand, the pace at which many economic activities are now taking place is such that states are unable to develop and implement policies fast enough (Conca 2002; Reardon and Farina 2002). One response has been the creation of global governing bodies, such as the WTO. A second, and increasingly prominent response, is the use of private standards and non-governmental enforcement mechanisms (Hatanaka et al. 2005; Mutersbaugh 2005; Reardon and Farina 2002).

With neoliberal restructuring and political globalization the nation-state is often portrayed as withering away (Ohmae 1995). However, this has not been the case, as states continue to be important actors in economic, social, and other matters. Rather, what has occurred is a "qualitative" transformation of the state. Put differently, the

[1] Conca (2002) discuses how computer chip manufacturers, such as Intel, have subcontracted manufacturing operations first to small companies in the US west and then companies outside of the US to avoid stricter environmental regulations.

constitution of the state, its responsibilities, and how it functions have undergone significant changes (Hart 2004; Jessop 2002c; Kelly 1999; Swyngedouw et al. 2002). Some have theorized this transformation in how the state governs as shift from government to governance (Jessop 2002b; Peine and McMichael 2005; Rhodes 1997; Stoker 1998; Swyngedouw et al. 2002).

Governance is a network-based, rather than a state-led, system of regulation. Thus, whereas the state previously had sole authority over regulation, today it increasingly shares regulatory functions and responsibilities with non-state actors, such as supranational governing bodies and private actors—e.g., corporations and non-governmental actors (Swyngedouw et al. 2002). Increasingly, it is private actors, consortia of private actors, or joint public-private consortia that develop standards and then non-governmental bodies, most notably third-party certifiers, who oversee the implementation of such standards (Hatanaka et al. 2005).[2] In such a system, the role of the state shifts largely to that of steering and guiding the development of regulations and overseeing the regulators (Stoker 1998).

One way to understand governance is as a "middle-way" between the unfettered rule of the market as advanced by neoliberalism and state intervention as advanced by the Keynesian social welfare state (Jessop 2002b). This is because systems of governance enable the state to continue to regulate, but in a way that is significantly less costly, as it no longer must bear the cost of monitoring and enforcement. At the same time, systems of governance enable the market to be regulated, albeit in a way that is quite flexible,

[2] Standards are used in a variety of ways today (Reardon et al. 1999). One way that they are being used is to regulate the activities of actors in commodity chains, whether it is labor practices, environmental outputs, or quality requirements. In this way, standards are becoming the regulations in today's global political economy.

business-friendly, and supportive of entrepreneurship. In other words, governance is a regulatory system that provides government stability while giving firms flexibility, and is relatively inexpensive for states.

The changes to states and political systems over the last three decades have clearly altered the political opportunities for social movements. There is widespread agreement that the neoliberal restructuring of the early to mid 1980s generally closed off opportunities for labor, environmental, and leftist movements. In contrast, the impact of globalization on social movements remains contested; with some scholars seeing new opportunities (Sklair 2000; Smith et al. 1997), and others more obstacles (Tarrow 2001). For example, some argue that there is the opportunity for the development of global regulations for labor, communities, and the environment (i.e., a race to the top). However, others point out that the undemocratic character of global supranational governing organizations remains a serious impediment to the enactment of such regulations.

The implications of the shift from government to governance are largely unknown at this time. On the one hand, it is clearly closing off some opportunities for social movements in that the rules for participating in policymaking and regulation are no longer clearly demarcated (Swyngedouw et al. 2002). On the other hand, to the extent that social movements are able to influence the ways that emerging systems of governance are structured, the shift from government to governance may generate new opportunities. While each of the above transformations has or will impact the political opportunities of social movements in particular ways, the collective effect has been a weakening of the state vis-à-vis economic actors. Simply put, the cumulative effect of

the above changes is a decline in political opportunities for social movements. Thus, given current political conditions, social movement organizations have begun to seek out alternative ways to exercise their power and influence society. One arena to which they have turned is the market.

*Buyer-Driven Commodity Chains and the Downstreaming of Power*

Partly driving the above political transformations and partly being driven by them has been a series of economic transformations. National economies and the global economy have increasingly moved away from Fordist models of production and consumption. "Entirely new sectors of production, new ways of providing financial services, new markets, and above all, greatly intensified rates of commercial, technological, and organizational innovation" have developed over the past three decades (Harvey 1989, 147). One of the most prominent and transformative developments has been the emergence of buyer-driven commodity chains (Gereffi et al. 1994; Ponte and Gibbon 2005).

While the idea of commodity chains is not new (Friedland 2005), with economic globalization, global commodity chains are emerging as the dominant form of economic organization (Busch Forthcoming). A global commodity chain is a set of "interorganizational networks clustered around one commodity or product, linking households, enterprises, and states to one another within the global economy" (Gereffi and Koreniewicz 1994, 2). A key insight of global commodity chain analysis, and a corrective to neoliberal economics, is that while firms are competing against one another, they also cooperate, most often in the form of commodity chains (Busch Forthcoming).

In other words, firms increasingly are organized into a commodity chain, where there are various degrees of cooperation. The aim is to make the commodity chain as efficient and profitable as possible in order to out-compete other chains and thus, maximize market share and profits. Thus, in addition to firm versus firm competition, we increasingly have commodity chain versus commodity chain competition (Busch Forthcoming). For example, we have the Ford commodity chain competing against the Toyota commodity chain and the Wal-Mart commodity chain competing against the Kroger commodity chain.[3]

Within commodity chains there tends to be a lead actor(s) who drives the chain. Under Fordist models of capitalism, lead actors tended to be large manufacturers, such as Ford and General Electric. While producer-led commodity chains persist in some economic sectors, with the shift towards more flexible and specialized modes of production, buyers have emerged as the lead actors in many commodity chains (Conca 2002). In other words, large retailers (e.g., Wal-Mart) and brand name merchandisers (e.g., Nike) are increasingly the lead actors in many supply chains. As such companies control large shares of the market, this gives them considerable power over upstream actors, which enables them to largely set prices and standards for quality, among other things (Ponte and Gibbon 2005).[4] Thus, what is occurring in many commodity chains is the "downstreaming" of power (Conca 2002).[5]

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[3] While this section largely builds on the literature on commodity chains, it is also informed by Busch's (Forthcoming) study of supply chains. The terms "commodity chains" and "supply chains" both refer to similar ways of conceptualizing the economy. However, the term commodity chains tends to be used by social scientists who are critically examining the organization of the economy, while the term supply chain is used by economic actors themselves.

[4] It should be noted that the distinction between producer- and buyer-driven commodity chains is an ideal type. In practice, both buyer- and producer-driven commodity chains are quite diverse (Raikes et al. 2000). For example, a Wal-Mart led and a Nike led buyer-driven commodity chains may be quite different in how

With the emergence of buyer-driven commodity chains, and the increasing global extension of commodity chains, the ways that commodity chains are organized and governed have changed. Fordist era producer-driven commodity chains tended to be vertically integrated. In such a model, the lead firm would own all facets of the production process, usually with the exception of retailing operations. In contrast, buyer-driven commodity chains tend to be vertically coordinated. Here, while lead firms still exert considerable control over upstream actors and practices, they do so without ownership. Rather, they often use standards, which are increasingly part of contracts, to set production practices (e.g., labor and environmental) and quality criteria (Busch Forthcoming; Ponte and Gibbon 2005; Reardon et al. 1999). Recently, lead firms in buyer-driven commodity chains have also begun to use third-party certification to ensure that suppliers are complying with the required standards (Hatanaka et al. 2005).[6] The use of standards and third-party certification enables lead actors to exert control over the upstream portions of commodity chains, but at a distance. Put differently, using standards and third-party certification, lead actors are able to govern upstream actors without direct oversight and with few additional costs.[7]

The emergence and proliferation of buyer-driven commodity chains is affecting opportunities for social movements to influence production practices. On the one hand, with the downstreaming of power, focusing directly on producers may not be an effective strategy. On the other hand, buyer-driven commodity chains may be generating new

---

they are organized and managed. Additionally, in actuality, many commodity chains are both buyer- and producer-driven at the same time.

[5] Conca (2002) notes that power has also shifted upstream to financial institutions, such as investment companies and hedge funds. Thus, the actors in the middle of supply chains are increasingly getting squeezed from both upstream and downstream actors.

[6] Third-party certification is a governance mechanism where independent third-party bodies audit actors against a set of standards (Hatanaka et al. 2005).

[7] Generally, suppliers are responsible for the costs of third-party certification (Hatanaka et al. 2005).

opportunities for social movement organizations (Gereffi et al. 2001; O'Rourke 2005). Specifically, there are three characteristics of buyer-driven commodity chains that are important with respect to social movement opportunities. First, the downstreaming of power may open up opportunities for movement organizations to use market-based campaigns. For example, movement organizations can target a large retailer's customer-base and market-reputation to try to get it to change its procurement practices (Bailey et al. 2003; O'Rourke 2005). Second, the use of standards by lead actors to govern commodity-chains may generate opportunities for movement organizations to influence and/or participate in the governance of commodity chains. Increasingly, activist organizations are setting-up governance institutions that set standards (e.g., environmental, labor, etc) to regulate industry. Third, the downstream endpoints of many buyer-driven commodity chains tend to become more oligopolistic with time. This, in turn, increases competition among the remaining downstream actors (Gereffi et al. 1994). Movement organizations can seek to take advantage of such oligopolistic conditions, as slight changes to a company's market share may have significant impacts on its profitability (Konefal and Mascarenhas 2005). Additionally, as firms capture greater market share, their power over upstream actors further increases. Thus, if a social movement organization is able to get a large retailer, such as Wal-Mart, to incorporate environmental standards into its procurement practices, this would have significant upstream impacts.

*Risk, Quality, and the Politicization of the Market*

In his pioneering work, *Risk Society: Towards a New Modernity*, Beck (1992) argues that risk has replaced class as the dominant organizing principle in society. While Beck overstates the importance of risk vis-à-vis class, Beck's notion of a "risk society" does capture the rising importance that risk plays in modern society. In risk society, no longer is it just a question of having enough food to eat, clothes to wear, and a place to live. Now people are also increasingly concerned whether the food that they eat, clothes they wear, and places that they live are safe and healthy.

Applied to the economy, the consequences of Beck's argument are that wealth and profit are no longer just a question of production expenses, the price of goods, and the quantity of goods sold. Rather, questions of risk and quality have become increasingly important to how business operates (Cochoy 2003). This is because consumers are increasingly considering a good's or company's riskiness, in addition to price, when deciding what to buy. Thus, it has become increasingly important for business to avoid risks, and be perceived as not-risky. Additionally, firms are increasingly learning that competing on price is a zero-sum game, especially in markets with oligopolistic conditions. In other words, firms have begun to compete on such things as quality, convenience, and service, in addition to price. The combined effect of increasing consumer concern over risk and constraints on price-competition has been (1) increased differentiation of both companies and products, and (2) the further politicization of the marketplace.

Risk is often translated into and understood as quality in the economy. For example, what consumers want are products of high quality, i.e., products that are safe,

well-made, produced using fair labor practices and/or in ways that are environmentally sustainable. That is, they want products that are not risky for them, others, and/or the environment. Thus, from the perspective of business, quality control has become of utmost importance; not just in terms of controlling technical imperfections in the production process (e.g., consistency and uniformity), but also socially. In other words, quality control has become just as much about the social (and environmental) conditions and relations of production as the technical conditions and relations (Cochoy 2005). Consequently, the business community has begun to develop mechanisms to ensure quality and avoid risks, such as corporate social responsibility policies, codes of conduct, private standards, and third-party certification (Blowfield and Frynas 2005; Gunningham et al. 1999; Hatanaka et al. 2006; Hughes 2005).

Observing this change in how quality is understood and its increasing importance in the market, Callon et al. (2002) argue that "economies of quality" are emerging in many industrialized countries. By this they mean that economic competition is increasingly revolving around quality, in addition to price. Put differently, it is the qualification and re-qualification of products that is the primary locus of competition. Thus, sellers seek to attach qualities (e.g., eco-friendly, good labor practices) to their products that distinguish them from others (i.e., singularization) and appeal to consumers. By doing so, they are able to raise the value (i.e., profitability) of goods and attach consumers to specific goods. For example, ethically informed consumers may be willing to pay more for goods produced using fair labor practices. Thus, by using fair labor practices to produce goods, and labeling them as such, a company may be able to charge more for its goods and develop a dedicated customer-base. This may prove more

profitable than producing undifferentiated commodities, especially as competition has intensified in many bulk commodity markets (Gibbon and Ponte 2005). Consequently, we see a proliferation in the attributes now being attached to goods, and intensified competition among firms to capture value added and niche market opportunities.

Cochoy (2003; 2004) argues that the shift towards a risk society and the consequent development of economies of quality has led to the politicization of the marketplace. In other words, decisions regarding production practices, product attributes, and marketing strategies are no longer just technical questions decided by experts, but negotiated decisions between actors within and outside of commodity chains. Cochoy (2004) outlines four characteristics of market politicization. First, it produces a "voluntary and substantial politicization of products" as political characteristics are added to products as a way to sell them (Cochoy 2004, 16). Second, it extends product differentiation beyond its traditional scope to include social, ethical, and environmental values. Third, it reverses Marx's commodity fetishism. That is, rather than hiding the conditions and relations of production, market politicization leads to more transparent supply chains and opens them to inspection by outsiders (e.g., consumers and social movement organizations) (Hudson and Hudson 2003). For example, with the advent of the idea of traceability, consumers are increasingly able to trace the products they buy back through each stage of the production process. Lastly, Cochoy (2004, 17) notes that, paradoxically, market politicization "uses the market power as the only means to fight against its abuses and to relay the criticism against globalization." Thus, for Cochoy, with globalization and weak international law, the market and competition around ethical

and political preferences is the only means to counter exploitive political economic practices.

The emergence of a risk society, economies of quality, and the politicization of the market have generated new opportunities for social movements to target companies directly. Specifically, competing on environmental, cultural, and ethical qualities has made companies vulnerable to campaigns by social movements. For example, such competition opens up opportunities for movements to pressure companies to adopt stronger environmental, health, and/or labor standards, and become certified to demonstrate that they are actually abiding by legitimate standards. Where a company is making false claims (e.g., greenwashing), movements can publicly expose such claims, and potentially cause a backlash against a given company. Additionally, some companies may be more open to working with social movement organizations, particularly if they are in an economy of quality. That is, companies may strategically choose to align themselves with social movement organizations as a way to differentiate themselves and/or products from their competitors.

*The Politicization of Consumption*

Historically, consumers have been viewed as relatively powerless and unorganized compared to business and industry (Princen et al. 2002; Schnaiberg 1980). In general, business and industry have decided the kinds of goods to make and how to make them, while consumers passively consumed whatever goods they were offered. However, this view of consumers and consumption has begun to be contested. Increasingly, consumers are viewed as having power and consumption as an act that can

affect upstream business decisions and production practices (McLaughlin 2004 (February 17); Micheletti 2004; Micheleletti et al. 2006). Put differently, one of the reasons that there is now organic milk, natural cleaning products, and recycled paper is because consumers are demanding such products (DuPuis 2000).[8]

This change in how consumption is understood is partially an outcome of the political, economic, and socio-cultural transformations outlined above. Neoliberalism, and the more recent shift towards systems of governance, emphasizes individual responsibility and action. In other words, problems are framed as individual in character – as opposed to collective or social – and thus, responsibility for solving them tends to fall on individuals. Additionally, as the regulatory power of the state has weakened, people have often sought to protect themselves from risks through individual, consumptive practices (Micheletti 2004; Micheletti et al. 2006; Szasz 2006). At the same time, with the shift towards an economy of qualities, which is partially driven by both the declining regulatory capability of states and heightened consumer concern about safety and health, the market has become a forum for people to protect themselves, at least for those who can afford to do so. That is, through the market, people can protect themselves from risks, whether it is purchasing bottled water, organic foods, or homes in gated communities (Szasz 2006). The outcome has been what some have termed the "politicization of consumption" or "political consumerism" (Holzer 2006; Micheletti 2004; Micheletti et al. 2006).

Political consumerism can be defined as "doing politics *through* the market" (emphasis in original, Holzer 2006, 406). That is, through their purchasing practices,

[8] It needs to be noted that companies are often willing to accommodate such consumer demands, as they are often profitable.

consumers are expressing their moral, ethical, socio-cultural, and political values (Micheletti et al. 2006). Thus, consumption has become an outlet for people to express their power in contemporary industrial societies. Micheletti (2004) argues that political consumerism can take three forms: negative, positive, and public discursive. Negative political consumerism is the oldest form and the one that is most often associated with consumer action. It is when consumers decide not to purchase a product, and more recently not shop at a specific retailer, to protest some aspect of how the product is produced or a store's business (e.g., labor) or procurement practices. Positive political consumerism is when consumers purchase specific products to encourage certain production or business products. Examples include purchasing fair trade products and organic foods, and shopping at retailers that pay fair wages, support communities, and/or have socially just and environmentally sustainable procurement practices. While this form of political consumerism has been practiced for quite some time, only recently has it become a prominent form of consumer agency that potentially may impact markets.[9] Public discursive consumerism is a relatively new form of consumer action, which goes beyond purchasing or non-purchasing. In other words, it is acting from the position of a consumer, but extending consumer action beyond the act of purchasing. The example given by Micheletti, and perhaps the best example, is the case of a student trying to have "sweatshop" printed on his Nike sneakers during Nike's short-lived program where people could customize their sneakers (Peretti and Micheletti 2006). In practice, political consumers tend to engage in all three forms of political consumption simultaneously.

[9] Historically, positive consumerism has taken the form of "buy" campaigns, such as "Buy American" and "Buy Union."

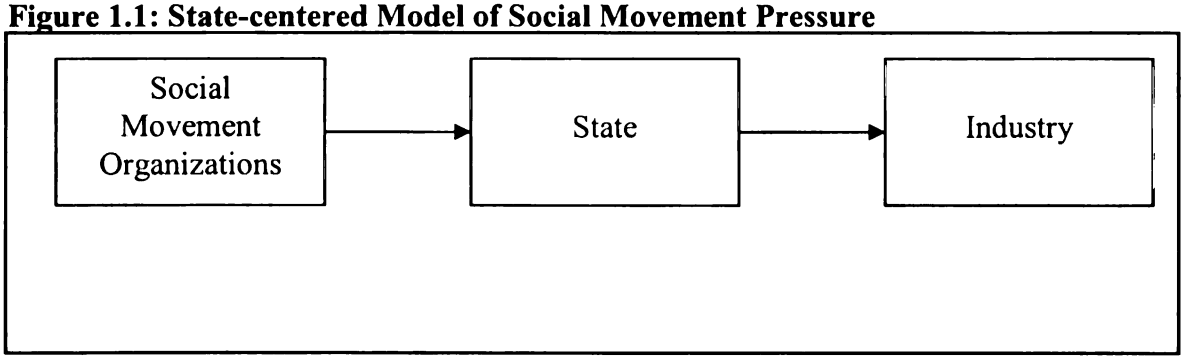
While both positive and negative forms of consumerism have been practiced for quite some time, there is an important difference between older and more recent instances of their use. Where previously political consumerism was nearly always organized by social movement organizations, today it may or may not be. Thus, previously it tended to be in response to something specific (e.g., poor labor practices), and often temporary. For example, once union workers got better wages, consumers could then resume buying a given product. However, today, political consumerism is often the outcome of people expressing values, and is often not a collective form of action organized by a social movement organization. Additionally, it also tends not to be temporary, but rather a permanent part of people's lifestyles. For example, many drinkers of fair trade coffee will always drink fair trade coffee.

The politicization of consumers, even a relatively small number of them, creates potential opportunities for social movements. First, the more consumers care about how goods are produced, the safety and quality of products, and the symbolic attributes attached to products, the more receptive they may be to various social movement claims. In this way, the more politicized consumers the easier it may be for social movement organizations to mobilize them. In doing so, they may be able to transform individual consumer efforts into collective action (Holzer 2006). Second, social movement organizations can potentially use consumers as a point of leverage to pressure corporations. Through mobilizing consumers, or the threat to do so, movement organizations may be able to pressure both lead actors, and thus, upstream actors as well, in commodity chains.

*The Market-Turn by Social Movements*

The traditional strategy used by social movements has been to pressure governments to enact legislation on their behalf (See Figure 1.1). For example, in the US, the women's movement pressured the government to enact equal-opportunity laws; the civil rights movement pressured the government to pass laws against segregation and discrimination; and the environmental movement pressured government to put into place laws protecting the environment. However, the political, economic, and socio-cultural changes discussed above have significantly affected opportunities for social movements. On the one hand, neoliberal reforms, globalization, and the shift towards governance, have led to a decline in political opportunities for many social movements. Thus, traditional state-centered strategies may not have the same effectiveness that they once had. On the other hand, the emergence of buyer-driven commodity chains, economies of quality, and politicized markets and consumers are generating opportunities for social movement organizations to use market-based campaigns (Bartley 2003; Newell 2000).

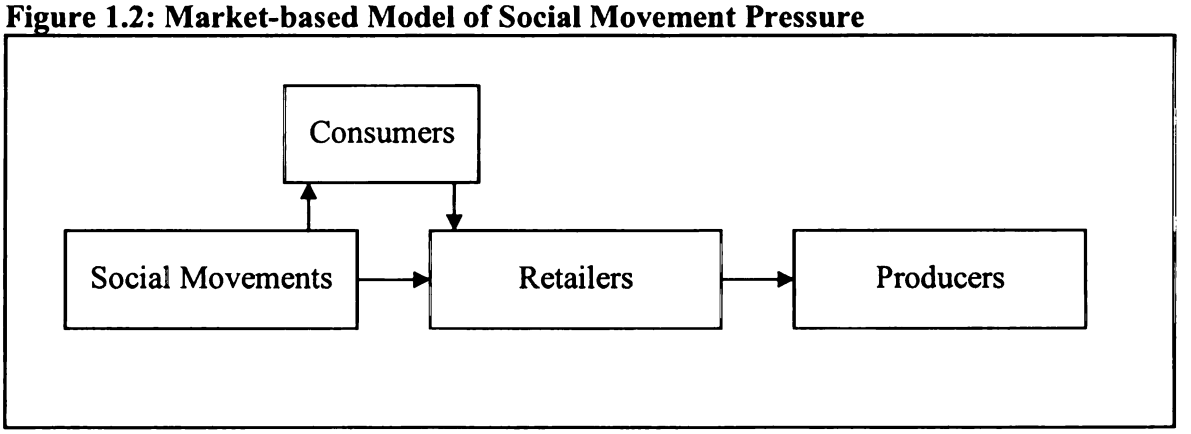
**Figure 1.1: State-centered Model of Social Movement Pressure**




The objective of market-based campaigns is to achieve change through the use of the market, as opposed to the state. For example, to encourage more sustainable agricultural practices, social movement organizations might try to increase market demand for organics. The idea is that through shifting the market, movement

organizations can force upstream actors to make changes in their production practices (Bailey et al. 2003). Thus, with the use of market-based campaigns, social movement organizations are bypassing the state, and directly targeting companies. In other words, they are directly targeting those actors who are the perpetrators of many social and environmental problems and injustices. Given the weakened regulatory power of states, and the increased power of transnational corporations, Newell (2000, 120) argues that targeting companies now often "offers the prospect of higher 'returns'" than pressuring the state. In other words, social movements may be able to achieve greater change at a faster pace through the market and pressuring corporations than through the political system and pressuring the state. The outcome is a new model of social movement activism (See Figure 1.2).

**Figure 1.2: Market-based Model of Social Movement Pressure**




**Analytical Framework**

Sociologists have outlined three factors that significantly influence social movement outcomes. They are the availability of resources (McCarthy and Zald 1977), political and economic opportunities (McAdam 1999; Schurman 2004), and the ability of social movements to connect with people (i.e., framing) (Benford and Snow 2000; Snow

et al. 1986). Combining each of these factors into a single analytical framework provides a useful approach for examining the use of market-based campaigns by social movements.

McCarthy and Zald (1977) examine why social movements develop in some instances and not others. Arguing that there is always structural strain and injustices in society, movements do not necessary arise in response to these. If this was the case, there would be the continual emergence of new social movements. Rather, they argue that social movements tend only to emerge when organizations are able to mobilize resources (i.e., money, time, and knowledge) and enroll supporters. In other words, for them, the key to understanding the emergence of social movements, as well as movement outcomes, is the ability of movement organizations to raise money and get people to both support and donate their time to the movement. Enrolling actors with specialized knowledge, such as scientists or lawyers, is also important to movement emergence and outcomes. Additionally, McCarthy and Zald's (1977) resource mobilization approach also focuses attention on intra-movement relationships. This is because studying how movement organizations mobilize resources requires analysis of the power relationships and internal politics of the movement.

While a resource mobilization approach provides important insights into social movement mobilization, its focus on resources is too narrow (Lo 1992; McAdam 1999; Robnett 1997). In his landmark study of the civil rights movement, McAdam (1999) argues that movement scholars have to examine external factors, as well as internal ones. Specifically, in addition to a movement organizations' ability to mobilize resources, McAdam (1999) argues that "political opportunities" also affect movement emergence

and outcomes. By political opportunities, McAdam (1996; 1999) means the structure of the political system and the alignments of power (i.e., divisions of power among political parties). In other words, he theorized the structure of the state and its political makeup influenced both movement emergence and outcomes. While McAdam does not examine the implications of the changes to the state resulting from neoliberal restructuring, political globalization, or the emergence of systems of governance for social movements, the political opportunities approach is a useful framework for such analysis.

However, the political opportunity structure approach is too narrow in that it only focuses on the state (Goldstone 2004), especially given the changes that have taken places to states over the last 25 years. Furthermore, with social movements increasingly turning to the market to try to achieve their goals, the political opportunity approach needs to be broadened to also include market and economic opportunities. In using market-based campaigns, it is not so much the structure of the state or political alignments, but rather the structure of an industry or economic sector that is important.

Attempting to theorize this shift towards non-state centered campaigns and strategies by social movements, several scholars have re-conceptualized the idea of political opportunities to also include economic opportunities (Pellow 2001; Schurman 2004). The most developed effort to date is Schurman's (2004) "industry opportunity structures" framework. She argues that there are four components of an industry or economic sector that influence social movement mobilization and outcomes. First, is the economic and competitive behavior of firms. This includes how firms operate (e.g., low cost, high turnover vs. high cost, lower turnover) and protect and expand market share, among other things. Second, is the relationship among actors in an industry or

commodity chains. Put differently, how commodity chains are organized affects the opportunities available to social movements. For example, in most instances, social movement campaigns would want to target lead actors, as they tend to have the most power and thus, have influence over other actors in the chain. Third, is industry and corporate cultures. Some industries or companies may be more open to ideas of social responsibility and environmental sustainability than others. Lastly, is the character of the goods or services themselves. In other words, some goods are more conducive to market-based campaigns than others. Reasons that some goods might be better suited than others for market-based campaigns include greater consumer concern (e.g., baby food), the negative impacts more visible (e.g., forest clear cuts), and easy to switch to alternatives (e.g., eating cherries instead of grapes), among others.

The last factor that influences movement emergence and outcomes is the ability of movement organizations to convince actors that there is a problem, that the problem is social in character, that action is needed, and that they can make a difference. This process is what social movement scholars refer to as "framing" (Benford and Snow 2000; Snow et al. 1986). In other words, for a social movement to take hold and be successful, organizations have to render a problem meaningful and develop a collective identity around that problem. Framing is a strategic process by social movement organizations. It is "deliberate, utilitarian, and goal directed... and frames are developed and deployed to achieve specific purposes" (Benford and Snow 2000, 624). Thus, events and actions are framed in specific ways, with some aspects highlighted more than others. Framing is an active, ongoing process, as frames need to be changed and reinforced as conditions change. Additionally, frames are often contested and challenged by movement

opponents, as well as the media, forcing them to be renegotiated (Benford and Snow 2000).

Social movement scholars have identified three specific practices undertaken by social movement organizations: diagnostic, prognostic, and motivational framing. Diagnostic framing is where movement organizations identify the problem and its causes; prognostic framing is the articulation of possible solutions; and motivational framing encourages people to take action (Benford and Snow 2000). Additionally, social movement organizations utilize several practices meant to "amplify," "bridge," and/or "extend" their frames. For example, a movement organization might frame an issue slightly differently when they are addressing consumers, politicians, or representatives of industry. Scholars of social movements refer to this process of selective highlighting as frame amplification (Benford and Snow 2000). Frame bridging entails a social movement trying to link its cause with other causes (Benford and Snow 2000). For example, anti-nuclear organizations partook in frame bridging when they sought to connect their frames with those of environmental, peace, and community organizations (Joppke 1993). Frame extension is where a movement organization seeks to extend its frames to include issues that it perceives to be of importance to potential supporters (Benford and Snow 2000). Examples of frame extension might include the labor movement extending its frames to include economic development in less industrialized countries or the environmental movement extending its frames to include social justice. Each of these practices represents an effort by movement organizations to broaden their potential support base and enroll larger numbers of supporters.

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Social movement scholars have also identified several criteria that frames must meet if they are to successfully accomplish their tasks. Specifically, for actors to believe a frame, it has to be consistent, credible, and resonate with actors (Benford and Snow 2000). Consistency refers to congruency between the beliefs, claims, and actions of a social movement organization. Credibility relates to the fit between the frame and actual events. Lastly, frames must have salience with actors. That is, actors have to care about the frame them and be able to relate to it.

Taken together, these three approaches to understanding social movements – resource mobilization, political and economic opportunities, and framing – form an analytical framework for understanding the sustainable seafood movement. In using market-based campaigns, the sustainable seafood movement has had to mobilize resources, sought to take advantage of the political and economic opportunities available to it, and engaged in framing. How well organizations are able to do each of these will significantly affect the outcomes the movement is able to achieve.

**Organization of the Dissertation**

The remaining parts of this dissertation are organized in the following way. In chapter 2, I outline my role as a researcher and the research practices I used in producing this dissertation. I first discuss why I selected the sustainable seafood movement as my case study, and why it is an ideal case for examining the use of market-based campaigns by social movements. Next, I describe how I approach research and what my objectives are as a researcher. Then, I provide an overview of the research process. Here, I focus on the reasons why I selected qualitative research methods and how they are best suited

for the kinds of research I conducted. I also discuss each of the three qualitative methods that I used in my data collection: (1) semi-structured interviews, (2) participant observation, and (3) content analysis of movement materials. Lastly, I outline how I analyzed my data.

In chapter 3, I examine the political economy, consumption, governance, and environmental impacts of seafood. The primary purpose of herein is to provide the backdrop for my analysis of the use of market-based campaigns by the sustainable seafood movement in subsequent chapters. However, this chapter also fills gaps in the agrifood and environmental literatures, as researchers in both areas have largely neglected seafood. Specifically, I examine the historical development of the seafood industry, the character of current seafood production, the current organization of the seafood industry (i.e., commodity chains), the consumption of and marketplace for seafood, the governance of seafood, and the environmental impacts of the current practices of the fishing and aquaculture industries.

In chapter 4, I present an overview of the sustainable seafood movement. Specifically, I discuss the factors behind the turn to market-based campaigns by marine and ocean conservation organizations, the organizations that make up the sustainable seafood movement, and the various campaigns that the movement has undertaken. This overview serves as the foundation for my analysis of the use of market-based campaigns by the sustainable seafood movement in the remaining parts of this dissertation.

Chapter 5 examines my first research question: what are the political and/or economic opportunities driving the shift towards market-based campaigns by social movements? Faced with few political opportunities, I examine how organizations in the

sustainable seafood movement are trying to take advantage of economic opportunities by using market-based campaigns. In particular, I identify three sets of economic opportunities: opportunities presented by the structure of the seafood industry, seafood consumption, and the agrifood marketplace.

Chapter 6 focuses on my second research question: what are the practices involved in implementing market-based campaigns? Specifically, I examine how organizations in the sustainable seafood movement have experimented with a diverse array of strategies, including chef and restaurant, retailer, consumer, and media -ocused strategies. I also discuss the various frames that the movement has used, and the ways organizations have sought to communicate these frames to different audiences. A key finding is that the inclination towards non-confrontational approaches by most organizations in the sustainable seafood movement has funneled them towards the use of specific strategies, frames, and forms of messaging in implementing market-based campaigns.

Chapter 7 examines my third research question: what do movements hope to achieve through the use of market-based campaigns? I argue that while movement organizations often have a diversity of objectives that they want to achieve, they can be categorized into two general kinds: (1) shifting consumption patterns and the market for seafood, and (2) achieving policy change with respect to fishing and aquaculture. First, I document how some movement organizations believe that through affecting demand and the market, they can have impacts on upstream practices, and make fishing and aquaculture more sustainable. Second, I examine how other movement organizations view shifting demand and the market as insufficient, and consider the value of market-

based campaigns to be more in their capability to pressure industry and governments and get regulations put into place. Consequently, I argue that the objectives of market-based campaigns are often broader and more diverse than commonly thought.

Chapter 8 is structured around my fourth and last research question: how has the use of market-based campaigns evolved with time? Focusing on how the implementation of social movement campaigns is an on-going process, I examine how the use of market-based campaigns by organizations in the sustainable seafood movement has shifted with time. In particular, I discuss how marine and ocean conservation organizations have restructured their use of market-based campaigns in reaction to: (1) obstacles they have encountered, (2) the responses of the seafood industry, and (3) evaluations of campaign effectiveness. I argue that the outcome is a shift away from campaigns focused on consumers, chefs and restaurants, and single species towards working more with large buyers.

In chapter 9, building on my empirical chapters, I return to the fundamental question that initially motivated me in undertaking this dissertation: given the political, economic, and socio-cultural changes of the last quarter century, how can social movements continue to be a powerful force in society? For the sustainable seafood movement, as well as many other social movement organizations and activists, the answer has been through the market. My analysis of the sustainable seafood movement tends to confirm the potential effectiveness of market-based campaigns for social movements. However, it also raises some concerns with respect to how they are currently being used. In concluding, I examine these concerns, and suggest potential ways that social movements might begin to tackle them.

## Chapter 2. Methodology

This chapter outlines my role as a researcher and the research practices I used in producing this dissertation. First, I discuss why I selected the sustainable seafood movement as my case study, and why it is an ideal case for examining the use of market-based campaigns by social movements. In the second section, I describe how I approach research and what my objectives are as a researcher. Third, I explain why I selected qualitative research methods and how they are best suited for the kinds of research I conducted. Fourth, I provide an overview of the three methods I used for data collection, which are interviews with representatives of movement organizations, participant-observation, and content-analysis of movement materials. Lastly, I outline how I analyzed my data.

### Selection of the Sustainable Seafood Movement

The sustainable seafood movement is an ideal movement from which to study why and how social movements are increasingly turning to market-based campaigns in order to achieve their goals.[10] First, the majority of marine and ocean conservation organizations have shifted from using state-centered campaigns to almost entirely market-based ones.[11] As a result, for many marine and ocean conservation organizations, market-based campaigns are now the centerpiece of their efforts. Because of this, I argue that the sustainable seafood movement makes an excellent case study of the use of market-based campaigns by social movement organizations.

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[10] I characterize the sustainable seafood movement as a subset of the marine and ocean conservation movement. Namely, it consists of those organizations that are using market-based campaigns. This distinction is discussed in more depth in Chapter 4.

[11] The reasons why marine and ocean conservation organizations have shifted towards market-based campaigns is discussed in chapters 4 and 5.

Second, the sustainable seafood movement has received very little attention from sociologists thus far. Compared to other environmental movements, marine and ocean conservation efforts have been understudied. Thus, little is known about their campaigns, strategies, and goals.[12] This lack of research on the sustainable seafood movement represents a significant gap in the social and environmental movement literature. This is because the movement itself is important and deserves similar scholarly attention as other social and environmental movements. Additionally, research on the sustainable seafood movement will serve as an important addition to the literatures on social and environmental movements, and allow further comparative analysis across different social movements.

Lastly, as part of my focus is on the political and economic opportunities available to marine and ocean conservation organizations, research on the seafood industry is necessary. This is an additional contribution of this dissertation, as the seafood industry – both fishing and aquaculture – has received little attention from agrifood and environmental sociologists. This is a troublesome gap in the sociological literature for several reasons. First, the consumption of seafood is rising in the US and is also quite significant globally. Second, aquaculture is the fastest growing form of food production (FAO 2004) and thus, is an increasingly important component of the global agrifood system. Third, both fishing and aquaculture are responsible for significant environmental transformations (Jackson et al. 2001; Pauly et al. 1998; Goldburg and Naylor 2005). Thus, I argue that incorporation of the fishing and aquaculture industries into agrifood and environmental sociology is an urgent priority.

[12] The reasons for this disparity in research are discussed in chapters 3.

**My Standpoint and Research Objectives**

This study is grounded in a constructivist understanding of knowledge and science. For me, science is a socially, culturally, politically, and economically mediated knowledge producing practice (Barad 1996; Clarke and Fujimura 1992; Haraway 1997; Latour 1987). Operating from this perspective, in doing research, I am generating partial, situated knowledge (Haraway 1991; Harding 1991). In other words, my findings are not the only account and analysis of the sustainable seafood movement. Rather, they represent a single narrative, which reflects my theoretical commitments, objectives as a researcher, and social location. Therefore, it is important to clarify my social location and the motivations underlying my work as a scholar before moving on to my analysis and findings. This position is congruent with more reflexive understandings of research and knowledge in sociology (Burawoy 2004; 2005).

My research is driven by a political and intellectual interest in issues of social justice, food, and the environment. In other words, while one objective of my research is to contribute to sociological understandings, another objective is to contribute to more fair, just and sustainable agrifood systems and environments. Thus, I approach my research not just as a scholar, but also as an activist.

As an activist-scholar my research is informed by two critical research traditions. The first is the recently re-emergent idea of "public sociology" (Burawoy 2004; 2005). Burawoy revisits two long debated questions in sociology, and science more generally, which are, "Knowledge for Whom" and "Knowledge for What." Historically, sociologists have answered these questions in a variety of ways, with answers ranging from basic knowledge for fellow sociologists to applied knowledge for public use.

However, in recent times, the emphasis has shifted to knowledge for fellow sociologists, or what Buroway terms "instrumental knowledge" (i.e., sociological knowledge). While acknowledging the importance of instrumental knowledge, Buroway seeks to reinvigorate public sociology, which generates different forms of knowledge, what he calls "reflexive knowledge." By reflexive knowledge, Buroway means knowledge that is undergirded by social values and commitments and seeks to further social projects. Thus, in doing research from the position of a public sociologist, I seek to produce research that is of use to both academics and non-academics, and contributes to dialogue about political and moral questions and the kind of societies and environments we want to inhabit.

The second tradition is advocacy research. Advocacy research can be considered a specific kind of public sociology.[13] Pellow (2002, 17-18) argues that advocacy research is "the practice and theory of making the scholarly enterprise more application oriented, more sustainable, and more relevant to communities." In researching the sustainable seafood movement, one of my aims is to generate knowledge that is of use to movement actors. My hope is that they can use my findings in ways that will make the movement more effective than it currently is.[14]

The above understandings of science, research, and sociology necessitate a rethinking of objectivity and validity. The conventional understanding of valid research and objective science was that it was conducted in a value-free manner (Merton 1973). However, such an understanding of objectivity and validity is in contradiction to that of

[13] Burawoy (2004) notes that public sociology can take many forms, ranging from policy sociology to participatory action research.

[14] I am cognizant of the fact that opponents of the movement can try to use my research to thwart the movement. While this is always a danger in doing research, it should not prevent one from doing research or the open dissemination of one's findings. Rather, the researcher should work to ensure that her/his findings are put to uses that they feel are ethically correct and productive.

the position of public sociology and advocacy research. Research in the tradition of public-sociology and advocacy research is by design value-laden. Therefore, in place of traditional notions of objectivity and validity, I propose the idea of "strong objectivity" (Harding 1991) for judging my research, and research more generally. Strong objectivity entails making those factors historically considered external in evaluating the validly of scientific claims — e.g., cultural positions, background beliefs, political agendas, and economic concerns — as an inherent and legitimate part of science (Harding 1991). For these reasons, I have tried to be up front with respect to my standpoint, and expect my findings to be judged from such a standpoint. In other words, my research and findings should also be read and judged based on my commitments to social justice and environmental sustainability, in addition to the technical practices of my research (e.g., sampling, coding, etc.).

**Qualitative Research Methodology**

Given the objectives of my research, and the character of the sustainable seafood movement, I used qualitative research methods to conduct this study. Qualitative methods are particularly well suited for in-depth inquiry into social practices and processes, and the ways that knowledge is constructed (Patton 2002). As the focus of my study is on (1) the ways movement actors understand current social, political, and economic conditions, (2) the processes and practices of implementing market-based campaigns, and (3) different understandings of market-based campaigns, qualitative research methods are an appropriate approach. Additionally, I selected qualitative research methods because they enable me to be reflexive in my research. Put differently,

with qualitative methods, I was able to revise my data collection practices and analytical framework as new insights and findings emerged (Ragin 1994).

Furthermore, because the sustainable seafood movement is composed of a relatively small number of actors, qualitative research methodologies had several advantages over other approaches. First, because my sample was relatively small, I was able to interview many of the key actors in the sustainable seafood movement. Thus, using qualitative methods enabled me to get in-depth information from participants, and allowed for an open-ended data gathering process. Second, given the small size of my sample, a survey and quantitative analysis would not have yielded statistically significant results.

I used a case study approach to conduct my research on the sustainable seafood movement, as my research focused on a single environmental movement that is defined by its objectives (i.e., conservation of marine life and environments) and its use of market-based campaigns. Like all case studies, the boundaries of the case are both defined by the case itself (i.e., the movement) and the process of inquiry (Stake 2003). In other words, how the movement is bounded in this study is partially an outcome of my research questions and objectives. Thus, the movement organizations and campaigns that are the focus of this dissertation were selected according to my interests in how social movement organizations are using the market.

Case studies can produce two kinds of findings. The first is intrinsic findings. These are findings that pertain to only to the specific case that is being examined. The second is instrumental findings. These are generalizable beyond the specific case (Stake 2003). My study of the sustainable seafood movement is designed to be both intrinsic

and instrumental in form. That is, my objective is to improve understandings of the sustainable seafood movement (i.e., intrinsic), and generate data on the use of market-based campaigns by social movements. Thus, many of my findings are directly related to the sustainable seafood movement. However, as a case study, my research also contributes to the emerging literature on the use of the market by social movements.

## Methods

To collect my data on the sustainable seafood movement I used three qualitative methods. The first was interviewing. I conducted semi-structured interviews with various key actors in the sustainable seafood movement. The second was participant observation of movement activities. The third was content analysis of movement materials, such as reports, brochures, and websites. How I implemented each of three methods is discussed in the following sections.

### *Interviews*

I conducted 31 in-depth interviews with representatives of marine and ocean conservation organizations. Interviews were conducted in person in all instances but three, which were conducted over the phone. Interviews ranged in length from twenty minutes to three hours, with the average interview lasting between one hour and one hour and a half. All interviews were tape recorded, except for two phone interviews. All tape recorded interviews were transcribed, but not entirely verbatim. Where direct quotes were not necessary, interviewees' comments were transcribed in note form. To the extent that the law allows, I have promised to keep the identities of interviewees confidential.

My sample consisted of the organizations that make up the sustainable seafood movement. As discussed above, organizations active in the sustainable seafood movement were identified using two criteria: (1) whether they were active in marine and ocean conservation issues and (2) whether they were using market-based strategies. All participants in the study were representatives with organizations in the sustainable seafood movement. In most instances, one representative from each organization was interviewed. However, in a few cases, multiple representatives with the same organization were identified. For example, the executive director and a campaign coordinator were both interviewed in some instances. Participants ranged from executive directors to campaign coordinators to organizers. Where organizations were smaller, executive directors tended to be interviewed. With larger organizations that had multiple campaigns, campaign coordinators and/or organizers tended to be interviewed. No attempt was made to ensure a random sample of participants; instead, a purposive sampling method was used. Participants were viewed as key informants and selected with the aim of maximizing the diversity of standpoints. This approach was used because it yields as complete of a picture of the issues as possible (Strauss and Corbin 1998). Interviewing continued until a representative from nearly all key movement organizations was interviewed. There were several organizations that I was unable to interview, as they were unwilling to participate. However, towards the end of my fieldwork, saturation (i.e., no new information is being uncovered) was achieved.

Initial access was gained through a professional contact. I had a contact who was working for a movement organization involved in the sustainable seafood movement. This contact introduced me to people at several other organizations in the movement.

This enabled me to gain initial access to the movement. Additionally, I identified the various organizations active in the sustainable seafood movement through web research, and sent out letters to relevant people at those organizations informing them of the study. While I received a few responses to my initial letter, it was not until I began to conduct interviews and was able to get interviewees to contact fellow movement actors that I was able to establish contact with the majority of movement actors. Thus, participants were primarily located and selected based on a snowball sampling technique. Given the relatively small size of the movement this worked quite well, as movement actors tend to know each other and are in frequent contact with each other.

Interviews were conducted during three periods of field work. As my research was centered on a movement that is (inter-)national in character, as opposed to a regional issue or topic, conducting interviews entailed visiting multiple sites. The first set of interviews were conducted on the west coast of the US and Canada in June and July 2005. The second set of interviews was conducted on the East Coast of the US in December 2005 and January 2006.[15] Most often interviews were conducted at movement organizations' offices. However, they were conducted in cafes and restaurants in some instances. A third set of interviews was conducted at the Seafood Choices Summit in Seattle, Washington from January 29-31. The Seafood Choices Summit is a meeting organized by the Seafood Choices Alliance that seeks to bring together marine and ocean conservation organizations, the seafood industry, and the food service sector (e.g., retailers, restaurants, chefs, and institutional buyers) to discuss how to make seafood

[15] Given that the focus of the sustainable seafood movement is on marine life and environments, most movement organizations tend to be located on or near costal areas. Thus, in the middle of the US there were few organizations engaged in marine and ocean conservations issues at the time of my research. Additionally, national environmental organizations, such as Environmental Defense and the World Wildlife Fund, tend to have their headquarters in cities in the eastern US.

more sustainable. As the meeting is widely attended by movement organizations, I was able to interview several movement representatives from different parts of the US at the meeting.

*Participant-observation*

The second method I utilized in conducting my research was participant-observation. While in the field, I attended several movement-related activities and events, including public presentations and movement meetings, such as the Seafood Summit. These experiences enabled me to view movement organizations in action, and observe their interactions with a variety of actors, including consumers, food service representatives, members of the seafood industry, and government officials. Such opportunities were particularly useful for understanding how movement participants undertake framing and communicate with different audiences. Furthermore, attendance at movement-related events enabled me to engage in informal conversations with many members of movement organizations. These conversations provided additional information and often reinforced the data gathered in official interviews.

*Content-Analysis*

The last data collection method I used was content analysis of movement materials. Included in the analysis were press releases, newspaper advertisements, reports prepared by movement organizations, brochures, newsletters, websites, and other forms of public documents. As such documents are often concrete forms of movement frames and messaging, they were particularly useful in understanding the frames and

messages movement organizations were using. Analysis of movement documents was also useful for understanding the organizational structure, missions, and official goals of movement organizations. Documents were primarily accessed through organization websites. However, in some cases, participants also provided documents.

**Analysis**

In my analysis, I used both inductive and deductive approaches. My coding scheme incorporated codes based on my research objectives, review of relevant literatures and analytical framework, and codes that emerged from the data itself. This approach enabled me to both integrate my analysis with existing studies of social movements and market-based campaigns and include ideas and themes raised by my research participants.

First, I developed an initial coding scheme based on my research objectives, review of the literature, analytical framework, and interview notes. I then coded a representative sample of eight interviews using this coding scheme. I used this initial coding to tighten up my coding scheme. This included adding new codes based on the interview data, eliminating codes that turned out to be irrelevant, and re-organizing the coding scheme to eliminate repetitiveness. All interview data, notes from participant-observation, and relevant movement materials was then analyzed using the finalized coding scheme. The coding was done using NVivo, a qualitative software program.

As this study is a qualitative study, detailed statistics are not reported. As semi-structured interviewing was used, the questions asked were not standardized across all participants. Additionally, given the sample size, providing detailed statistics would be

of little significance. Lastly, as the focus of this dissertation is on how movement actors understand current movement opportunities and market-based campaigns, and the practices of implementing market-based campaigns, reporting detail statistics would not increase the significance of the findings. Rather, I report general patterns among interviewees' responses. For example, I note instances where there is general consensus or significant disagreement among interviewees.

## Chapter 3. The Production, Consumption, and Governance of Seafood: Fishing, Aquaculture, and Environment

To understand the opportunities of which marine and ocean conservation organizations are attempting to take advantage through their use of market-based campaigns and strategies, knowledge of the seafood industry, market for seafood, and the governance of fishing and aquaculture are necessary. This chapter provides an overview of each of these areas. Such an overview will serve as a backdrop for my subsequent analysis of the sustainable seafood movement and its use of market-based campaigns.

This chapter also aims to fill a gap in the sociological literature on food and the environment by analyzing the political economy of seafood, and its environmental implications. Agrifood sociologists have long neglected fish. Perhaps, this is because, unlike nearly all the other foods consumed by humans, fish were largely a "wild" animal that was captured and not grown, until recently. However, natural resource sociologists have also paid little attention to fish. Rather, they have tended to focus on other resources, such as minerals, gases, and timber. When social scientists have examined fisheries, they have examined just a few specific issues, namely access and allocation, traditional ecological knowledge, and the social construction of nature (Clausen and Clark 2005). Thus, with the exception of recent work by Mansfield, (2003; 2004), Clausen and Clark (2005), and Wilkinson (2006) on fishing and, research by Skladany and Harris (1995), Vandergeest et al. (1999), and Phyne and colleagues (Phyne and Mansilla 2003; Phyne et al. 2006) on aquaculture, there is little research on the political economy of fishing and aquaculture and its relationship to the ecology of the oceans. This chapter aims to fill this gap in the literature on seafood, and, in doing so, bring to

attention the critical position that fish now occupy in today's global agrifood system, and the significant ecological transformations resulting from both fishing and aquaculture.

The first part of this chapter provides an overview of the seafood industry's historic development through a discussion of its technological development. Here, I trace the shift in fishing from a low-tech local and regional industry to a high-tech global one. I also discuss the emergence of aquaculture and the increasingly prominent role it occupies in the seafood industry. Second, a brief overview of the global character of current seafood production is provided. Third, using commodity chain analysis (Gereffi and Koreniewicz 1994; Ponte and Gibbon 2005; Raikes et al. 2000), the current organization of the seafood industry is outlined. Here, the focus is not only on how goods are produced, processed, and distributed, but also the relationships between different actors, and the flow of power through seafood commodity chains. Fourth, the consumption of and marketplace for seafood are examined. Fifth, the governance of fishing and aquaculture is discussed. Lastly, I examine the social and environmental impacts of the current practices of the fishing and aquaculture industries. To do this, I draw on theoretical frameworks in environmental sociology, namely the treadmill of production (Gould and Schnaiberg 1994; Schnaiberg 1980), second contradiction (O'Connor 1988; 1991), and ecological modernization (Mol 1995; Mol and Spaargaren 2000).

**Seafood: From a Subsistence Good to a Global Commodity**

Fish have long been an important food source for people, particularly those who lived in costal areas or along major rivers. Various kinds of fish were an important component of many early European, indigenous, and settler societies. Here, fishing was primarily for subsistence and confined to locally available species. For many indigenous communities, fishing was also regulated by various customs and rituals (Taylor 1999). The effect was that the impact of fishing on fisheries was limited by social rules, technological limitations, and consumption. While there were instances of local exploitation, fisheries were largely healthy as demand was limited, many fisheries remained out of reach, and, in the case of some indigenous communities, the catch was regulated to ensure the long-term sustainability of the fishery (Kurlansky 1998).

While pockets of subsistence fishing still exist throughout the world, fishing has become a capitalistic global industry. The shift from fish as a source of subsistence to fish as a commodity is uneven spatially, temporally, and by species. For example, cod was the first fish species around which a global industry developed. In part, this is because cod was found abundantly throughout the northern Atlantic. Its abundance made it relatively affordable, making it an important food for rapidly industrializing Europe. Cod also played a crucial role in the establishment of North America, as it was one of North America's first export commodities (Kurlansky 1998). In addition, just as important, cod was an ideal fish for salting, which made its transportation and storage feasible prior to the invention of refrigeration or canning. The industrialization and commodification of other fish species occurred somewhat later, as technologies for preserving fish, such as canning, refrigeration, and canning, had first to be developed.

Thus, to understand the evolution of commercial fishing, it is necessary to examine technology and the role it has played in transforming fishing practices.

## Technologies of Fishing

The development of technologies is both a technical and social process. In other words, the context in which technology is developed, and the actors that participate in the process, in addition to the technical and material, influence the kinds of technologies that get developed and adopted (Bijker 1995; Law 1987). Thus, the kinds of technologies that developed around fishing are as much an outcome of political, economic and cultural factors as they are an outcome of scientific knowledge.

Technological development in commercial fishing has been driven largely by three imperatives: 1) to harvest as much fish as possible as fast as possible; 2) find ways to transport fish to markets; and 3) to develop solutions to problems of declines and/or collapses in fisheries. As we will see, the introduction of new technologies into fishing has altered not only how fish are caught, but also how and where it is consumed, as well as the ecologies of oceans and rivers. Additionally, current fishing and aquaculture technologies are also contributing to the over-capitalization of parts of both industries.

### *Catching Fish*

The capacity to harvest fish has increased tremendously over time. Technological innovations in catching fish have occurred along three lines: ship technology, gear for catching fish, and technology for finding fish. The first major technological innovation that began the revolution of fishing was the invention of the schooner in 1713. A

schooner is a small, two-masted vessel that was significantly faster than previous kinds of fishing boats. The schooner allowed cod fishermen to make trips to and from fishing grounds much quicker, and thus increased fishing capacity (Kurlansky 1998).

However, more revolutionary was the switch from wind to engines as the source of power for fishing boats. Like most early fishing technologies, the switch to steam power occurred first in Europe, where the fishing industry was already quite competitive due to the large number of countries fishing the same waters (Kurlansky 1998). The first steam-powered trawler was built in Hull in the United Kingdom in 1881, and by the 1890s not a single sailing trawler was still in use on the North Sea (Kurlansky 1998). The transition from sail to steam took place considerably later in New England, but by 1918 the transition was well underway (Kurlansky 1998). This switch to steam-power engines had several effects. First, it further increased the speed at which ships could travel, and thus ships could now cover more area and travel to and from port faster. Second, it enabled ships to become larger. This would have future implications, as it would make processing on ships possible. Third, it enabled the use of new kinds of fishing gear, which could harvest more fish at faster pace. With the switch to diesel fuel following World War II, the benefits gained from engine power were further intensified, as the relatively cheap cost of diesel fuel made operating even larger ships possible (Wilkinson 2006).

The second set of technological innovations that revolutionized commercial fishing was the development of new kinds of gear and methods to catch fish. Originally, catching fish was largely a passive activity in that you dropped your lines or set your nets and waited for the fish to bite or swim into your net (Kurlansky 1998; Taylor 1999). In

the oceans, such methods limited the amount of fish that could be caught. In rivers, significant quantities of salmon could be caught using nets or water wheels, but only during the two times a year when salmon were spawning. However, the continual evolution of technologies has shifted how fish are caught. Catching fish went from a passive to active act, where fish are actively sought out and rounded-up. The outcome is that large quantities of fish are now able to be caught in increasingly short periods of time.

The first significant technological development in fishing gear technologies was the development of longlines by the French in 1815 (Kurlansky 1998). A longline is essentially a long fishing line that trails behind a boat for anywhere from a half mile to fifty miles and has hooks with bait every three feet or so (Kurlansky 1998). The idea of a longline was not new. However, up until the French began to use them, their use was not feasible, as they require large amounts of bait, which was not readily available or cheap enough to make the use of longlines economical. Today, there are approximately "100,000 miles of line and 5 million baited hooks set each day throughout the world's oceans" (Safina and Brownstein 2004). Longlines are used to catch both pelagic fish, such as tuna and swordfish, and bottom dwelling fish, such as cod and halibut.

Second, with the shift from sail to engine powered ships, a new technique emerged for catching fish: trawling. Trawling involves towing a net behind a ship, which ensnares fish. Soon after steam engines began to be used, bottom trawlers, which go right along the sea floor, quickly gained in use, as they enabled fishermen to catch huge quantities of cod and required no baitfish. By 1895, trawlers were the standard fishing method used by the British North Sea fleet, and by 1918 their use was becoming common

in New England (Kurlansky 1998). As ship size increased, so did the size of trawling nets. The largest trawlers can now capture 400 tons of fish at a time (Wilkinson 2006). Trawlers are primarily used for bottom fish, such as cod, flounder, and shrimp, and mid-water species, such as sardines. The technique of trawling has also been adapted to catch various kinds of shellfish, such as scallops, clams, and oysters. In such cases, the net is replaced with a metal "rake," which stirs up the shellfish in the mud and then captures them in a bag that floats behind the rake.

While engine powered ships made it possible to cover more area and access previously inaccessible fishing grounds, and longlines and trawlers made it possible to catch large quantities of fish, locating fish was still largely guesswork. The third technological innovation in catching gear was the development of technologies that aided in finding fish. Following World War II, war technologies were adopted by fishermen and adapted to finding fish. Specifically, "SONAR, designed to detect enemy submarines, became an effective fish finding device. RADAR allowed safe operation in dense fog. LORAN permitted pinpoint navigation to fish hide-outs with push-button ease" (Safina and Brownstein 2004, 75-76).[16] In other words, as a Gorton's [leading supplier of frozen fish sticks at the time] spokesperson stated, "... fishing is no longer the hit-or-miss proposition it was 50 years ago" (Kurlansky 1998, 141).

[16] SONAR uses radio waves, and RADAR and LORAN electromagnetic waves to detect objects and measures distances.

*Getting Fish to Market*

The cumulative effect of the above technological developments and adaptations was that unprecedented levels of fish were being harvested from the world's oceans. However, supply was outstripping demand, as getting fish to markets that were not in coastal areas remained a problem. Given that there was no way to preserve fresh fish, it could only be sold in coastal communities. For a significant period of time, the only method for preserving fish was curing, either through drying or smoking (Jarvis 1988; Kurlansky 1998). However, not all fish were suitable for curing, and not all people enjoyed cured fish. Furthermore, prior to the invention of the railroad, there was limited capacity for transporting products from coastal areas inland.

Greater amounts of fish being harvested, coupled with limited markets, spurred efforts to develop new ways to preserve and transport fish. Canning was the first technology that revolutionized how fish could be preserved and transported. With canning, fish could be preserved in meal size containers that were easily transportable. Additionally, canning fish reduced processing time, as curing fish often took considerable time. Canning of seafood began to emerge in Europe and the US during the early to mid 1800s. The first canning operation in the US is believed to have started in 1819 in New York City and canned oysters and other seafood products (Jarvis 1988).

Where canning became most prominent, and had the greatest effect on fisheries, was with pacific salmon. Canning exploded on the Columbia River, then one of the largest commercial salmon fisheries in the world, in the mid to late 1800s. In 1866 there was one cannery, which packed 272,000 pounds of salmon. By 1875 the number of canneries had increased to fourteen and they were packing 25 million pounds per year. In

1884, a year after the arrival of the railroad, which immediately created a national market for salmon, there were 37 canneries packing 42 million pounds of salmon (Taylor 1999). Thus, canning, in conjunction with the development of the railroads, had the effect of making seafood available throughout the US, with some of it being relatively affordable. By 1938, canned seafood accounted for 39 percent of the US seafood market, with salmon and tuna being the two largest canned seafood products (Jarvis 1988). To date, canned seafood continues to be an important commodity, with 763 million pounds of canned seafood products produced in 2004, with a market value of approximately $966 million (Johnson 2005).

Cold chain technologies were the next major technological innovation that revolutionized supply chains for food. While ice was used to store and ship fresh seafood, there were limits to this method. The invention of refrigerated railroad cars and then mechanical refrigeration rendered both the problems of storing and shipping fresh fish obsolete. Refrigerated railroad cars were first used in the US in the 1840s and by 1860 were being used to ship seafood (Krasner-Khait 2000). Next, the invention of mechanical refrigeration made possible cold storage warehouses. This enabled the storage of larger quantities of seafood for long period of times. Refrigeration technology has since been adapted to trucks, airplanes, and ships, making the global movement of fresh and frozen seafood possible. Lastly, the development and widespread adoption of refrigerators made it possible to store fresh and frozen fish in one's home (Giedion 1948). Thus, with the development of cold chain technologies that could keep fish cold from the time it is caught to the time it was consumed, fresh fish became accessible to a large percentage of people in industrialized countries, regardless of where they lived.

The development of cold chain technologies also made possible several technological developments in the fishing industry itself. With refrigeration, fillets of fish could now be stored and shipped. In 1921, filleting machinery was introduced in New England, and by 1930 128 filleting plants were operating in the region (Kurlansky 1998). When later combined with freezing technology, a new seafood product was born: "fish fillets." Fish fillet technology also enabled the use of a greater diversity of fish, as fillets from white fish are not easily distinguished (Kurlansky 1998). This became important as cod became depleted; other fish could be substituted, often without consumers knowing it. In 2004, approximately 574 million pounds of fish fillets were produced in the US, worth approximately 918 million dollars (Johnson 2005).

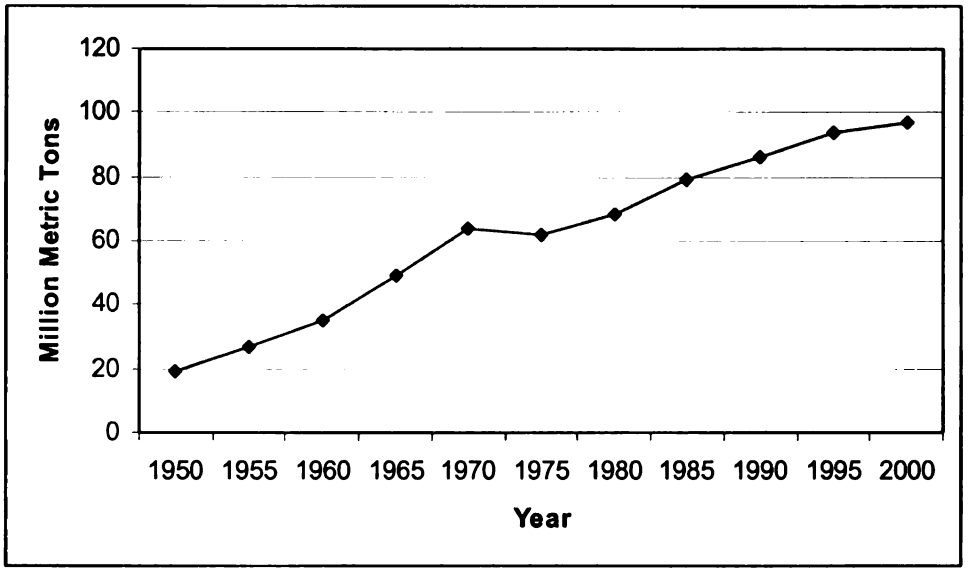
Soon after frozen fillets became a mass produced commodity, fish processors developed what is perhaps the most successful seafood product to date: frozen fish sticks. Processors were able to take fillets, freeze them together, and then cut them into sticks. Fish sticks were a relatively cheap seafood product that revolutionized fish consumption in that they made cooking fish quite simple, as the advertisement by Gorton's from the 1980s illustrates:

> Thanks to fish sticks, the average homemaker no longer considers serving fish drudgery. Instead, she regards it as a pleasure, just as her family have come to consider fish one of their favorite foods. Easy to prepare, thrifty to serve and delicious to eat, fish sticks, it can be truthfully said, have greatly increased the demand for fish, while revolutionizing the fishing industry (qtd. in Kurlansky 1998, 138).

Fish sticks became immensely popular, as total US production of them tripled between 1960 and 1970 (Kurlansky 1998). They remain an important seafood product today, with approximately 57 million pounds being produced in the US in 2004 (Johnson 2005).

All of the above technological innovations came together with the development of factory trawlers in the 1950s. Factory trawlers are massive ships that not only catch fish, but process and freeze them right on board. The ships tend to be 450 feet long or longer, can bring in 400 tons of fish in one haul, and operate twenty-four hours a day, with the nets being emptied every four hours on average (Kurlansky 1998; Wilkinson 2006). By the 1970s factory trawlers had come to dominate much of the fishing industry, with the Soviet Union operating 400 trawlers, Japan 125, Spain 75, and the UK and France 40 each (Wilkinson 2006). While technological innovations were making fishing more efficient, the number of fishing operators also continued to expand. The size of the global fishing fleet continued to expand until the early 1990s, when expansion leveled off at 1.3 million decked vessels and 2.8 million undecked vessels (FAO 2004). As technologies increased fishing capacity and the ability to store, process, and transport fish, the quantity of fish harvested as greatly expanded. Total global catch has increased nearly five-fold from 19.2 metric tons in 1950 to 96.8 metric tons in 2004 (see Figure 3.1) (FAO 2006).

**Figure 3.1: Total Global Commercial Fisheries Catch**




(FAO 2006)

*From Catching Fish to Producing Fish: The Rise of Aquaculture*

Governments and managers of fisheries have sought to use technology as a solution to declining fish stocks. Rather than taking on the political, economic, and sometimes cultural factors undergirding declining fish stocks, the most prominent approach has been to try and find ways to artificially enhance fish stocks (Taylor 1999). Consequently, since the 1850s, fish culture has been a prominent component of fishery management. By the beginning of the 20th century, federal management of fisheries centered around the artificial propagation of fish through the use of hatcheries, which had sprung up across the US. However, much of early fish propagation may have done more damage than good, as the biology of many fish species was not well understood. Furthermore, in many instances, artificial propagation was driven by economics. That is, those fish that were most economically valuable were reproduced the most. In the Pacific Northwest, particularly the Columbia River, the result was the propagation of a small sub-set of the genetic population of salmon. In this case, as well as many others, artificial

propagation led to changes in the environments of river ecosystems and decreases in the genetic diversity of certain fish species (Taylor 1999).

Hatcheries continue to play a critical role in US fish management. And, while debates continue regarding the artificial propagation of fish, the science of fish culture has improved significantly. Today, there are 70 national fish hatcheries operating in the US. Additionally, many states also operate their own hatcheries. Much of hatchery production is oriented to sport fish, such as trout. However, hatcheries do play an important role in some commercial fisheries, most notably salmon. For example, in Alaska, the largest salmon fishery in the world, hatcheries released over 1.4 billion salmon in 2005 (White 2006). Thus, hatchery production continues to supplement natural production in some fisheries in order to keep them commercially viable.

However, the artificial propagation of fish only represents the first step in technoscientific efforts to overcome problems of declining fish stocks. Today, not only are fish being bred, they are also being raised in captivity. With the advent of aquaculture, it has become possible to control the whole production process from the egg to the dinner plate for certain species of fish. In other words, fish are now being farmed in ways similar to that of land-based animals, such as cows, pigs, and chickens.

It needs to be noted that the idea of aquaculture is not new. For example, in parts of Asia, low-tech forms of aquaculture have been practiced for thousands of years. Traditional forms of aquaculture tend to involve omnivorous fish, few inputs, are relatively small scale, and are often part of a larger integrated agriculture-aquaculture system. The production of omnivorous fish using low-intensity aquaculture continues to be the most common form of aquaculture practiced (Economist 2003). However, low-

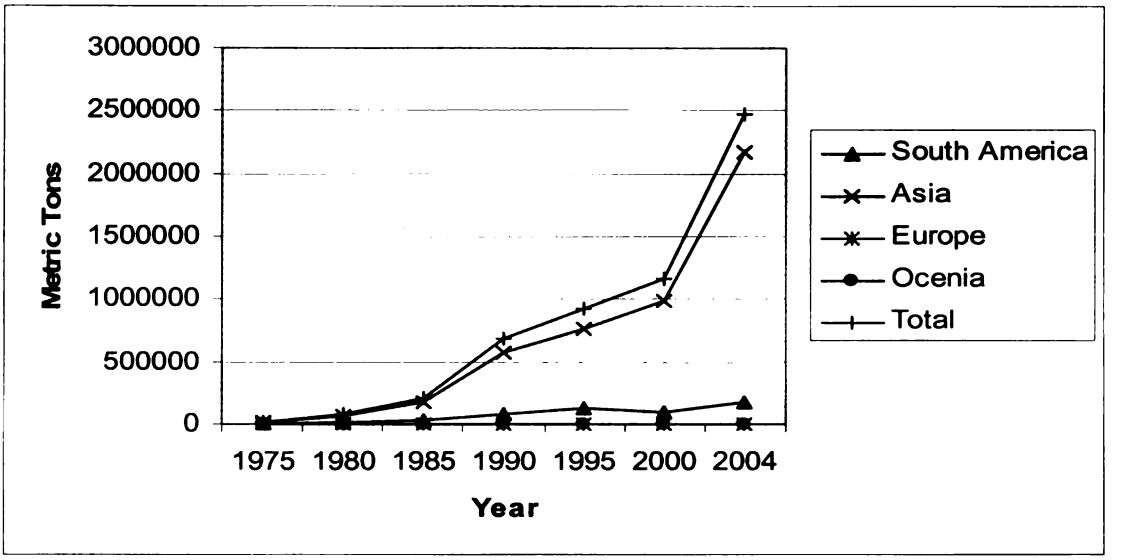
intensity forms of aquaculture may soon be a thing of the past, as there is a significant push to "modernize" aquaculture (Public Citizen 2005).

The push to intensify aquaculture has primarily come from two directions. The first is the effort to intensify shrimp aquaculture in Asia. The second is the development of salmon aquaculture. Seeking to replicate the productivity gains of the Green Revolution, beginning in the 1970s the idea of a Blue Revolution emerged. Essentially, the promises of the Blue Revolution are analogous to the Green Revolution: to feed the world through the intensification of aquaculture. One of the first targets of the Blue Revolution was shrimp production, which at the time was almost exclusively located on the Asian continent(Skladany and Harris 1995). A key force behind the intensification of shrimp were development institutions, most notably the (1) international development banks, such as the World Bank, Asian Development Bank, the Inter-American Development Bank, and the African Development Bank; (2) bilateral aid agencies from many industrialized countries, including Japan (the Overseas Economic Cooperation Fund and the Japan International Cooperation Agency), the US (the US Agency for International Development), Europe (the UK Department for International Development and the Norwegian Agency for Development Cooperation), and Canada (the Canadian International Development Agency); and (3) multilateral development assistance agencies, such as the Food and Agriculture Organization (FAO), the United Nations Development Program, and the Commission of the European Community (Public Citizen 2005). While there is no complete record of all the support that flowed from the North to South to promote the expansion and intensification of shrimp aquaculture, according to the FAO's Fisheries Project Information System, from the mid-1970s onwards the World

Bank and other regional banks alone provided loans of nearly US$ 1.3 billion for aquaculture projects, with the bulk going to shrimp aquaculture (Public Citizen 2005). Thus, in the case of shrimp, aquaculture was framed not only as a way to feed the world's growing population, but also as a way for less developed countries to achieve development (Hatanaka 2006).

Consequently, the productivity of shrimp aquaculture expanded rapidly with the intensification of practices. Intensification includes monocultures (i.e., raising one kind of shrimp and only raising shrimp), higher pond densities, synthetic feeds, and the use of various chemicals to regulate ponds and shrimp. Paralleling the intensification of shrimp aquaculture has been its geographical expansion. It has not only expanded throughout the costal regions of many Asian countries, but has spread to other continents, most notably Latin America and, more recently, Africa. The result has been a massive increase in the amount of farmed shrimp being produced. Global production of shrimp from aquaculture was increased from 1,325 metric tons in 1950 (all of which was in Asia) to 2,476,023 metric tons in 2004 (see Figure 3.2). Consequently, shrimp is a now one of the most traded seafood commodities, and is the most popular seafood in the US (Johnson 2005).

**Figure 3.2: Global Shrimp Aquaculture Production**



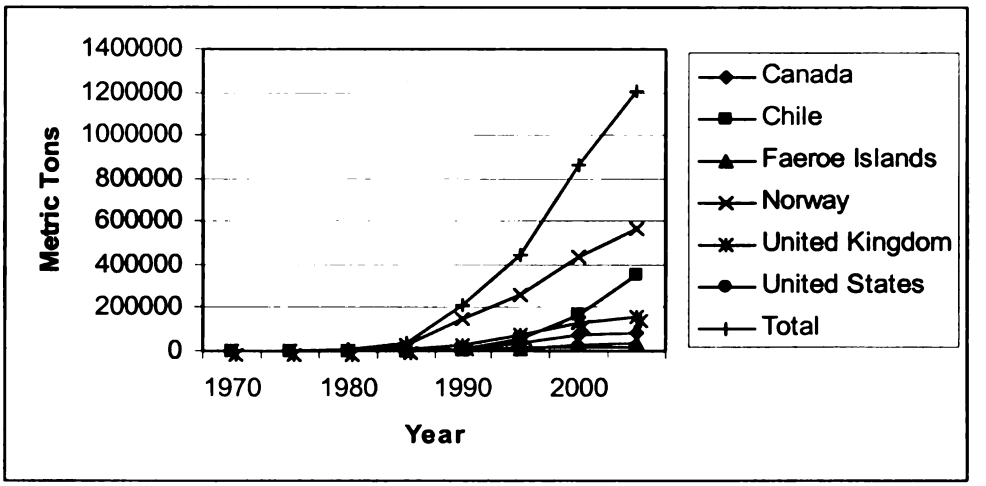

(FAO 2006)

The second push to intensify aquaculture began in Norway as a response to declining fisheries (Phyne et al. 2006). Norway was able to develop an aquaculture system for Atlantic salmon. Farming Atlantic salmon departs from other forms of aquaculture in two important ways. First, salmon are carnivorous fish. Prior to the adaptation of aquaculture to salmon, most farmed fish were omnivores. Thus, salmon have to be fed other fish. Second, salmon are raised in net-pens in open bodies of water, most often fjords, bays, or other protected bodies of water. As we will see, these two aspects of salmon aquaculture has generated a significant amount of controversy, and are, in part, responsible for much of the opposition that salmon aquaculture faces.

Salmon aquaculture remained a relatively small industry, mostly located in Norway, until the mid to late 1980s when the industry began to quickly grow. From 1992 to 2002, the "global production of farmed salmon roughly quadrupled in weight" (Goldburg and Naylor 2005, 21). Production sites have also expanded to include Chile,

the Pacific and Atlantic coasts of Canada, parts of the United Kingdom, and the United States (see Figure 3.3).

**Figure 3.3: Global Salmon Aquaculture Production**




(FAO 2006)

Largely as a result of these two pushes, aquaculture is currently the fastest growing sector in the global agrifood system (FAO 2004). In 1970, aquaculture only produced 3.9 percent of seafood (White et al. 2004). In 2005, 40 percent of all seafood consumed directly by humans was from aquaculture (Goldburg and Naylor 2005). If the current growth rate of ten percent per year continues, aquaculture you will overtake capture fisheries within a decade (Greenberg 2006 (June 18)). While shrimp and salmon are the species most commonly identified with aquaculture in the US, a host of other seafood products are also produced using aquaculture (see Table 3.1).

**Table 3.1: US Aquaculture Production, Top Ten Species by Weight in 2002**

| Species Group | Quantity (Metric tons) | Percent of total aquaculture Production |
|---|---|---|
| Carp and other cyprinids | 16,692,147 | 41.9 |
| Oysters | 4,317,380 | 10.8 |
| Miscellaneous marine mollusks | 3,739702 | 9.4 |
| Clams, cockles, arkshells | 3,430,820 | 8.6 |
| Salmons, trout, smelts | 1,799,383 | 4.5 |
| Tilapias | 1,505,804 | 3.8 |
| Mussels | 1,444,734 | 3.6 |
| Miscellaneous marine mollusks | 1,348327 | 3.4 |
| Shrimp, prawns | 1,292,476 | 3.2 |
| Scallops, pecterns | 1,226,568 | 3.1 |

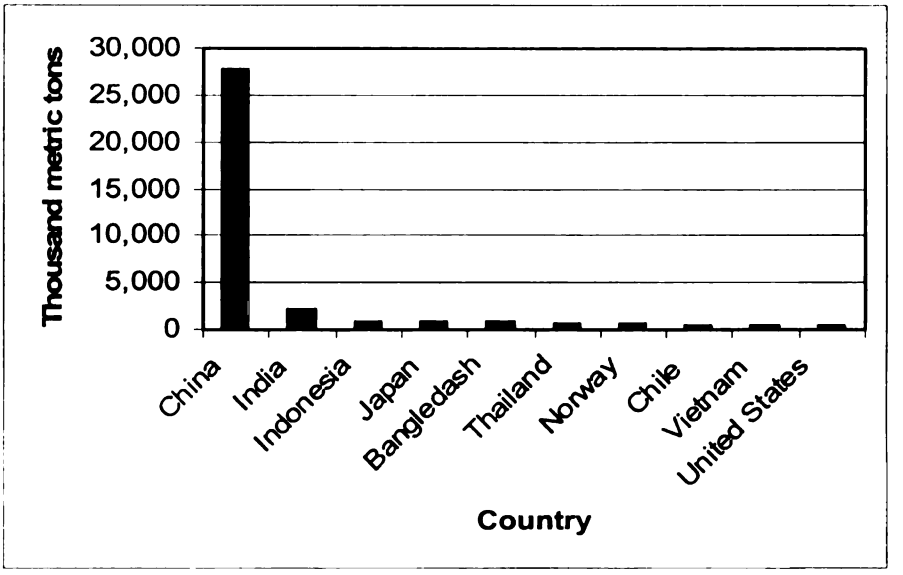
(FAO 2004)

There are now also efforts underway to expand aquaculture to several new species of fish. Aquaculture companies and several governments, most notably Norway, are investing in research to overcome previous biological and technoscientific boundaries to domestically producing such fish as cod, halibut, and tuna (Greenberg 2006 (June 18)). These efforts are partially driven by declining fisheries and rising demand. However, they are also driven by declining profitability in salmon aquaculture, largely as a result of the massive increases in its production over the last decade (Economist 2003; Phyne et al. 2006). Thus, aquaculture is going to become a more prominent component of the global agrifood system in the future.

Development of aquaculture in the US has lagged behind several other nations. In 2002, the US was the tenth largest aquaculture producer in the world (see Figure 3.4). While aquaculture continues to expand in the US, the pace of expansion is well below the world average of ten percent per year (FAO 2004). In 2005, there were 4,309 aquaculture facilities operating in the US, and total sales of aquaculture products were over one billion dollars (National Agricultural Statistics Service 2006). Catfish is by far

the leading aquaculture product produced in the US, followed by oysters, clams, and trout (National Agricultural Statistics Service 2006).

**Figure 3.4: Top Ten Aquaculture Producing Countries in 2002**




(FAO 2004)

Aquaculture in the US has been partially stifled by a lack of quality sites. This is particularly true for brackish water aquaculture, as there has been significant opposition to aquaculture by many coastal communities (Goldburg and Naylor 2005). Despite the slow growth of aquaculture, the US government is seeking to significantly expand aquaculture production in the US. Partially driven by an escalating trade deficit in seafood that is currently around $10 billion, the US government has a stated goal of raising the value of domestic aquaculture production to $5 billion by 2025 (Nash 2004; Skladany et al. 2005). To accomplish this, the US government is trying to establish offshore aquaculture. That is, the US wants to open up its exclusive economic zone (EEZ), which is all ocean waters between 3 and 200 miles off the US coast, to aquaculture. This would enable aquaculture to bypass coastal communities and states, and place the federal government in charge of regulating aquaculture. The bill to

establish offshore aquaculture was introduced to Congress in June of 2005. However, the bill remains under discussion, as it faces significant opposition from environmentalists and parts of the fishing industry.

**Seafood: A Global Industry**

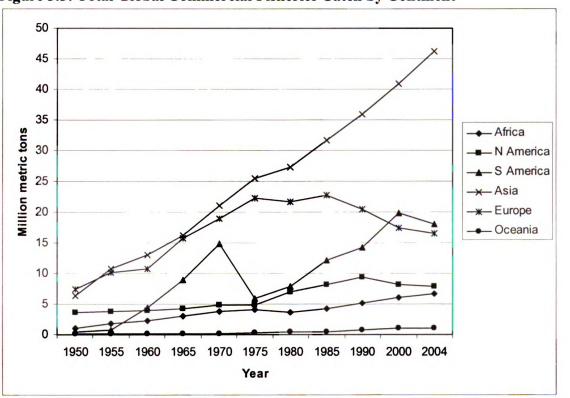
The above technological innovations have enabled seafood to become a global industry. Today, seafood is produced in all parts of the world, and is traded throughout the world.[17] In 2002, total world trade of fish and fish products was $58.2 billion (export value). This is an increase of 45 percent from 1992 (FAO 2004). Shrimp is the most widely traded seafood product in terms of value, accounting for 18 percent of traded seafood commodities, followed by groundfish (10%), tuna (9%), and salmon (8%). Fishmeal accounted for four percent of traded fish commodities and fish oil one percent (FAO 2004)

Technological innovation, combined with declining fish stocks and legislation imposing limits on fishing in parts of the North, have also led to the expansion of commercial fishing into the waters of less industrialized countries (see Figure 3.5). At the same time, a lack of regulation, combined with development initiatives, has led to the intensification and expansion of aquaculture in less industrialized countries. The result is that seafood products are now the leading food and agricultural export for less industrialized countries. In 2000-2001, less industrialized countries exported approximately $33 billion in seafood products, which is more than coffee, cocoa, tea, spices and nuts, cotton, and sugar combined (Roheim 2005). China is now the world's

[17] "Produced" refers to both seafood products from fishing and aquaculture. Given the way that fisheries are managed and often supported by artificial propagation, fishing is not just a form of extraction, but also production.

largest producer of capture fish, followed by Peru and then the US (FAO 2004).[18] China is also the world's largest exporter of fish and fish products, having overtaken Thailand in 2002 (FAO 2004). While less industrialized countries have become the largest producers of seafood, developed countries have become the leading importers. In 2002, global imports of fish and fish products were $61 billion, a record high, with industrialized countries accounting for 82 percent of imports (FAO 2004). The EU is the largest importer, followed by Japan, and then the US.

**Figure 3.5: Total Global Commercial Fisheries Catch by Continent**




(FAO 2006)

[18] China's position in the global political economy is becoming increasingly fuzzy, as it is rapidly industrializing and has very high rates of economic growth. In this dissertation, it is treated as a less industrialized country, as this is how it tends to be classified by the FAO.

**Seafood Commodity Chains**

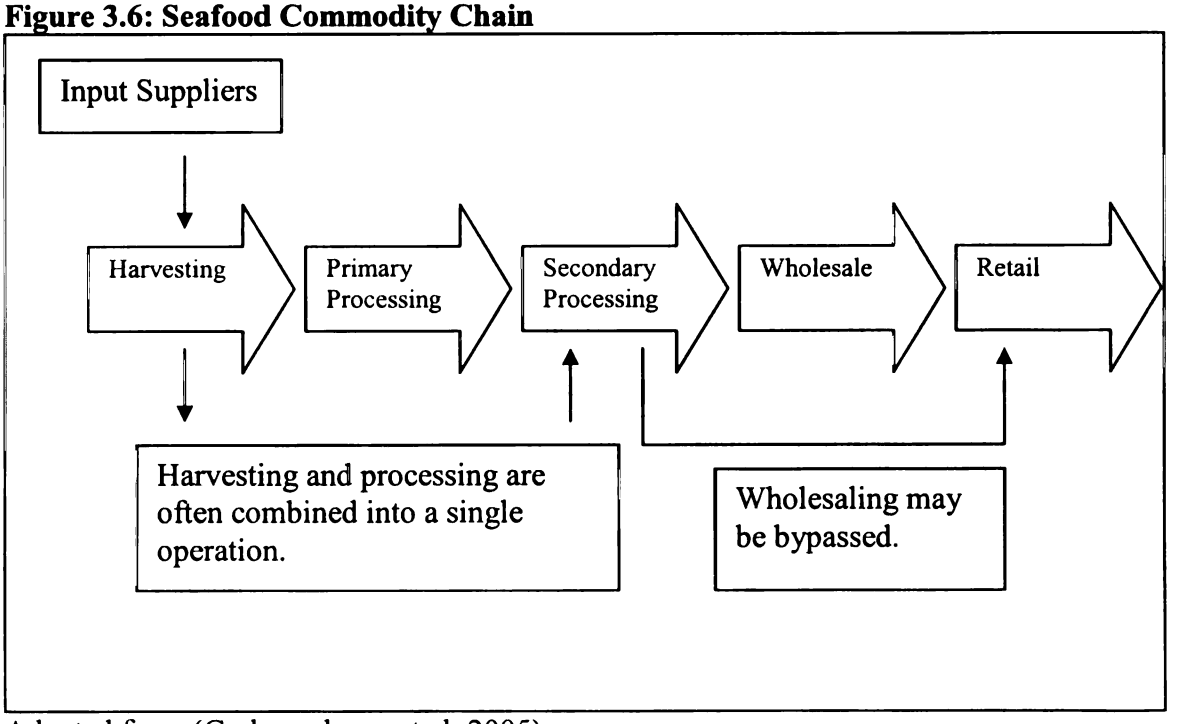
The seafood industry is organized into commodity chains, many of which are now global. A commodity chain is a set of "interorganizational networks clustered around one commodity or product, linking households, enterprises, and states to one another within the global economy" (Gereffi and Koreniewicz 1994, 2). Research on commodity chains focuses on the ways that the production of a commodity is organized. Specifically, commodity chain analysis examines the ways that various actors are organized and linked together, governance mechanisms used to regulate the chain, institutional frameworks, and the geographical scope of the chain (Raikes et al. 2000).

The literature on commodity chains divides them into two ideal types: producer-driven and buyer-driven. Products that are capital- and/or technology-intensive, such as automobiles and computers, tend to take the form of producer-driven commodity chains. In contrast, buyer-driven commodity chains tend to develop in economic sectors where production is not capital- or technology-intensive, and where large retailers, brand-name merchandisers, or trading companies are the lead firms. Whereas in producer-driven commodity chains profits tend to be gained from scale economies and technological advances, in buyer-driven commodity chains profits tend to be derived from design, sales, and marketing (Gereffi et al. 1994). However, while the producer versus buyer distinction is useful, Raikes et al. (2000) caution that in practice commodity chains often exhibit characteristics of both. This is the case for many of the commodity chains that compose the seafood industry. Additionally, Raynolds (2004) notes that not all producer-driven or all buyer-driven commodity chains are the same. She argues that who are the lead actors, the amount of power lead actors have, and internal organization and practices

all vary (Phyne and Mansilla 2003). This is the case with seafood commodity chains. They are often a hybrid of both producer- and buyer-driven commodity chains, with the lead actors, and the amount of power they have, varying by the kind of seafood and its characteristics.

All seafood commodity chains tend to take a similar general form (see Figure 3.6). First, fish are harvested. This is accomplished via either aquaculture or fishing. Second, fish are processed. Processing is either done all together or divided into multiple steps. This often depends on what the final product is. Third, finished seafood products are shipped to wholesalers, who then distribute fish to various retail outlets. However, with some seafood products, retailers are now directly contracting with processors. Lastly, retailers distribute the fish to consumers. While this general model holds for most seafood, there are internal variations by different kinds of seafood.

**Figure 3.6: Seafood Commodity Chain**




Adapted from (Gudmundsson et al. 2005)

Seafood commodity chains can be divided into two types. The first are those chains that produce bulk seafood commodities, such as fish sticks, frozen fillets, farmed salmon, and shrimp. These commodity chains tend to be dominated by large multinational corporations that control significant market shares. For example, 20-30 percent of the world fish catch is controlled by four or five firms (Wilkinson 1992). In the US, the top three frozen fish and seafood companies control approximately 66 percent of supermarket sales, while one frozen shrimp supplier, Private Label, controls 55percent of supermarket sales (Johnson 2005).[19] Salmon aquaculture has also experienced significant consolidation and concentration over the last decade (Cox 2004; Phyne and Mansilla 2003; Phyne et al. 2006). In 2000, four companies – Stolt, Marine Harvest, Pan Fish and Heritage – produced over half the farmed salmon sold in North America (Redmayne 2000). However, Marine Harvest acquired Stolt in 2005, and in March of 2006 Pan Fish bought Marine Harvest. The result is that Pan Fish now controls 20 percent of global farmed salmon production (Pan Fish 2006).

In bulk seafood commodity chains, large multinational corporations often control multiple parts of the commodity chain. In the production of fish sticks, harvesting and processing are often combined on factory trawlers, which are owned by the large companies. In much of salmon and shrimp aquaculture, production and processing, and even now the production of feed, are all done by the large companies. Thus, in much of the bulk seafood commodity market, production is vertically integrated with a single firm controlling large portions of the commodity chain. Bulk seafood commodity products also tend to be sold directly to retail outlets, distributors (i.e., Sysco), and large restaurant

[19] However, these numbers exclude Wal-Mart, which is the largest food retailer in the US.

chains, as opposed to going through wholesalers. In other words, you have large producers/processors interacting with large retailers, distributors, and restaurant chains.

The second type of seafood commodity chain is those for more specialized products. These tend to be for fresh fish of lower volumes, such as tuna, halibut, and wild salmon, among many others. Here producers tend to vary in size from small to medium, and processing is sometimes integrated and sometimes not, with processors varying greatly in size. There is also a mix of importers, exporters, and wholesalers, and distribution occurs through various channels, including very large distributors (i.e., Sysco), small specialized distributors, markets, and direct marketing. These chains tend to be both local and global, with many places having their own dedicated distribution networks. In many instances, because these chains often deal with highly perishable products and smaller volumes, they have been able to resist takeover by the large multinational seafood companies. In contrast to the integrated bulk commodity seafood chains, these chains are quite fragmented. Thus, upstream producers and processors often have limited power to negotiate with more large-scale downstream actors, most notably supermarkets, large distributors, and restaurant chains (Glitnir 2006).

Following other commodity chains in the global agrifood system, such as produce, seafood commodity chains are becoming more buyer-driven (Glitnir 2006; Gudmundsson et al. 2005; Phyne and Mansilla 2003; Phyne et al. 2006; Wilkinson 2006). As discussed in chapter 5, retailers have become the lead actors in the global agrifood system. This has enabled them to exert increasing amounts of control up commodity chains. For example, in the seafood industry, retailers are increasingly specifying standards that seafood products must meet and setting prices (Phyne et al. 2006).

Retailers have also become key players in the market differentiation of seafood through various value-added fresh seafood programs. For example, supermarkets have been key actors in promoting fresh farmed salmon, and turning it into one of the most popular seafood products in the US (Wilkinson 2006).

However, while seafood commodity chains have many similarities with other agrifood commodity chains, there are more constraints on the power of downstream actors in seafood commodity chains compared to other food and agricultural commodity chains. That is, the structure of the seafood industry limits the amount of control that retailers are able to exert on upstream actors. First, the highly capitalized character of bulk seafood commodity chains limits the influence that that retailers can exert on capture fisheries (Wilkinson 2006). This is because the massive technological investment by upstream actors limits their flexibility and thus, the demands that retailers can make. Second, demand for seafood products from capture fisheries tends to outstrip supply (Merkl 2006). For those seafood products that cannot be produced using aquaculture, there are ecological constraints on supply. Third, aquaculture is increasingly dominated by a few large multinational corporations, which may place limits on the power of retailers, as they have little choose between suppliers. Thus, while seafood commodity chains are becoming more buyer-driven, their form will likely continue to differ from other food and agricultural commodity chains.

**The Marketplace for Seafood**

Seafood is a commodity that is consumed globally. In 2002, humans consumed approximately 100.7 metric tons of seafood. Excluding China, seafood consumption was 65.5 million metric tons (FAO 2004).[20] Global per capita consumption of seafood has increased from 9 kg per year in the early 1960s to 16.2 kg in 2002; excluding China it has increased to 13.2 kg (FAO 2004; World Health Organization). Per capita consumption of seafood tends to be significantly higher in developed countries than less developed countries. However, in many less developed countries, a higher percentage of animal proteins often comes from seafood (FAO 2004)

In the United States, the consumption of seafood is on the rise. The volume of seafood consumed in the US has increased from 3.92 billion pounds (edible weight) in 1995 to 4.85 billion pounds in 2004. Per capita consumption is also at an all time high of 16.6 pounds, up from 12.5 pounds in 1980 and 15 pounds in 1995 (Johnson 2005). Paralleling the increase in seafood consumption is an increase in consumer expenditure on seafood. In 2004, total consumer expenditure on seafood was $61.7 billion, an increase of approximately $20 billion in eight years (Glitnir 2006). Approximately $19 billion of consumer expenditures were at retailers. The average household spent $124 per year on seafood for home consumption in 2003, with the households in the west and northeast spending the most, and Asian households spending 2.5 times the national average (Johnson 2005). The foodservice industry (e.g., restaurants and noncommercial institutions, such educational institutions and hospitals) accounted for $42.8 billion in consumer expenditures on seafood, which is an increase of over 16 billion since 1996

[20] China's fishery statistics are quite contested, as evidence indicates that China has been inflating its production statistics (FAO 2004).

(Johnson 2005). Here, seafood chain restaurants, such as Red Lobster, are responsible for a significant percentage of seafood sales. Thus, while both the retail and restaurant markets for seafood are increasing, significantly more seafood continues to be consumed outside of the home.

Shrimp is now the most popular type of seafood in the US, followed by canned tuna, salmon, pollock, catfish, and tilapia (which was not even in the top 10 as of 2000) (Johnson 2005). Seafood is most often purchased fresh or frozen (with 71% of the market share in 2004) followed by canned and then cured seafood products (Johnson 2005). Most of the growth in the seafood market has been in fresh and frozen seafood products, as the market for canned and cured products has remained fairly steady over the last decade (Glitnir 2006).

Seafood is clearly becoming a greater part of American's diets. In particular, aquaculture, especially shrimp and salmon, has increased people's access to seafood and lowered the price of certain seafood products. Consequently, whereas shrimp and fresh salmon were once luxury items, they are now everyday foods for many people. Increased consumption of seafood is also being driven by health concerns, taste, and variety (Johnson 2005). The effect is not only the increased consumption of seafood, but also changes in the kinds of seafood consumed and the form in which seafood is consumed. In other words, people are eating more fresh fish, and a greater diversity of kinds of fish. The effect is that the market for seafood will likely become both more standardized and differentiated in the future (Hatanaka et al. 2006). On the one hand, as aquaculture continues to expand, what were once luxury items will, most likely, continue to become bulk commodities. On the other hand, as American's palate continues to diversify (Kamp

2006), and fine dining continues to prosper, demand for and consumption of a diverse array of fish will further expand.

**Governance of Fisheries and Aquaculture**

The regulation of oceans and fisheries has lagged behind the management of terrestrial industry and agriculture. In part, this is a result of the oceans' status as a commons (Juda 2002). It is also a partial outcome of a lack of knowledge regarding ocean ecosystems (Clausen and Clark 2005). Thus, until relatively recently, regulation of fisheries has been minimal. Furthermore, in instances where there has been regulation, regulations have tended to be designed to maximize harvest, and not the conservation of fisheries. Similarly, aquaculture also has been relatively unregulated. The outcome has been significant overfishing and degradation of ocean ecosystems.

Initial efforts to regulate fisheries and the oceans were driven by efforts to limit competition from foreign fishing fleets. The first major regulation of the oceans was the establishment of the EEZ, which was largely an outcome of nations wanting to protect their fisheries and natural resources (i.e., oil under the ocean floor) from foreign competitors (Kurlansky 1998). While the idea dates back to the 1820s, it was not until 1945 when then US President Truman re-conceptualized it as a way to protect offshore oil that EEZs began to take their current form. However, the major driving force behind its expansion was Iceland, which in an effort to protect its declining cod stocks from foreign fishing fleets, extended its EEZ to four miles in 1950, followed by 12 miles in 1958, 50 miles in 1972, and finally 200 miles in 1975 (Kurlansky 1998). Then in a 1973 UN meeting 34 nations – nearly all located in the global South – endorsed a 200 mile

EEZ. By 1976, most nations had implemented 200 mile EEZs. The 1982 Convention on the Law of the Sea finally codified the 200 mile EEZs (Juda 2002).

The advent of EEZs had the effect of replacing the open sea regime with national and regional fishing models, as 90 percent of living marine resources are located within 200 miles of shores (Roheim 2005). However, the enactment of EEZs did little to change how the fishing industry operated (Roheim 2005; Wilkinson 2006). First, it led some countries, such as the US, to develop their own fishing fleets to fish the waters that now belonged to them (Wilkinson 2006). Second, while it severely restricted the fishing grounds of several global fishing fleets, most notably Japan and several European countries (Roheim 2005); it also gave control over important fish stocks to less industrialized countries. At the time, the fishing fleets of these countries were often small-scale and non-export oriented. While some countries have since developed significant fishing fleets, in many cases, they have leased out their waters to countries with large fishing fleets. For example, in 2000, the European Union had fishing access agreements with 20 nations with a total value of over 400 million euros (Roheim 2005). This has maintained, and in some instances increased, overfishing, as many less industrialized countries have either little incentive to regulate, or lack the resources to enforce regulations (Ibarra et al. 2000; Roheim 2005). Thus, to date, the enactment of EEZs has done little to curb overfishing.

The enactment of EEZs created two governance regimes for fisheries: national management of EEZ areas and the management of the high seas (i.e., the area outside EEZs). States have the exclusive right to regulate and exploit marine resources as they want within EEZs (Roheim 2005). Within EEZs, management takes one of two forms:

open access or limited access or harvest. In an open access fishery, there are no restrictions on access or harvest. Limited access fisheries control access through controlling the number of fishing days, number of fishers, and/or the kind of gear used, while limited harvest controls harvest by setting fishing quotas based on the status of fish stocks. Most fisheries in the US and EU are governed using some form of limited access or harvest (Roheim 2005). However, the conservation benefits of limited access and harvest fisheries are seriously questioned, as many fish stocks continue to be overexploited. Limiting harvest has also contributed to the further over-capitalization of the fishing industry (Johnsen 2005). For example, preset catch limits have forced fishermen to catch as much fish as fast as possible, and this has led to investment in technologies that enable the removal of large quantities of fish in short periods of time (Roheim 2005).

In the US, fisheries are managed by regional fisheries councils and the National Ocean and Atmospheric Administration (NOAA). In 1976, the Magnuson Fishery Conservation and Management Act was enacted, which established regional fisheries bodies to oversee the management of fisheries and ensure their conservation. However, such regional fisheries councils have tended to be dominated by representatives of fisheries. Consequently, they have done a poor job at conserving fisheries (Clover 2006). For example, several New England fish stocks, including cod, yellowtail flounder, and haddock collapsed under the management of regional fisheries council (Clover 2006). Under pressure from environmentalists the conservation measures in the Magnuson Act (renamed the Magnuson-Stevens Act) were strengthened in 1996. Among other things, the 1996 Act strengthened stipulations on rebuilding overfished fisheries, set for

standards for protecting "essential" fish habitat, stipulated provisions for the transition to "sustainable fisheries." Consequently, conservation in some fisheries has improved since the passage of the 1996 act. However, fishery councils continue to be controlled by fishing interests and thus, overfishing remains a significant problem. While regional fisheries councils manage fisheries, NOAA is responsible for the regulation of other activities in US waters.

While the bulk of commercial fisheries are located within the 200 miles EEZ, there are a significant number of fisheries that extend into the high seas. Additionally, there are several fisheries that straddle multiple EEZs, as well as migratory fisheries that cross multiple jurisdictional boundaries (Juda 2002). Historically, regulation of the high seas has been quite difficult in terms of both gaining international agreement and enforcement of regulations (Juda 2002). At this time, there are several multilateral international treaties on fishing practices that specify standards for fishing practices and conservation in the high seas. However, these treaties are soft law and thus, they are non-binding (Juda 2002). As a result, they have had a limited impact on fishing in the high seas to date.

Regional fisheries bodies are the main mechanism through which the high seas and fisheries that cross jurisdictional boundaries are managed. For example, regional fisheries bodies have been established to manage high seas fisheries (e.g., Commission for the Conservation of Antarctic Marine Living Resources), migratory fish (e.g., International Commission for the Conservation of Atlantic Tunas), and fisheries that straddle multiple EEZs (e.g., Pacific Salmon Commission). However, the power of such bodies is severely limited. In most instances, the treaties establishing them contain an

"opt out" clause that allows members to unilaterally reject proposed management practices (Juda 2002). Additionally, such bodies tend to be controlled (either directly or indirectly) by representatives of the fishing industry. Consequently, they have tended to manage fisheries with the goal of maximizing catch, as opposed to conservation. Thus, as the overexploited state of several fisheries illustrates, regional fishery bodies have had limited success in curbing overfishing.

The regulation of aquaculture is not as complex, as aquaculture operations are fixed operations located within the jurisdiction of a single nation. Thus, aquaculture is subject to regulation by the state. However, similar to many other newly emerging industries, aquaculture has been minimally regulated. This has been particularly the case with respect to shrimp aquaculture and other forms of aquaculture that are located predominately in less industrialized countries. On the one hand, these countries have received considerable funding to develop, expand, and intensify aquaculture operations from development institutions and banks (Vandergeest et al. 1999). Consequently, aquaculture has represented a significant source of industrialization in many less industrialized countries. Thus, most countries have been slow to impose significant regulations on aquaculture operations, as such regulations may curb economic development (Vandergeest et al. 1999). On the other hand, where regulations have been enacted, enforcement has tended to be poor. This is due to both a lack of resources and because shrimp farms are dispersed across rural areas, which often makes them quite difficult to access (Hatanaka 2006; Vandergeest et al. 1999).

The regulation of aquaculture in industrialized countries has not been all that different from less industrialized countries. For example, initially, aquaculture was

largely unregulated as a new industry. As some governments began to see the economic opportunities the development of an aquaculture industry offered, they have focused more on promoting the development and expansion of aquaculture than its regulation (Cox 2004; Skladany et al. 2007). For example, in the US, NOAA is currently trying to push through a plan for the development of offshore aquaculture operations in the EEZ, which would be beyond the three mile state coastal boundaries (Skladany et al. 2007). Some countries (and states/provinces within countries) have developed regulations that pertain directly to aquaculture, such as siting and permit requirements. However, in many instances, aquaculture is only subject to regulation by existing environmental regulations. For example, in the US aquaculture is subject to the Clean Water Act, Marine Mammal Act, and the Federal Insecticide, Fungicide, and Rodenticide Act, among others (Goldburg et al. 2001). Given the historic lack of regulation of aquaculture, the response of both environmental organizations, as well as the industry, has been various forms of non-state regulation, such as certification (Hatanaka 2006; Vandergeest et al. 1999)

**Fishing, Aquaculture, and the Environment**

Environmental sociologists have demonstrated that current modes of capitalistic economic organization tend to generate significant environmental degradation (Foster 1999; Gould and Schnaiberg 1994; O'Connor 1998; Schnaiberg 1980). A leading political economic theoretical framework in environmental sociology is the "treadmill of production," which argues that economic logic is in contradiction with ecological principles (Gould et al. 2004; Gould and Schnaiberg 1994; Schnaiberg 1980). Its basic

premise is that competition forces firms to continually increase technological efficiency. This, in turn, causes production to increase, which intensifies withdrawals and additions to the environment. The outcome is that as economies grow, environmental degradation also increases.

The history of commercial fishing generally corresponds to the treadmill of production thesis. Competition has been a key driving force in the fishing industry. Partially driven by competitive pressures, technological innovation in the fishing industry has largely been geared towards increasing the amount of fish that can be caught and the pace at which they can be caught. Technological innovations have also led to the use of fishing practices that generate massive amounts of waste (i.e., bycatch) and disrupt the ocean floor (i.e., bottom trawling). For example, both longlines and nets not only catch the target species, but often also many other kinds of fish. Estimates are that nearly one-third of catches are bycatch, most of which are discarded (Safina 2006).

Combined with a regulatory environment that has placed few restrictions on fishing, the structure, practices, and technologies of the fishing industry have led to the massive exploitation of global fish stocks.[21] Since the FAO began monitoring fish stocks in the 1970s, the number of fish stocks fully exploited or overexploited has progressively increased. In 2004, the FAO (2004) estimated that 52 percent of the world's fish stocks were fully exploited (at their maximum sustainable limits), while 16 percent were overexploited, 7 percent depleted, and 1 percent recovering from depletion. In the US, the National Oceanic and Atmospheric Administration (2005) categorizes 44 stocks as

[21] The fishing industry is not fully responsible for the decline of fish stocks. Development, pollution, and dams have also significantly contributed to the decline of some fish stocks.

subject to overfishing.[22] Exploitation of fisheries has reached the point that some of the most productive fisheries have had to be completely shut down to fishing. The most notable has been what was once considered the most fecund fishery in the world, the Grand Banks cod fishery of the coast of Northern New England and the Atlantic coast of Canada.

However, the state of global fisheries may be even worse shape than conventionally thought. For example, looked at historically, Jackson et al. (2001) argue that these estimates are conservative, and fisheries are exploited more than people realize. Pauly and colleagues (1998) also argue that further exacerbating the situation is that the fishing industry seems to be "fishing down the marine food web." That is, as traditional fisheries become commercially, if not also ecologically, extinct, the fishing industry has shifted to species lower in the food web, such as smaller invertebrates and planktivorous fishes. Marine scientists argue that the combined effect of overfishing has been massive disruption to and transformations of marine ecosystems (Jackson et al. 2001; Pauly et al. 1998; Worm et al. 2006).

Given the exploited state of global fishing stocks, an argument could be made that the fishing industry is undermining its own conditions of production. O'Connor (1998) has theorized this tendency as the "second contraction" of capitalism. Here, the drive to continually maximize profit leads to exploitation of the environment, which, in turn, generates environmental degradation that undermines the productive capacity of a firm or industry. The fishing industry in its quest for short-term profits has undermined its long term productivity in many instances. The Grand Banks cod fishery is the clearest

[22] It needs to be noted that out of the 688 known stocks, the status of 452 stocks is unknown with regard to overfishing.

example in that when the Canadian government shut it down in 1992, 300,000 people lost their jobs (Kurlansky 1998). Additionally, as more traditional kinds of fisheries have become exploited, the fishing industry has shifted to new fisheries. One such example is deep sea fisheries, such as Patagonian toothfish (i.e., "Chilean sea bass") and slimehead (i.e., "orange roughy"). However, deep-water fish tend to reproduce quite slowly. Such low reproduction rates, combined with heavy fishing, has led to the massive exploitation and closure of many deep sea fisheries in less than two decades. For example, orange roughy was introduced to world markets in the late 1970s, and by 1995 the fish was nearly extinct (Kurlansky 1998).

Given the severity of overfishing, aquaculture is increasingly being viewed as a future source of much seafood. As discussed above, aquaculture enables fish to be artificially reproduced and raised on farms. Theoretically then, aquaculture can reduce pressure on fisheries, while maintaining a large supply of seafood products. Thus, one can view aquaculture as the "ecological modernization" of the seafood industry. Proponents of ecological modernization argue that environmental sustainability can, in part, be achieved through new technologies that "disconnect economic development from relevant resource inputs, resource use and emissions" (Spaargaren 1992, 335). From such a perspective, an argument could be made that aquaculture is reducing pressure on inputs and resource use (i.e., fisheries) and emissions (i.e., bycatch).

While this may be true, a number of concerns have been raised regarding the environmental impacts of certain forms of aquaculture, most notably salmon and shrimp (Goldburg et al. 2001; Goldburg and Naylor 2005; Naylor et al. 2001; Stonich and Vandergeest 2001; Vandergeest et al. 1999). Salmon tend to be raised in open-water net-

pens, and as a result, concerns have been raised regarding the impact of the organic and chemical pollution produced by farms on the ecosystems in which they are embedded, and the introduction of invasive species and disease transfer to wild salmon in British Columbia (Goldburg et al. 2001).[23] Furthermore, salmon farming may very well lead to increases in fishing, as salmon are carnivorous fish and thus must be fed other small pelagic fish. For example, it is estimated that approximately 2.4 kilograms of wild fish are required to produce one kilogram of farmed salmon (Naylor et al. 2003). In 2001, 17-20 million tons of fishmeal, derived primarily from anchovies, sardines, and capelin, was used in aquaculture. These problems may become even more serious in the future, as the aquaculture industry is looking to expand to other carnivorous finfish, as there is a lucrative market for such fish (Goldburg and Naylor 2005; Wilkinson 2006).

Serious concerns have also been raised regarding the impacts of shrimp aquaculture on costal environments and communities, including the destruction of mangrove forests, salinization of coastal and agricultural lands, loss of genetic diversity in shrimp populations, increases in conflicts and violence over land rights and access to natural resources, use of excessive antibiotics, fungicides, pesticides, detergents and chemicals, uneven income distribution, corruption and human rights violations (Stonich and Vandergeest 2001). Consequently, the environmental sustainability of current aquaculture practices is quite contested.

[23] Because there are relatively healthy wild pacific salmon stocks in British Columbia, salmon farms in the region pose extra risks. First, salmon farms can transfer diseases and parasites to wild salmon. Second, Atlantic salmon are raised on most farms (which are not native to the area), and when they escape this poses dangers to the native pacific salmon (Naylor et al. 2003). For example, one million Atlantic salmon escaped from farms in Washington and British Columbia (Naylor et al. 2003), and it is been documented that Atlantic salmon have begun to spawn in Pacific rivers (Volpe 2001).

**Summary**

Without a firm grasp of the history of the seafood industry, marketplace for and consumption of seafood, and the governance of seafood, one cannot understand the shift to market-based campaigns by the sustainable seafood movement. Thus, the primary purpose of this chapter was to provide a backdrop for my analysis of the use of market-based campaigns by the sustainable seafood movement in the subsequent chapters. With this aim, in this chapter, I discussed a variety of components of the 'political economy of seafood.' They include: the historical development of the seafood industry, with a particular focus on technological innovations, the character of current seafood production, the current organization of the seafood industry (i.e., commodity chains), the consumption of and marketplace for seafood, the governance of seafood, and the environmental impacts of the current practices of the fishing and aquaculture industries. Given the fact that both agrifood and environmental sociologists have long neglected seafood, I argue that this chapter is valuable not only in providing a backdrop to my analysis of market-based campaigns, but also in filling gaps in the sociological literatures on food and the environment.

## Chapter 4. The Sustainable Seafood Movement

The marine and ocean conservation movement is one segment of the environmental movement. Similar to the environmental movement, the movement for marine and ocean conservation is made up of a diversity of organizations. While united in the goal of conserving marine life and the oceans, there is significant variance in the kinds of approaches, strategies and tactics used, as well as the suggested solutions. This chapter provides an overview of a subset of the marine and ocean conservation movement, namely those organizations that are using market-based strategies.[24] In this dissertation, the sustainable seafood movement refers to those marine and ocean conservation organizations that are engaged in market-based strategies.

The chapter consists of four sections. The first section discusses the origins of the sustainable seafood movement. Here, the focus is on the lack of success the movement has had in pressuring government, and how marine and ocean conservation organizations partially molded their seafood campaigns on the market-based campaigns being used by forest activists. Second, the processes by which market-based strategies emerged in the marine and ocean conservation movement is examined. In this section, the key role that foundations, particularly the David and Lucile Packard Foundation, have played in promoting the development of market-based campaigns for marine and ocean conservation is stressed. Third, the leading organizations in the sustainable seafood movement are outlined. Fourth, the various campaigns that comprise the sustainable seafood movement are discussed. This section is divided into demand- or supply-oriented campaigns. This overview of the emergence of the sustainable seafood

[24] While much of the marine and ocean conservation movement has turned to market-based strategies, some organizations continue to use predominately more traditional state-centered approaches. However, as these are not the focus of the dissertation, this aspect of the movement is not discussed.

movement, the various organizations that compromise it, and its campaigns provides the groundwork for the analysis of market-based strategies in the latter chapters.

**Origins of the Sustainable Seafood Movement**

A key driving force behind the emergence of the sustainable seafood movement was that existing approaches to ocean conversation, most notably pressuring governments, were not working. Activists within the movement for marine and ocean conservation thought that they had won a significant victory in 1996 when the Sustainable Fisheries Act was passed. The act stipulated that the National Marine Fisheries Service and its eight regional management councils had to reform management plans to (1) prevent overfishing and rebuild overfished stocks, (2) report and minimize bycatch, and (3) designate essential fish habitat for all federally managed fish species and minimize adverse effects of fishing on those habitats (Marine Fish Conservation Network). However, most the activists I interviewed argued that the act has not had the effects that they had hoped it would. Furthermore, since passage of the Sustainable Fisheries Act, the marine and ocean conservation movement has been taking "defensive action" to try and ensure its implementation and prevent the act from being weakened. In the words of a long-time prominent leader in the movement, "we have been just trying to save what we gained."

The case of salmon aquaculture in British Columbia (BC), Canada is illustrative of how the unreceptivity of government led environmental activists concerned with salmon farming to turn to market-based strategies. Hearing reports on the impact that salmon aquaculture was having on native salmon populations and the marine

environment in Norway, coupled with the significant expansion of salmon farming in the waters of BC, activists began pressuring both the provincial and federal governments in the late 1980s and early 1990s to better regulate salmon aquaculture operations and limit future expansion. Partially in response to the demands by environmentalists, in 1995, the BC government placed a moratorium on the future expansion of salmon aquaculture in the waters of BC. Soon thereafter a review of the industry was launched, known as the "Salmon Aquaculture Review." Forty nine recommendations were made by the review board that addressed such issues as escapes, location of farms, waste water treatment, among others (Connell 2004).

While the members of the environmental community whom I interviewed did not fully agree with the set of recommendations, they did believe that they represented a good first step and would have produced some positive changes.[25] However, interviewees involved in the farmed salmon campaign argued that, for the most part, the recommendations were never implemented (Connell 2004). In September 2002, the seven-year moratorium on new salmon farms in the province was lifted by the BC government. The government claimed that "ending the moratorium would assist beleaguered rural communities, augment provincial coffers and have negligible impacts on the environment" (Cox 2004, xi). In contrast, the environmental activists I interviewed argued that the government acquiesced to the pressure of the salmon farming industry, and also viewed salmon aquaculture as economically valuable in that it positively contributed to Canada's national balance of trade, as the majority of BC farmed salmon is exported to the US. As one BC environmental activist commented, this

[25] The recommendations maintained that open-water salmon aquaculture could be done in a way that did not negatively impact the environment. In contrast, members of CAAR argue that for salmon aquaculture not to have negative environmental impacts, closed containment systems need to be used.

was "a clear sign that their intention is not to reform [salmon aquaculture]." Further worsening the situation, from the perspective of environmentalists in BC, was that the BC Salmon Farmers Association, the trade association for salmon aquaculture companies in BC, proposed an expansion of salmon aquaculture in BC by ten new farms per year.

This inability to accomplish ocean and marine conservation goals through government regulation spurred environmental leaders in both the US and Canada to seek out alternative approaches.[26] As one prominent leader in the ocean and conservation movement remarked, "It became painfully apparent that relying on public policy to save the oceans was a mistake. We needed to find new approaches to create incentives for conservation." Seeing the recent success of some of the forestry campaigns that were using various market-based strategies, several key players in the movement began to look into the possibilities of market-based campaigns for the oceans. For example, one activist remarked, "So we said okay, if the industry will not change, government will not implement changes, we have to start having economic impacts on these companies." Thus, the turn to market-based strategies by marine and ocean conservation organizations was, at least partially, a response to unresponsive, captured, and/or neoliberal states.

Nearly all of interviewees viewed the campaigns around deforestation (e.g., old growth forests) and paper and packing as the first market-based campaigns undertaken in the environmental movement.[27] For example, one of the foundations that provide significant funding to marine and ocean conservation organizations looked at the forestry

[26] While the above discussion focuses on a case in Canada, interviewees with environmental movement organizations in the US also pointed to the inability to affect government regulation of fisheries as a key reason behind their turn to market-based campaigns. Specifically, the ineffectiveness of the Magnus-Stevens Act, and the continued control of fisheries management bodies by fishery representatives, was pointed to by interviewees as reasons their organizations began using market-based campaigns.

[27] While a few interviewees noted that market-based movements had been around for quite some time, most often citing the United Farm Workers grape boycott, the current use of market-based strategies by environmental organizations is generally viewed to have begun with the old growth and paper campaigns.

campaign, and specifically the creation of the Forest Stewardship Alliance, and noted that "there are many similarities between these industries, forestry and fishing." In particular, "they are both globalized, they both rely on extraction of wild resources and natural resources, and there is farming in both of them." Thus, the initial efforts undertaken by the marine and ocean activists, most notably the Marine Stewardship Council (MSC) and the "Give Swordfish a Break" campaign, were partially modeled on stuff undertaken in the forestry campaign. As BC was one of the key battlegrounds for forestry issues, the forest campaign was an obvious model for the salmon aquaculture activists in BC as well.

**The Emergence of the Sustainable Seafood Movement**

Market-based campaigns for seafood emerged from both the bottom-up and top-down. Those campaigns that emerged from the bottom-up have been largely the outcome of efforts to find approaches that worked. Perhaps the best example is the Coastal Alliance for Aquaculture Reform (CAAR) in BC, which turned to markets as somewhat of a last hope, after pressuring government proved largely ineffectual. However, for the most part, the sustainable seafood movement largely developed from the top-down.

The movement towards market-based strategies in marine and ocean conservation is largely an outcome of foundation funding. In part, foundations have been able to have significant sway over the movement, because, compared to terrestrial-focused environmentalism, there are relatively few foundations active in marine and ocean conservation. Additionally, as the movement largely consists of professional organizations, most organizations do not have a large membership base to draw on for funding. As a result, movement organizations have limited options outside of

foundations for funding. Three foundations were commonly cited by interviewees as supplying the bulk of foundation funding for marine and ocean conservation: the David and Lucile Packard Foundation, the Pew Charitable Trusts, and the Gordon and Betty Moore Foundation. Of the three, Packard and Pew were most often attributed with being the most significant source of funding for marine and ocean conservation. While no interviews were able to give exact numbers, one interviewee estimated that Packard and PEW were responsible for approximately 60 percent of foundation funding for marine and ocean conservation.

With respect to market-based strategies, the Packard Foundation has been the most important source of funding. According to an internal review of Packard's "Seafood Choices Initiative," which is Packard's market-based funding program in ocean and marine conservation, by the Bridgespan Group (2005, 2), Packard "became frustrated with the slow progress that its traditional approach, centered on policy reform, was making towards the goal of improving the health of ecosystems." In response, Packard launched a market-based funding program. According to several interviewees, the promotion of a markets-based program by Packard was also an outcome of what has been happening in other sectors of the environmental movement, most notably in forestry. As one interviewee commented, and several others confirmed, that then head of Packard's Marine Fisheries Division announced at a meeting with marine and ocean conservation organizations that he wanted a "'Home Depot' version of a fish campaign." The outcome was the "Give Swordfish a Break Campaign."

In the first five years of its existence (from 1999 to 2005), Packard's Seafood Choices Initiative received $37 million in funding, with 60 percent ($23 million) coming

from Packard. The remaining funding came primarily from the budgets of environmental organizations, corporations, and other foundations (Bridgespan Group 2005). The Seafood Choices Initiative has five components: (1) certification, (2) consumer and gatekeeper education, (3) single-species campaigns, (4) business-environmental organization partnerships, and (5) markets campaigns (Bridgespan Group 2005).[28] The breakdown of funding between the components is shown in Table 4.1.

**Table 4.1: Distribution of Funds within the Seafood Choices Initiative**

| Component | Funding Received | Amount from Packard |
|---|---|---|
| Certification | 57% | $12.2 million |
| Consumer and gatekeeper | 20% | $5.2 million |
| Single-species campaigns | 10% | $2.3 million |
| Business-environmental partnerships | 5% | $825,000 |
| Market campaigns | 4% | $860,000 |
| Research and Coordination | 4% | $1.6 million[29] |

(Bridgespan Group 2005)

As the Seafood Choice Initiative indicates, Packard has shifted the bulk of its funding for marine and ocean conversation to market-based strategies. Currently, on its website, Packard states that it is funding various kinds of market-based efforts, and that it does "not fund fisheries management activities directly, and is phasing out support for work on federal-level fisheries policy (The David and Lucile Packard Foundation 2007a). The shift towards market-based strategies is confirmed by an analysis of the grants Packard issued in 2006. Of the 31 grants Packard issued, 17 went to market-based initiatives, accounting for approximately $7,685,000 of the $10,907,000 Marine Fisheries grant budget (The David and Lucile Packard Foundation 2007a).[30]

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[28] Each of these initiatives is discussed below in the section on the various market-based campaigns that make up the sustainable seafood movement.

[29] This number is an approximation based on the Packard Foundations total investment of $23 million.

[30] Included in those grants classified as market-based initiatives, are grants to help fisheries become certified, as well as other supply-oriented grants. In one instance, one grant was split between support for

Thus, foundations, particularly Packard, are a significant source of funding for the sustainable seafood movement. As is discussed below, all but one organization and campaign in the sustainable seafood movement has received funding from the Packard Foundation. Providing such a large amount of funding has given foundations significant power in the movement. Consequently, foundations have been able to "channel" the movement in specific directions (Brulle and Jenkins 2005). The most prominent of which has been steering the movement towards market-based campaigns. The implications of foundation power with respect to the sustainable seafood movement are discussed in more depth in the conclusion.

**The Organizations of the Sustainable Seafood Movement**

Similar to most social movements, the movement for ocean and marine conservation is made up of a diversity of organizations. First, there are organizations dedicated solely to marine and ocean issues, such as the Blue Ocean Institute, as well as organizations that are active in a wide range of environmental issues. Organizations in this latter category include Environmental Defense (ED) and the World Wildlife Fund (WWF), among others. Second, the organizations involved also range in scope from global to regional and local organizations. Third, the movement has organizations that are membership-based, professional, and some that are a combination of the two.[31] Fourth, some organizations active in the movement are not traditional social movement

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MSC certification and the elimination of harmful fisheries subsidies. While this grant was included as a market-based grant, it needs to be noted that some of the activities funded by it are not market-based. Thus, the amount of money calculated as going to market-based activities is only an estimation, and may be slightly inflated.

[31] "Professional" environmental organizations refer to organizations that are run by a full time professional staff, tend to be bureaucratically organized, and have no membership or a membership that is largely inactive (Mertig et al. 2002).

organizations, most notably aquariums and a trade association. The latter two have formed as the movement has shifted more towards market-based strategies, as they fulfill new functional areas that did not exist in older forms of social movement organization.

In this section, I examine the leading organizations in the sustainable seafood movement. The first section examines those mainstream environmental organizations that have major ocean, fishery, marine life, and/or seafood campaigns. Second, organizations that focus solely on marine and ocean conservation issues are examined. Third, aquariums and the role that they play in the movement are discussed. Lastly, I examine the two coalitions that have formed within the sustainable seafood movement. The following overview of organizations active in the sustainable seafood movement is not meant to be comprehensive. Rather, it is designed to provide an overview of the leading actors. Additionally, as is the case with all social movements, the sustainable seafood movement is fluid. Thus, since the time of my research there may have been some changes in the constitution of the movement.

*Mainstream Environmental Organizations*

There are several mainstream environmental organizations that are active in the sustainable seafood movement. The mainstream environmental movement in the US tends to be characterized by large professional organizations, passive membership (e.g.., through direct mail), concern with issues of conservation, and "power-orientation" approaches "aimed at wielding political power to generate new laws and influence public agencies to implement them," such as lobbying and litigation (Mertig et al. 2002; see also Brulle 2000; Dowie 1997). Dowie (1997) argues that these organizations increasingly

turned towards business-oriented cooperative approaches beginning in the mid -1990s, in what he calls the "third-wave" of environmentalism.[32] The turn to market-based strategies in the area of marine and ocean conservation can be viewed as part of this shift.

ED and WWF are two mainstream environmental organizations that have significant marine and ocean conservation programs and use market-based strategies.[33] ED began to focus on marine and ocean issues in the mid-1990s, according to one interviewee, "when it became clear that marine fish stocks were in deep trouble." Additionally, the organization was growing at the time, and people were coming onto staff with training in marine and ocean issues. The marine and ocean program at ED, which is called "Oceans Alive," has two components. The first is focused on fishing and its management. The second is a markets campaign that is focused on changing the marketplace for seafood. Additionally, through its "Corporate Innovation" program, ED is working on partnerships with retailers to develop standards for the sourcing of sustainable seafood. ED is consistent with the above characterization of mainstream environmental organizations in that it is run largely by a professional staff, while its membership is largely passive.

WWF has also been a key player in the sustainable seafood movement. Similar to ED, it is engaged in policy and outreach. However, perhaps, its most important actions in

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[32] According to Dowie (1997), the conservationist and preservationist movements of the late nineteenth and early twentieth centuries represented the first wave of environmentalism. Second wave environmentalism stretches from the beginning of the modern-day environmental in the 1960s up until early 1980s when Regan largely dismantled the movement. Second wave environmentalism was largely populist, but became more professional with time, reform-oriented, and sought change through legislation, litigation, and some protest and grassroots efforts.

[33] The environmental movement in many ways has been slower to take-up issues related to marine life and the oceans compared to land- and air-based issues. Two reasons for this were identified by interviewees. First, this is because land- and air-based problems are often more visible and thus, people are more easily made aware of them. Second, scientific research on land- and air-based issues emerged earlier than science on marine and ocean issues.

marine and ocean conservation has been its role in founding the MSC, and now its efforts to create a certification program for aquaculture. WWF has also been a key participant in talks to get large retailers and restaurant chains to sign onto the idea of sustainable seafood. Here, WWF's reputation as a relatively moderate environmental advocacy organization has helped it to become a key player in working with business and establishing environmental-business partnerships, a key proponent of third-wave environmentalism and the sustainable seafood movement. Similar to ED, while a membership organization, WWF's membership is largely passive and it is mostly managed by a professional staff. However, while passive, members of ED and WWF do provide them with an important source of funding, which the organizations discussed below tend to lack. Consequently, this gives them more freedom in terms of choosing the issues on which they want to focus, the goals that they pursue, and the approaches that they use.

The National Resource Defense Council (NRDC) has also been included on several campaigns in the sustainable seafood movement because of its expertise in the areas of law and policy. Many of the campaigns in the sustainable seafood movement, while market-oriented, also have law and policy components. Given NRDC's expertise and engagement in these areas, they have been included on several campaigns. Like other mainstream environmental organizations, NRDC has a professional staff that manages the organization, runs campaigns, and largely decides issues, and a relatively passive membership.

The National Environmental Trust (NET) has become a key actor in the sustainable seafood movement. NET is a professional organization that is funded by

grants from foundations and other charitable donations. Initially, NET was started by the Pew Charitable Trust to do communications for the environment. NET was founded in 1994. According to one interviewee familiar with NET, its founding was a "result of the fact that they [Pew] felt that environmentalists were sort of losing the war on environmental messaging and communications.... Overall there was not a great message going out there to the media that here are the problems." Thus, NET was not set up to do traditional environmental advocacy work, such as lobbying and litigation. While they are designed to do outreach, outreach is not conceived in the traditional sense. For example, they do not send organizers out door-to-door to inform and mobilize citizens. Rather, they use the media and the marketplace to inform citizen-consumers on environmental issues, as well as to pressure business and governments. Increasingly, NET is also gaining a reputation as a leader in the environmental community for doing shareholder work.[34]

*Marine and Ocean Conservation Organizations*

Several organizations involved in the sustainable seafood movement are concerned solely with marine, ocean, and fishery issues. These include the SeaWeb, Blue Ocean Institute Sustainable Fishery Advocates, the Pew Institute for Ocean Science, and the Institute for Fishery Resources. Among the most prominent is SeaWeb. A year after NET, SeaWeb was founded by the Pew Charitable Trusts also to do "public relations for the environment." A little over a year after its founding, SeaWeb split from Pew and became a non-profit. With this shift, Packard began to replace Pew as SeaWeb's primary source of funding. Pew recruited Vikki Sprull, then senior vice

[34] Shareholder work entails using shareholders and shareholder meetings as a way to pressure corporations.

president of a public relations company, to be the Executive Director of SeaWeb, a position she held through 2005. According to one interviewee familiar with SeaWeb, it was founded on the idea of "social marketing." In other words, it was to undertake marketing on behalf of the oceans and marine life. In a sense, then, the founding of SeaWeb and NET can be seen as the beginning of the move by environmental organizations toward consumer- and market-oriented campaigns and strategies. SeaWeb differs from NET in that it tends to take a less confrontational and more cooperative approach towards working with business and industry. For example, one interviewee noted that SeaWeb "has always been adamant that they are not an advocacy group." They claim that "they are communicating an issue and making a change through ... shifting baselines." The reason for this framing is that SeaWeb wants to be able to work cooperatively with non-environmental actors, such as fishers, distributors, chefs and restaurants, and retailers.

SeaWeb has been one of the leading organizations in the sustainable seafood movement. It launched the first single species campaign, "Giving a Swordfish a Break," developed the "gatekeeper" strategy, and sought to foster business-environmental organization relations through the Seafood Choices Alliance. Over time, SeaWeb has moved more towards working with business, and away from single-species campaigns. SeaWeb is a professional organization that relies on foundations and other contributions for its funding.

The Blue Ocean Institute is in some ways a spin-off group. Its founders, Carl Safina and Mercedes Lee, were previously at the Audubon Society. However, the Audubon Society began dismantling its Living Oceans program in the early 2000s. At

that point, Safina and Lee decided to branch out on their own, and began an organization that sought to move beyond the traditional policy and advocacy routes. Blue Ocean was founded on the idea of building positive relations between people and oceans. In other words, part of what Blue Ocean is trying to do is find ways to develop connections between people and the oceans. Seafood-based campaigns are one way that Blue Ocean is trying to develop such connections. Blue Ocean is a relatively small professional-based organization that relies on foundation funding and contributions for the majority of its operating budget.

The Pew Institute for Ocean Science was established by the Pew Charitable Trusts in 2003, and continues to receive the majority of its funding from them. Its mission is to "commission, sponsor, perform...and disseminate the results of scientific research in support of ocean conservation." While the Pew Institute for Ocean Science is primarily a science-oriented organization, one-third of its budget is dedicated to outreach. Consequently, they have played an important role in getting scientific findings into the media to support market-based initiatives, and were also one of the organizations that managed the "Caviar Emptor" campaign.

The Institute for Fishery Resources was founded by the Pacific Coast Federation of Fishermen's Associations to focus on conservation needs related to the fishing community. While not exclusively engaged in market-based strategies, the Institute for Fishery Resources does utilize market-based strategies to promote sustainable seafood, particularly in the area of salmon. The Institute for Fishery Resources has a membership, but is managed by a professional staff. It receives funding from foundations, its members, government grants, and charitable donations. Sustainable Fishery Advocates

was started by a couple of Santa Cruz graduate students interested in marine and ocean conservation. Seeing that there was almost no information about seafood products in their local retail stores, even the more progressive minded organic stores, Sustainable Fishery Advocates was started in an effort to develop a labeling program for seafood. Sustainable Fishery Advocates is a professional organization with a small staff that is funded through foundation grants and other charitable contributions.

*Aquariums*

A somewhat unique component of the sustainable seafood movement is the role of aquariums as key actors. While zoos and aquariums have always played a role in fostering awareness of wildlife, and more recently, environment issues, historically their roles have been limited to informing their visitors. However, several aquariums, most notably the Monterey Bay Aquarium and the New England Aquarium, have expanded their missions to include conservation activities as an integral component of what they do. The Monterey Bay Aquarium, which was founded by the Packard Foundation, has been at the forefront of the sustainable seafood movement. It has become a leading research center for science related to the conservation and protection of marine life. It is also a leader in consumer-citizen education, with its Seafood Watch program. The New England Aquarium was one of the first aquariums to create a conservation program, and continues to be among the most active aquariums in conservation efforts today. Building on its research program, the New England Aquarium has also entered into a partnership with Royal Ahold USA, a leading retailer in the US, where it advises Ahold USA on its

seafood. It also has a "Celebrating Seafood" initiative aimed at consumer-citizen education.

Several interviewees noted that aquariums have certain advantages because they are not usually viewed as advocacy organizations. For example, one interviewee commented that "because we are the aquarium, we're one of those institutions where fishermen and others came as children. So we've been seen as kind of a trusted resource for a lot of people and a lot of organizations over time." In this sense, aquariums are often viewed as more moderate actors then environmental advocacy organizations, and this often makes them more approachable for industry. Along these lines, one interviewee noted that for his/her aquarium it was very important not to be viewed as an advocacy organization. This is because such a view would potentially undermine their legitimacy with respect to industry. However, for some aquariums, whether they are viewed as an aquarium, advocacy organization, or both has become blurred as a result of their participation in the sustainable seafood movement. This is the case with respect to the Monterey Bay Aquarium, which is a leading distributor of seafood cards.

*Coalitions*

SeaWeb, with funding from Packard, launched the Seafood Choices Alliance in 2001 (Bridgespan Group 2005). While still tied to SeaWeb, the alliance largely functions as an independent organization. The Seafood Choices Alliance was founded in an effort to bring together environmental organizations and business. Thus, its members include environmental organizations, fishers and fish farmers, distributors, restaurants and food service companies, and retailers. The Seafood Choice Alliance officially calls itself a

trade association, and it actively tries to put forth this image of itself, as opposed to that of an advocacy organization. For example, one interviewee from the Seafood Choice Alliance argued that "Seafood Choices Alliance sees itself as like squat in the middle between the far extreme environmentalists and far extreme industry that does not want to do anything." She continued, saying "people think of us as sort of a neutral broker."[35]

However, for several other interviewees, what the Seafood Choices Alliance was, and what its role has been is, is a bit confusing and unclear. The Bridgespan Group (2005) also commented on this in their report on the Packard Foundation's market-based marine and ocean conservation initiatives. First, at times, the Seafood Choice Alliance seems to operate as a coordinator of the sustainable seafood movement. That is, it tries to keep the various organizations informed of the activities of others, and coordinate activities between organizations. Second, it seems also to be an organization interested in brokering environmental-business partnerships. Third, it also functions as a trade association. For example, it seeks to bring together producers and buyers of sustainable seafood and publishes a sustainable seafood buying guide. At the time of my research, largely as a result of the Bridgespan Report (2005), the Seafood Choices Alliance was beginning to seek to redefine itself and its purpose more clearly. Specifically, there seemed to be an effort to push the Seafood Choices Alliance towards the latter roles: brokering partnerships with industry and functioning as a trade association.

In British Columbia, the various groups working on issues pertaining to salmon farming are organized into a coalition, CAAR. The alliance consists of eight

[35] In part, to advance this image, the Seafood Choices Alliances has actively sought to separate itself from SeaWeb, which is viewed as an advocacy organization and thus perceived somewhat negatively by industry, largely as a result of the "Give Swordfish a Break" campaign. However, the extent to which the Seafood Choices Alliance has been able to accomplish this separation is contested.

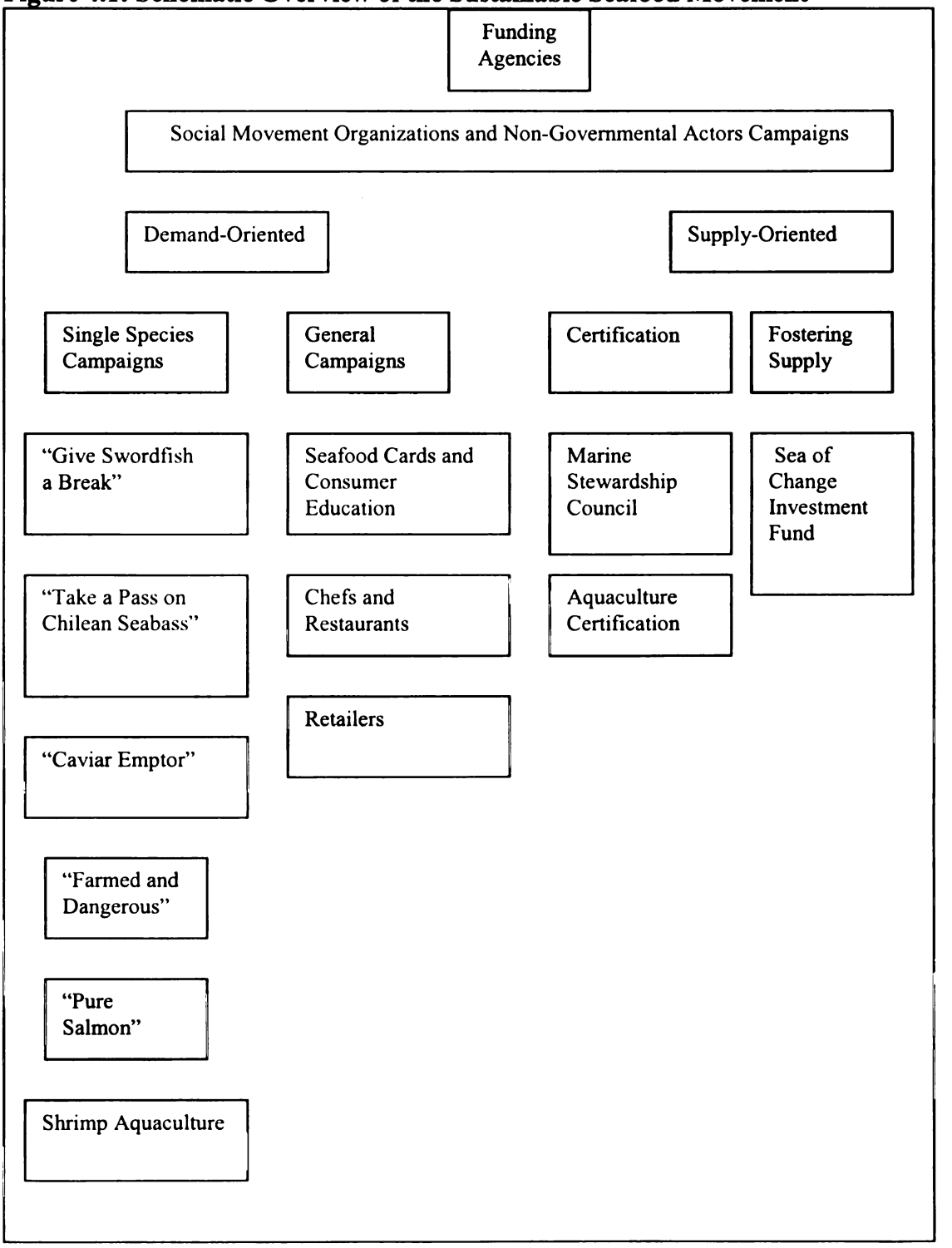
environmental organizations and one First Nation organization. The environmental organizations include several grassroots/regional environmental organizations, and one leading national environmental organization in Canada, the David Suzuki Foundation. CAAR was formed in 2000, when some of the groups approached foundations for money to conduct a farmed salmon campaign. One foundation responded that they were interested in funding a campaign, but "if you guys want to tackle this, you got to get together and work out a strategy." This led to the formation of a coalition on salmon farming by many of the environmental organizations in BC.

The member groups of CAAR negotiated for approximately two years to develop a campaign and strategies. Interviewees commented that a lot of work went into establishing CAAR, its organizational structure, mode of decision-making, and the kind of campaign it wanted to run. However, everyone also agreed that the process of setting-up CAAR was very important in that it resulted in a strong coalition. Consequently, there is a deep respect for each other in CAAR by its member organizations, and an understanding of the various roles and positions of the various groups. For example, the various organizations have worked out a division of labor according to each member organizations' existing focus and expertise. Furthermore, to maintain their cohesiveness, decision-making within CAAR is by consensus. Another key component of CAAR has been having a First Nation as one of its member groups. First Nations are an important component of British Columbia's social fabric. Thus, the inclusion of a First Nation in CAAR has given it an "added voice" that is not an environmental advocacy organization.

## Campaigns

The sustainable seafood movement consists of two general kinds of campaigns: demand-oriented and supply-oriented. Demand-oriented campaigns seek to alter the marketplace and consumption of seafood. Such campaigns can be further divided into two kinds: single-species campaigns and general campaigns. Single-species campaigns are focused on altering demand for and consumption a single kind of seafood, such as Chilean sea bass. General campaigns seek to promote the idea of sustainable seafood more generally. Supply-oriented campaigns are designed to ensure a supply of environmentally sustainable seafood, and that seafood that claims to be sustainable is in fact sustainable. The primary mechanism by which the movement has sought to accomplish this is certification. However, the movement is beginning to undertake other efforts to promote the growth of the supply of sustainable seafood (See Figure 4.1).

**Figure 4.1: Schematic Overview of the Sustainable Seafood Movement**



**Demand-oriented Campaigns**

Demand-oriented campaigns are a key component of the sustainable seafood movement. They also tend to be the most public component of the movement, and the one with which people most often are aware of and/or identify with. The first kind of demand-oriented campaign is single-species campaigns. To date, five species of fish have had single species campaigns constructed around them: swordfish, Chilean seabass, farmed salmon, sturgeon (in the form of caviar), and shrimp. The second kind of demand-oriented campaigns are general ones that seek to promote the consumption of sustainable seafood more generally. Such campaigns include consumer education, working with chefs and restaurants, targeting retailers, and labeling campaigns.

*Single Species Campaigns*

"Give a Swordfish a Break" was the first market-based single species fish campaign.[36] The campaign was an outgrowth of the Packard Foundation's initial efforts to see if a markets campaign, similar to what was being done with respect to forestry, would work for fisheries and the oceans. SeaWeb and the NRDC jointly managed the campaign. The "Give a Swordfish a Break" campaign ran from 1998 to August 2000, when the campaign's two goals were fulfilled: international quota restrictions (they were put into place in 1999) and the closure of swordfish nursery areas in US waters (SeaWeb 2007). The campaign sought to affect the marketplace for seafood through (1) getting

[36] In the late 1980s, there were boycotts organized of canned tuna because of the way that existing tuna fishing practices caught and killed dolphins as bycatch (Brown 2005). However, the dolphin-safe tuna campaign was largely an isolated use of the market, and predates the turn towards market-based campaigns by marine and ocean conservation organizations. For this reason, I argue that it has more in common with earlier uses of boycotts, such as the grape boycotts organized by the United Farmer Workers, than with current market-based campaigns.

chefs to stop selling swordfish until the populations recovered, (2) targeting large buyers, such as Royal Caribbean Cruises and hotel management groups and retailers, and (3) encouraging consumers temporarily not to eat swordfish, primarily through the use of the media.

According to several interviewees, what was novel in the swordfish campaign, and what more recent campaigns have borrowed the most, was its enrollment of chefs as spokespersons. The chef strategy emerged out of market research on swordfish, which indicated that most swordfish is consumed in white table cloth restaurants. Seeking to use a "gatekeeper strategy," which entails "finding out who are the best voices to carry your message" and convincing them to do so, the campaign decided to target chefs at high-end restaurants. The rationale was that "through educating just 100 people [chefs], through those 100 people you could get thousands," to borrow the words of an interviewee. This gatekeeper strategy has become a key component of the seafood movement, and has been a central part of all demand-oriented campaigns in the movement. The other lesson that the movement learned from the swordfish campaign was that "consumers and chefs didn't want to buy into a boycott, and so you had to say 'don't do this until…"[37] Lastly, the swordfish campaign demonstrated that market-based approaches were a potentially effective strategy to ocean and marine organizations. In the words of one activist, "It ["Give Swordfish a Break"] put seafood on the map as an environmental concern. And as a way to think about campaigning to protect the ocean resources."

The second single species campaign to emerge was "Caviar Emptor: Let the Connoisseur Beware," which was officially launched in 2000. The campaign was

[37] This point is discussed in more depth in the section on messaging in Chapter 6.

initially funded by the Packard Foundation, and then received additional support from the Oak Foundation. The campaign was managed initially by NRDC, Wildlife Conservation Society, and SeaWeb. The Wildlife Conservation Society's role transferred to the Pew Institute for Ocean Science when the lead scientist on the campaign moved from the Wildlife Conservation Society to the Pew Institute for Ocean Science. The campaign was initially designed as a two-year campaign, but was extended for an additional two years.

The campaign was specifically focused on beluga and other Caspian Sea caviar. Populations of beluga sturgeon in the Caspian Sea had plunged by more than 90 percent due to a combination of overfishing, habitat loss, pollution, and poaching (NRDC, SeaWeb and Pew Institute for Ocean Science 2007). With little access to the governments of the Caspian Sea countries, NRDC, Wildlife Conservation Society, and SeaWeb decided to try to force policy change through targeting the US market for caviar. At the time, the US was the largest market for beluga caviar, consuming 60 percent of the world supply (NRDC, SeaWeb and Pew Institute for Ocean Science 2007). Following up on the success of the swordfish campaign, and given that caviar is a luxury food item that is consumed largely in restaurants, the markets component of the campaign focused on chefs and specialty food retailers. In 2003, the campaign had what it called "Caviar Nouveau" where chefs in 15 US cities removed beluga caviar from their menus and replaced it with alternative forms of caviar that are more sustainable, such as caviar from farmed sturgeon, paddlefish, and trout. Additionally, the campaign utilized more traditional social movement strategies, such as pressuring the government and other governing bodies (i.e., Convention on International Trade in Endangered Species (CITES)), lawsuits, and outreach in Caspian Sea countries.

Several changes in policy have been made to reduce the harvesting of Caspian Sea beluga sturgeon, which are at least partially attributable to the campaign. In June 2001, CITES imposed a six-month temporary ban on Caspian Sea sturgeon fisheries. In October 2002 CITES halted beluga caviar exports from all five Caspian Sea nations, but lifted the ban in November. In January 2006, CITES again shut down Caspian Sea sturgeon fisheries, but again reopened them in February of 2007. The campaign has had more success with the US government. In 2004, the US Fish and Wildlife Service classified beluga sturgeon as a "threatened species" and in September 2005, the US government banned beluga caviar imports from Caspian Sea nations (NRDC, SeaWeb and Pew Institute for Ocean Science 2007). However, one interviewee familiar with the campaign pointed out that the policy changes have had limited effects, as Caspian Sea nations have just switched their beluga caviar exports to alternative markets. Additionally, it needs to be noted that prior to the US ban on Caspian Sea beluga imports, consumption of beluga caviar in the US was already declining. As this decline in consumption began before the campaign was launched, the extent to which the campaign contributed to further declines cannot be fully quantified (Bridgespan Group 2005).

The next single species campaign to emerge was the "Take a Pass on Chilean Sea Bass" campaign, which again was largely funded by the Packard Foundation. NET launched the "Take a Pass on Chilean Sea Bass" campaign in June of 2001. According to one environmental organizer who worked on the campaign, Chilean sea bass was chosen "because it's honestly just a poster child for problems that are going on in the ocean." Specifically, Chilean sea bass had gone from a relatively unheard of fish in the early 1990s to one of the most overfished and poorly regulated fisheries in the world.

Compounding the problem is that Chilean sea bass is a deep-water fish that is slow-maturing and thus, the rate of reproduction is relatively slow.

Given the character of Chilean sea bass consumption in the US – according to a interviewee who worked on the campaign, roughly "70 percent of it [Chilean sea bass] was being sold in restaurants" primarily high-end restaurants – NET decided to emulate the "gatekeeper" strategy used in the swordfish campaign. They targeted the top restaurant and media markets in the US, and did a "rolling launch across the country to make it seem like there was this movement of chefs" coming out against Chilean sea bass. The campaign started in San Francisco, and worked its way across the country, eventually targeting 11 cities in total. NET would have organizers in each city, who "would actually try and recruit a first chef who will be the person who will take the lead on reaching out to other chefs." The procedure was that once they got a "critical mass" of chefs, then they would do a press conference. The campaign was able to get over a thousand chefs to pledge "to stop serving Chilean Sea Bass until proper regulations are in place" (National Environmental Trust 2007). NET then sought to mobilize the publicity generated by the chef's campaign and consequent media coverage in order to pressure the US government to take action.

The market-component of the Chilean sea bass campaign has largely come to an end. In part, this is because the regulation of Chilean sea bass has improved. The Commission for the Conservation of Antarctic Marine Living Resources, which overseas much of the fishing grounds for Chilean sea bass, has imposed catch limits and other conservation measures. Additionally, all Chilean sea bass must have documentation that it was legally caught to enter the US. However, an outcome of the new regulations has

been an increase in illegal fishing for Chilean sea bass (National Environmental Trust 2004). Consequently, NET has shifted much of its focus to countering illegal fishing.

The next single-species campaigns to emerge were those around farmed salmon. Currently, there are two campaigns focused on farmed salmon: "Farmed and Dangerous" and "Pure Salmon." The original campaign is CAAR's "Farmed and Dangerous" campaign in BC. The "Farmed and Dangerous" campaign differs from other single species campaigns in that it is tied to a specific place, namely BC. In other words, unlike most of the other campaigns in the sustainable seafood movement, the "Farmed and Dangerous" campaign is the response of regional environmental organizations to a regional problem. Consequently, its efforts have been primarily focused in BC, and the leading markets for BC farmed salmon, which are Oregon, Washington, and California.

In addition to a markets-based campaign, CAAR's efforts include local outreach, producing and disseminating scientific findings, government relations, and First Nation outreach. Nevertheless, the markets campaign has been the most visible and effective component of their efforts. As one organizer for CAAR commented, "Without the markets campaign we would still be just working with government on some minor points." The markets campaign consists of enrolling chefs to stop serving farmed salmon until the industry reforms and become spokespersons, targeting retailers to get them to stop selling farmed salmon, and consumer education.

At the time of my research in 2005, the campaign had been successfully enrolling restaurants, particularly in BC. However, the campaign has been less successful targeting retailers. Some smaller, local/regional retailers, as well as the natural food chain, Wild Oats, have agreed to stop selling BC farmed salmon. But, for the most part, retailers have

been resistant to CAAR's campaign. While hard to quantify, the organizers with CAAR whom I interviewed pointed out that the campaign has had the effect of making farmed salmon into an important political issue in BC. They noted that the issue is now in the media on a daily basis, and that nearly everyone you ask has a position on farmed salmon. Additionally, interviewees also pointed out that in the 2005 provincial election, the New Democratic Party took a critical stance on salmon aquaculture, and was able to pick seats in many coastal districts.[38] Expansion of salmon farming in BC has also been significantly more limited than projected. This is due, at least, partially to CAAR's efforts. Lastly, in 2004, CAAR entered into discussion with Marine Harvest, a leading salmon farming company both in BC and globally. In January 2006, CAAR and Marine Harvest made their discussions public and announced a "Framework for Dialogue." The framework includes:

> ...collaborative research on the extent of sea lice impacts on wild salmon, industry-NGO exploration of the current viability of closed tank systems, and, as an interim measure to reduce impacts of net-cage farming on wild salmon, explores establishing migratory corridors for wild juvenile salmon (CAAR and Marine Harvest 2006 (January 12)).

The second farmed salmon campaign is the "Pure Salmon" Campaign. More recently the Packard Foundation provided funding to NET to launch a new single species campaign. According to one interviewee familiar with the campaign, Packard allotted funding to NET for a single species seafood campaign, and left it up to them to decide what would be the species. NET then spent a year researching four species of fish: salmon, tuna, shrimp, and pollack. In assessing the kinds of different species, they asked which one needs the most help, would be conducive to a market-based campaign, and

[38] The New Democratic Party went from winning two of the 79 seats in the 2001 election to 33 in 2005. They also won nine of the 13 seats on Vancouver Island (CBC.2005 (May 18)-a; 2005 (May 18)).

would resonate most with consumers. Farmed salmon was chosen, because, according to one environmental organizer knowledgeable about the campaign, "it has just a few narrow points in the production chain ...and it's fast becoming a staple seafood item." Additionally, it was noted that aquaculture is viewed as something that people in the environmental community see as the future of how we are going to feed people fish, as wild fisheries are already severely over harvested. However, the way much of aquaculture is currently being practiced is not environmentally sustainable, especially salmon aquaculture. Thus, a campaign that focused on aquaculture, and not wild fisheries, was viewed as more necessary, given the rapid expansion of aquaculture.

NET's farmed salmon campaign, "Pure Salmon," differs from previous single species market campaigns in that it is the first campaign that is trying to be international in scale, beyond just North America. While NET heads the campaign, it has partners in several countries in Europe (as well as a European organizer), Canada, and Chile. The campaign uses many of the similar kinds of strategies as previous single species campaigns. However, what distinguishes this campaign from other campaigns is that it is more focused on retailers and larger buyers, such as distributors, and less so on chefs. In part, this is because salmon is a much more "popular" fish than swordfish, Chilean sea bass, and caviar, all of which are more "luxury" food items. While the "Pure Salmon" campaign was still getting off the ground at the time of my research, it had been successful in getting Albertson's to issue a letter to the Salmon of Americas, a salmon aquaculture trade association, that was critical of the current salmon aquaculture practices, and specified standards that they would like to see instituted in the industry.[39]

[39] See Appendix 1 for a copy of the letter.

Lastly there is an emerging campaign focused on farmed shrimp. The campaign is concerned with the environmental impacts of shrimp aquaculture, the potential health hazards of farmed shrimp to people, and the impacts that shrimp farming is having on the shrimp fishing industry in the US. At the time of my research, the campaign was largely an "education building campaign." While the campaign has focused more on pressuring government, a component of the campaign is "decreasing the consumption of farmed raised shrimp." Thus far, most efforts have been oriented towards educating consumers and getting them to request wild shrimp at restaurants and retailers. The campaign has yet to make any significant gains in either curbing the market for shrimp, or getting stronger regulations passed.

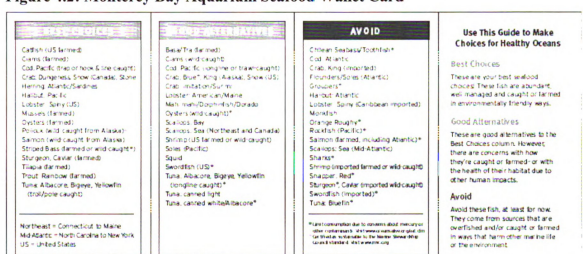
*General Demand-Oriented Campaigns*

There are four kinds of general campaigns oriented towards moving the market for seafood in more sustainable directions. They are consumer education campaigns, chef- and restaurant-focused campaigns, campaigns targeting retailers, and labeling campaigns.

Consumer education has been a cornerstone of the sustainable seafood movement. Approximately 20 percent of the Packard Foundation's spending on sustainable seafood from 1999 to 2004 went to consumer and gatekeeper (i.e., chef) education (Bridgespan Group 2005). The most important component of consumer education campaigns, and one of the trademarks of the movement, has been seafood cards (See Figure 4.2). Seafood cards are wallet-sized cards that inform consumers what fisheries and kinds of aquaculture are environmentally sustainable.

Currently, there are three sets of cards circulating in the US. The Monterrey Bay Aquarium, Blue Ocean Institute, and ED all produce cards, with the Monterrey Bay Aquariums having the largest circulation.[40] There are several variations in the cards, which has been the source of some controversy. The Monterey Bay Aquarium and Blue Ocean Institute use three categories, in the case of the Monterey Bay Aquarium these are "best choices," "good alternatives" and "avoid." Blue Ocean uses a color coded scheme that rates seafood as having few to no problems, some problems, or a combination of problems. ED only uses two categories: "best choices" and "worst choices." However, more controversial is that each of the three organizations uses slightly different methodologies to decide how to classify the various kinds of seafood.[41] Consequently, at times, there has been some variation in where certain species of fish are classified on the different cards.

**Figure 4.2: Monterey Bay Aquarium Seafood Wallet Card**




(Monterey Bay Aquarium 2006)

[40] As the Monterey Bay Aquarium is an aquarium that receives a high number of visitors, it is able to distribute cards more widely than the Blue Ocean Institute or ED. Additionally, it has partnerships with several other aquariums through which its seafood cards are distributed.

[41] Seafood Choices Alliance undertook an effort to coordinate the cards. However, the process never came to fruition. Part of the problem, several interviewees noted, was that certain actors were unwilling to compromise on their methodologies.

In conjunction with the cards, the three organizations, as well as other organizations active in the sustainable seafood movement, partake in a host of consumer education activities. To complement the wallet-sized versions of the cards, which contain only a very limited amount of information, each organization also has a website and additional publications that contain much more information on the fish species and fishing and aquaculture practices. For example, the Blue Ocean Institute has produced a *Seafood Lover's Almanac*, which is a book on sustainable seafood that includes environmental information, cooking suggestions, and artwork. The organizations also periodically hold public events to publicize the idea of sustainable seafood and the cards, such as the Monterey Bay Aquarium's annual "Cooking for Solutions" event, which is a multi-day cooking event that features celebrity chefs from all over North America.

In evaluating the effectiveness of the cards and connected events, the Bridgespan Report (2005) found that awareness of sustainable seafood has increased. Several interviewees also commented that the cards have raised awareness among consumers. Additionally, many of the above single species campaigns have been couched in the cards. As will be discussed later, having alternatives when telling someone not to eat, sell, or serve a fish is crucial. Thus, organizers of single species campaigns have used the cards as a way to recommend good alternatives to consumers, chefs, and retailers.

However, the impact of cards is contested within the movement. First, it was questioned whether the cards were preaching to the choir. While some supporters of the cards admitted that this might be partially true, they commented that many environmentalists did not even know what fish they should and should not eat. Thus, even if the cards were just reaching those already committed to marine conservation, they

were still fulfilling an important function. Second, some criticized the cards for putting all the responsibility on consumers. For example, one interviewee commented:

> To carry around those god damn cards, to get the updates, to understand the difference between this kind of shrimp and this kind of shrimp.... That kind of nuance is lost, because there are some sustainable shrimp. You get to the restaurant and they probably call it something else on the menu and there is this huge "I don't know."

The above comment also points to the third and fourth criticisms of the cards that emerged in interviews. Third, questions were raised regarding the ability of the cards to keep up with the changing conditions of fish stocks. For example, one interviewee rhetorically asked, "How often does the consumer need to get a new card?" Proponents of the cards argued that this was not a problem, as the condition of fish stocks or aquaculture practices did not change that rapidly, and the cards were updated periodically. Fourth, nearly all interviewees argued that seafood was extremely complex, especially compared to other protein sources such as beef, pork, and chicken. Consequently, some interviewees believed the cards were too simplistic. For example, often for any single seafood product, there are good choices and bad choices. Thus, within the best choice category there could be seafood that was problematic, and in the worst choice category there could be some seafood that was a good choice. However, there is no way for such information to be conveyed by the cards. Lastly, the cards were criticized for not being better integrated into the large ocean and marine conservation movement. In speaking about the cards, one interviewee asked, "How long can you sustain the masses and affect their eating habits?"

In addition to getting chefs and restaurants to support single species campaigns, there is an effort within the movement to encourage chefs and restaurants to become

supporters of the notion of sustainable seafood more generally. Spearheading the effort is the Seafood Choices Alliance. The alliance is working with chefs and restaurants to get them to support sustainable seafood. These efforts include chef education, connecting chefs with sustainable suppliers, and public relations efforts to promote sustainable seafood, as well as those actors catching, producing, processing, and selling it. As part of this effort, Seafood Choices Alliance also holds an annual "Seafood Summit" that brings together the seafood industry, the foodservice industry, and the environmental community. Currently, over 1,300 restaurants in the US and Canada are members of Seafood Choices Alliance.[42] In conjunction with the Blue Ocean Institute and Wildlife Conservation Society, Seafood Choices Alliance is also working on a program entitled "Schooling Chefs," which is a sustainable seafood training program for foodservice professionals. Here, the idea is to create an educational program that can be adopted by culinary schools to teach their students about the various environmental issues related to seafood. The Chefs Collaborative and ED have also produced educational materials on sustainable seafood, and have worked with chefs to educate them about the environmental impacts of different kinds of seafood.[43]

According to the Bridgespan Report (2005), the above programs have had some success in educating chefs. There has been an increase in the number of chefs and restaurant owners "who perceive that harmful fishing practices are a severe problem" from 26 percent in 2001 to 36 percent in 2004 (Bridgespan Group 2005, 9). Additionally, there was an increase from 30 percent of chefs and restaurant owners in 2001 who

[42] It needs to be noted that membership does not require to sell only seafood in the best choice category. Rather, it just means that they support the idea of sustainable seafood.
[43] The Chefs Collaborative is an organization of progressive chefs committed to social and environmental causes, such as environmental sustainability.

stopped selling a particular kind of seafood in response to environmental issues to 37 percent in 2004. Nevertheless, somewhat contradictorily, the percentage of chefs and restaurant owners who perceive overfishing to be a severe problem decreased from 39 to 34 percent over the same time period.

While targeting retailers is a key component of single species campaigns, several organizations are also working cooperatively with retailers to try and get them to make their seafood product lines more sustainable. One of the longest running relationships is between the New England Aquarium and Royal Ahold USA, which have been collaborating since 2001. The relationship began when Royal Ahold's then director of corporate social responsibility approached the New England Aquarium about being a "third-party auditor" of their seafood. The outcome was a joint program known as "Choice Catch," which was renamed "EcoSound" in 2005.

In the "EcoSound" program, the New England Aquarium's primary role has been to make recommendations to Royal Ahold regarding seafood products that they should and should not be carrying. In 2002, they recommended that Royal Ahold not carry Chilean seabass. Even though Chilean seabass was quite a popular fish at the time, Royal Ahold agreed to phase it out. They compromised in that they would only special order it for customers if they requested it after the seafood clerk had explained to them the reasons they did not carry it. Similarly, the aquarium also recommended that they switch their sourcing of orange roughy to one stock that the aquarium identified as being healthy. While not willing to stop selling orange roughy, they did agree to stop advertising it, which has led to a significant drop in their sales of it. The aquarium has also been working with Royal Ahold to develop standards for aquaculture products.

Recognizing that Royal Ahold will not stop selling farmed salmon or shrimp due to their immense popularity, the idea is to develop standards, identify the best producers, and shift Ahold's procurement to them. The relationship has been largely behind the scenes until recently when they did some joint promotions of haddock in select stores. At this time, Ahold's partnership with the New England Aquarium was publicly advertised.

In March of 2006, ED, Wegmans, a medium-sized retailer located primarily in the northeast, and Bon Appétit Management Company, an on-site restaurant company serving over 190 corporations and universities, announced jointly developed standards for farmed salmon (Environmental Defense 2007b). The agreement was reached through ED's "corporate innovation" program. The agreement outlines eight purchasing standards, five of which must be put into practice immediately, and three that will be phased in according to an agreed upon timetable. The standards include:

1. Farmed salmon must meet international health standards and advisories;
2. Reductions in ratio of wild fish used in fish feed, and sourcing of fish feed from only well-managed fisheries;
3. Improved systems to prevent escapes;
4. Minimization of drug use;
5. Minimization of disease and parasites in farming operations, and their transfer to wild species;
6. Reduction in water pollution;
7. Reduction of impacts on habitats below net-pens;
8. No killing or harming of wildlife (Environmental Defense 2007a).

The hope is that through getting some companies to adopt standards for salmon aquaculture, it will pressure other retailers to do the same and thus, generate a "race to the top" in the salmon aquaculture industry.

The biggest development for the sustainable seafood movement has been getting Wal-Mart to make a commitment to sustainable seafood. In 2005, Wal-Mart announced that it would purchase shrimp certified by GAA. However, more significant was the

announcement by Wal-Mart in February 2006 that it would shift to stocking its North American stores with wild-caught fresh and frozen fish that are MSC certified. These negotiations were ongoing during my research and were confidential. While my knowledge of how this development came about is limited, it was, at least, a partial outcome of a meeting between several large seafood buyers, including Wal-Mart, Darden, Royal Ahold, and Sysco, and environmental organizations, including SeaWeb and WWF, among others. Also coming out of these negotiations was an announcement by Darden, which is the owner of Red Lobster and Oliver Garden restaurants, among others, that it was developing a certification program for farmed shrimp. The ability to get Wal-Mart and Darden to make a commitment to the idea of sustainable seafood represents a shift in the movement from focusing on consumers and niche markets to focusing on larger retailers and the mass market. This is an important transformation in the movement, which is discussed in chapter 8.

The last kind of demand-oriented campaign being used by the movement is a labeling campaign. In 2002, Sustainable Fishery Advocates was founded and launched the FishWise™ labeling program. The program labels the fish in a retailer's seafood counter: green (best choice), yellow (okay choice) and red (worst choice). The program uses its own standards and criteria in determining the proper category for seafood products. However, it works with the Monterrey Bay Aquarium, and has also been working with ED on labeling for the healthiness of fish. The program is designed as a turnkey program in that Sustainable Fishery Advocates provides the labels, and trains the staff. Thus, it requires little effort on the part of the retailer. At the current time, FishWise™ is being used by several independent retailers in the Bay area and central

valley regions of California, two regional chains in the area, and an online retailer. The stores using the FishWise™ program tend to be oriented towards the natural food and organics market (Sustainable Fisheries Advocates 2007).

A labeling campaign, such as FishWise™, differs from other demand-oriented campaigns in two ways. First, in some ways, it targets both consumers and retailers. While retailers label their seafood accordingly, consumers are the ones who make the ultimate decisions. Consequently, it is seeking to educate both consumers and retailers. Second, it is completely non-confrontational. That is, the program does not ask retailers to change their buying practices at all. One person knowledgeable about FishWise™ commented:

> The program is not telling them [retailers] what to buy and what not to buy. They are not putting any judgment on anything. They are just offering transparent labeling. So there is really no risk to the store. They are not taking any chances by doing that.

Thus, the philosophy undergirding FishWise™ is to provide people with information, and let them make informed decisions. The assumption is that if people have information on the environmental impacts of various seafood products, they will tend to choose the products that have less negative impacts on the environment. Figures 4.3, 4.4, and 4.5 represent data from one of the retailers that has implemented FishWise™.[44] The data indicate that the labeling of seafood by its environmental impacts has led to changes in consumer buying habits.[45]

[44] Data were provided by a participant in the study.
[45] It needs to be noted that these data are from a natural foods and organic grocer in a fairly progressive region. Thus, caution is necessary in generalizing these data to other kind or retail outlets and markets.

**Figure 4.3: 2nd Half 2002 Seafood Sales**

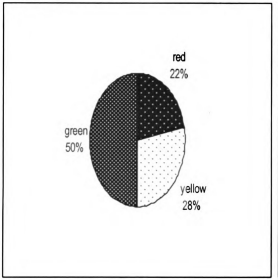



**Figure 4.4: 1st Half 2003 Seafood Sales**

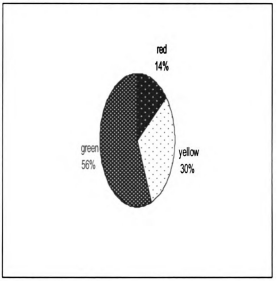
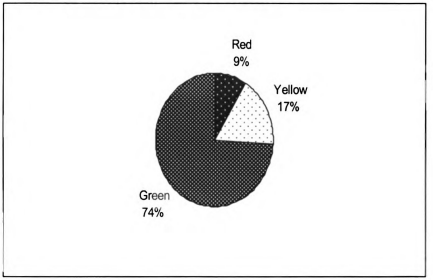



**Figure 4.5: 1st Half of 2004 Seafood Sales**




**Supply-oriented Campaigns**

In order for there to be a campaign promoting the idea of sustainable seafood, there has to be a supply of sustainable seafood. Thus, foundations and marine and ocean conservation organizations have initiated a series of efforts, first, to promote sustainable fishing and aquaculture practices, and second, to differentiate sustainable seafood sources

from unsustainable ones. The primary mechanism through which the movement has tried to achieve this has been certification of two kinds: certification for wild-caught fisheries, and certification for aquaculture. In addition, the Packard Foundation, in conjunction with private investors, launched an investment fund focused on sustainable seafood in 2005 in an effort to promote the production of sustainable seafood.

*Marine Stewardship Council (MSC)*

The MSC has been and continues to be a cornerstone of the sustainable seafood movement. The MSC is an accreditation body that established environmental standards for fisheries and accredits third-party certifying bodies to certify fisheries against such standards. The MSC was formed in 1997 by several marine and ocean conservation movement organizations and the transnational corporation, Unilever. According to WWF, the purpose of the MSC is to "provide powerful economic incentives for sustainable well-managed fisheries" (qtd. in Constance and Bonanno 2000, 129), while the goal for Unilever was to secure a long-term supply of fish. According to one interviewee, the Packard Foundation was a key player behind the scenes in the establishment of the MSC, and has been a central source of its funding. From 1999 to 2004, the Packard Foundation invested $12.2 million in certification-related activities, with a majority of it either directly or indirectly supporting the MSC. This represented 57 percent of the money allocated to the Seafood Choices Initiative, by far the most funding of any of the components of the initiative (Bridgespan Group 2005).

The MSC functions similarly to other social and environmental accreditation agencies (Cashore et al. 2004; Hatanaka et al. 2005; Mutersbaugh 2005) in that it has

developed a set of principles for sustainable fishing that fisheries can be certified against. The principles include:

- The maintenance and re-establishment of healthy populations of targeted species;
- The maintenance of the integrity of ecosystems;
- The development and maintenance of effective fisheries management systems, taking into account all relevant biological, technological, economic, social, environmental and commercial aspects; and
- Compliance with relevant local and national local laws and standards and international understandings and agreements (Marine Stewardship Council 2002).

For each of the above principles a series of criteria exist that elaborate on each principle in more detail. Independent certifiers are then accredited to certify fisheries to these standards. Upon certification, fisheries can claim and advertise that they are certified by MSC.

As of the end of 2006, 21 fisheries had been certified to the MSC standard and over 450 products carried the MSC label globally (Marine Stewardship Council 2007). Nevertheless, while the environmental advocacy community tends to support the MSC in principle, support of it has been divided in its brief history. In part, this is because there have been a number of controversial certifications undertaken. The marine and ocean conservation community has contested several fisheries that the MSC has certified as sustainable, including New Zealand hoki, South Georgian toothfish (i.e., Chilean seabass), and Alaskan pollack (Brown 2004). In these instances, questions were raised regarding whether these fisheries were sustainable, and whether fish were being harvested in sustainable manners. Some interviewees also commented that parts of the seafood industry continue to be weary of the MSC because they perceive it as being aligned with WWF, despite the fact that there is no formal affiliation with WWF

anymore. Put differently, parts of the seafood industry view it as an environmental advocacy organization, as opposed to a "neutral" standards setting body.

The other problem plaguing the MSC that interviewees identified was its lack of visibility in North America. For example, interviewees remarked that "consumer awareness of the MSC label in the US is very low" and "their lack of label on product and lack of label recognition" is hurting the ability of the MSC to create economic incentives for sustainable fishing practices. At the time of my research, many of the fisheries that were MSC certified, such as Alaskan salmon, tended not to advertise in the marketplace that it was MSC certified. Part of the problem may be that there are fees to use the MSC label, and in most marketplaces there may not be sufficient demand for sustainable seafood to warrant companies paying to use the label on their products. However, despite the above critiques, the environmental community tends to view the MSC as a critical component of marine and ocean conservation. Many of the environmental organizers who I interviewed commented that while the MSC "was not perfect" and that it "got off to a rocky start" ... "the environmental community needs to throw its support behind it."[46]

*Aquaculture Certification*

In contrast to the MSC-led certification for wild-caught fisheries, there is no single accreditation body that oversees environmental certification of aquaculture. The result has been the development of multiple certification programs and private partnerships for various kinds of aquaculture. First, several private environmental third-

[46] Several interviewees pointed to the hiring of a new CEO in 2004 as a sign that the MSC might be getting its act together.

party certification companies, such as Naturland, have developed their own standards for either environmentally sustainable or organic aquaculture. The validity of these standards tends to be contested within the environmental community. Second, several industry groups, such as the GAA, have developed best practice environmental and social standards for aquaculture, particularly shrimp aquaculture. However, the environmental community tends to view these as industry standards and, thus, as having limited legitimacy. Third, seafood distribution companies have also begun to develop their own standards. Eco-Fish, which is a company that specializes in supplying sustainable seafood to retailers and restaurants, has developed its own standards for both wild caught and aquaculture sustainable seafood products. Compared to other companies, Eco-Fish has a high level of legitimacy in the environmental community, as it has received support from the Packard Foundation, and has several prominent members of the marine and ocean conservation community on its board that reviews the sustainability of different fisheries and producers. Lastly, there are several partnerships, like the one between ED, Wegmans, and Bon Appetite, and the New England Aquarium and Ahold US, where private standards have been collaboratively established for aquaculture.

While the sustainable seafood movement as a whole tends to support certification as a useful mechanism to regulate wild-caught fisheries and aquaculture, the emergence of multiple private standards and certification problems for aquaculture tends to be viewed as problematic.[47] First, there is a concern regarding the transparency of private standards and certification. Speaking of such programs, one interviewee commented, "there is no transparency, there is no monitoring." Second, there are questions of

[47] A minority of the movement is critical of the notion of certification *per se*. The concerns of such critics tend to focus on questions of transparency, fear of industry control of certification, and the belief that public regulations are better governance mechanisms than private standards and certification.

legitimacy and trust. How do private label and certification programs establish trust and legitimacy in the public eye? With private label standards and certification programs, trust and legitimacy is tied to the organization/company. Thus, actors with different missions tend to be distrustful of each other and their standards and certification programs (e.g., industry tends to distrust environmental advocacy organizations, and environmental advocacy organizations tend to distrust industry). Lastly, there is the threat that if there are too many private standards and certification programs, then this will become confusing to consumers. In such a situation, there is the threat that certification and labels will become "meaningless to the public."

Largely in response to such concerns, the WWF, with support from the Packard Foundation, is spearheading an effort to develop an aquaculture certification program and accreditation body to manage it. To accomplish this, the WWF is holding a series of "dialogues" that bring together actors in all parts of aquaculture supply chains, scientists, and NGOs (World Wildlife Fund 2007). The goal of such dialogues is to develop standards through consensus. As one interviewee familiar with the dialogues stated, "They're not talking about the gold standard that nobody's ever thought of.... They're talking about what's feasible and who is the best doing that." In other words, they are trying to identify the most environmentally sound producers, and make their practices into best management practice standards. By doing this, they are hoping to shift the management practices of the entire aquaculture industries to those of the top five percent of producers. The idea is that raising production standards in aquaculture production to that of the best producers will mitigate the worst of the environmental impacts.

Having the resultant standards agreed upon by both industry and the environmental community is also important for pressuring retailers to only source from certified farms. According to one interviewee, the hope is that by reaching consensus,

> We can spin off so much momentum that the buyers and retailers can't say no.... And if they have been offered this and they reject it, and say that they will still buy their shrimp and buy tilapia from such and such, they look really bad because they have an option now.

Put differently, retailers will not be able to claim that the standards are biased towards the environmental community; thus, this will eliminate a chief obstacle to getting them to implement such standards into their procurement practices.

*Investing in Sustainable Seafood*

Seeking to go beyond just establishing standards and promoting the certification sustainable seafood, the Packard Foundation has begun to seek ways to actively foster the growth of sustainable seafood. In 2005, the Packard Foundation launched an effort to increase the supply of sustainable seafood through investment in the seafood industry. Recognizing that bottlenecks in the middle of the supply chain were a potential roadblock to making sustainable seafood a reality in the marketplace, the Packard Foundation established the Sea of Change Investment Fund. Packard contributed half of the start-up costs and private investors the other half. The fund is a "double bottom line" investment fund in that it is seeking both financial returns and conservation returns. The goal is to provide capital to firms involved in the distribution of sustainable seafood products. The company has made two investments thus far. One is in EcoFish, and the other is in Callaway Consumer Products, LLC, which is the parent company of Organic Bistro Whole Life Meals, which produces packaged instant organic meals.

In some ways, many in the movement view the Sea of Change Investment Fund as an experiment in terms of new ways to use foundation funding. Several interviewees commented that to their knowledge it was the first time that foundation money has been used to leverage private equity to invest in environmentally sustainable businesses. Thus, "if it [Sea of Change Investment Fund] is successful then its biggest legacy will probably be the change in the way foundations and venture capital work as a model," according to one interviewee. Such a use of foundation money represents another new market-based social movement strategy.

**Summary**

The primary purpose of this chapter has been to provide the backdrop for the remaining chapters of this dissertation, wherein I present my findings on the use of market-based campaigns by the sustainable seafood movement. To do this, this chapter provided an overview of the sustainable seafood movement. This discussion included the factors behind the turn to market-based campaigns by marine and ocean conservation organizations, the organizations that make up the sustainable seafood movement, and the various campaigns that the movement has undertaken.

In the first part of this chapter, I argued that the turn towards market-based campaigns was a response to the movement's lack of success in pressuring government, as well as the successes that forest advocates were having using the market. Additionally, I found that foundations have been the lead actors behind the move towards market-based approaches by marine and ocean conservation organizations. In the second section, I identified three kinds of organizations in the movement: (1) mainstream

environmental organizations, (2) marine and ocean conservation organizations, and (3) aquariums. In addition, there are two coalitions that are part of the movement. The first is CAAR, which runs the "Farmed and Dangerous" campaign, and the second is the Seafood Choices Alliances, which is a loose coalition of most of the organizations in the movement.

In the last section, I examined the campaigns that have been undertaken by movement organizations. Two general kinds of campaigns were identified: demand and supply focused. I further divided demand-oriented campaigns into two distinct kinds: single-species campaigns and general campaigns. Whereas single-species campaigns are organized around a single kind of marine species, general campaigns focus on a general constituency, such as consumers, chefs, or retailers. In contrast, supply-oriented campaigns tend to be less diverse, with the focus mostly on certification. However, a recent innovation by the movement is the Sea of Change Investment Fund, which is designed to make financial investments that foster the supply of sustainable seafood. Having now provided an overview of both the seafood industry and the sustainable seafood movement, the remaining parts of this dissertation present the findings from my analysis.

## Chapter 5. From Political to Economic Opportunities: How the Sustainable Seafood Movement is Trying to Take Advantage of Opportunities Presented by the Structure of the Seafood Industry, Seafood Consumption, and the Agrifood Marketplace

As discussed in the introduction, the political opportunity approach examines the ways that the structure and practices of the state affects social movements (McAdam 1999). While this approach is useful, its focus on the state is too narrow, as social movements increasingly are operating in the marketplace. Thus, to understand the opportunities of which social movement are trying to take advantage, the structure and practices of both the state and economy have to be examined (Pellow 2001; Schurman 2004). To do this, I combine the political opportunity approach with Schurman's (2004) "industry opportunities approach." Using this framework, I argue that the structure of fisheries management limits the political opportunities available to the sustainable seafood movement. Consequently, the movement is using market-based campaigns to try to take advantage of the economic opportunities presented by the structure of the seafood industry, seafood consumption, and agrifood marketplace. The first part of this chapter examines the lack of political opportunities available to the movement, while the remaining sections discuss the economic opportunities presented by the structure of the seafood industry, seafood consumption, and agrifood marketplace

### Constrained Political Opportunities

Most interviewees noted that a leading factor behind the turn to market-based campaigns was a lack of political opportunities. This, in turn, was largely attributed to the prioritization of economic outcomes over conservation goals in the management of fisheries. Schnaiberg's (1994) analysis of the relationship between the state and

environment is useful for understanding the lack of political opportunities for marine and ocean conservation. He argues that there is a continual conflict within states between fostering accumulation and protecting the environment. He outlines three possible approaches states can take to managing this conflict: (1) economic, (2) managed scarcity, and (3) ecological. In the first, capital accumulation completely wins out; in the second, the environment is minimally regulated to ensure continual accumulation; and, in the third, the environment is prioritized. Applying this framework to the management of fisheries and oceans by the US state, up until the Sustainable Fisheries Act in 1996, the US government's approach to fisheries and ocean management was largely economic in orientation. Since the Sustainable Fisheries Act, it has shifted towards a managed scarcity approach. However, in both instances, political opportunities for social movements are minimal. In the first case, movements are fighting to get marine and ocean conservation on the agenda, and in the second, opportunities are constrained by the continued conceptualization of fisheries as natural resources.[48]

The passage of the Sustainable Fisheries Act had the potential to generate additional political opportunities to marine and ocean conservation organizations, as the notion of conservation was made a formal part of fisheries management. However, several interviewees stressed that this did not happen. Rather, the movement was forced to go on the defensive, as the fishing industry pressured government to roll back or not implement various portions of the act. Additionally, a significant number of interviewees also commented that the pro-business, anti-environmental position of the Bush

[48] The internal conflict between accumulation and the environment is also evident by the dual character of those agencies that are responsible for regulating marine life and oceans. In the US, marine life and the oceans are regulated by the National Oceanic and Atmospheric Administration, which is located in the Department of Commerce. Similarly, in Canada, the Department of Fisheries and Oceans is in charge of both promoting the development of aquaculture and regulating marine life and oceans.

administration has pushed many organizations even more towards market-based campaigns. In discussing less industrialized countries, some interviewees also commented that such countries tend to prioritize economic over environmental interests to an even greater extent, in their efforts to "develop." Thus, political opportunities for marine and ocean conservation tend to be even more constrained in less industrialized countries.

**Economic Opportunities: The Structure of the Seafood Industry**

A lack of political opportunities does not necessarily mean that movements will turn to market-based campaigns or that such campaigns will be successful. The use of market-based campaigns and their success is also dependent on the economic opportunities presented by the given industry(s) that is focus of movements. In the case of the seafood industry, I argue that it has certain characteristics that present opportunities for the use of market-based campaigns, and possibly even necessitate their use. First, the seafood industry is a global industry. This characteristic constrains the ability of marine and ocean conservation organizations to pressure governments to enact stricter management policies or directly pressure producers.

Many interviewees argued that the movement does not have, and in all likelihood will not have, the resources necessary to carry out a series of coordinated campaigns in every nation with significant fishing and aquaculture industries. Furthermore, even if they did have such resources, many nations, particularly those that are less industrialized, most likely would not be receptive to their claims, as fishing and aquaculture are often economically quite important. In this context, many interviewees contended that the

marketplace and market forces were the only way to affect the industry and thus, bring about change in fishing and aquaculture industries that operate today at the global scale.

Second, how the upstream portions of seafood commodity chains are organized can also affect opportunities for social movements to use market-based campaigns. In bulk seafood commodity chains, such as fish sticks, the upstream portion of the chains are fairly consolidated and integrated. Since a few firms control such large percentages of the market, demand-oriented market-based campaigns may be able to shift upstream production practices. Under such conditions, a small, even temporary, change in the market may significantly affect a company's profitability; because producers of bulk seafood products tend to be heavily capitalized. Additionally, companies seeking to gain a competitive advantage, may be willing to implement environmental standards or make changes in their practices in order to separate themselves from their competitors. Thus, in such chains, demand-based strategies may be effective.[49]

In more specialized and niche seafood commodity chains, the upstream portions of the chains tend to be relatively unconsolidated. Consequently, several interviewees noted that pressuring or working with producers can be quite difficult and also time consuming. Rather, through changes in the market, movement organizations can reform upstream components of commodity chains without having to work with a large number of individual producers. Thus, focusing on the market and demand may be a faster and more effective approach to reform fishing and aquaculture practices in such chains than pressuring the governments to enact regulations.

[49] In bulk seafood commodity chains producer-oriented campaigns might also be effective, as movement organizations would only need to target and negotiate with a few companies.

**Economic Opportunities: The Structure of Consumption**

To use market-based campaigns movements need access to markets with high per capita consumption of the product that they are seeking to reform. For example, one interviewee noted that while China's market for seafood is quite large, per capita consumption is quite low. Consequently, doing a market-based campaign there would be quite difficult, as it would entail focusing on a greater number of consumers and retailers. Additionally, opportunities for market-based campaigns would be constrained, if consumption of seafood was globally distributed in ways similar to production. This is because the movement would need to operate in many markets simultaneously. However, while seafood consumption is somewhat globally dispersed, certain markets account for a significant share of consumption. In speaking of how to design and implement market-based campaigns and strategies, a leader in the sustainable seafood movement commented,

> Just like seafood is a globalized industry, you go to the countries where demand is greatest. It is sort of a fundamental principle of a market approach you have to go to where per capita consumption is greatest. In the context of seafood, there are only really three significant markets in the world: US, European Union, and Japan.

In other words, market-based campaigns and strategies are partially dependent on markets of significant size with relatively high levels of per capita consumption.

The US market is a significant market where changes in it could lead to changes in upstream production practices. Additionally, consumption of species from overfished fisheries, such as Chilean sea bass, and farmed salmon and shrimp – currently the most environmentally unsustainable forms of aquaculture – is quite high in the US. Thus,

changes to the US marketplace might disproportionately affect those fisheries and farming operations that are responsible for the most environmental degradation.

**Economic Opportunities: The Structure of Agrifood Marketplaces**

The structure of the market also affects opportunities for the use of market-based campaigns. With respect to seafood, there are five components of the marketplace that influence the opportunities available to marine and ocean conservation organizations to use market-based campaigns. They are (1) retailer concentration, consolidation, and scope, (2) the emergence of economies of quality, (3) the prominence of restaurants, (4) the development of a celebrity chef culture, and (5) the politicization of consumption. Each of these characteristics of the market and how they influence opportunities for the use of market-based campaigns by marine and ocean conservation organizations is discussed.

*Retailers*

Over the past ten years, the US agrifood system has undergone a series of important transformations. One of the most significant outcomes is the emergence of retailers as the lead actors in most agrifood supply chains (Busch and Bain 2004; Konefal et al. Forthcoming; Ponte and Gibbon 2005). Among other things, this has created opportunities for the use of demand-oriented market-based campaigns by social movements. The sustainable seafood movement is one of many movements trying to take advantage of these opportunities.

Up until the 1990s the food retail sector in the US consisted of largely regional markets and mid-size firms (Konefal et al. Forthcoming). Consequently, the power of retailers in agrifood commodity chains was quite constrained. However, a series of political reforms and economic changes in the 1990s has significantly transformed the retailer sector and consequently agrifood supply systems. Whereas in 1992, the top five grocery retailers controlled 19 percent of the US market, by 2005 their market share had grown to 48.3 percent (Caspers-Simmet 2003; Hendrickson et al. 2001; Progressive Grocer 2005). Additionally, while consolidation initially focused on in-market mergers and acquisitions, they have since expanded to include other markets (Wrigley 2001). Thus, as retailers are becoming more consolidated, they are also extending the scale of their operations from regional to national, and now even global markets.

The outcome of this consolidation, concentration, and expansion has been the development of retail oligopolies and buyer-driven supply chains in the global agrifood system (Busch and Bain 2004; Ponte and Gibbon 2005). As leading retailers have gained an increasingly large market share, power has shifted to them in agrifood networks. In short, it is largely retailers, not producers and processors, that now manage supply chains, set product attributes, and determine prices (Busch and Bain 2004; Konefal et al. 2005; Ponte and Gibbon 2005; Wrigley 2001). In other words, retailers are able to exert considerable control on upstream actors.

The advent of a retailer-led agrifood system, where a few retailers control significant market share and where retailers are the lead actors in supply chains, creates opportunities for the use of market-based campaigns. First, large retailers are increasingly national (and global) in scope, making them susceptible to social movement

campaigns on the national (and global) level. Here, the national (and global) scope and significant market share that large retailers control make them more visible and thus, more susceptible to pressure by social movements. Furthermore, the larger retailers are, the more their brands are worth. Hence, large retailers are more likely to protect their brands from damage by social movements and other actors.

Second, if marine and ocean conservation organizations can pressure a larger retailer to implement environmental standards for seafood, or only carry MSC certified products, they can significantly affect upstream practices. For example, speaking of the BC farmed salmon campaign, one interviewee commented that the whole point of going after Safeway is to get them to "push better standards and refuse to buy product that is not farmed better." Third, if a lead retailer adopts such standards, it is likely that others will follow for competitive reasons. One interviewee commented that if one industry leader decides to support the idea of sustainable seafood, this puts pressure on the rest of the industry. He used the example of Wal-Mart, saying if Wal-Mart signs on to the campaign, then "Kroger are you going to say that you are behind Wal-Mart now as far as production and buying practices? You are not up to speed with Wal-Mart?"

*Economies of Quality*

As the retail sector has become more consolidated and concentrated, the character of competition within it has begun to shift. Historically, retailers competed on price; that is, they tried to undersell each other. While price remains important, retailers are now also increasingly competing on quality (Busch and Bain 2004). In other words, the marketplace for food in the US, as well as other industrialized countries, is moving

towards what Callon et al. (2002) have termed "economies of quality." Thus, rather than trying to undersell their competitors, retailers are now attaching qualities to their products and their stores (e.g., environmentally sustainable, socially just, animal welfare, etc.) that distinguish them from others (both within their stores and at other stores).

This shift towards quality is evident in three trends in the retail sector. The first is the rapid expansion of "high-quality," "natural," and "health-oriented" retailers, of which Whole Foods is the most prominent. Second, seeking to differentiate themselves from other large retailers, and also feeling pressure from the rapid expansion of Whole Foods, large national retailers, such as Kroger, have begun to diversify their stores, and are increasingly carrying organic or eco-friendly products, an increased selection of high-quality niche products, and more ethnic foods. Third, mid-sized and regional retailers, such as Wegmans, realizing that they cannot compete with the large retailers on price, have turned to quality in order to try and differentiate themselves and maintain a place in the marketplace (Konefal et al. Forthcoming).

The shift towards competition on quality also creates opportunities for the sustainable seafood movement to use market-based campaigns to pressure retailers to carry seafood that is more environmentally sustainable. First, the idea of sustainable seafood should appeal to those retailers, such as Whole Foods, that brand themselves as environmentally-friendly, health-conscious stores. Not surprisingly, such stores have tended to be among the first targets of the campaign. Second, sustainable seafood provides both large and medium firms a way to differentiate themselves from their competitors and for early adopters, at least temporarily, to become an industry leader.

Third, with the shift towards competition based on quality, retailers generally become more susceptible to social movement pressure, especially large national retailers with their increased visibility. Specifically, the more retailers compete on quality, the more important reputation becomes to their profitability. This position was affirmed by several interviewees who stressed the importance of reputation and perception with regard to food. Thus, movements can publicly air contradictory claims to the ecological, health, or cultural messages that retailers are advancing, when retailers are not doing what they are saying. For example, in discussing one retailer, an interviewee commented,

> They are doing this re-branding 'green is for life' ... so if you stand up and say "No you are having a negative impact on the health of our communities, we need you to come up and see what is going on." And they say, "no we don't think it is worth it." Then this is not going to reflect well on their new goal, image.

Put differently, while competition on quality creates new opportunities for profitability for retailers, it also creates opportunities for social movements to pressure them and become important actors in the marketplace.

*Restaurants*

Restaurants are another component of the agrifood market that presents opportunities for the use of market-based campaigns. Restaurants are becoming increasingly important actors in the US agrifood system, and possibly the global agrifood system.[50] In the US, people are spending a greater percentage of their food budgets at restaurants than ever before (Economic Research Service 2002). According to the

[50] Despite their increasing prominence, the role of restaurants in the global agrifood system has been largely neglected by food and agricultural sociologists. Thus, there is a shortage of data on how restaurants influence markets and consumption, as well as upstream production processes.

National Restaurant Association, in 2005, the average household expenditure at restaurants was $1,054 per person (National Restaurant Association 2007). In other words, restaurants have become more important in deciding the kinds of foods people eat. While approximately seven out of ten restaurants are independent operations (National Restaurant Association 2007), large chains, such as Red Lobster, Olive Garden, and Applebee's, have become ubiquitous in the US.[51] The national scope of such chains means that they are in nearly every market in the US, that they have strong brand recognition among consumers, and that they have significant purchasing power. Thus, given the increasing popularity of restaurants, coupled with their increased visibility, to the extent that marine and ocean conservation organizations are able to influence what restaurants put on their menus, they can affect seafood consumption.

Restaurants are also quite important, as certain kinds of seafood are predominately consumed in restaurants. While seafood products like canned tuna and fish sticks have always been consumed at home, and shrimp and salmon are increasingly becoming home products as they become more accessible, seafood has not penetrated home cooking to nearly the same extent as chicken or beef in the US. Much fresh fish, such as Swordfish and Chilean sea bass, and luxury seafood items, such as caviar, tend to be disproportionately consumed in restaurants. Consequently, a significant portion of the market for, and consumption of, seafood is controlled by restaurants. As a result, market-based campaigns that focus on restaurants may be able to shift demand for certain kinds of seafood.

[51] Many chain restaurants are franchises, meaning that they are independently owned. However, franchise owners have varying degrees of freedom depending on the particular franchise.

*Chefs as Celebrities*

Opportunities for social movement organizations in the area of food and agriculture are also emerging as chefs increasingly become celebrities. Chefs, such as Mario Batali, Bobby Flay, and Alice Waters, have gained tremendous popularity, giving them power to influence food consumption patterns and trends. For example, one interviewee commented that "chefs are huge educators of food" and that "people really respect what chefs say." Similarly, with respect to the "Caviar Emptor" campaign, another interviewee commented that celebrity chef support has been key to the campaign's success. She noted that "getting into *Food and Wine*, getting into some major trade shows, and just promoting the alternatives with celebrity chef backing ... has been very important."[52] Furthermore, as chefs have gained celebrity status, their influence has moved beyond just the restaurant walls. Increasingly, chefs are impacting home food consumption through the proliferation of cook books, television programs, webpages, and magazine articles. For example, one interviewee commented that if people see chefs cooking tilapia – a relatively uncommon kind of seafood in the US until fairly recently – they are more likely to try and cook it at home. In this way, marine and ocean conservation organizations can potentially shift the demand for and consumption of seafood by influencing chefs.

[52] *Food and Wine* is a leading cooking, dining, and wining magazine that commonly features celebrity chefs.

*Political Consumerism*

The final component of the market that may affect the use of market-based campaigns by marine and ocean conservation organizations are consumers themselves. Consumer interest in the safety and quality of food, and how, where, and by whom it is produced has also increased in industrialized countries (DuPuis 2000; Murdoch et al. 2000). Additionally, consumers often express their moral, ethical, socio-cultural, and environmental values through consumption (Micheletti et al. 2006). Consequently, consumers may be more open to the claims advanced by social movement organizations and their critiques of the conventional agrifood system. In this way, movement organizations can use market-based campaigns that highlight the unsafe, unhealthy, socially unjust, and environmentally unsustainable character of contemporary food to enroll concerned consumers as movement supporters.

**Summary**

Historically, social movements have sought to take advantage of political opportunities through the use of state-centered campaigns. However, in case of the sustainable seafood movement, the structure of fisheries management poses significant constraints to the use of state-centered campaigns. Consequently, having few political opportunities, the sustainable seafood movement has sought to take advantage of economic opportunities presented by the structure of the seafood industry, seafood consumption, and the agrifood marketplace. I argue that the outcome has been the emergence of market-based campaigns as the dominant approach used by marine and ocean conservation organizations.

## Chapter 6. The Practices of Market-based Campaigns

Implementing market-based campaigns entails using a diverse array of strategies to pressure actors whose actions a movement is seeking to change. In this chapter, I examine the strategies that organizations in the sustainable seafood movement have used in their market-based campaigns. First, the two forms that market-based campaigns can take are examined: confrontational and non-confrontational. Organizations in the sustainable seafood movement have tended to favor non-confrontational approaches. This is important, because it influences the strategies, frames, and messaging used by organizations in implementing market-based campaigns. Second, I examine the strategies used by organizations in implementing market-based campaigns. Specifically, chef and restaurant, retailer, consumer, and media focused strategies are discussed. Third, I examine how movement organizations have portrayed the problems associated with overfishing and aquaculture to various actors. Here, I draw on the idea of framing in the social movement literature (Benford and Snow 2000; Snow et al. 1986). Fourth, how organizations then communicate frames to consumers, retailers, and chefs is discussed. Fifth, I examine the role that science plays in market-based campaigns. Similar to most environmental campaigns, science plays an important role in legitimating the claims of movement organizations in the sustainable seafood movement. Lastly, the importance of alternative seafood offerings to the success of market-based campaigns is discussed.

**Confrontational Versus Non-confrontational Approaches**

Newell (2000) argues that market-based strategies can take two forms: "liberal" and "critical." Liberal approaches are marked by cooperation between movement organizations and government, while critical approaches are more confrontational. While the divide between liberal and critical approaches is evident in the sustainable seafood movement, the movement as a whole tends to be more liberal in its orientation. A common position expressed in interviews was that the movement was trying to achieve incremental change. This position is reflected in the following comment from an interviewee.

> As a conservation organization, if there is an opportunity for improvement, it seems like you got to take it. Are we selling out to big industry? I think we are selling out to improvement. That's our job.

Additionally, movement organizations with a liberal orientation tend to view working with business and industry, as opposed to against them, as the most effective way to achieve social and environmental change. Many of the organizations in the sustainable seafood movement operate from this position. Thus, they seek to work cooperatively on both the back and front stages with retailers, chefs and restaurant owners, and the seafood industry. The outcome is that much of the sustainable seafood movement favors non-confrontational strategies.

While the movement tends to lean towards approaches that are not confrontational, some organizations have shifted towards more conformational strategies when they have achieved little success using liberal approaches. For example, both farmed salmon campaigns – "Farmed and Dangerous" and "Pure Salmon" – began by seeking to work cooperatively with retailers. In part, the farmed salmon campaigns tend

to be more confrontational than others, because farmed salmon has become an important product for retailers and thus, they tend to be highly resistant to not selling it. After being stonewalled by most retailers, CAAR took out a full-page article in the New York Times naming specific retailers as selling farmed salmon from BC, and the dangers posed by salmon farming to BC's environment. As part of its "Farmed and Dangerous" campaign CAAR also has an ongoing campaign targeting Safeway – "Smarten up Safeway" – that is publicly very critical of Safeway. The "Pure Salmon" campaign has also taken more of a critical approach in its campaign targeting retailers.

Within the movement, the degree to which confrontational approaches are necessary or even beneficial is contested. On the one hand, some interviewees argued that the movement needs a diversity of positions and approaches from radical to conservative. Reflecting this position, one interviewee argued,

> ... you need all types of people. I have been working in the environmental community for a long time and you always need a left and right flank. And you need the people in there who are supposedly reasonable.... And the other people are out there putting all the pressure on making sure that a good deal gets cut and not something just minimal.

On the other hand, some interviewees argued that confrontational approaches are dangerous, since they can undermine the ability of movement organizations to collaborate with restaurants, retailers, and the seafood industry in the future. Several interviewees cited earlier campaigns, such as "Give Swordfish a Break," and the way they angered the seafood industry and some chefs as hurting future collaborations. As the movement is increasingly emphasizing working collaboratively with restaurants, retailers, and industry, the use of more confrontational approaches will likely become even less common in the future.

**Implementing Market-based Campaigns: Strategies**

Marine and ocean conservation organizations have used a multitude of market-based strategies in trying to take advantage of the economic opportunities presented by the seafood industry and marketplace for food. In part, this is because social movement use of market-based campaigns was still relatively new at the time. Consequently, marine and ocean conservation have experimented with a variety of strategies in trying to find out which were most effective. In this section, the various strategies used by the sustainable seafood movement are examined. Strategies are divided into subsections by their focus: chefs and restaurants, retailers, consumers and media. While each of the following strategies is discussed separately, organizations in their various campaigns have used some combination, if not all, of these strategies.

*Chefs and Restaurants*

Many of the campaigns in the sustainable seafood movement have had components that have focused on chefs and restaurants. While chefs work in restaurants, focusing on chefs and targeting restaurants are not necessarily the same process nor do they seek to achieve the same objective. Specifically, the objective of enrolling chefs is to garner allies and public spokespersons, while the objective of targeting restaurants is to influence their menu offerings.

Viewing chefs as gatekeepers, the campaign has sought to enroll them as allies and spokespersons. The process of enrolling chefs is a generally a grassroots effort. In the Chilean sea bass campaign, NET had a roving set of organizers who would travel from city to city trying to get chefs to sign onto the campaign. In the "Farmed and

Dangerous" campaign, CAAR has organizers assigned to do market-based campaigning in the Vancouver area, as well as an organizer assigned to the Bay Area in California. One of the tasks of these organizers is to try and get chefs to sign on as supporters of the campaign.

In the case of CAAR, the process typically works in the following way. First, an organizer contacts a chef and inquires into whether they sell farmed salmon. Second, the organizer sends an introductory packet to the restaurant that outlines the environmental impacts of salmon farming, what other restaurants have signed on, what the experiences of some restaurants and chefs that have signed on are, how their customers have reacted, and whether there have been any economic costs. Third, the organizer will usually visit the restaurant and talk with the chef and/or owners. In some instances, chefs will sign on immediately; in other cases, discussions will extend for a couple of months.

A second tactic that marine and ocean conservation organizations tend to use is to try and get a few leading chefs to sign on to a campaign and then have them recruit fellow chefs. In such instances, more progressive chefs, such as those who are members of the Chef's Collaborative, and/or particularly well known chefs are initially targeted. In this way, organizations are often able to enroll a greater number of chefs at a faster pace with fewer resources. In trying to do this, CAAR has brought well known US chefs to BC to see salmon farms and speak with First Nations. A last strategy used is that organizations have organizers attend trade shows and try to get articles into trade publications. Thus, enrolling chefs is largely about getting leaders in the restaurant community, and, in the case of celebrity chefs, publicly known actors, to endorse a campaign.

Enrolling chefs tends to be easier than getting restaurants to sign on as supporters of a campaign for several reasons. First, chefs tend to be associated with high end restaurants. In such restaurants, the price of supplies is often not as much of an issue. There is also often greater flexibility in terms of menu construction.[53] Second, high-end restaurants are often independently owned, or the chef often has considerable autonomy. Consequently, chefs in such restaurants tend to be able to decide whether or not to support a campaign themselves without having to consult company managers.

Whereas getting chefs to support a campaign is about gaining influence within the restaurant sector and identifying public spokespersons, getting restaurants to support a campaign is more about curbing demand, and quantity. The latter point refers to an organization being able to say that so many restaurants support their campaign. Additionally, getting restaurants to support a campaign tends to be more difficult than getting chefs. In part, this is because in targeting restaurants, organizers are dealing with a greater diversity of restaurants. In focusing on restaurants that are not high-end and that are part of a chain or restaurant group, additional issues often arise that make the task of getting them to sign on to a campaign more complicated. One issue is that price of supplies tends to be of more importance mid-range than high-end restaurants. Thus, substituting alternatives or eliminating a cheaper menu item, such as farmed salmon, may not be as easy. This is especially the case for high volume restaurants that are dependent on high turnover and affordable prices. Also, with chain restaurants, or restaurants that are a part of a restaurant group, chefs often have limited power, and decisions over

[53] However, there may be certain items on which some high-end chefs are less willing to compromise, such as blue fin tuna. Additionally, several interviewees pointed out that if you look at restaurants that have joined the Seafood Choices Alliance, you will find really mixed results. In other words, some restaurants will serve only seafood in the best choice category, while others have very mixed menus.

menus, prices, and supplies are often made by company officials. In such instances, organizers often need to engage with more actors, which can take longer. Chain restraints also tend to have standardized menus. Thus, while getting them to support a campaign may have more of an impact on the market; it may take longer, as they may be more hesitant to make a change because of the scale of their operations.

*Retailers*

Getting retailers to change their procurement practices and implement standards for seafood is a cornerstone of the sustainable seafood movement. To date, the movement has used a variety of strategies to try and achieve this. They include working cooperatively backstage with retailers, publicly pressuring retailers, and shareholder activism. Generally, specific campaigns tend to use a combination of all three strategies.

In seeking to get retailers to makes changes in their seafood offerings, the first step is to decide which retailer(s) to target. In some instances, organizations have selected specific retailers on which to focus their campaigns. Several campaigns have chosen to first focus on natural food retailers, such as Wild Oats and Whole Foods. In these cases, the assumption is that such retailers would be more open to the idea of sustainable seafood, as their stores are constructed around providing environmentally sustainable and healthy food products. Additionally, sometimes organizations have chosen to target mid-sized retailers, such as Albertsons, whose profitability is based on both quality and price. Movement organizations also select retailers by their position in the market. In deciding what retailers to target, CAAR conducted research on who was a leading retailer in the markets in which BC farmed salmon was predominately being sold.

Based on such research, they decided to focus on Safeway. Lastly, some organizations do not approach retailers. Rather, they let retailers approach them. This has been the case with respect to the partnership between Royal Ahold USA and the New England Aquarium.[54]

Two other factors emerged from interviews regarding how organizations select which retailers to target. The first was that you want to focus on retailers with which there is a chance of gaining some concessions. For example, one interviewee remarked that if you were going to do a farmed shrimp campaign, you would not center the campaign on Red Lobster. Rather, she argued, "We would pick a company where shrimp is not the number one or two selling item. It would be a company that is large enough that reaches some people, but does not necessarily depend on shrimp for profits." Some interviewees argued that focusing on companies that you know will not change is a waste of resources. Thus, the movement has tended not to focus on those companies that tended to have the most unsustainable seafood offerings, at least initially. Second, some interviewees stressed that you do not want to begin the campaign with your "biggest hit." As one interviewee remarked, "You have to be able to ramp up your campaign. You can't come out with your biggest hit as the first thing." In addition, interviewees noted that this was because you are not usually going to be successful initially. Furthermore, interviewees argued that you want it to look as if your campaign is gaining momentum with time.

Most organizations begin by first approaching corporations privately and gauging what their interest might be in signing on to the campaign. Generally, this involves

[54] Those organizations that let retailers approach them either have a reputation as being non-advocacy organizations, such as the New England Aquarium, and/or have a history of working cooperatively with companies.

sending the management materials and then conducting follow-up meetings. If companies show interest in the campaign, negotiations tend to continue backstage.[55] Once they reach an agreement, there is usually a public announcement that the given retailer has signed on to the campaign, will phase in the following standards, or has agreed to shift towards selling more seafood that is MSC certified.

In some instances, if the retailer is not interested, or if negotiations break down, the movement organization moves on to other retailers. This tends to be true of organizations that normally avoid more confrontational strategies, such as ED, WWF, and SeaWeb. However, some organizations, if they are stonewalled backstage, shift their campaign to the front stage. This tends to be done in two ways. First, there are public campaigns that target specific retailers. These have been done mostly with respect to farmed salmon, and include campaigns that have targeted Whole Foods, Wild Oats, and Safeway, among others. They tend to include the use of the media, online petitions, letter writing and faxes, and public demonstrations. For example, in the first round of CAAR's "Smarten Up Safeway" campaign, they had an international day where they had coordinated protests at Safeway stores, and were able to get people to send 26,000 faxes to Safeway.

The other strategy used by organizations is shareholder activism. This was the approach that NET used in getting Albertson's to write a letter to Salmon of the Americas.[56] Shareholder activism involves raising issues at the level of shareholders and boards of directors. This tends to be done either directly, or through large investors. In the former, organizers get onto the agenda and speak at shareholder meetings. Ideally,

[55] Data on how such negotiations work is limited, as such data tend to be confidential.
[56] Salmon of the Americas is a farmed salmon trade association that promotes farmed salmon.

the goal is to a get resolution introduced that, for example, might state that the company will not purchase farmed salmon unless it meets such and such standards. However, even if a resolution is not introduced, organizers may be able to get the board of directors or the CEO to make comments on the record, which the campaign can use to publicly pressure the company in the future. The second approach is to work with large investors, such as unions, and get them to use their shares to pressure the company.

Often public campaigns and shareholder activism are used in conjunction with each other. As campaigns shift to the front stage, some interviewees commented that what they are trying to do is find as many points as possible to exert pressure on corporations. Additionally, when campaigns shift to the front stage, backstage negotiations often continue, or, if they had come to a halt, they are likely to resume. Thus, front and backstage strategies are commonly used simultaneously by some organizations in the sustainable seafood movement.

An important point that emerged from interviews was that there was not a single approach that worked with all retailers. Interviewees stressed that it was important to try different approaches, as the kinds of pressure and messages that retailers respond to varies. For example, some might respond to environmental issues, others to health concerns, and other questions of corporate oversight. Additionally, interviewees commented that retailers also react in different ways. Some may be cooperative from day one, and willing to listen to what you have to say. Others may stonewall you from the beginning, and only come to the table after they are pressured. Thus, it is often necessary to use multiple strategies, and for organizations to be flexible, in approaching retailers.

*Consumers*

A third component of the sustainable seafood movement has been consumer education. The primary method by which this has been carried out has been through the use of seafood cards. Cards are distributed by the Blue Ocean Institute and ED to their membership, through various partner organizations, and at select events. The Monterey Bay Aquarium distributes its cards to aquarium visitors, and has agreements to distribute cards in other aquariums. Single-species campaigns also seek consumer support. This is primarily done through information distribution, using brochures, websites, and the media.

For the most part, the movement's approach to consumer education and mobilization can be characterized as passive. In other words, the movement largely has not engaged in grassroots organizing, where organizers actively seek to get people to join and/or support the movement. Partly, this may be because the movement largely seeks to operate at the national scale. Thus, it is not tied to any place. The campaign that has used grassroots organizing the most is the BC farmed salmon campaign, which also happens to be the only movement tied to a particular place. However, the lack of consumer mobilizing may also reflect the orientation of many movement organizations towards working with industry and using the market, and away from more traditional and confrontational forms of activism.

Reflecting the movement's approach to consumers, consumer participation in the sustainable seafood movement is also largely passive. Consumer participation tends to take the form of purchasing sustainable seafood. In some campaigns, consumers are asked to sign petitions, usually electronically, or send faxes and write letters. In rare

instances, a campaign will undertake some form of public demonstration and ask consumers to picket a store or partake in some action. Again, the "Farmed and Dangerous" campaign has utilized this tactic most often. Additionally, consumer input into the movement tends to be quite limited, as the movement is managed largely by professional organizations and is significantly directed by the Packard Foundation.

*Media*

The media is a key component of market-based campaigns that focus on chefs and restaurants, retailers, and consumers. The ability of the movement to get press coverage is often cited by its participants as a success of the movement. The sustainable seafood movement has sought to enroll and use the media in three ways. The first is to get the negative environmental impacts of overfishing and poor aquaculture practices covered by the media. Much of this involves getting new scientific findings publicized. To accomplish this, many organizations have devoted substantial resources and effort to cultivating the media and building up a network of journalists. For example, one interviewee mentioned that her organization had developed networks of journalists whom they can contact and say, "we have a story breaking or we have new research that shows ... and this is why you should be interested in it." The second strategy has been to penetrate the food media. This includes articles in magazines, such as *Food and Wine*, as well as articles in the food section of newspapers. Additionally, it includes efforts to discourage the publishing of recipes for kinds of seafood that are not sustainable.

The last way the movement uses the media is the running of advertisements in newspapers and other media outlets publicizing campaigns and identifying retailers that

sell specific kinds of seafood, such as farmed salmon. These advertisements tend to be designed to attract attention to an issue, and are often quite critical.[57] One interviewee argued that advertisements serve dual purposes. The first is to inform consumers. The second, and more important, is to pressure retailers and industry. Specifically, she argued that,

> When you buy an ad in a newspaper for one day, not that many people are going to read it. But the people who are going to see it and freak out are the salmon farming companies.

Partly, this is because running advertisements in major papers, such as the *New York Times*, "creates an illusion of power," as it often makes it look as if your organization has significant resources, even if it does not. In other words, if an organization is placing advertisements in the *New York Times*, the leading national paper in the US, those that it is targeting often assume the organization's campaign is well financed. However, some interviewees also contest the effectiveness of running advertisements, arguing that they are essentially one shot deals and thus, have very little long-term effectiveness. This is because most marine and ocean conservation organizations do not have the resources for major advertising campaigns that run over an extended time period.

**Framing**

Social movements need to frame their issues in such ways that people will care about them and be propelled to take action to try and achieve change (Benford and Snow 2000; Snow 1986). As discussed in the introductory chapter, frames render "events or occurrences meaningful," and "function to organize experience and guide action, whether individual or collective" (Snow et al. 1986, 464). Historically, social movements

[57] See Appendix 2 for a copy of one the advertisements from CAAR's "Smarten Up Safeway Campaign."

engaged in motivational framing to get people to participate in the movement by partaking in demonstrations, donating time and money, and letter writing. While some sustainable seafood organizations do engage in this kind of motivational framing, it is not the predominant mode of framing within the movement. Framing takes a somewhat different form with market-based campaigns compared to more traditional modes of social movement action. It is oriented towards getting consumers to support sustainable seafood through their purchasing practices, and restaurants and retailers to support a move towards more sustainable sourcing practices.

Organizations within the sustainable seafood movement have used six diagnostic frames: (1) food, (2) environmental sustainability, (3) health, (4) quality, (5) economic benefits, and (6) socio-cultural impacts. Organizations tend to use multiple frames at once, and direct their frames to their targeted audience. Along these lines, one interviewee noted that what she stresses "depends also on where I am and why I am there." To give an example, CAAR tends to stress environmental problems in BC and health issues in US markets in its farmed salmon campaign. Additionally, as the movement progresses, it is continually searching for new frames in an effort to expand its supporters. In other words, movement organizations are engaged in what social movement scholars refer to as frame amplification and bridging (Benford and Snow 2000).

To use market-based campaigns, movement organizations had to frame marine and ocean conservation issues in terms of food. In other words, if you want to protect marine life and oceans through the market, it needs to be done through food, as that is the product that most marine species take in the market. Thus, in turning to market-

campaigns, the movement has framed problems associated with overfishing and aquaculture as problems of what people eat. Borrowing the words of one interviewee, "the movement has framed the issues in terms of "what's on their [people's] plate." In this way, food is the master frame that the sustainable seafood movement is using to try to convince people to care about fisheries and oceans and take action to protect them.

Framing marine and ocean conservation issues as what people eat has several advantages. First, nearly everyone can relate to food. For example, while discussing farmed salmon, one interviewee expressed this position, arguing,

> There's a small segment of the population who cares that it's degrading the environment or they care that there's bad labor conditions. Or that First Nations are not being consulted about their tribal lands or rights. But everybody cares about the food that they eat.

Similarly, framing marine and ocean conservation issues in terms of food also generated a way for the movement to connect with people in the Midwest, who often have little connection to the oceans. Second, as discussed in some of the agrifood literature (DuPuis 2000; Murdoch and Miele 1999), people are often more concerned about the food they eat, because food is viewed as directly affecting their bodies, than other products that they use. Or, as one interviewee commented, "You are dealing with what moms are making for dinner."

Once marine and ocean conservation issues were framed as food, movement organizations next had to identify those aspects of food that people most cared about. The frame that the movement would like people to identify with most is that of environmental sustainability. In other words, the movement is trying to convince people not to eat certain kinds of seafood because they are from depleted fisheries or farming operations that negatively impact the environment. In many campaigns, an

environmental frame is used, and is the primary frame. According to one interviewee, in the "Caviar Emptor" campaign, consuming caviar was framed in terms of "bad taste." That is, by consuming caviar, people were "driving this species [Caspian Sea sturgeon] to extinction," which is a "majestic animal that has been alive for years almost since the time of the dinosaurs." In BC, CAAR has appealed to people largely in terms of the effects that farmed salmon are having on wild salmon. However, the environmental frame, at least in part, resonates with people in BC because the wild salmon are right there in their backyard. In other words, in BC, people are able to see the connections between salmon farming and the environment for themselves. The environmental sustainability frame is also being used to approach retailers and the seafood industry. According to one interviewee, the message to retailers and the seafood industry is "if you don't have any fish, you don't have a seafood industry."

However, almost unanimously, interviewees agreed that the environmental sustainability frame had limited traction and that the movement has had to use other frames to convince consumers, chefs and restaurants, and retailers. First, this is because many people, when deciding what seafood to eat, care more about other factors than sustainability such as its healthiness and quality. Second, one interviewee argued that part of the problem was that Northern consumers "have no sensory perception of what it is to take a fish out of an ecosystem and what it does to an ecosystem." In other words, part of the problem is that people are often not directly impacted by overfishing, nor can they see the impacts. As a result, she argued that the movement has had to seek out other frames in order to better connect with consumers.

Rather than environmental sustainability, interviewees argued that what they found was that most people care first and foremost about health issues. The health issue seems to particularly resonate with people when it comes to farmed salmon. In part, this may be an outcome of contradictory information about farmed salmon. On the one hand, salmon is promoted as very healthy food, because of the omega-3s it contains. On the other hand, the healthiness of farmed salmon is contested, as it has color added and may have significant levels of polychlorinated biphenyls (PCBs). For example, one interviewee remarked that people perceive the adding of colorants to salmon as a health issue, and they "just seem to get freaked out that salmon is being colored." The health frame has also received a boost by recent studies that have raised questions regarding contaminants and seafood (Hites et al. 2004; Stephenson 2004). Consequently, several organizations are trying to take advantage of this increase in consumer concern about the healthiness of fish by developing health-based initiatives. Examples include ED adding health information to their seafood cards, Sustainable Fishery Advocates incorporating health-based labeling to their FishWise™ program, and Ecofish developing a contaminant testing and labeling program called "Seafood Safe."

Another frame that some organizations in the sustainable seafood movement are attempting to use is the idea of quality. Multiple interviewees argued that framing sustainable seafood as also quality seafood was essential if sustainable seafood is to gain significant market traction. This is because consumers, restaurants, and retailers will often not buy seafood unless it is of a certain quality. Put differently, to even talk of sustainability, seafood must meet certain quality standards. One interviewee commented that what their organization had found in talking to restaurant owners is that "the first

thing they [customers] want to know is if it's fresh or frozen? ... Second thing they want to know is the health aspects. And the third thing they are concerned about way down is sustainability." Several interviews made similar remarks regarding retailers, namely that "quality can't take a hit." In other words, retailers will not make any sacrifices on quality in order to carry seafood that is sustainable.

However, among interviewees there was disagreement regarding the quality of sustainable versus conventional seafood. On the one hand, several interviewees argued that sustainable seafood tends to be of high quality, often better quality than conventional seafood. The superior quality of wild salmon compared to farmed salmon was the most common example given of the quality of sustainable versus unsustainable seafood. On the other hand, some interviewees commented that sustainable seafood could not compete with conventional seafood on quality, at least yet. For example, one interviewee pointed to blue fin tuna and asked, "what better tuna are you going to find?" Thus, it seems that while sustainable seafood needs to meet certain quality standards to even be considered an option, framing it in terms of quality may work for some species, but not others.

When approaching retailers, some movement organizations would frame the issue of sustainable seafood in terms of its economic benefits. That is, they frame sustainable seafood as being a good investment for retailers, as something that can increase retailer profits. This is the approach largely being used by Sustainable Fishery Advocates in approaching larger retailers.

> ... with the gourmet food stores we have been talking to, we don't come in with an environment sales thing. Like do something good for the world. We don't even bother. It's all just like, here's the data, this labeling does this and this and this. Its an awesome marketing tool for you. Here's the data of how it changes your sales. And as a little bonus you are doing something good for the oceans.

As the movement moves more towards working cooperatively with retailers and the seafood industry, using an economic benefits frame is likely to increase in use. Additionally, organizations working in areas where people's livelihoods are tied to the sea via either commercial or sport fishing also use an economic benefits frame. In these instances, organizations seek to connect people's livelihoods to the idea of sustainable seafood. That is, if there are no fish left, or the environment is severely degraded, then the local economy is not going to be very prosperous.

A few organizations also framed their causes in terms of their social-cultural impacts. This frame is most commonly used by CAAR in BC to raise the issue of First Nation rights. Here, salmon farming is framed as impinging on the rights of First Nations. This frame has had some resonance in BC, as there is a significant First Nation population there. Additionally, it extends problems associated with salmon farming from environmental to social problems. As one interviewee argued, "When you put a human aspect on it as well and people can see it, that makes a big difference." Food and Water Watch in its farmed shrimp campaign, also uses a socio-cultural frame in that it portrays shrimp farming as a form of corporate agriculture that resembles factory farms. They argue that part of the problem with shrimp farming is rooted in the corporate character of the industry and the way it is affecting small independent shrimp fishing operations.

My analysis indicates that the motivational frame that most closely corresponds to the sustainable seafood movement's mission – environmental sustainability – does not resonate strongly with most of the movement's targeted populations. Consequently, the movement has had to partake in frame bridging in try to convince people to eat certain kinds of seafood, and not other kinds. Specifically, movement organizations have

developed and linked their campaigns to concerns about health, quality, economic benefits, and socio-cultural impacts. While each of these issues may encourage people to consume, restaurants to serve, and retailers to sell sustainable seafood, each is peripheral to the central mission of the sustainable seafood movement: marine and ocean conservation. This lack of interest in sustainability raises questions regarding the movement's ability to generate enough interest in fisheries and oceans by consumers, chefs and restaurant owners, and retailers to shift fishing and aquaculture towards more sustainable practices.

While movement actors have put significant effort into developing motivational frames, both diagnostic (i.e., the cause of the problem) and prognostic (i.e., how to solve the problem) frames are underdeveloped. The degradation of marine environments and fisheries tends to be attributed to overfishing, poor fishing practices (e.g., the use of gear that generates significant bycatch or degrades the ocean floor), and/or poor aquaculture practices. However, the specifics of these causes tend not to be elaborated on in much detail. For example, with the exception of the frame that the government has failed us (i.e., they are unwilling to protect fisheries and marine resources) and thus, we are asking you, consumers, to help us, there is little public framing of the political, economic, and socio-cultural factors driving the exploitation of fisheries and degradation of marine environments. Additionally, the level of consumption of seafood in the US, and whether sustainable fisheries are possible at such a level, tends not to be publicly addressed by the movement. Rather, the problem tends to be framed as (temporary) over-consumption of certain kinds of seafood, such as Chilean sea bass.

Similar to diagnostic frames, prognostic frames also tend to be underdeveloped by organizations in the sustainable seafood movement. Solving problems associated with overfishing and poor aquaculture practices is framed as possible by people consuming, restaurants serving, and retailers selling seafood that is sustainable. Such actions may produce incentives to make fishing and aquaculture more sustainable. However, specific changes in the management, structure, practices, and technologies of fishing and aquaculture are also necessary. There is little public framing of these latter changes by movement organizations. This may lead to consumers, chefs and restaurant owners, and retailers having limited knowledge of the kinds of concrete changes that are necessary for fishing and aquaculture to become more sustainable. In part, it may not be necessary to fully frame the problems and solutions to degradation of fisheries and marine environments, as consumers, chefs and restaurant owners, and retailers may become overwhelmed by such information, or may not be interested in such details. Nevertheless, providing such information may benefit the movement in that it may enable consumers, chefs and restaurant owners, and retailers to be more knowledgeable and thus, take a more active role in the movement.

**Communicating Frames and Enrolling Supporters: Movement Messaging**

For frames to resonate with their targeted audience and thus, produce action, actors need to be convinced of the frame's validity (Benford and Snow 2000). Organizations in the sustainable seafood movement have found how they communicate with their targeted audience, whether it is consumers, chefs and restaurants, or retailers, is quite important in deciding whether a particular frame is adopted or not. In other words,

how frames are communicated influences the extent to which they are supported. Within the sustainable seafood movement, frames are communicated using both positive and negative messaging. However, given the movement's non-confrontational orientation, positive messaging tends is more prevalent.

With a few exceptions, nearly all the organizations in the sustainable seafood movement exclusively use positive messaging. The exceptions tend to be the more confrontational farmed salmon campaigns, which also use more critical messaging at times. For example, CAAR's campaign slogan is "Farmed and Dangerous: Think Twice about Eating Farmed Salmon," and in their campaign targeting Safeway, they have run advertisements with critical headings, such as the following, "With all the chemicals in Safeway's farmed salmon, you might as well eat the packaging." However, farmed salmon campaigns tend to be the exception, not the rule. Rather, most interviewees commented that their organizations "focus on the positives" and "use positive messaging."

The inclination towards positive messaging is, perhaps, most visible in the movement's strong avoidance of the term "boycott." Nearly all interviewees were adamant that their organizations were not calling for a boycott in any of their campaigns. Several factors were given by interviewees for why their organizations and the movement more generally tended to avoid the use of boycotts and the term boycott. First, they argued that boycotts tended to generate strong, counter-reactions. For example, industry tends to see boycotts in black and white terms, and often perceives them as an attempt to hurt their business. Here, interviewees stressed that what they were trying to do was "not

shut industry down." Rather, as one interviewee argued, the movement is "trying to say it needs to be reformed."

Second, the movement did not want to use the word boycott, because they envisioned most of the campaigns as temporary, and when the fisheries recovered or aquaculture practices reformed, people could go back to eating the fish, restaurants to serving it, and retailers to selling it. All the single species campaigns are constructed in such a way. According to one interviewee, what organizations are trying to do with single-species campaigns is tell people that,

> There is a problem with this fish. You really should not be eating it, because of these reasons. But if we don't eat it for now and get some regulations then we will be able to enjoy it in the future for the long term.

Additionally, several interviewees remarked that if people thought that they only had to give up something temporarily, then they were much more likely to give it up.

Third, some interviewees argued that consumers and chefs do not like to be told what to do. As one interviewee put it,

> People don't like to be told what to do. Wagging your finger at somebody and telling them not to do something is just good motivation for them to go out and do that very thing that you don't want them to do.

Some organizations took even a more extreme position, claiming that their role was only to provide information to people. It was then up to people to make the decisions and take action. Such a position shifts the responsibility for sustainable seafood onto consumers, as well as chefs, restaurants, and retailers.

The preference for positive messaging is, at least partially, based on two positions that many organizations in the sustainable seafood movement subscribe to. The first is that people are overloaded with negative messaging today, and that negative messaging

often alienates people. One interviewee summed up this position, when she commented on her organization's approach:

> The idea is to reach people through something positive, enabling them to make changes in their everyday lives that are relatively easy. And make them feel that their life does affect the oceans. That is much more positive then if you don't ... right now like 5,000 fish are going to die. And I think the whole movement really took hold because of that, because people were looking for something positive to do to save the oceans.

Second, the desire for many organizations to establish cooperative relations with industry has also led them to positive messaging. Many interviewees argued that confrontational campaigns that use negative messaging anger and alienate retailers and industry, which makes it harder to develop collaborative relations. For example, in reflecting on the "Give a Swordfish a Break" campaign, one interviewee commented that it "angered fisherman, it really angered the fishing industry in general, and even some chefs, because it really was a boycott." For her, this is problematic, because "at some point you are going to call that person on the phone again and whether or not they talk to you is going to be based on how they felt they were treated in your other campaign."

**Science and Market-based Campaigns**

Similar to many other environmental campaigns, science plays a crucial role in the sustainable seafood movement. Partly, the movement is at somewhat of a disadvantage in that many of the problems associated with overfishing and aquaculture are not easily visible to the general public. For this reason, scientific evidence is often necessary if people are to know if fisheries are being depleted. According to some interviewees, increased interest in marine life and the oceans by the environmental community coincided with the emergence of new scientific findings on declining fisheries and other disruptions to ecosystems in the oceans.

Science also plays a crucial role in the use of market-based campaigns by marine and ocean conservation organizations. Marine and ocean conservation organizations in their market-based campaigns are asking consumers, restaurants, and retailers to trust them and stop eating and selling certain kinds of fish until their stocks become sustainable and/or aquaculture operations are better regulated. Consequently, because market-campaigns are partially built on trust, several interviewees remarked that if you are going to do market-based campaigns, you better have the science behind you. The first reason is knowledge derived from science tends to be trusted in contemporary society. Scientific knowledge also tends to be understood as the best indicator of the state of the environment (Macnaghten and Urry 1998; Taylor 1997). Thus, because of the credibility awarded scientific knowledge, particularly with respect to the environment, marine and ocean conservations seek to ground their campaigns in science and use it to build relations of trust with consumers, chefs and restaurants, and retailers.

Second, some interviewees pointed out that if you are asking consumers, restaurants, and chefs to make changes, and you are doing so without the support of scientific findings, then industry will exploit your lack of science. If it turns out that the campaign is not based on sound science, not only will the campaign lose its legitimacy, but also the organization running the campaign might lose its legitimacy. This, in turn, could undermine the capability of the organization to carry out any future campaigns. Third, some interviewees argued that having science on your side enables their organizations to compete with the better funded counter-campaigns by industry. Commenting on this, one interviewee argued, "Where they [industry] can continue to pour money into the marketplace to sustain and brainwash people, we only get a few

kicks of the can. But we can pull the heart strings better than they can." In this way, some in the movement viewed science as their trump card, which gave their campaigns a fighting chance against better-funded industry counter-campaigns.

However, at the same time, interviewees also noted that "science is never certain," and that there can always be counter-science. Thus, similar to other environmental campaigns, what often happens is that opponents counter with scientific findings that dispute the movement organization's science. In such instances, market-based campaigns become enmeshed in battles over whose science is right. When this occurs, science tends to lose its meaning, and other factors become more relevant, such as who is making the claims (Michael 1996; Wynne 1991; 1992). This is what has happened with respect to farmed salmon, with both proponents and opponents making counter arguments about the healthiness versus unhealthiness of farmed salmon, and the environmental impacts of farming practices.

**Alternatives**

A critical component of a successful market-based campaign identified by interviewees was the ability to put forth alternatives. In other words, if you are asking consumers not to eat something, restaurants not to serve it, and retailers not to sell it, interviewees argued that you need to give them something that they can replace it with. As one interviewee said, "Since seafood is all about food, people have to have some choices and alternatives." Interviewees also remarked that it was easier to get consumers, restaurants, and retailers to agree to temporarily stop eating, serving, and selling something if there was a comparable replacement.

In some cases, finding alternatives is easier then for others. For example, there are now a number of alternative kinds of "caviar" on the market that come from farmed fish. Thus, organizers in the "Caviar Emptor" campaign were able to promote these alternatives in place of Caspian Sea caviar. The message was "if you must eat caviar, there are good alternatives out there."[58] In other cases, promoting alternatives is more difficult. This tends to be the case for farmed salmon. While there is a significant supply of wild salmon, it is only seasonal and tends to be considerably more expensive. Thus, in this instance, you are not necessarily substituting one item (i.e., farmed salmon) with a comparable item (i.e., wild salmon). One interviewee also pointed out that restaurants and chefs may switch to alternatives that are equally bad. For example, she argued that if they replace farmed shrimp with farmed salmon, what good does this do. She pointed out that this is largely what happened with Chilean sea bass, which were often replaced by orange roughy.

Lastly, the promotion of alternatives raises the question about the sustainability of current and escalating levels of consumption. There is little discussion of curbing seafood consumption or the need to reduce levels of consumption. As the movement wants to work cooperatively with restaurants, retailers, and the seafood industry, whose profitability is dependent on maintaining and escalating consumption, questioning consumption itself is taboo.

[58] It should be noted these alternatives are good in comparison to Caspian Sea caviar. However, as one organizer with the campaign noted, you are still producing fish just for their eggs, which is not a very efficient form of food production.

**Summary**

This chapter examined the practices of market-based campaigns. I found that organizations in the sustainable seafood movement tend to favor non-confrontational approaches. This inclination towards non-confrontational approaches, in turn, affects the specific strategies, frames, and forms of messaging that organizations have used in implementing market-based campaigns. My findings also indicate that, initially, the sustainable seafood movement experimented with a diverse array of strategies – e.g., pressuring chef and restaurant, retailer, consumer, and media – not knowing which would be most effective. As is discussed in chapter 8, the movement has now begun to narrow the kinds of strategies it uses. Additionally, I found that movement organizations have utilized multiple frames in trying to find frames that resonate with different target populations, such as consumers, retailers, and chefs. Furthermore, not surprisingly, given the movements non-confrontational orientation, my findings indicate that most movement organizations tend to use positive messaging. Two additional findings include the importance of science in legitimating movement claims and frames, and that movement organizations must specify alternative options when asking actors not to purchase a specific kind of seafood.

## Chapter 7. Objectives of Market-Based Campaigns: Shifting the Market and Policy Change

What are the objectives of market-based campaigns? Put differently, what kinds of immediate outcomes do movement organizations hope to produce through the use of market-based campaigns that will help them to achieve their ultimate goal of marine and ocean conservation? While interviewees answered these questions in different ways, their responses can be grouped into two general categories. On the one hand, some respondents thought that market-based campaigns had the capability to shift demand and the market for seafood. From this perspective, the sustainability of fishing and aquaculture could be furthered through changes in the marketplace. On the other hand, some viewed the most important outcomes of market-based campaigns as non-market outcomes, most notably policy change. From this perspective, the aim of market-based campaigns is not necessarily shifts in the marketplace. In fact, among interviewees, there is considerable disagreement over whether this is even possible. Rather, for some interviewees, the value of market-based strategies lies in their non-market impacts, including shifting industry to make regulation possible and/or indirectly pressuring government. Thus, my research indicates that the objectives of market-based campaigns are often broader and more diverse than is commonly thought. For example, while market-based campaigns operate in the market and economy, they often seek non-market changes, such as changes in the management and regulation of fisheries.

This chapter examines the various objectives that the sustainable seafood movement is trying to achieve through the use of market-based campaigns. The first section examines the ability of the sustainable seafood movement to shift the market for seafood in more sustainable directions. In this section, the movement's ability to increase

consumer awareness, and to pressure buyers and producers are discussed. I also argue that the limited success that the sustainable seafood movement has had in shifting the market raises questions as to the extent that social movements can produce market change. The second section examines how the sustainable seafood movement is using market-based campaigns to try to achieve policy change. Specifically, I discuss how market-based campaigns are being used to shift industry to make regulation more possible and as a way to indirectly pressure government. Also discussed in this section, is how the largest market transformations have occurred where market-based campaigns have been able to generate policy change.

**Shifting the Market**

An underlying principle of market-based campaigns is that by shifting the market and changing consumption patterns, social movements can bring about change. In other words, by affecting demand, movement organizations can have impacts on upstream processes. In the sustainable seafood movement, movement organizations have sought to shift the market in two interrelated ways. The first is through increasing public awareness regarding seafood – e.g., where it comes from, and how it is harvested or produced. Here, the idea is that by increasing consumer awareness of the kinds of seafood that are environmentally sustainable, and those that are not, consumer eating habits will shift towards those varieties of seafood that are sustainable. The second strategy used to try to shift the market is pressuring buyers, such as retailers and restaurants. In this case, movement organizations are trying to shift the market through influencing the kinds of seafood retailers and restaurants offer. In doing so, they are able

to influence the options available to consumers. In both instances, one intended effect is to put pressure on upstream actors to change their practices. I turn to the ability of these two strategies to shift the market and pressure upstream actors next.

*Increasing Consumer Awareness*

In the sustainable seafood movement, a central component of market-based campaigns is efforts to increase consumer awareness regarding the environmental impacts of the seafood they eat. By increasing consumer awareness, the aim is to shift people's consumption of seafood towards more sustainable varieties of seafood. The idea underlying this strategy is that if people begin to demand and consume seafood that is sustainable, this will pressure the fishing and aquaculture industries to become more sustainable.

Several interviewees commented that the movement has been successful in raising consumer awareness of the sustainability of different varieties of seafood. For example, one interviewee argued that very few consumers knew what sustainable seafood meant six years ago, whereas there is significant awareness among consumers today. While in BC, interviewees who worked on the "Farmed and Dangerous" campaign argued that you could hardly find a person now who is not knowledgeable about the debate over salmon farming. This high degree of public awareness was attributed by them largely to their campaign.

While interviewees generally acknowledged that public awareness regarding the environmental impacts of different kinds of seafood had increased, some questioned the extent to which market-campaigns could change people's consumption patterns.

Partially, this view is based on the understanding of consumers as fickle. In other words, many interviewees argued that the movement could not count on consumers to be diligent and committed adherents to sustainable seafood over an extended period of time. There is also the issue of a disjuncture between what people say or believe and what they do (Sagoff 2004). Just because someone claims that they support sustainable seafood does not necessarily mean that they do not eat varieties of seafood that are unsustainable. For example, one interviewee argued,

> Probably the realistic goal in terms of consumers is not "all or nothing." Its not like someone is never going to eat Chilean sea bass, but it is that they are going to think twice. A realistic attainable goal is making the consumer think twice. And just raising the awareness slightly.

Some interviewees also raised doubts regarding the ability of the movement to sustain changes in consumption over the long-run. While the movement was able to produce temporary shifts in consumption – for example, with some single species campaigns – they were not confident that the movement could sustain such shifts. Questions over the ability of the movement to produce long-term shifts in consumption patterns are also raised by its messaging. Movement organizations in their campaigns often ask consumers to temporarily stop consuming a fish, rather than to make permanent changes in their eating habits. As discussed in chapter 6, partly, this is because movement organizations have found that it is easier to get consumers to participate in a campaign if they only have to make temporary changes in their lifestyles. However, such messaging implies that permanent changes in consumer eating habits are not necessary, that environmental problems pertaining to seafood are temporary and can be corrected relatively quickly.

If increasing awareness slightly, and temporarily shifting consumption patters, are the best that market-based campaigns can accomplish with respect to consumers, questions are raised regarding the actual impacts that such efforts are having on the sustainability of seafood. With the effort to shift more towards working with large buyers, parts of the movement may be recognizing the limits the movement faces in transforming the consumption of seafood. For example, one interviewee argued,

> Whereas before when people were talking about market campaigns it was about consumer[s] mostly. And those are great for raising awareness. They are great for media attention and that kind of thing. And they do impact the market in small ways. But in terms of direct work they don't directly impact the market themselves enough to make a difference.

Thus, while raising consumer awareness is a key component of the sustainable seafood movement, the primary benefit may not be changes in consumption patterns *per se*, but rather other kinds of outcomes, such as media attention and as a way to pressure retailers, producers, and governments.

*Pressure Buyers*

The second, and perhaps now more prominent, way the sustainable seafood movement is trying to shift the market is by pressuring buyers, namely retailers and restaurants. As discussed in chapter 6, movement organizations seek to pressure buyers through the use of both cooperative and confrontational strategies. The idea is to influence the kinds of seafood that retailers sell and restaurants serve. While strategies focusing on retailers and restaurants are often undertaken in conjunction with strategies aimed at raising consumer awareness, in some instances, they are done independently. In the latter case, such strategies, partly, try to shift the market without the aid of consumers.

Within the movement, there is debate over the extent to which retailers and restaurants can be shifted towards more sustainable seafood offerings, and whether these shifts can become permanent. Thus far, interviewees tended to agree that the movement has succeeded in creating niche markets for sustainable seafood. However, creating niche markets is not the same as shifting demand. Rather, what has happened is the "the menu of options for consumers" has been broadened. In other words, the market for seafood is becoming more diversified in terms of sustainability, but not necessarily more sustainable. As one interviewee put it, "So you might get some environmental sound product, but consumers can still have environmentally bad products. And its cheaper. It's just that you [i.e., movement] are creating a space in the marketplace for the environmentally better products..." Thus, retailers or restaurants now increasingly sell seafood that is both sustainable and unsustainable. For example, retailers may carry wild Alaskan salmon that is MSC certified, but likely carry farmed salmon as well.

Furthermore, the Bridgespan Group (2005), in their review of the Packard Foundation's "Seafood Choices Initiative," found mixed outcomes regarding the movement's efforts to raises retailers' and restaurants' awareness of sustainable seafood. They found that generally there is greater awareness among retailers, but less so among restaurants. However, there also appears to be considerable confusion among retailers and restaurants in terms of what kinds of seafood are actually sustainable. For example, Bridgespan (2005, 7) reported that "when asked how often in the past year they had sourced seafood from environmentally-responsible suppliers, 62% of respondents believed that they had done so 'all of the time.'" However, given the current state of the

seafood supply, this is not possible, Bridgespan notes.[59] Additionally, a majority of respondents reported that farmed salmon was a sustainable seafood product, a position that the movement sharply disagrees with. Thus, buyers may be paying lip service to the idea of sustainable seafood, but, in practice, are likely to continue to offer mixed seafood offerings at best.

*Pressure Producers*

The goal of increasing consumer awareness and pressuring buyers is to exert pressure on upstream producers to change their practices. According to interviewees, the idea is to "economically impact" producers, as this is most effective way to get them to operate in more sustainable ways. For example, one interviewee, in discussing farmed salmon, argued, "Because they [salmon farming companies] are driven by economics, when they see a dip in their profits that is when they are going to respond." Another interviewee commented that, with respect to producers in less industrialized countries, threatening their market share and profitability is the only way to get them to change. He argued,

> We're sourcing so much seafood from China these days. The only way to improve practices there ... is market force. Because you are not going to educate producers there. You are not going to educate consumers there. You are not going to educate buyers there. There is such a capitalistic mode of thinking. Not I want to destroy the environment. I want to be successful.

In other words, using the market, movement organizations are trying to impact companies' profitably in order to move them towards more sustainable practices.

[59] This is because many of these retailers carry seafood products in which there is no sustainable supply at this time.

Using the market to pressure producers takes two forms: penalizing bad producers and rewarding good producers. Put differently, the movement is trying to use both a carrot and a stick to move producers in more sustainable directions. In the first instance, in the words of an interviewee, "The market begins to send signals that it's going to reward best practice in conservation instead of exploitation." This is the carrot. The stick is the threat that if producers do not adopt best practices, they will lose their market share.

To date, the movement has had mixed success in pressuring buyers. On the one hand, the number of fisheries with MSC certification and seeking certification has increased. Many aquaculture producers are also engaged with WWF in discussions over the development of environmental standards for aquaculture and a corresponding oversight body. Markets have also developed for companies marketing themselves as sustainable seafood companies, such as Ecofish. However, at the same time, the marketplace continues to be filled with environmentally unsustainable seafood choices. Additionally, environmentally damaging fishing and aquaculture practices continue to persist.

**Using the Market as a Means to Achieve Policy Change**

While market campaigns differ from traditional forms of social movement mobilization and activism in terms of strategies, what movements seek to accomplish is quite similar, in both instances. Emerging from my interviews was the understanding that changing the market was only one objective of market-based strategies, and an objective that some questioned was even possible. Rather, some interviewees argued that

their organization's market-based campaigns sought not simply to change the market, but also to pressure governments and get better regulations put into place. On this point, one interviewee remarked, "In a large markets campaign, things like building public support and increasing issue salience are important, but maybe the most important function of them is building regulatory form." In fact, many interviewees claimed that the ultimate goal of their campaigns was not market change, but policy changes.

For example, where the sustainable seafood movement has changed the market the most has also been where they have been able to produce policy change. Specifically, in some instances where new regulations on the harvesting or trade of certain fish species have been enacted, there have been significant changes in the market. One example is Chilean sea bass. An organizer who worked on the campaign commented,

> Telling people to take a pass in Chilean sea bass did not drop sales a bit. You could see how it could go down somewhat. But it was not a huge number until the regulations that we kept talking about and asking the US government to put into place came into fruition and then it did drop.

A similar argument was also made with respect to Caspian Sea Caviar. While the campaign curbed demand somewhat, it was new regulations enacted by the US government that shut down the market. Thus, in these instances, market-campaigns were able to produce policy changes, which, in turn, led to transformations in the market.

There are two primary ways that the sustainable seafood movement has sought to accomplish policy change through the use of market-based campaigns. The first is to shift industry to make regulation more possible. In other words, the aim is to get some companies in the seafood industry to adopt practices that are more sustainable. In doing so, such companies would be compliant with any new environmental regulations passed

and thus, supportive of them. The second way is to use market-based campaigns as a way to indirectly pressure government.

*Shifting Industry to Make Regulation Possible*

A position underlying the use of market-based campaigns in the sustainable seafood movement is that such campaigns are a way to make the seafood industry more conducive to stricter environmental regulation. This perspective was advanced by a leading member of the movement, who argued,

> The seafood movement is an attempt to change the politics of fisheries by swinging industry support behind responsible management of fisheries. And at the end of the day, I think that is every bit as, if not more, important than the market itself sending signals to producers, for example.

In other words, what the movement is seeking to do is to convince parts of the seafood industry to adopt more sustainable practices. The idea is that those who adopt more sustainable practices will become allies in calling for better regulations. This is because they already are compliant with the proposed regulations, and if enacted, the regulations will give them a temporary competitive advantage, as others will need to adjust to them. In this way, the sustainable seafood movement is, at least partially, turning social movement strategies on their head. That is, rather than using regulation to change industry, they are first trying to change some members of the industry through the marketplace, and then seek policy change with support from some industry actors.

Several interviewees also commented that working with industry may be easier than pressuring government. This is because pressuring government can be slow compared to pressuring industry. First, governments tend to be highly bureaucratic. Second, they also tend to be beholden to multiple interests, which they must balance.

Consequently, getting governments to enact a regulation and then implement it tends to be a slow process. In the case of industry, you may only have to pressure and negotiate with a few companies, as is the case in bulk seafood commodity chains and much of the agrifood market, where a few corporations are dominant. Another advantage to pressuring industry first, some interviewees identified, was that if industry and movement organizations jointly proposed a policy to government, it would become hard for government to reject it. This is because government could not say one side or the other objects to the proposed regulations. For example, one organizer with the CAAR campaign commented, if "Marine Harvest [a salmon farming company] and CAAR go together to government, that's the greatest influence we have."

The idea then is to convince some seafood companies to be early adopters of more sustainable fishing and/or aquaculture practices. Once they become early adopters, more stringent regulations are of benefit to them, as they will give them a temporary competitive advantage over those companies that are unable to meet the new regulations. This process was described by one interviewee,

> There is actually a marketing advantage to that. Because if you are a major seafood producer and the government says do this and you actually do this and you can put pressure on the government to bring the standard up. That's going to drop out many more bad producers. So if you can be one of the leading horses and if you can be exceeding what the government expects, that is going to let the government know that they can just raise the bar that much more.

In this way, by getting some early adopters in the seafood industry to jointly press for stricter environmental regulations, the movement can force the worst producers to either change or leave the industry. This, in turn, would shift the market in more sustainable directions. Furthermore, such an approach also presents an additional advantage to industry in that it allows them to have significant say as to the form and

content of future regulations. In this way, they can design regulations that are more favorable to them, as opposed to having less favorable ones imposed on them.

*Pressure Government*

In addition to shifting industry in more sustainable directions, the sustainable seafood movement also uses market-based strategies to indirectly pressure government to enact new policies. Interviewees indicated that market-based campaigns are an effective strategy for pressuring government. The idea is to use market-based campaigns to generate enough consumer displeasure and negative publicity with how fisheries and aquaculture are being managed that the government has no option but to take action. For example, one interviewee involved with the "Farmed and Dangerous" campaign argued that, "... what has happened is the consumers are so aware of this issue and so pissed off that the government has to listen." Thus, to borrow the words of another interviewee, the idea is to "make sure that every single bit of leverage you build through consumer awareness" is used to try and bring about policy change.

Interviewees with several different campaigns noted that this was a key outcome of their campaigns. With respect to the "Caviar Emptor" campaign, one interviewee remarked,

> The fact that we have actually gotten our name into print so many times, you can link that to the consumer behavior, and you can link that to the policy whims, and then you can link that to sort of just our power. It is like all these groups that are involved in managing sturgeon realize that we really are able to get into the press. So if you do something and we see it, we will publicly acknowledge that this is wrong. And we can do it with ease.

An interviewee who had worked on the Chilean sea bass campaign made a similar argument:

> Where they [market-based campaigns] can impact the market, and where I argue Chilean sea bass work did, is that it forced the government to actually take a more active role in regulating the toothfish, which is exactly what happened. So there is this whole regime that is set up, the Commission for the Conservation of Antarctic Marine Living Resources [CAMR], and the US takes part in it. They are one of many governments that take a role there. And the US enacted several measures above and beyond what CAMR requires ever since the Chilean sea bass campaign took place. And a lot of people credit us. All the work that we did and the reason why they sort of had to take a stronger role because it was just in the public eye. So often people would keep asking what about Chilean sea bass. And they did not have a good answer.

Thus, through generating significant consumer awareness and publicity, the sustainable seafood movement has been able to pressure government to take action in several instances. This is a significant finding, as it indicates that movement organizations may have greater success pressuring government using market-based campaigns, than they can adopting more traditional state-centered approaches, such as lobbying.

**Summary**

This chapter examined the objectives that the sustainable seafood movement is trying to achieve through the use of market-based campaigns. I found that while there is a diversity of objectives, they tend to fall into two general categories. The first category is to shift consumption patterns and the market for seafood. Some movement organizations believe that by affecting demand, they can have impacts on upstream practices, and make fishing and aquaculture more sustainable. Typically, these movement organizations seek to shift consumption patterns and the market in two interrelated ways: (1) increasing consumer awareness regarding seafood and (2) pressuring buyers. In both instances, the intended outcome is to put pressure on upstream actors to change their fishing and farming practices. The second category of objectives is

to achieve policy change with respect to fishing and aquaculture. For some movement organizations, the value of market-based campaigns lies not simply in their potential to change the market, but more so in their capability to pressure industry and governments and get regulations put into place. Thus, I maintain that the objectives of market-based campaigns are often broader and more diverse than commonly thought, ranging from changes to the market to non-market changes, such as changes to the management and regulation of fisheries.

## Chapter 8. The Progression of the Sustainable Seafood Movement: Zeroing in on Retailers

Implementing a campaign is an ongoing process for social movement organizations. As campaigns unfold, obstacles for which organizations did not account arise. Some strategies are more successful than others. Opponents respond in a variety of ways. All of these require movement organizations to make adjustments. Consequently, movement organizations must continually rethink, restructure, and adapt campaigns. How well organizations do this will affect the outcomes they are able to produce, as well as the future of the movement itself. This chapter examines how organizations in the sustainable seafood movement have adapted to various obstacles, industry responses, and evaluations.

The first part of this chapter examines the obstacles the sustainable seafood movement has encountered in implementing market-based campaigns. Specifically, I discuss difficulties with respect to mobilizing consumers and structural constraints associated with seafood. In the second part of the chapter, I examine the responses of the seafood industry to the sustainable seafood movement, and the ways that these have changed over time. Third, I discuss issues pertaining to the evaluation of market-based campaigns. How to evaluate market-based campaigns is a contentious issue within the movement, as how campaigns are measured can influence whether they are viewed as effective or not. Lastly, I examine the development of the sustainable seafood movement over time. In an effort to increase its effectiveness, the movement is becoming increasingly focused on large buyers, and shifting away from consumers, chefs and restaurants, and single species campaigns. This shift towards large buyers is a significant

development in the movement, which has several implications for organizations in the movement.

## Obstacles to Implementing Market-Based Campaigns

Two sets of obstacles to successfully implementing market-based campaigns were identified by interviewees. The first set of obstacles relates to organizing consumers. Three specific obstacles were identified: (1) the power of consumers in relation to industry, (2) consumer fickleness, and (3) the complexity of seafood. The second set of obstacles pertained to the structural characteristics of seafood and large buyers. Specifically, several interviewees argued that if the movement is to get large buyers to support sustainable seafood, there needs to be a large, consistent, and relatively cheap supply of sustainable seafood. This is because large buyers need high volumes, value consistency, and many also utilize a low-price high-turnover business model. However, such a supply often does not exist. In many ways, the sustainable seafood movement is at a juncture where it is confronting and trying to overcome these obstacles. How the movement actors respond to these obstacles will influence the future trajectory of the movement.

### *Consumers*

Consumer education and mobilization has been a cornerstone of the sustainable seafood movement since its inception. As discussed in chapter 6, the movement has sought to affect the market for seafood by mobilizing consumers and asking them to purchase certain seafood products and not others. In some instances, consumers have

also been recruited to take more participatory roles within campaigns, such as sending faxes, donating time and money, and taking part in public demonstrations. However, interviewees highlighted several obstacles to mobilizing consumers and maintaining their interest/participation in the movement over an extended period of time.

The first obstacle identified by some interviewees to organizing consumers and using them as leverage to pressure retailers and restaurants, the seafood industry or the government is that there are constraints on consumer power. On the one hand, many consumers are constrained in that they cannot afford to purchase certain products or not purchase others. One interviewee argued that this is an obstacle facing the sustainable seafood movement, much as is the case with the organic movement. She argued, "It is like people want to eat certain things and they don't have the money to eat the alternatives. There is a certain body of consumers out there who are not rich enough." Thus, there is a certain segment of consumers that most likely will never be able to partake in the movement, even if they wanted to participate. While this has always been an issue for the movement, it is likely to become a more significant issue as the movement moves forwards and expands its focus to seafood products that are less luxurious and markets that are not as high-end. For example, there is often a significant price difference between farmed and wild salmon, which may make wild salmon unaffordable to many consumers. [60]

There is also disagreement within the movement with respect to the power of consumers in relation to retailers or the seafood industry. Some interviewees viewed

[60] However, it should be noted that some of the seafood products that are in the best choice category on the seafood cards also tend to be among the most affordable kinds of seafood, such as tilapia, catfish, and pollack.

consumers as powerful actors who had the ability to make a difference through their actions. The following comment, by one interviewee, is reflective of this perspective:

> We do believe that change can occur through purchasing power. The United States has become the land of consumers. And so that is the strength that we have. That we can make change with our purchasing power. With our consumer power.

However, while some interviewees view consumers as powerful, it appears that much of the movement has realized that there are limitations to the amount of change that can be achieved through consumer mobilization. For example, one interviewee who tended to be critical of strategies being used by the movement to mobilize consumers, such as seafood cards, commented, "If you are going to continue with a campaign that targets the consumer, you are going to lose. I think that the consumer power is much lower than the power of big industry."[61] As this perspective has come to the forefront, the emphasis, in much of the movement, is shifting away from consumers and more towards large retailers, restaurant companies, and seafood companies.

The second obstacle that emerged from interviews was the fickleness of consumers. Interviewees would commonly comment that "people get bored about the same issue" or that "everybody gets sick of hearing no." A few interviewees also noted that consumers are constantly inundated with causes and campaigns, and they can become overwhelmed. In such instances, one response is apathy, where consumers say enough is enough; no matter what they eat it is bad for them, bad for the environment, bad for workers, or some combination of all three. They opt to just eat what they want and not worry. A corollary concern that some interviewees also raised is that while

[61] The first understanding of consumers resonates with recent arguments in both environmental and agrifood sociology (Bell 2006; DuPuis 2000; Goodman and Goodman 2001;Lockie 2002), while the latter perspective fits with the longstanding view in environmental sociology of consumers as disorganized and less powerful compared to industry actors (Princen et al. 2002; Schnaiberg 1980).

consumers may be interested in seafood today, they may be interested in something else tomorrow. Thus, in a world of continuous problems, and mobilization against those problems, there is no guarantee that one movement can hold consumer interest long enough to bring about significant change.[62]

The third obstacle identified by interviewees was a concern that seafood was too complex for consumers to fully understand. The following passage from one interviewee illustrates the complexity of seafood and the challenges it presents to consumers:

> If you think about, compare it [seafood] to the other proteins that are available to us: beef, chicken, pork... As Carl Safina, from Blue Ocean Institute, says, 'fish is really the last buffalo on the planet.' It's the only wild harvested thing on a large scale. The beef, poultry, all the other proteins available to us are normally a single species raised on land-based farms. So you walk into the supermarket, and you want to buy tuna, but there are multiple species of tuna, coming from all the oceans in the world. On any given day in that same supermarket there can be a different species from 8, 10, 12 thousand miles apart. So keeping track of that relative to beef or chicken is much more complex. You as a consumer walk in the supermarket, you decide to have beef for dinner, relative to the average seafood counter, your options are significantly limited. It's one species and it's cut up in a few different ways. But if you walk into Whole Foods or something, you find a species of fish from all over the world. So it's a much more complex. And then because of that you look at the different variables, whether its contaminants, or how it's processed, or how many hands it has gone through. There are many less distribution points for the other proteins. And that creates a lot of complexities.

The complexity of seafood presents two problems for those movement organizations seeking to shift consumer purchasing habits. First, because seafood is such a complex product, some interviewees argued that there was no way to provide all the necessary information to your everyday consumer. For example, while the seafood cards often make distinctions between whether a seafood product is farmed or wild-caught, and different methods of catching fish (i.e., longlines vs. trolling), they do not note other important differences, such as the origin of the fish or the specific population it comes

[62] However, it should be noted that this tends to be a problem for social movements in using state-centered strategies as well.

from. On this issue, an interviewee from one of the organizations that produces seafood cards commented,

> I think the bigger problem is that some fish come from all over the world. ... A better example is Atlantic cod actually, where cod have distinct populations. You have populations in North America, populations in Iceland, there are populations in Norway. And we get cod from all those places. And US, Canada, and Norway, Iceland, each has their own management regimes. And you have to average over all of them to give consumers advice. And that could be hard. So you have to decide when you are going to lump them and when you are going to split with some of these fish. And that gets really hard. ... And if you start telling people that you can buy mahi from the US, but not from Ecuador. It gets really complicated.

Thus, because of the complexity of seafood, some interviewees argued that the cards were only able to convey certain information, and often were forced to gloss over other important differences. For these reasons, while they view the cards and consumer education and mobilization as useful, or as a good first step, they also argued that there were limits to how much change such an approach could achieve.

The other obstacle that has arisen as a result of the complexity of seafood is consumer confusion regarding what kinds of seafood are healthy and/or sustainable. On the one hand, interviewees commented that doctors are increasingly telling people to eat more seafood because of its health attributes. On the other hand, studies are coming out indicating that many seafood products may have high level of contaminants, such as mercury or PCBs. The following comment by one interviewee illustrates the contradictory messages about the healthiness of seafood today:

> They [consumers] are going to their doctor and their doctor is saying 'you know you've got to eat more seafood.' The medical community today is overwhelmingly recommending people eat more seafood. Because lots of very credible studies are coming out and saying that it helps brain functioning, it's healthy for your heart, blah, blah. And then you read articles like the Chicago Tribune last week, and they're scaring people to death. They think that all

> seafood is full of levels of mercury that will kill you an hour after you eat it. So as a consumer how do you deal with that?

Thus, many interviewees pointed out that there are many conflicting messages about seafood, and that this was confusing consumers. In the words of one interviewee, "I think people are confused. I think shoppers are somewhat aware, but really don't know much at all. I think they are a little frightened."

Conflicting messages and consumer confusion is, perhaps, greatest with respect to farmed salmon. Partly, this is because farmed salmon has become one of the most contested seafood products on the market today. For example, one interviewee commented,

> You have Hites coming out and saying 'oh farmed salmon are loaded with PCBs.' And then you have other people coming out and saying 'no that's not the case.' And then they will release another paper which is just the same data massaged in a different way. And it gets confusing to consumers.

Such consumer confusion may work in the sustainable seafood movement's favor in that it may scare consumers away from seafood. That is, a drop in consumer demand for seafood would potentially lead to declines in harvest of wild fish and aquaculture production levels. However, the greater concern among interviewees is that such confusion is undermining the movement's ability to communicate with consumers, as consumers do not know who to trust or what to believe. Thus, there is concern that such confusion will undermine movement organizations' ability to reach and mobilize consumers, as consumers will become increasingly apathetic towards seafood generally, or sustainability and health issues pertaining to seafood.

*Price and Supply*

When approaching retailers and, to a lesser degree, restaurant chains, price and supply are major issues. Several interviewees commented that for retailers to even consider carrying seafood products that were sustainable, they had to have a guarantee of a consistent supply at certain price levels. Where this becomes problematic is that large retailers require large volume, something that is either not possible in certain fisheries because of ecological constraints (e.g., long reproductive cycles, seasonality, etc.), or because the seafood industry does not have the capacity to supply such volumes. Some interviewees argued that this constrained their ability to approach and negotiate with retailers, in some instances.

Price and supply can also constrain movement organizations' efforts where the price of seafood products is low and supply abundant. Movement organizations have struggled to get large buyers to make changes with respect to seafood commodities that are abundant and affordable, but unsustainable, as such seafood commodities are quite attractive to retailers. This has been the case with respect to farmed salmon.

The sustainable seafood movement has sought to overcome price and supply issues in several ways. First, the movement is quite aggressively seeking to expand the number of MSC certified fisheries and develop a credible certification mechanism for aquaculture. The aim is to expand the quantity of sustainable seafood being harvested and produced. Second, organizations, such as ED and the New England Aquarium, are working with retailers to develop private standards for farm-raised seafood products. Here, the goal is to get retailers to implement environmental standards aquaculture. Doing so, would force producers to make their practices more sustainable and thus,

increase the supply of sustainable seafood. Third, the Seafood Alliance has developed a buyer's guide for sustainable seafood to try to facilitate connections between purveyors of sustainable seafood and retailers and restaurants. The aim is to match supply and demand and more efficiently move sustainable seafood through the commodity chain. Fourth, through the Sea of Change Investment Fund, the movement is investing in suppliers of sustainable seafood. And, lastly, some organizations are working with retailers to try to get them to carry more diverse and flexible seafood products lines that change with supply and seasonality. However, while these various efforts address the issue of supply, they do not tackle the issue of price constraints. Additionally, for the most part, they do not question the overall business model of retailers or the structure of seafood consumption generally.[63]

**The Responses of the Seafood Industry**

A key objective of market-based campaigns, and an objective of many of the campaigns undertaken by organizations in the sustainable seafood movement, is to pressure producers to adopt more sustainable practices. Actors in the seafood industry have responded in a variety of ways, including denial, anger, counter-campaigns, and accommodation and collaboration.[64] Historically, interviewees argued that the seafood industry has not had "a very strong conservation ethic." One interviewee argued that the seafood industry has been "at best denying and at worst counter-productive" in terms of conservation. Similarly, another argued that "the seafood industry has run scared and

[63] As I discuss in more depth in the conclusion, consumption itself, and consumption levels, are almost never questioned by movement actors.

[64] In using the term "seafood industry" I am referring to upstream actors, such as fishers, fishing companies, aquaculture companies, and processors. Additionally, the "term" producer refers to both fishing and aquaculture operations.

swept that [sustainability] under the rug for years. Their fisheries are well managed, there are no problems, leave us alone. That's basically been the line." Thus, not surprisingly, the initial reaction by most of seafood industry to the movement's efforts was denial, anger, or some combination of the two.

According to interviewees, negative responses by producers to the movement's campaigns include trying to dismiss them as overblown, to organize counter-campaigns, and to shift to alternative markets. In the first instance, the response has been to try to demonstrate that the claims of overfishing or the harmful environmental impacts of aquaculture are overstated. This often involves the use of contrary scientific findings and the portrayal of environmentalists as over-zealous and reactionary. However, in some cases, seafood industry actors have become more organized in countering the campaigns of movement organizations. The most prominent example of this response is the counter-campaign by the salmon aquaculture industry. At one point, the BC Salmon Farmers Association hired the public relations firm of Hill and Knowlton to manage a pro-farmed salmon campaign.[65] More recently, Salmon of the Americas, a salmon aquaculture trade association, was founded to promote farmed salmon in North America. Interviewees involved in the salmon campaigns commented that, in both instances, the counter campaigns have largely mimicked their campaigns. For example, the aquaculture campaigns try to get chefs to endorse farmed salmon, run advertisements in major papers, collaborate with retailers, and enroll scientists. Thus, some interviewees argue that the debate over farmed salmon has turned into a public relations battle.[66] Lastly, in at least

[65] Hill and Knowlton is infamous for helping companies to counter negative claims made by environmental organizations (Stauber and Rampton 1995).

[66] Again it needs to be noted that the farmed salmon campaigns have elicited the strongest negative response from the seafood industry. In part, this may be due to a combination of the salmon aquaculture

one instance, producers have shifted markets in response to a campaign. One interviewee commented that Caspian Sea caviar producers responded to the "Caviar Emptor" campaign and the ensuing restrictions in the US by shifting exports to the European market.

However, as the sustainable seafood movement has gained some recognition, and the seafood industry realized that it was not going away, many interviewees argued that the response of much of the seafood industry has changed. Specifically, the response by much of the seafood industry has shifted from denial of the movement and its claims, to anger and contestation, and now, increasingly, accommodation. To borrow the words of one interviewee,

> It's like the stages of alcoholism the reaction of industry. First, it is denial. Like go away, we don't want to talk to you. Then it is anger. Like you son-of-bitches. Now we are in the acceptance stage. Where okay, sustainability is going to be part of our business.

Interviewees commonly cited this transformation as evidence of the impact that the movement was having. For example, interviewees pointed to a 2004 article in *Seafood Business*, the leading trade publication of the seafood industry, that stated that sustainability is here to stay. They also pointed to the increased discussion of sustainability at the Boston Seafood Show, the largest seafood trade show in the US, as another indicator of the changed position of much of the seafood industry with respect to the idea of sustainability.

Interviewees indicated that a driving force behind the shift in how industry perceives the idea of sustainability is, at least partially driven by recognition that being sustainable can also be profitable. Several interviewees commented that the industry is

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sector being fairly concentrated, a period of stagnating profits due to overproduction, the large market for farmed salmon, and the confrontational character of the farmed salmon campaigns.

seeing "profit potential" and "market opportunities" presented by the idea of sustainable seafood. For example, one interviewee argued that industry is not embracing sustainability because they have had "an ethical shift," but because it is profitable. In other words, while industry actors may not care more about the environment and sustainability than previously, they are becoming more sustainable because it is profitable to do so. Whether this is problematic in the long-run remains to be seen. However, one interviewee argued that as long as the outcomes are good, the motivations are not important.

Additionally, some interviewees commented that producers may be shifting towards more sustainable practices as a result of pressure from retailers, or concerns over pressure from retailers in the future. For example, one interviewee commented that producers see Wal-Mart announcing that it is going to shift towards only MSC certified wild-caught seafood, and they say, "jeez what's this going to mean for us." The hope of movement actors is that getting some lead actors from both the retail sector and seafood industry on board will create a snowball effect in favor of sustainability.

**Evaluating the Effectiveness of Market-based Campaigns: Questions of Measuring**

An important question that arose during interviews is: "How does one measure market-based campaigns?" As discussed throughout this dissertation, some interviewees attribute a significant amount of success to the various market-based seafood campaigns, while others are more critical. However, among nearly all interviewees there was disagreement with respect to how to evaluate the impact of specific campaigns and the movement as a whole. Partly, this concern with measuring was in response to the

Bridgespan Report, which some interviewees felt mischaracterized their campaigns. For example, one interviewee commented, "The trouble with evaluations is that groups like the Bridgespan Group... They want to have metrics for everything.... But it is very difficult to quantify things like the buzz in industry." Additionally, according to one interviewee, the movement also faced structural constraints in measuring the impact of campaigns. She commented, "One of the bugaboos of the public interest community is that we don't have the resources of a big marketing firm. It's harder for us to measure success because we don't do the before and after in the same way. And they are expensive to do."

The difficulty that interviewees had in gauging the success of their organization's market-based campaigns is visible in the kind of evidence they provided. The most concrete evidence interviewees provided was policy change, in those instances where it had occurred. In some cases, interviewees cited the number of chefs and restaurants who had signed onto the campaign, or specific agreements that they had entered into with larger buyers. However, most of the evidence that interviewees provided of the movement's success was anecdotal. In other words, they pointed to the "buzz" around sustainability at the Boston Seafood Show and the article on sustainability in *Seafood News* as evidence of the movement's influence.[67]

How to measure or quantify their results is an important issue for movement organizations using market-based campaigns, especially for those organizations focused on consumers. As opposed to policy change, the impacts of market-based campaigns

[67] The one exception is a survey conducted by the Seafood Choices Alliance in 2001 (2003). The survey included consumers, chefs and restaurants, and retailers. However, the survey was geared more towards finding out what people knew, what they were interested in (e.g., taste, health, sustainability), and their interest in sustainable seafood and a sustainable seafood label. In this way, it was more of a tool for constructing future campaigns, frames, and messaging than assessing the impact of the movement to date.

may not be easily visible or measurable. Additionally, there may be a delay between shifts in the market and actual changes in fishing or aquaculture practices. This inability to measure can become problematic, as movement organizations need to justify their campaigns to funding bodies and, in some instances, their members, if they want to continue to receive funding. For example, getting Wal-Mart to agree to shift towards sourcing MSC certified seafood products is a visible and measurable movement outcome. However, such an outcome may not have been possible without other campaigns, such as consumer education, whose impacts are not as visible or easily measured. Thus, if foundations and other funding bodies, and organizations themselves, develop metrics for measuring market-based campaigns and strategies, this may lead towards favoring campaigns and strategies with visible and immediate outcomes over those that may produce more subtle and longer-term shifts in the market. I return to the potential implications of this stress by foundations on "visible" and "tangible" outcome in the conclusion.

**Movement Progression: Zeroing in on Retailers**

In response to the above obstacles, the shift towards accommodating sustainability by the seafood industry, and the ways that campaign effectiveness has been evaluated, the character of the seafood movement has began to shift. Specifically, the movement is shifting from focusing on consumers, using single-species campaigns, and more confrontational approaches towards more collaborative approaches with large buyers. This section discusses this progression of the sustainable seafood movement, as

well as the concerns that some movement actors have with the current direction of the movement.

Not surprisingly, in its early phases, the sustainable seafood movement focused on actors it thought would be most receptive to the idea of sustainable seafood. As one interviewee commented,

> Like anything usually, your preliminary targets are your lowest hanging fruit. And the lowest hanging fruit... are those educated consumers who care, which are basically the people who go into Whole Foods. Or the chefs who are members of the Chefs Collaborative.

In other words, the sustainable seafood movement's initial targets were environmental and health conscious consumers, natural food retail chains, and progressive chefs. These foci are evident in many of the early campaigns in the movement. Seafood cards have been largely distributed to members of Blue Ocean and ED, and aquarium visitors. Natural food chains, such as Whole Foods and Wild Oats, and independent natural food stores have been the early focus of the "Farmed and Dangerous" campaign. And the gatekeeper strategy used in many of the campaigns has focused on enrolling progressive and/or white-table cloth chefs.

While there was relative consensus in terms of whom to target (e.g., consumers, high-end restaurants, and natural food retailers), there was uncertainty within the movement on what strategies to use. Thus, in the movement's early phases, both movement organizations and foundations experimented with a diverse array of campaigns and strategies. For example, in speaking of the beginning of the movement, one interviewee commented that "five years ago Packard threw money in the air to seafood." In other words, the Packard Foundation was willing to fund all sorts of campaigns and strategies that showed any promise of having success.

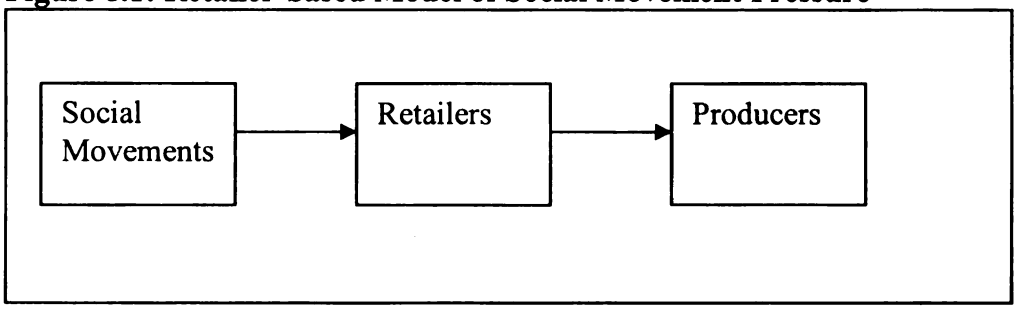
At the time of my research, the sustainable seafood movement was in a time of transition. It was shifting from its initial stage, which was characterized by experimentation to a more focused second stage, where the focus was increasingly on working collaboratively with business. In 2005, the sustainable seafood movement had been in existence long enough to begin to evaluate what had worked and what had not. At the movement level, the main form that the process of evaluation took was the Packard Foundation's external review of its "Seafood Choices Initiative" by the Bridgespan Group (2005). With the external review, one interviewee commented that what Packard is saying to the movement is that "we are done experimenting and we're going to be a little smarter with our money now."

The Bridgespan Report issued two conclusions that potentially will restructure the sustainable seafood movement in significant ways. The first is that movement has to become more narrow and focused. In other words, the movement generally, and the Packard Foundation specifically, has to focus on those campaigns and strategies that have the largest impact. Second, the report recommended that the movement focus its efforts on large buyers. In its report, the Bridgespan Group argued that while the movement has raised the salience of the idea of sustainable seafood among targeted groups, it has had a relatively small impact on fishing and aquaculture practices thus far. The report concluded that the movement could have a larger impact by focusing on large buyers of seafood, namely large retailers and restaurant chains. In March 2007, the Packard Foundation (2007b) announced that it was restructuring its Marne Fisheries Program, largely in line with the recommendations made by the Bridgespan Group.

This position that the movement has to focus its efforts on the big buyers was echoed by many interviewees. Several interviewees commented that they have been able to raise consumer awareness with respect to sustainability and seafood, and get high-end chefs and restaurants and some natural foods retailers to support the idea of sustainable seafood, and that this was a good first step. However, it is time to scale-up the movement. For example, one interviewee commented, "... there has been enough of a groundswell so that they [their organization] can switch to corporations," while another commented that "we got to get Applebees." Thus, some interviewees commented that the movement was entering a more "collaborative phase" with business.

As the movement shifts towards working more collaboratively with large buyers, a new perspective on how to achieve environmental change (i.e., marine and ocean conservation) is gaining hold. Specifically, the importance of consumers as an important agent in achieving environmental change is declining, at least from the perspective of some movement organizations. In the words of one interviewee, "Lets face it, we could print 50 million seafood cards and still not move the market. If you want to move the market you go work with the big buyers, like Wal-Mart and Costco." Thus, what is emerging is a market-based approach that is narrowly focused on large buyers, and where consumers play an increasingly peripheral role (see Figure 8.1). The following comment by an interviewee illustrates this latest shift: "We're seeing a shift from environmental groups going through consumers to industry to going straight to industry. It's the same thing with going through government to get to industry."

**Figure 8.1: Retailer-based Model of Social Movement Pressure**




However, the shift towards working more collaboratively with large buyers is contested by some actors in the movement. Several concerns emerged during interviews with respect to the shift towards working more collaboratively with large buyers. Some interviewees expressed concern that if the movement gets too close to retailers, the kinds of environmental standards that get implemented for aquaculture and/or fishing will be at the lowest common denominator. Additionally, given the importance of Packard funding to many organizations, there was a concern by some of the organizations engaged in consumer or more confrontational campaigns that they might lose some or all of their funding as Packard shifted towards funding more collaborative approaches with large buyers. Thus, some interviewees' critiques may be partially rooted in concerns regarding their organization's continued role, and, in some cases, existence. Nevertheless, the shift towards more collaborative approaches is a significant development that will have important implications for the future of the movement and marine and ocean conservation.

**Summary**

Focusing on how social movement campaigns are an on-going process, this chapter examined the evolution of market-based campaigns in the sustainable seafood movement. For social movement organizations to achieve their goals, they have to be

flexible and continually rethink, restructure, and adapt their campaigns. In the case of the sustainable seafood movement, organizations have restructured market-based campaigns in response to various obstacles, the responses of the seafood industry, and evaluations of campaign effectiveness. Specifically, organizations have encountered two sets of obstacles. First, have been problems pertaining to (1) the power of consumers in relation to industry, (2) consumer fickleness, and (3) the complexity of conveying environmental and health information on seafood to consumers. Second, in working with large buyers, problems of a ensuring a large, consistent, and acceptably priced supply of sustainable seafood have arisen. Movement organizations have also had to adapt their strategies to different responses by the seafood industry, which have shifted over time from anger and denial towards accommodation and acceptance. Lastly, there is widespread contestation with respect to how to measure the effect of market-based campaigns among movement organizations. Much of this contestation is in response to a trend by foundations to focus on 'visible' and 'tangible' evidence, which may favor certain kinds of campaigns over others. One outcome has been the recommendation for the movement to focus more narrowly on large buyers. Indeed, as the movement moves forward, initial evidence indicates that large buyers will be the primary focus of movement efforts (The David and Lucile Packard Foundation 2007b).

## Chapter 9. Conclusion

In this dissertation, I examined the use of market-based campaigns by marine and ocean conservation organizations. First, I demonstrated how marine and ocean conservation organizations are trying to take advantage of economic opportunities through the use of market-based campaigns. Second, I outlined the diverse array of market-based campaigns being used by the sustainable seafood movement and the processes of implementing them. Third, I examined the objectives that the sustainable seafood movement is trying to achieve through the use of market-based campaigns, as well as the obstacles they have encountered.

In concluding, I return to the fundamental question with which I began this dissertation: given the political, economic, and socio-cultural changes of the last quarter century, how can social movements continue to be a powerful force in society? For many social movement organizations and activists, the answer is through the market. I partially agree with this response, and argue that market-based campaigns are, perhaps, the best option for social movements to achieve their objectives given the current political economy. However, my research raises some concerns and risks with respect to the current use of market-based campaigns by the sustainable seafood movement. These include: (1) the role of foundations in the movement, (2) the shift towards working with large buyers, (3) the implications of market-based campaigns for collective action, (4) the role of the state, and (5) the transformative capacity of the movement.

The first part of this chapter examines what constitutes a social movement, and whether the sustainable seafood movement is in fact a social movement. Here, I argue that the sustainable seafood movement is representative of the increasingly

professionalized form of contemporary social movements. Second, I examine the five concerns regarding market-based campaigns raised by research. As market-based campaigns have become an integral approach for many social movements, I argue that if left unaddressed, these concerns have the potential to undermine the power of social movements in contemporary society. Thus, in concluding, I suggest several potential ways for social movements to begin to take up these concerns.

**Is the Sustainable Seafood Movement a Social Movement?**

What constitutes a social movement? While there is little consensus on what is a social movement, scholars have identified three general characteristics of social movements: (1) a network of individuals and organizations, (2) involved in a political or cultural conflict, and (3) a shared identity (Diani 1992). The sustainable seafood movement clearly meets the first two criteria. First, there are multiple organizations engaged in the effort to conserve fisheries and marine environments through the idea of sustainable seafood and the use of market-based approaches. Second, conserving fisheries and marine environments is both a political and cultural conflict. However, whether the sustainable seafood movement has a shared identity is not as clear. Among professional activists in the movement, there is a shared identity with respect to conserving fisheries and marine environments. For the most part, there is also agreement regarding the effectiveness of market-based approaches. Yet, as the discussion of framing in chapter 4 shows, many of the actors (e.g., consumers, chefs and restaurant owners, and retailers) that the movement is trying to enroll do not share the same concern for fisheries and oceans. Consequently, the movement has had to develop additional

frames in order to enroll supporters. This raises the question as to what extent there is a collective identity around marine and ocean conservation and sustainable seafood that extends beyond the professional activists in the movement. If there is not a collective identity beyond the professional activists that head the organizations active in the movement, then the extent to which the sustainable seafood movement is a social movement, or an effective social movement, is open to question.

However, the question can also be turned on its head. That is, might our understanding of social movements need to be rethought? Historically, social movements have involved a significant number of people, who actively contributed to the movement. In other words, they had some populist element, which took the form of either a membership (e.g., unions) or large, active constituency (e.g., civil rights). They also tended to seek change both through and outside "normal" political channels. The sustainable seafood movement, and most contemporary social movements, does not to fit this model. Rather, social movements tend to be run by a relatively small number of professional organizations with full-time paid staff, and often have little or no active members. Additionally, many social movements have shifted towards increasingly using "normal" political channels and non-confrontational approaches. In this way, the sustainable seafood movement fits the increasingly dominant form of contemporary social movements in that it consists largely of professional organizations that are loosely coordinated and united behind a common cause, but with almost no populist component. Given the form of contemporary social movements, a rethinking of what constitutes a social movement, and critical analysis of the increasingly professionalized form of social movements might be in order.

**Foundations in the Sustainable Seafood Movement: Too Much Influence?**

Research on social movements indicates that foundations are playing an increasingly prominent role in social movements (Brulle and Jenkins 2005; Faber and McCarthy 2005). In part, this is because there are more foundations now than heretofore and the assets of many foundations have increased (Faber and McCarthy 2005). Increasingly, foundations are using their resources to decide what social and environmental problems are most urgent, and the best approaches by which to remedy them (Brulle and Jenkins 2005; Faber and McCarthy 2005). To accomplish this, foundations are using grants to "channel" social movements towards specific problems, campaigns, and strategies (Brulle and Jenkins 2005). Consequently, in some instances, foundations have become the lead actors in social movements.

My findings on the sustainable seafood movement indicate that foundations are the lead actors in the movement and are channeling the movement in very specific directions. Indeed, the influence of foundations may be greater than in other environmental movements due to the relatively small number of foundations that fund marine and ocean conservation. As discussed in chapter 4, several interviewees noted that compared to land-based forms of environmentalism, the number of foundations that fund marine and ocean conservation is quite limited. As a few foundations have provided the bulk of foundation funding to the sustainable seafood movement, the power of foundations within the movement is undeniable.

In particular, two foundations have been the driving force behind the sustainable seafood movement, namely the Packard Foundation and Pew Charitable Trust. With its Seafood Choice Initiative, the Packard Foundation shifted the bulk of its funding for

marine fisheries towards market-based campaigns. Whereas prior to Packard's Seafood Choice Initiative there were almost no market-based campaigns in the area of marine and ocean conservation, since its implementation market-based campaigns have become the most prominent kind of campaign used in marine and ocean conservation. Indeed, every organization and campaign I identified within the sustainable seafood movement has received funding from the Packard Foundation, except one, the farmed shrimp campaign by Food and Water Watch. For many campaigns, Packard has been the largest source of foundation funding.

The Pew Charitable Trust was also instrumental in establishing the sustainable seafood movement. Two of the lead organizations in the sustainable seafood movement were set up by Pew: NET and SeaWeb. Their initial funding, organizational structure, mission, and the kinds of actions they undertook were all originally determined by Pew. As several interviewees noted, in establishing NET and SeaWeb, an objective of Pew was to develop a more market-oriented approach by the environmental movement.

As the above examples indicate, both the Packard Foundation and the Pew Charitable Trust use very hands-on approaches. Simply put, both have sought to channel social movements in specific directions. Indeed, the Packard Foundations does not deny that they do this. Dennis Kelso (2003), the current director of the Marine Sciences Program at the Packard Foundation, commented that Packard does not just provide funds, but remains engaged in the campaign from start to finish. Specifically, they do this through developing a model of social change, designing metrics for measuring campaign effectiveness, undertaking campaign monitoring and evaluation, and developing exit strategies.

Thus, while many organizations pre-dated the turn to the market by foundations, and some were already experimenting with market-based campaigns, it was foundation funding that largely led to the widespread use of market-based approaches by those organizations in the sustainable seafood movement. This foundation-led feature of the movement has affected the sustainable seafood movement in several important ways. First, the movement is largely made up of mostly professional environmental organizations, with some exceptions. This finding is consistent with research on social movements, which has found that foundations tend to favor professional organizations (Brulle and Jenkins 2005; Faber and McCarthy 2005). The professional character of most organizations in the movement may constrain the movement's options in the future, as they have few sources of funding besides foundations. For example, with some exceptions, organizations do not have members they can draw on for funding.

Second, foundations, especially Packard, have significant influence with respect to how the sustainable seafood movement has developed. This is most evident in the shift towards working with large buyers that is currently taking place. As discussed in Chapter 8, largely in response to the Bridgespan Group's report (2005), Packard (2007b) is shifting away from single species campaigns, working with chefs, and consumer education. Instead, it is scaling up its funding of work with large buyers, as well as certification. Thus, movement organizations committed to single-species campaigns, working with chefs, and consumer education face possible marginalization or exclusion. Furthermore, this move may undermine the few participatory tendencies (e.g., getting people actually actively participating in protecting marine life and the oceans) that exist

in the movement. As most movement organizations have few alternative funding options, they have little choice but to follow the lead of Packard and other foundations.

Third, in its diagnosis of the problems, rhetoric, and proposed solutions, the sustainable seafood movement is largely conservative.[68] This finding is consistent with research on social movements, which has found that foundations tend to favor reform-oriented social movement organizations (Brulle and Jenkins 2005; Faber and McCarthy 2005). I argue that the sustainable seafood movement does not contest the structure of the seafood industry or the retail sector. In other words, the message emanating from the movement is that solving problems of overfishing and the negative environmental impacts of aquaculture does not require significant political or economic changes. Rather, incremental change is stressed with regard to fishing and aquaculture practices. The conservative character of much of the movement is also visible in the fact that the *amount* of seafood consumed is not an issue addressed by movement organizations. Rather, movement discourse and frames are only about the *kinds* of seafood consumed. In part, this is because questioning the amount of consumption entails addressing larger political, economic and social issues, which may alienate those actors the movement is increasingly trying to work with – i.e., large buyers and the seafood industry.[69]

Fourth, movement organizations must continually justify themselves and their campaigns to foundations. This is likely to influence the kinds of campaigns movement

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[68] There are some exceptions, most notably some of the organizations in CAAR. As discussed earlier in this dissertation, CAAR's campaign is the most populist of the campaigns in the sustainable seafood movement and the only one tied to a particular place.

[69] This raises a significant contradiction between the movement and its objectives. Specifically, given that the consumption of seafood is rising in the US, at some point, the level of consumption needs to stop increasing, and possibly decrease, to prevent overfishing. However, in my research, I found no organization addressing this, though some interviewees did comment that this was an issue that the movement was ignoring. In fact, I would argue that the movement tends to promote the consumption of seafood, while just asking people to avoid certain kinds.

organizations undertake. First, this may lead movement organizations to choose campaigns according to what is most likely to be funded, as opposed to what they see as the top priority. For example, some interviewees commented that at the time of the "Give Swordfish a Break" campaign, the state of Atlantic swordfish populations was not the most pressing problem. However, of greater concern is the need for movement organizations to be able to measure their campaigns, and provide data to foundations with respect to what their campaigns achieved. This could place organizations that focus on consumer education at a disadvantage, as raising consumer awareness is not easily quantifiable. Conversely, organizations that are working with large buyers or on certification may be favored, as such outcomes are often clearly measurable.

Lastly, if campaigns are primarily funded by foundations, then there is always the chance that they may end prematurely. In other words, if the grant runs out, and a foundation does not view the campaign as worth continuing, the campaign may have to come to an end, regardless of whether it achieved its goals. Some interviewees indicated that this had been an issue with respect to their campaigns.

### The Shift Towards Working With Large Buyers: Is the Sustainable Seafood Putting Too Many of its Roe in One Basket?

As my findings show, the sustainable seafood movement is moving towards working with large buyers. For example, the Packard Foundation (2007b) has concluded that the movement could achieve the largest and most immediate impact through working with large buyers. There are several potential advantages for the sustainable seafood movement to work with larger buyers. First, given the power of the leading retailers in the global agrifood system, they have the ability to dictate up supply chains (e.g.,

processors and producers) as to what kinds of seafood they want and how they want that seafood caught, produced, and processed. Second, large retailers control such a significant market share that they have the ability to create a substantial market for sustainable seafood through offering and promoting it. Third, instead of having to educate, organize, and mobilize large numbers of consumers, movement organizations can concentrate their efforts on just a few large actors. Fourth, conveying complex information to retailers is easier than educating consumers. In part, this is because in working with retailers, movement organizations are dealing with a very small number of actors. Thus, whereas with consumers information on seafood often needs to be presented in black and white terms (i.e., good or bad), with large buyers information can be more nuanced. For example, a movement organization can recommend to a retailer to only source farmed shrimp from select shrimp aquaculture operations, which the movement considers sustainable. This contrasts to working with consumers, where it is much harder for movement organizations to convey that they can purchase shrimp from Producer A, but not Producer B. Lastly, in working with large buyers the movement can potentially achieve its goals faster than by organizing consumers or chefs. This is primarily because it takes fewer of them to significantly impact upstream producers. As a result, conservation outcomes can potentially be achieved faster through focusing on large buyers.

While collaborating with large retailers is a logical and potentially effective strategy for the sustainable seafood movement, such a strategy also has several risks. Most notably, the movement could become dependent on retailers. As retailers have significant control over both the market and the supply of sustainable seafood, a power

imbalance may arise between retailers and movement organizations. This could result in retailers deciding what counts as sustainable and what does not, among other things. This is especially the case if the movement fails to continue to strategically enroll consumers, as it shifts more resources towards working with large buyers.

There is also the risk that movement organizations might over-compromise with respect to their conservation goals in efforts to gain the support of large buyers. For example, given the conservative orientation of the movement, and most movement organizations' stress on incremental change in seeking to achieve some progress, there is a chance that movement organizations will agree to a "weak" definition of sustainable seafood with large buyers. While this would result in increased conservation of marine life and environments, in all likelihood contestation would emerge as to whether such conservation measures were sufficient. If this were to occur, one negative implication might be a fissuring of the sustainable seafood movement, as some of the more conservative organizations may undercut the efforts of more radical organizations. One place where this could occur is with farmed salmon, where there is already significant divergence among movement organizations regarding what is sustainable salmon aquaculture.

**Consumption and Collective Action: In Promoting Consumption is the Sustainable Seafood Movement Undermining Itself?**

In a recent paper, Andrew Szasz (2006) argues that people are increasingly practicing what he terms "inverted quarantine" to protect themselves from social, environmental, and health risks. By this, he means that people are "isolating themselves from their disease-inducing surroundings, by erecting some sort of barrier or enclosure

and withdrawing behind it or inside it" (Szasz 2006, 4). Typically, people erect this barrier through their consumption practices. That is, they buy bottled water to protect themselves from contaminated public water systems, consume organic food to protect themselves from the health risks associated with industrial agriculture, and live in gated communities to protect themselves from unsafe people. Put differently, people are increasingly responding in an individualistic manner to social and environmental problems. Szasz (2006) argues that this response is markedly different from collective responses, such as people joining together to demand better public water systems, safer neighborhoods, and a safer and healthier food system.

I argue that social movements are promoting and legitimating the notion of "inverted quarantine" in their use of market-based campaigns. This is so because in promoting consumption as an appropriate avenue for people to express their political, ethical, and environmental values, market-based campaigns reinforce individualistic responses by people. Allen and Guthman (2006, 411-412) argue,

> The idea of consumer choice is especially appealing because it absolves people of the need to do anything else beyond selecting products for purchase. This elision thus reinforces the idea that social change is simply a matter of individual will rather than something that must be organized and struggled over in collectivities.

If Allen and Guthman are correct, the implication is that, increasingly, people will view individual actions (i.e., consumption) as sufficient to achieve social change.
One consequence of such a position is that people would not view collective forms of action as necessary for social and environmental change. If this were to occur, this would be problematic for social movements that use market-based approaches, as the power of movement organizations is largely based on mass support and/or claims to represent a collective of people (Holzer 2006). Thus, in promoting individual consumption as the

primary form of activism undertaken by people, as opposed to mobilizing people to partake in collective forms of action, the sustainable seafood movement may be undermining its source of power.

**The State: Is It Still Needed?**

Market-based campaigns potentially may further weaken the regulatory power of states in that they reinforce the idea that government regulations are not necessary for a safe, healthy, sustainable, and socially just world. Rather than contesting the rolling back of the welfare state and devolution of regulation to non-governmental actors, social movements are implicitly supporting such actions with the use of market-based campaigns. That is, in using market-based campaigns, social movements are advancing the market as the appropriate mechanism for regulating the environment, safety, health, quality, and social justice, among other things. Thus, in using market-based campaigns, the sustainable seafood movement is both promoting and legitimating the market as the appropriate institution for regulating fishing and aquaculture. For example, with the MSC, private labeling schemes (e.g., FishWise™), and private standards (e.g., Wegmans, Bon Appetite, and ED salmon aquaculture standards), one can ask where the need for state regulation is?

**Market-Based Campaigns: Transformative or Conservative?**

Taylor (2005, 130) argues that with market-based campaigns, social movement organizations are trying to be "in the market, but not for it." Put differently, they are strategically using the market to try to achieve social and environmental objectives

"without being captured by the market's conventional logic, practices, and dominant actors" (Taylor 2005, 130). However, at least in the case of the sustainable seafood movement, movement organizations seem to be "in the market, and for it." In other words, the sustainable seafood movement is not challenging how the market is structured and operates. Rather, movement organizations are simply trying to create space in the marketplace for sustainable seafood.

Accepting the current structure and operating practices of the market limits the kinds of changes that the sustainable seafood movement can achieve. Specifically, the current use of market-based campaigns by the sustainable seafood movement limits it to solutions that are consistent with the existing structure and practices of the market, as well as leading market actors (i.e., business). The outcome is reform-based approaches that seek to "ecologize" the market by the sustainable seafood movement. These may generate niche markets for sustainable seafood and even shift the mainstream markets to a certain extent. However, such approaches do not challenge the social forces that are creating incentives for the exploitation of fisheries and marine environments. This raises questions as to the transformative capacity of the sustainable seafood movement.

First, in not challenging the structure and practices undergirding the exploitation of fisheries and marine environments, the consequence may be a dual seafood system, where you have sustainable, safe, high quality seafood and, at the same time, unsustainable, unsafe, and poor quality seafood.[70] Such an outcome would maintain a market for unsustainable seafood, and reinforce class divides, as access to seafood would

[70] Findings from other areas such as coffee, forestry, and produce and meat support this argument. In each of these areas there are now "alternative" products that capture a relatively small share of the market and conventional products, which still make-up the overwhelming majority of the market (Cashore et al. 2004; Shreck, 2005; Szasz 2006; Taylor 2005).

continue to be based on its affordability.[71] In other words, as long as there is a significant percentage of the population that is poor, there will be demand for unsustainable seafood. And, to the extent that the current capitalist market system persists, there will continue to be poverty. Thus, the degree of change the movement can achieve is limited by class boundaries.

Second, in not reforming the structure of the political economy, continual movement pressure is likely to be necessary to prevent a return by companies (either retailers or producers) to more unsustainable practices (Szasz 2006). In other words, without policy change, the continual support of sustainable seafood by both retailers and producers is dependent on profitability, movement pressure and/or government regulations. This is problematic for movements, because maintaining both consumer and foundation interest in a specific cause over an extended period of time is often quite difficult.

Third, in not contesting the structure of the political economy, the sustainable seafood movement may alienate itself from other social movements. For example, in seeking to gain some support from large retailers, the movement may ignore the other problematic policies of such retailers. For example, in working with Wal-Mart, sustainable seafood movement organizations have ignored Wal-Mart's exploitative labor practices in order to win environmental concessions from them. Consequently, in not contesting the structure of the global political economy, the movement may also end up promoting retailer procurement policies and consumption practices that foster

[71] There is the possibility that technological innovations will lead to the production of seafood that is both sustainable and affordable. However, as many fishing and aquaculture operations uses practices and technologies that are highly efficient, but quite environmentally destructive as a result, making seafood more sustainable will lead to price increases for many products, at least in the short-term.

environmental sustainability, but are socially regressive and unjust. This may undermine possibilities for coalitions with other social movements that are also targeting large retailers. In fact, it might even lead to competition among movements to gain influence with large retailers.

For these reasons, the current use of market-based campaigns by the sustainable seafood movement does not have the capacity to transform the structure of the political economy of the global agrifood system. This places serious limitations on the outcomes the movement can achieve. In fact, the use of market-based campaigns by the sustainable seafood movement tends to do the opposite in that they reinforce the existing social order and political economy. In other words, they promote individual action through the market as a sufficient regulatory mechanism. Thus, I contend that the current use of market-based campaigns by the sustainable seafood movement is largely complicit with neoliberal ideology.

**Moving Forward: Possibilities for Social Movements in the Future**

Despite the above concerns, market-based campaigns should not be dismissed altogether. Given current political and economic conditions, they may still be the best option for achieving a world that is more environmentally sustainable and socially just than that which currently exists. For example, the sustainable seafood movement may not be transforming the political economy and consumption of seafood today. Nevertheless, it needs to be emphasized that it is slowing down the exploitation of fisheries and marine life. This is important because it both conserves, at least, some marine life and environments, and keeps open the possibility for more significant changes

in the future. At the same time, I argue that the movement needs to strive to have a greater impact than it currently does.

In the spirit of advocacy research, I conclude by offering suggestions for making the sustainable seafood movement, and social movements generally, more effective. Specifically, I argue that the sustainable seafood movement has to continue to use a (1) diversity of market-based approaches, (2) increase the participation and role of consumers in the movement, (3) maintain a focus on the state, and (4) seek to form coalitions with other social and environmental movements.

*Maintaining a Diversity of Market-Based Approaches*

While the sustainable seafood movement is increasingly moving towards working with retailers, it needs to continue to utilize a diversity of market-based campaigns and strategies. It is critical that the movement maintains a balance between consumer campaigns, critical campaigns, and collaborative campaigns. First, this is so because if the movement does not maintain such a balance, it may undermine the primary leverage point it has with respect to retailers, namely the claim be the collective voice of consumers. Given that it is movement organizations' claim to represent consumers – whether real or perceived – that is the key source of their power, neglect of consumer mobilization could weaken the power of movement organizations in relation to other actors (e.g., retailers and producers). Therefore, while the Bridgespan Group (2005) is correct in its finding that the movement's efforts to mobilize consumers have not had a significant impact on the marketplace, they may have underestimated the indirect impacts of such campaigns. Specifically, if movement organizations are to work with buyers, as

the Bridgespan Group recommends, they need to be able to claim to represent consumers. If not, their bargaining power vis-à-vis retailers will be limited.

Second, in the absence of radical organizations and campaigns, it may be more difficult for conservative organizations in the sustainable seafood movement to negotiate with large retailers and producers. In many movements, more radical organizations and activists have made more conservative organizations and activists seem reasonable. In some instances, this has made it easier for conservative organizations to negotiate with opponents (either government or business) and gain greater concessions (Dowie 1997; Mertig et al. 2002). Thus, contrary to what some movement actors argue, I contend that the sustainable seafood movement needs to continue its use of more confrontational campaigns. In other words, the movement needs to have organizations both publicly targeting retailers, as well as working cooperatively with them backstage.

*Enhancing Consumer Participation*

Currently, consumer participation in the sustainable seafood is minimal. To date, what the sustainable seafood movement has been doing is strategically using consumers. Specifically, it is trying to educate and mobilize consumers in order to pressure a given actor, such as a large retailer. The idea is to enroll consumers, so that the movement can claim to speak on their behalf. In doing so, the sustainable seafood movement organizations can claim to represent consumers, and use the position of representing 'consumers' as leverage to pressure large buyers and seafood companies.

To strategically use consumers, movement organizations have to collectivize consumers and become the voice of this collective. One perspective on this process is

that social movements give consumers voice (Holzer 2006). That is, they translate consumer preferences into a collective voice that takes other forms than simply purchasing practices (i.e., public discursive political consumerism). In such instances, movements emerge from the bottom-up (e.g., from consumers). Thus, they are truly consumer movements. However, in contrast to this approach, the opposite has occurred with respect to the sustainable seafood movement. Rather, movement organizations have largely usurped the voice of consumers for their own ends.[72] In other words, they claim to speak on behalf of consumers, but with little actual input from consumers.[73] Consequently, I argue that there is a difference between consumer movements and the strategic use of consumption by social movements.

Thus, while consumers are an important component of the sustainable seafood movement, they have little voice in the movement. Their role is largely limited to exit or loyalty. That is, consumers can be loyal to a movement or campaign—e.g., by temporarily stopping to purchase some kinds of seafood—or choose not to support a movement or campaign—e.g., by not following the purchasing pattern suggested by movement organizations.[74]

Rather than simply seeking to strategically use consumers, I argue that the sustainable seafood movement needs to try and enhance the role of consumers in the

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[72] The primary way movement organizations attempt to do this is through framing (Holzer 2006). However, as my analysis indicates, movement organizations have found this quite challenging for a variety of reasons.

[73] As retailers are also trying to represent consumers (Marsden et al. 2000) what is emerging in the global agrifood system is battle between retailers and social movements to represent consumers.

[74] Thus, my findings, at least partially, call into question this conceptualization of the modern-day consumer as a powerful social agent. For example, in some movements that have been termed consumer movements, consumers participate minimally. Consequently, while consumers have the ability to choose from an increasing plethora of goods, their input into the goods offered remains relatively constrained, as their power in relation to both retailers and social movements is often limited.

movement. In other words, the movement has to shift more towards being an actual "consumer" movement. Most significantly, this would provide the movement with an active membership base, which might benefit the movement in several ways. First, an active membership base would give movement organizations an alternative source of funding and resources (i.e., time and expertise) to foundations. This might broaden the options available to movement organizations in terms of objectives, campaigns, and strategies. Second, if people felt that they belonged to a movement and they had voice in the movement, it might spur them to partake in collective forms of action. This might shift people away from thinking and acting in largely individualistic ways (i.e., "inverted quarantine") towards more collective and communal understandings and forms of action. Additionally, it might offer, at least a partial, solution to the issue of consumer fickleness with which the movement is struggling to deal. For example, if people were given a larger role in the movement, their level of commitment might be greater. At the same time, this may further benefit the sustainable seafood movement in that it may reinvigorate how people perceive social movements and the role that they play in society. In other words, they might see social movements as important, as they have historically been the primary agent of collective action.

*Keeping the State in the Picture*

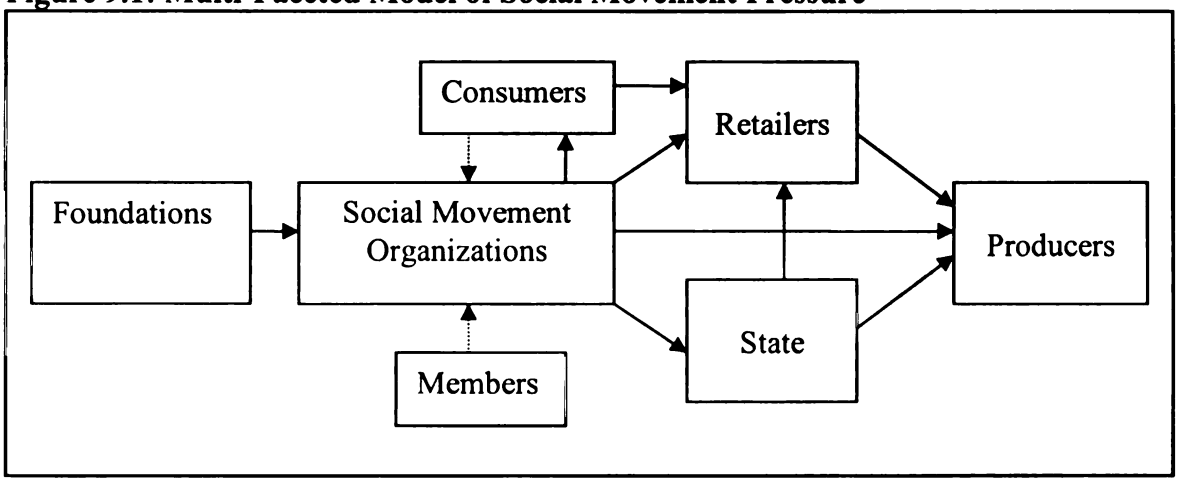
My analysis has indicated that there are few political opportunities available to the sustainable seafood movement at this time. Furthermore, having used market-based campaigns, most interviewees commented that they now favored them over state-centered campaigns. First, market-based campaigns are viewed as more efficient than

state-centered approaches, beacuse governments tend to operate quite slowly. Second, using market-based approaches enables movement organizations to directly pressure/work with stakeholders. As it is stakeholders who are affected by the depletion of fisheries or changes in management, they are viewed as more responsive than government. Third, using the market may potentially result in higher levels of environmental protection. Because they seek to balance competing forces (i.e., economic and environmental), government regulations tend to be viewed as weak regulations. In contrast, using private standards, much higher conservation requirements can be achieved, as the same sets of compromises often do not have to be made.

Despite the lack of political opportunities, and potential benefits of market-based campaigns over state-centered campaigns, I argue that the movement cannot completely abandon campaigns focused on the state. First, while the movement may be able to achieve significant changes through the market, there may be limits on how much change can be achieved this way. Furthermore, changes in the market have little permanence, as continued adherence to them depends on profitability, movement pressure, and/or government regulation. Second, social movements need other actors to regulate the market, because they do not have enough power to regulate the market themselves. While the capacity of states to regulate markets has decreased, they still have considerable power to regulate the market. The sustainable seafood movement, and social movements more generally, has to seek to take advantage of this power, and also seek to reinvigorate the state. That is, in focusing their efforts partly on the state, and demanding it take action, social movements can contest the declining power of the state, rather than reinforce the weakening of the regulatory power of states. This, potentially,

could spur a reinvigoration the state and a return it to a more active role in society. For social movements this opens up the possibility of outcomes that are not bounded by the market, but have the potential to transform the market. Thus, I argue that the movement needs to work to develop a multi-faceted approach that incorporates a diversity of market-based and state-based campaigns (see Figure 9.1).

**Figure 9.1: Multi-Faceted Model of Social Movement Pressure**




*Coalitions with Other Environmental and Social Movements*

At this time, there are a plethora of social movements focusing on large food retailers. These include fair trade, anti-biotech (in Europe), labor, and organics, among others. At the same time, there are also movements working towards alternatives ways of producing and consuming food that are using other avenues, such as collaborating with chefs and producers, and fostering alternative markets (e.g., farmers markets). Examples of such movements include slow food and local food movements, as well as the fair trade and organic movements, which use both kinds of approaches. However, all of these movements tend to function independently of each other. For example, one finds supporters of organic food eating farmed salmon or Chilean sea bass.

As each of these movements is seeking to change some practices of the political economy of the global agrifood system, they would benefit from greater collaboration. By working together, they could have multi-pronged coordinated campaigns targeting retailers. In doing so, each movement may be able to exert greater pressure on large retailers than each could individually. Additionally, it would constrain the ability of retailers to play movements off each other, or accommodate some, but not others. For example, it might make it more difficult for Wal-Mart to carry sustainable seafood, but continue to use exploitative labor practices. Lastly, in collaborating there is the potential for various movements to form a broad-based corporate-focused movement for social justice and environmental sustainability. Such a movement might have the capacity to generate significant transformations to the political economy of the global agrifood system, compared to the small concessions that movements tend to be gaining from retailers at this point in time.

**Conclusion**

This dissertation has sought to apply sociological knowledge to the use of market-based campaigns by the sustainable seafood movement. The objective of this project was two-fold. The first was to use my training as a sociologist to contribute to the sustainable seafood movement. My aim was to use sociological analyses to provide insights on the use of market-based campaigns, which movement actors might find helpful in designing and implementing campaigns in the future. My second aim was to contribute to sociological knowledge on the relationship between political economic conditions and social movements, the use of the market by social movements, and the seafood industry.

Here, I hope to contribute to the construction of social theories, as well as stimulate progressive forms of research. In writing this dissertation, I have tried my best to stay true to these objectives.

# Appendix 1. Alberstons' Letter to Salmon of the Americas

April 6, 2005

Alex Trent, Executive Director
Salmon of the Americas
MarketAction
194 Nassau Street
Princeton, NJ 08542

Dear Mr. Trent,

In our letter of December 5, 2003, we identified some of the serious environmental problems with the current practices of most farmed salmon producers. We encouraged Salmon of the Americas to work to resolve these problems and noted we would monitor the progress of the industry toward developing meaningful guidelines. Unfortunately, since then, the environmental problems of farmed salmon have become an even more conspicuous issue. Due to the values we hold as a food retail leader, we remain concerned about these problems.

In addition to the concerns set forth in our prior letter, Albertsons asks Salmon of the Americas and its member firms to appropriately respond to the following concerns:

- Adopting technology that eliminates disease transfer and farmed salmon escapes so that wildlife is not harmed as a result of salmon farming;
- Reduction leading to the eventual elimination of antibiotics, biocides and harmful chemicals in salmon farming;
- Adopt technology that treats, disposes of or otherwise manages waste in a way that ensures that it does not harm the environment;
- Developing and using farmed salmon feed that does not result in a net loss of protein and that does not deplete wild fish stocks; and
- Evaluating the use of genetically engineered fish, feed and other inputs.

It is Albertsons intention to be able to offer our customers sustainably-raised farmed salmon that are produced and managed under appropriate guidelines and standards. We prefer to source salmon from firms that are committed to meet these standards. We would appreciate receiving an update on how you plan to address the concerns noted above.

We appreciate your attention to our concerns and look forward to working with you and your membership in addressing these issues.

Best Regards,

Albertson's, Inc.

Jim Smits
Group Vice President, Fresh Foods
Merchandising

ALBERTSON'S, INC / GENERAL OFFICES / 250 PARKCENTER BOULEVARD / P.O. BOX 20 / BOISE, IDAHO 83726 / 208-395-6200

**Appendix 2 CAAR Safeway Advertisement**

## With all the chemicals in Safeway's farmed salmon, you might as well eat the packaging.

Farmed salmon just isn't natural. Tell Safeway to stop selling it.

**References**


Allen, Patricia, and Julie Guthman. 2006. "From "old school" to "farm-to-school": Neoliberalization from the ground up." *Agriculture and Human Values* 23:401-415.

Bailey, Conner, Peter Sinclair, and Mark Dubois. 2003. "Pushing Paper: Market Demand and Market-Based Environmentalism." Paper presented at the Rural Sociological Society Annual Meeting, Montreal, Canada.

Barad, Karen. 1996. "Meeting the Universe Halfway: Realism and Social Constructivism Without Contradiction." Pp. 161-194 in *Feminism, Science and the Philosophy of Science*, edited by Lynn H. Nelson and Jack Nelson. London: Kluwer Academic Publishers.

Barry, Andrew, Thomas Osborne, and Nikolas Rose. 1996. "Introduction." Pp. 1-17 in *Foucault and political reason: Liberalism, neo-liberalism and rationalities of government*, edited by Andrew Barry, Thomas Osborne, and Nikolas Rose. London: UCL Press.

Bartley, Tim. 2003. "Certifying Forests and Factories: States, Social Movements, and the Rise of Private Regulation in the Apparel and Forest Product Fields." *Politics and Society* 31:433-464.

Beck, Ulrich. 1992. *Risk Society: Towards a New Modernity*. London: Sage Publications.

Bell, Michael M. 2006. "Welcome to the Consumption Line: Sustainability and the Post-Choice Economy." Paper presented at the Sustainable Consumption and Society Conference, University of Wisconsin-Madison, Madison, Wisconsin, June 2-3.

Benford, Robert D. and David A. Snow. 2000. "Framing Processes and Social Movements: An Overview and Assessment." *Annual Review of Sociology* 26:611-639.

Bijker, Wiebe. E. 1995. *Of Bicycles, Bakelites, and Bulbs*. Cambridge, MA: MIT Press.

Blowfield, Michael, and Jedrzej George Frynas. 2005. "Setting new agendas: crticial perspectives on Corporate Social Responsibility in the developing world." *International Affairs* 81:499-513.

Bridge, Gavin, and Andrew E.G. Jonas. 2002. "Guest Editorial: Governing Nature; the reregulation of resource access, production, and consumption." *Environmental and Planning A* 34:759-766.

Bridgespan Group. 2005. "Seafood Choices Initiative Evaluation." San Francisco: The Bridgespan Group.

Brown, James. 2005. "An account of the dolphin-safe tuna issue in the UK." *Marine Policy* 29:39-46.

Brown, Paul. 2004. "Crisis of credibility for 'green' fisheries." in *The Guardian*. London.

Brulle, Robert J. 2000. *Agency, Democracy, and Nature: The U.S. Environmental Movement from a Critical Theory Perspective*. Cambridge, MA: MIT Press.

Brulle, Robert J., and Craig J. Jenkins. 2005. "Foundations and the Environmental Movement: Priorities, Strategies, and Impact." Pp. 151-173 in *Foundations for Social Change: Critical Perspectives on Philanthropy and Popular Movements*, edited by Daniel R. Faber and Deborah McCarthy. New York: Rowman & Littlefield Publishers, Inc.

Burawoy, Michael. 2004. "Public Sociologies: Contradictions, Dilemmas, and Possibilities." *Social Forces* 82:1603-1618.

—. 2005. "2004 Presidential Address: For Public Sociology." *American Sociological Review* 70:4-28.

Busch, Lawrence. Forthcoming. "Performing the Economy, Performing Science: From Neoclassical to Supply Chain Models in the Agrifood Sector." *Economy and Society*.

Busch, Lawrence, and Carmen Bain. 2004. "New! Improved? The Transformation of the Global Agrifood System." *Rural Sociology* 69:321-346.

CAAR, and Marine Harvest. 2006 (January 12). Press Release: "Aquauculture Company, First Nations and Environmental Coalition Reach Unprecedented "First Step" Agreement." Accessed at http://www.farmedanddangerous.org on March 21, 2007.

Callon, Michel, Cecile Meadel, and Vololona Rabeharisoa. 2002. "The economy of qualities." *Economy and Society* 31:194-217.

Cashore, Benjamin, Grame Auld, and Deanna Newsom. 2004. *Governing Through Markets: Forest Certification and the Emergence of Non-state Authority*. New Haven: Yale University Press.

Caspers-Simmet, Jean. 2003. "Concentration Called Troubling Trend." in *Agri News*.

CBC. 2005 (May 18)-a. "B.C. Liberals win again, lose 8 ministers." *CBC News*. Accessed at http://www.cbs.ca on June 25, 2007.

—. 2005 (May 18)-b. "Strong showing by NDP on Island." *CBC News*. Accessed at http://www.cbs.ca on June 25, 2007.

Clarke, Adele E. and Joan H. Fujimura. 1992. "What Tools? Which Jobs? Why Right?" Pp. 3-44 in *The Rights Tools for the Job: At Work in Twentieth-Century Life Sciences*, edited by Adele E. Clarke and Joan H. Fujimura. Princeton, NJ: Princeton University Press.

Clausen, Rebecca, and Brett Clark. 2005. "The Metabolic Rift and Marine Ecology." *Organization & Environment* 18:422-444.

Clover, Charles. 2006. *The End of the Line: How Overfishing is Changing the World and What We Eat*. New York: The New Press.

Cochoy, Franck. 2003. "The Industrial Roots of Contemporary Political Consumption: The Case of the French Standardization Movement." Pp. 145-160 in *Politics, Products, and Markets: Exploring Contemporary Consumerism Past and Future*, edited by Michele Micheletti, Andreas Follesdal, and Dietlind Stolle. New Brunswick, NJ: Transaction Books.

—. 2004. "Is the modern consumer a Buridan's donkey? Product packaging and consumer choice." in *Elusive Consumption*, edited by Karin Ekström and Helene Brembeck. New York: Palgrave.

—. 2005. "A brief history of 'customers,' or the gradual standardization of markets and organizations." *Sociologie du travail* 47.

Conca, Ken. 2002. "Consumption and Environment in a Global Economy." Pp. 134-154 in *Confronting Consumption*, edited by Thomas Princen, Michael Maniates, and Ken Conca. Cambridge, MA: MIT Press.

Connell, Suzanne. 2004. "Regulating Salmon Aquaculture in BC--A Report Card." Nanaimo, BC, CA: Georgia Strait Alliance.

Constance, Douglas H., and Alessandro Bonanno. 2000. "Regulating the global fisheries: The World Wildlife Fund, Unilever, and the Marine Stewardship Council." *Agriculture and Human Values* 2000:125-139.

Cox, Sarah K. 2004. "Diminishing Returns." Victoria, Canada: Raincoast Conservation Society.

Diani, Mario. 1992. "The concept of social movement." *Sociological Review* 40:1-25.

Dowie, Mark. 1997. *Losing Ground: American Environmentalism at the Close of the Twentieth Century*. Cambridge, MA: MIT Press.

DuPuis, Melanie E. 2000. "Not in my body: rBGH and the rise of organic milk." *Agriculture and Human Values* 17:285-295.

Economic Research Service. 2002. "U.S. Food Marketing System." Washington, DC: United States Department of Agriculture.

Economist. 2003. "How aquaculture might meet most of the world's demand for fish without ruining the environment." *Economist*, August 7.

Environmental Defense. 2007a. "Bon Appetite Management Company/Wegmans Food Markets Farmed Salmon Purchasing Policy." Accessed at http://www.environmentaldefense.org/corporate_innovation.cfm on April 4, 2007.

—. 2007b. "Oceans Alive." Accessed at *http://www.oceansalive.org/home.cfm* on April 4, 2007.

Faber, Daniel R., and Deborah McCarthy. 2005. "Introduction to Foundations for Social Change: Critical Perspectives on Philanthropy and Popular Movements." Pp. 3-32 in *Foundations for Social Change: Critical Perspectives on Philanthropy and Popular Movements*, edited by Daniel R. Faber and Deborah McCarthy. New York: Rowman & Littlefield Publishers, Inc.

FAO. 2004. "The State of World Fisheries and Aquaculture." Rome: United Nations.

—. 2006. "Fishstat Database." Rome: United Nations.

Foster, John Bellamy. 1999. "Marx's Theory of Metabolic Rift: Classical Foundations for Environmental Sociology." *American Journal of Sociology* 105:366-405.

Friedland, William H. 2005. "Commodity systems: Forward to comparative analysis." Pp. 25-38 in *Cross-continental Food Chains*, edited by Niels Fold and Bill Pritchard. London: Routledge.

Gereffi, Gary, Ronie Garcia-Johnson, and Erika Sasser. 2001. "The NGO-Industrrial Complex." *Foreign Policy* 125:56-65.

Gereffi, Gary, and Miguel Koreniewicz. 1994. "Introduction: Global Commodity Chains." Pp. 1-14 in *Commodity Chains and Global Capitalism*, edited by Gary Gereffi and Miguel Koreniewicz. Westport, CT: Praeger.

Gereffi, Gary, Miguel Koreniewicz, and Roberto P. Korzeniewicz. 1994. "The Organization of Buyer-Driven Global Commodity Chains: How U.S. Retailers Shape Overseas Production Networks." Pp. 95-122 in *Commodity Chains and Global Capitalism*, edited by Gary Gereffi and Miguel Koreniewicz. Westport, CT: Praeger.

Gibbon, Peter, and Stefano Ponte. 2005. *Trading Down: Africa, Value Chains, and the Global Economy*. Philadelphia: Temple University Press.

Giedion, Siegfried. 1948. *Mechanization Takes Command: A Contribution to Anonymous History*. New York: Oxford University Press.

Glitnir. 2006. "U.S. Seafood Industry Report." Glitnir.

Goldburg, Rebecca, Matthew S. Elliot, and Rosamond L. Naylor. 2001. "Marine Aquaculture in the United States: Environmental Impacts and Policy Options." Arlington, VI: Pew Oceans Commission.

Goldburg, Rebecca, and Rosamond Naylor. 2005. "Future seascapes, fishing, and fish farming." *Frontiers in Ecology and the Environment* 3:21-28.

Goldstone, Jack A. 2004. "More social movements or fewer? Beyond political opportunity structures to relational fields." *Theory and Society* 33:333-365.

Goodman, David, and Michael Goodman. 2001. "Sustaining Foods: Organic Consumption and the Socio-Ecological Imaginary." Pp. 97-119 in *Exploring Sustainable Consumption: Environmental Policy and the Social Sciences*, edited by Maurie J. Cohen and Joseph Murphy. New York: Pergamon.

Gould, Kenneth A., David N. Pellow, and Allan Schnaiberg. 2004. "Interrogating the Treadmill of Production." *Organization & Environment* 17:296-316.

Gould, Kenneth Allan, and Allan Schnaiberg. 1994. *Environment and Society: The Enduring Conflict*. New York: St. Martin's Press.

Greenberg, Paul. 2006 (June 18). "Green to the Gills." *New York Times*. New York. Accessed at http://www.nytimes.com on June 18, 2006.

Gudmundsson, Eyjolfur, Frank Asche, and Max Nielsen. 2005. "Revenue Distribution Through the Seafood Value Chain." Rome: Food and Agricultural Organization.

Gunningham, Neil, Martin Phillipson, and Peter Grabosky. 1999. "Harnessing Third Parties as Surrogate Regulators: Achieving Environmental Outcomes by Alternative Means." *Business Strategy and the Environment* 8:211-224.

Haraway, Donna J. 1991. "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective." Pp. 183-201 in *Simians, Cyborgs, and Women: The Reinvention of Nature*. New York: Routledge.

—. 1997. *Modest_Witness@Second_Millenium.Femaleman©_Meets_OncoMouse*. New York: Routledge.

Harding, Sandra. 1991. *Whose Science? Whose Knowledge?* Ithaca, NY: Cornell University Press.

Hart, Gillian. 2004. "Geography and development: critical ethnographies." *Progress in Human Geography* 28:91-100.

Harvey, David. 1989. *The Condition of Postmodernity: An Enquiry into the Origins of Cultural Change*. New York: Blackwell.

Hatanaka, Maki. 2006. "Producing Sustainable Shrimp: Third-Party Certification in the Global South, Unpublished Dissertation." East Lansing: Michigan State University.

Hatanaka, Maki, Carmen Bain, and Lawrence Busch. 2005. "Third-party Certification in the Global Agrifood System: Causes and Consequences." *Food Policy* 30:354-369.

Hatanaka, Maki, Carmen Bain, and Lawrence Busch. 2006. "Differentiated Standardization, Standardized Differentiation: The Complexity of the Global Agrifood System." Pp. 39-68 in *Between the Local and the Global, Volume 12: Confronting Complexity in the Contemporary Agri-Food Sector*, edited by Terry Marsden and Jonathan Murdoch. London: JAI Press.

Hendrickson, Mary, William D. Heffernan, Philip H. Howard, and Judith B. Heffernan. 2001. "Consolidation in Food Retailing and Dairy: Implications for Farmers and Consumers in a Global Food System." Denver, CO: National Farmers Union.

Hites, Ronald A., Jeffery A. Foran, David O. Carpenter, M. Coreen Hamilton, Barbara A. Knuth, and Steven J. Schwager. 2004. "Global Assessment of Organic Contaminants in Farmed Salmon." *Science* 303:226-229.

Holzer, Boris. 2006. "Political consumerism between individual choice and collective action: social movements, role mobilization and signalling." *International Journal of Consumer Studies* 30:405-415.

Hudson, Ian, and Mark Hudson. 2003. "Removing the Veil? Commodity Fetishism, Fair Trade, and the Environment." *Organization & Environment* 16:413-430.

Hughes, Alex. 2005. "Responsible retailers? Ethical trade and the strategic re-regulation of cross-continental food supply chains." Pp. 141-154 in *Cross-continental Food Chains*, edited by Niels Fold and Bill Pritchard. London: Routledge.

Ibarra, Alonso A., Chris Reid, and Andy Thorpe. 2000. "Neo-liberalism and its impact on overfishing and overcapitalisation in the marine fisheries of Chile, Mexico and Peru." *Food Policy* 25:599-622.

Ibarra, Pedro. 2003. "Introduction: The Social Movements: From Promoters to Protagonists of Democracy." Pp. 1-20 in *Social Movements and Democracy*, edited by Pedro Ibarra. New York: Palgrave Macmillan.

Jackson, Jeremy. 2001. "Historical Overfishing and the Recent Collapse of Costal Ecosystems." *Science* 293:629-638.

Jarvis, N.D. 1988. "Curing and canning of fishery products: A history." *Marine Fisheries Review* Fall: Online. Accessed at http://findarticles.com/p/articles/mi_m3089/is_n4_v50/ai_9102707/print on October 24, 2006.

Jessop, Bob. 2002a. *The Future of the Capitalist State*. Cambridge: Polity.

—. 2002b. "Governance and Meta-governance: On Reflexivity, Requisite Variety, and Requisite Irony." Lancaster, UK: Department of Sociology, Lancaster University.

—. 2002c. "Liberalism, Neoliberalism, and Urban Governance: A State-Theoretical Perspective." *Antipode* 34:452-472.

—. 2003. "The Spatiotemporal Dynamics of Capital and its Globalization -- and how they Challenge State Power and Democracy." Lancaster, UK: Department of Sociology, Lancaster University.

Johnsen, Jahn P. 2005. "The evolution of the "harvest machinery": why capture has continued to expand in Norwegian fisheries." *Marine Policy* 29:481-493.

Johnson, Howard M. 2005. "Annual Report on the United States Seafood Industry." Jacksonville, OR: H.M. Johnson & Associates.

Joppke, Christian. 1993. *Mobilizing Against Nuclear Energy: A Comparison of Germany and the United States*. Berkeley: University of California Press.

Juda, Lawrence. 2002. "Rio Plus Ten: The Evolution of International Marine Fisheries Governance." *Ocean Development & International Law* 33:109-144.

Kamp, David. 2006. *The United States of Arugula*. New York: Broadway Books.

Kelly, Philip F. 1999. "The geographies and politics of globalization." *Progress in Human Geography* 23:379-400.

Kelso, Dennis. 2006. "Engines of Change: The Role of Philanthropy in the Sustainable Seafood Movement." Presentation given at the Seafood Summit, Seattle, Washington January 29-31, 2006.

Konefal, Jason , Carmen Bain, Michael Mascarenhas, and Lawrence Busch. Forthcoming. "Supermarkets and Supply Chains in North America" in *Transformations in the Production and Consumption of Foods*, edited by Geoffrey Lawrence and David Burch. London: Edward Elgar.

Konefal, Jason, and Michael Mascarenhas. 2005. "The Shifting Political Economy of the Global Agrifood System: Consumption and the Treadmill of Production." *Berkeley Journal of Sociology* 49:76-96.

Konefal, Jason, Michael Mascarenhas, and Maki Hatanaka. 2005. "Governance in the global agro-food system: backlighting the role of transnational supermarket chains." *Agriculture and Human Values* 22:291-302.

Krasner-Khait, Barbara. 2000. "The Impact of Refrigeration." *History Magazine* Fall: Online. Accessed at http://www.history-magazine.com/refrig.html on October 24, 2006.

Kurlansky, Mark. 1998. *Cod.* New York: Penguin Books.

Latour, Bruno. 1987. *Science in Action.* Cambridge, MA: Harvard University Press.

Law, John. 1987. "Technology and Heterogeneous Engineering: The Case of Portuguese Expansion." Pp. 111-134 in *The Social Construction of Technological Systems: New Directions in the Sociology and History of Technology*, edited by Thomas P. Hughes Wiebe E. Bijker, and Trevor J. Pinch. Cambridge, MA: MIT Press.

Lo, Clarence Y.H. 1992. "Communities of Challengers in Social Movement Theory." Pp. 224-248 in *Frontiers in Social Movement Theory*, edited by Carol McClurg Mueller Aldon D. Morris. New Haven: Yale University Press.

Lockie, Stewart. 2002. "'The Invisible Mouth': Mobilizing 'the Consumer' in Food Production-Consumption Networks." *Sociologia Ruralis* 42:278-294.

Macnaghten, Phil, and John Urry. 1998. *Contested Natures.* London: Sage Publications.

Mansfield, Becky. 2003. "Spatializing Globalization: A "Geography of Quality" in the Seafood Industry." *Economic Geography* 79:1-16.

—. 2004. "Rules of Privatization: Contradictions in Neoliberal Regulation of North Pacific Fisheries." *Annals of the Association of American Geographers* 94:565-584.

Marine Fish Conservation Network. "Caught in the Act." Washington, DC: Marine Fish Conservation Network.

Marine Stewardship Council. 2002. *MSC Principles and Criteria for Sustainable Fishing.* Accessed at http://www.msc.org on April 9, 2007.

—. 2007. *Marine Stewardship Council*: Accessed at http://www.msc.org on April 9, 2007.

Marsden, Terry, Andrew Flynn, and Michelle Harrison. 2000. *Consuming interests: The social provision of foods*. London: UCL Press.

McAdam, Doug. 1996. "Conceptual origins, current problems, future directions." Pp. 23-40 in *Comparative perspectives on social movements*, edited by John D. McCarthy Doug McAdam, and Mayer N. Zald. Cambridge: Cambridge University Press.

—. 1999. *Political Process and the Development of Black Insurgency 1830-1920*. Chicago: University of Chicago Press.

McCarthy, James, and Scott Prudham. 2004. "Neoliberal nature and the nature of neoliberalism." *Geoforum* 35:275-283.

McCarthy, John D. and M.N. Zald. 1977. "Resource Mobilization and Social Movements: A Partial Theory." *American Journal of Sociology* 82:1212-1241.

McLaughlin, K. 2004 (February 17). "Is Your Grocery List Politically Correct?" Pp. D1-D2 in *Wall Street Journal*. New York.

Merkl, Andreas. 2006. "Keynote Address." Presentation given at the Seafood Summit, Seattle, Washington January 29-31, 2006.

Mertig, A. G., R.E. Dunlap, and D.E. Morrison. 2002. "The Environmental Movement in the United States." Pp. 448-481 in *Handbook of Environmental Sociology*, edited by R.E. Dunlap and W. Michelson. Westport, CT: Greenwood.

Merton, Robert K. 1973. "The Normative Structure of Science." Pp. 267-278 in *The Sociology of Science: Theoretical and Empirical Investigations*, edited by N.W. Storer. Chicago: The University of Chicago Press.

Michael, Mike. 1996. "Ignoring Science: discourses of ignorance in the public understanding of science." Pp. 107-125 in *Misunderstanding Science? The public reconstruction of science and technology*, edited by Alan Irwin and Brian Wynne. Cambridge: Cambridge University Press.

Micheletti, Michele. 2004. "'Put Your Money where Your Mouth Is!': The Market as an Arena for Politics." Pp. 114-134 in *Market Matters: Exploring Cultural Processes in the Global Marketplace*, edited by Christina Garsten and Monica Lindh de Montoya. New York: Palgrave Macmillan.

Micheletti, Michele, Andreas Follesdal, and Dietlind Stolle. 2006. "Introduction." Pp. ix-xxvi in *Politics, Products, and Markets: Exploring Political Consumerism Past and Present*, edited by Michele Micheletti, Andreas Follesdal, and Dietlind Stolle. London: Transaction Publishers.

Mol, Arthur P.J. 1995. "The Refinement of Production: Ecological modernization theory and the chemical industry." Utrecht: Jan van Arkel/International Books.

Mol, Arthur P.J., and Gert Spaargaren. 2000. "Ecological Modernisation Theory in Debate: A Review." Pp. 17-49 in *Ecological Modernisation Around the World: Perspectives and Critical Debates*, edited by Author P.J. Mol and David A. Sonnenfeld. Portland, OR: Frank Cass.

Monterey Bay Aquarium. 2006. "Seafood Watch." Accessed at http://www.mbayaq.org/cr/seafoodwatch.asp on October 23, 2006.

Murdoch, Jonathan, Terry Marsden, and Jo Banks. 2000. "Quality, nature, and embeddedness: Some theoretical considerations in the context of the food." *Economic Geography* 76:107-125.

Murdoch, Jonathan, and Maria Miele. 1999. "'Back to Nature': Changing 'Worlds of Production' in the Food Sector." *Sociologia Ruralis* 39:465-483.

Mutersbaugh, Tad. 2005. "Just-in-space: Certified rural products, labor of quality, and regulatory spaces." *Journal of Rural Studies* 21:389-402.

Nash, C.E. 2004. "Achieving policy objectives to increase the value of the seafood industry in the United States: the technical feasibility and associated constraints." *Food Policy* 29:621-641.

National Agricultural Statistics Service. 2006. "Census of Aquaculture (2005)." Washington, DC: United States Department of Agriculture.

National Environmental Trust. 2004. "Black Market for White Gold: The Illegal Trade in Chilean Sea Bass." Washington, DC: National Environmental Trust.

—. 2007. "Take a Pass on Chilean Sea Bass". Accessed at http://www.net.org/marine/csb/ on March 17, 2007.

National Oceanic and Atmospheric Administration. 2005. "National Marine Fisheries Service 2004 Report to Congress: The Status of U.S. Fisheries." Washington, DC.

National Restaurant Association. 2007. "Restaurant Industry Facts." Accessed at http://www.restaurant.org/research/ind_glance.cfm on May 12, 2007.

Naylor, Rosamond L., Rebecca J. Goldburg, Jurgenne Primavera, Nils Kautsky, Malcolm C.M. Beveridge, Jason Clay, Carl Folke, Jane Lubchenco, Harold Mooney, and Max Troell. 2001. "Effects of Aquaculture on World Fish Supplies." *Issues in Ecology* 8:1-13.

Naylor, Rosamond L., John Eagle, and Whitney L. Smith. 2003. "A Global Industry: Salmon Aquaculture in the Pacific Northwest." *Environment* 45:18-39.

Newell, Peter. 2000. "Environmental NGOs and Globalization: The Governance of TNCs." Pp. 117-133 in *Global Social Movements*, edited by Robin Cohen and Shirin M. Rai. London: Athlone Press.

NRDC, SeaWeb, and PeW Institute for Ocean Science. 2007. "Caviar Emptor: Let the Connoisseur Beware." Accessed at http://www.caviaremptor.org/ on March 22, 2007.

O'Connor, James. 1988. "Capitalism, Nature, Socialism: A Theoretical Intorduction." *Capitalism, Nature, Socialism* 1:11-38.

—. 1991. "On the Two Contradictions of Capitalism." *Capitalism, Nature, Socialism* 2:107-109.

—. 1998. *Natural Causes: Essays in Ecological Marxism*. New York: The Guilford Press.

Offe, Claus. 1985. "New Social Movements: Challenging the Boundaries of Institutional Politics." *Social Research* 52:817-868.

Ohmae, Kenichi. 1995. *The End of the Nation State: The Rise of Regional Economies*. New York: Free Press.

O'Rourke, Dara. 2005. "Market Movements: Nongovernmental Organization Strategies to Influence Global Production and Consumption." *Journal of Industrial Ecology* 9:1-14.

Pan Fish. 2006. "Pan Fish acquires Marine Harvest to form the world's largest fish farming company." in *Pan Fish News*. Accessed at http//www.panfish.no/newsread/news.asp?docid=10406&wce=nyhet on November 18, 2006.

Patton, Michael Q. 2002. *Qualitative Research and Evaluation Methods*. Thousand Oaks, CA: Sage.

Pauly, Daniel, Villy Christensen, Johanne Dalsgaard, Rainer Froese, and Francisco Jr. Torres. 1998. "Fishing Down Marine Food Webs." *Science* 279:860-863.

Peine, Emelie, and Philip McMichael. 2005. "Globalization and global governance." Pp. 19-34 in *Agricultural governance: globalization and the new politics of regulation*, edited by Vaughan Higgins and Geoffrey Lawrence. New York: Routledge.

Pellow, David N. 2001. "Environmental Justice and the Political Process: Movements, Corporations, and the State." *Sociological Quarterly* 42:47-67.

—. 2002. *Garbage Wars: The Struggle for Environmental Justice in Chicago.* Cambridge, MA: MIT Press.

Peretti, Jonah, and Michele Micheletti. 2006. "The Nike Sweatshop Email: Political Consumerism, Internet, and Culture Jamming." Pp. 127-142 in *Politics, Products, and Markets: Exploring Political Consumerism Past and Present*, edited by Michele Micheletti, Andreas Follesdal, and Dietlind Stolle. London: Transaction Publishers.

Phyne, John , and Jorge Mansilla. 2003. "Forging Linkages in the Commodity Chain: The Case of the Chilean Salmon Farming Industry, 1987-2001." *Sociologia Ruralis* 43:109-127.

Phyne, John, Gestur Hovgaard, and Gard Hansen. 2006. "Norwegian salmon goes to market: The case of the Austevoll seafood cluster." *Journal of Rural Studies* 22:190-204.

Ponte, Stefano, and Peter Gibbon. 2005. "Quality standards, conventions and the governance of global value chains." *Economy and Society* 34:1-31.

Princen, Thomas, Michael Maniates, and Ken Conca. 2002. "Confronting Consumption." Pp. 1-20 in *Confronting Consumption*, edited by Thomas Princen, Michael Maniates, and Ken Conca. Cambridge, MA: MIT Press.

Progressive Grocer. 2005. "Views from the Top." *Progressive Grocer*. Accessed at http://www.progressivegrocer.com/progressivegrocer/images/pdf/pg-top-50-2005.pdf on February 21, 2006:74-84.

Public Citizen. 2005. "Fish Currency: How International Finance Institutions Fund Shrimp Farms." Accessed at http://www.citizen.org/cmep/foodsafety/shrimp/articles.cfm?ID=13314 on June 29, 2007.

Ragin, Charles C. 1994. *Constructing Social Research.* Thousand Oaks, CA: Pine Forge Press.

Raikes, Philp, Michael Friis Jensen, and Stefano Ponte. 2000. "Global commodity chain analysis and the French *filiere* approach: comparasion and critique." *Economy and Society* 29:390-417.

Raynolds, Laura T. 2004. "The Globalization of Organic Agro-Food Networks." *World Development* 32:725-743.

Reardon, Thomas, Jean-Marie Codron, Lawrence Busch, James Bingen, and Craig Harris. 1999. "Global Change in Agrifood Grades and Standards: Agribusiness Strategic Responses in Developing Countries." *International Food and Agribusiness Management* 2:421-435.

Reardon, Thomas, and Elizabeth Farina. 2002. "The rise of private food quality and safety standards: illustrations from Brazil." *International Food and Agribusiness Management Review* 4:413-421.

Redmayne, Peter. 2000. "Farmed Salmon." Pp. Online in *Seafood News*.

Rhodes, R.A.W. 1997. *Understanding Governance: Policy Networks, Governance, Reflexivity, and Accountability*. London: Open University Press.

Robnett, Belinda. 1997. *How Long? How Long? African-American Women in the Struggle for Civil Rights*. New York: Oxford University Press.

Roheim, Cathy A. 2005. "Seafood: Trade Liberalization and Impacts on Sustainability." Pp. 275-295 in *Global Agricultural Trade and Developing Countries*, edited by Ataman M. Aksoy and John C. Beghin. Washington, DC: World Bank.

Safina, Carl. 2006. "Fishing to the Bottom--and Back?" *Insights on Law and Society* 6:1-4.

Safina, Carl, and Carrie Brownstein. 2004. "Fish or Cut Bait: Solutions for Our Seas." Pp. 74-95 in *Feeding the Future: From Fat to Famine, How to Solve the World's Food Crises*, edited by A. Heintzman. Toronto: House of Anansi Press.

Sagoff, Mark. 2004. *Price, Principle, and the Environment*. New York: Cambridge University Press.

Schnaiberg, Allan. 1980. *The Environment: From Surplus to Scarcity*. New York: Oxford University Press.

—. 1994. "The Political Economy of Environmental Problems and Policies: Consciousness, Conflict, and Control Capacity." *Advances in Human Ecology* 3:23-64.

Schurman, Rachel 2004. ""Fighting "Frankenfoods": Industry Opportunity Structures and the Efficacy of the Anti-Biotech Movement in Western Europe." *Social Problems* 51:243-268.

Seafood Choices Alliance. 2003. "The Marketplace for Sustainable Seafood: Growing Appetites and Shrinking Seas." Washington, DC: Seafood Choices Alliance.

SeaWeb. 2007. "Give Swordfish A Break." Accessed at http://www.seaweb.org/programs/swordfish on March 7, 2007.

Shreck, Aimee. 2005. "Resistance, redistribution, and power in the Fair Trade banana initiative." *Agriculture and Human Values* 22:17-29.

Skladany, Michael, and Craig Harris. 1995. "On global pond: international development and commodity chains in the shrimp industry." Pp. 169-191 in *Food and Agrarian Orders in the World-economy*, edited by Philip McMichael. Westport: Praeger.

Skladany, Michael, Rebecca Clausen, and Ben Belton. 2007. "Offshore Aquaculture: The Frontier of Redefining Oceanic Property." *Society & Natural Resources* 20:169-176.

Skladany, Mike, Ben Belton, and Rebecca Clausen. 2005. "Out of Sight & Out of Mind: A New Oceanic Imperialism." *Monthly Review* 56:14-24.

Sklair, Leslie. 2000. "Social Movements and Global Capitalism." Pp. 291-311 in *From Modernization to Globalization: Perspectives on Development and Globalization*, edited by J. T. Roberts and A. Hite. Oxford: Blackwell Publishers.

Smith, Jackie, Ron Pagnucco, and Charles Chatfield. 1997. "Social Movements and World Politics." Pp. 59-77 in *Transnational social movements and global politics : solidarity beyond the state*, edited by Jackie Smith, Ron Pagnucco, and Charles Chatfield. Syracuse, NY: Syracuse University Press.

Snow, David A., E.B. Rochford, S.K. Worden, and R.D. Benford. 1986. "Frame alignment processes, micromobilization and movement participation." *American Sociological Review* 51:464-481.

Spaargaren, Gert and Arthur P.J. Mol. 1992. "Sociology, Environment, and Modernity: Ecological Modernization as a Theory of Social Change." *Society and Natural Resources* 5:323-344.

Stake, Robert E. 2003. "Case Studies." Pp. 134-164 in *Strategies of Qualitative Inquiry*, edited by Norman K. Denzin and Yvonna S. Lincoln. Thousand Oaks, CA: Sage.

Stauber, John C., and Sheldon Rampton. 1995. *Toxic Sludge is Good for You: Lies, Damn Lies and the Public Relations Industry*. Monroe, ME: Common Courage Press.

Stephenson, Joan. 2004. "FDA Warns on Mercury in Tuna." *Journal of the American Medical Association* 291:171.

Stoker, Gerry. 1998. "Governance as theory: five propositions." *International Social Science Journal* 50:17-28.

Stonich, Susan C., and Vandergeest. 2001. "Violence, Environment, and Industrial Shrimp Farming." Pp. 261-286 in *Violent Environments*, edited by Nancy Lee Peluso and Michael Watts. Ithaca: Cornell University Press.

Strauss, A., and J. Corbin. 1998. *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*. Thousand Oaks, CA: Sage.

Sustainable Fisheries Advocates. 2007. "FishWise." Accessed at http://www.sustainablefishery.org/ on April 4, 2007.

Swyngedouw, Erik , Ben Page, and Maria Kaika. 2002. "Sustainability and Policy Innovation in a Multi-Level Context: Crosscutting Issues in the Water Sector." Pp. 107-131 in *Participatory Governance in Multi-Level Context: Concepts and Experience*, edited by P. Getimis, H. Heinelt, G. Kafkalas, R. Smith, and E. Swyngedouw. Opladen: Leske & Budrich.

Szasz, Andrew. 2006. "Inverted Quarantine: A kind of "Green" Consuming that Fosters Political Anesthesia." Paper presented at the Sustainable Consumption and Society Conference, University of Wisconsin-Madison, Madison, Wisconsin, June 2-3.

Tarrow, Sidney. 2001. "Transnational Politics: Contention and Institutions in International Politics." *Annual Review of Political Science* 4:1-20.

Taylor, Joseph E. 1999. *Making Salmon: An Environmental History of the Northwest Fisheries Crisis*. Seattle: University of Washington Press.

Taylor, Peter J. 1997. "How Do We Know We Have Global Environmental Problems?: Undifferentiated Science-Politics and Its Potential Reconstruction." Pp. 149-174 in *Changing Life: Genomes Ecologies Bodies Commodities*, edited by S.E. Halfon Peter J. Taylor, and P. N. Edwards. Minneapolis: University of Minnesota Press.

Taylor, Peter L. 2005. "In the Market But Not of It: Fair Trade Coffee and Forest Stewardship Council Certification as Market-Based Social Change." *World Development* 33:129-147.

The David and Lucile Packard Foundation. 2007a. *Marine Fisheries*. Accessed at http://www.packard.org on March 7, 2007.

—. 2007b. "Strategy for Market-Intervention Tools to Conserve Marine Fisheries." Los Altos, California: The David and Lucile Packard Foundation.

Vandergeest, Peter, Mark Flaherty, and Paul Miller. 1999. "A Political Ecology of Shrimp Aquaculture in Thailand." *Rural Sociology* 64:573-596.

Volpe, John. 2001. "Super un-Natural: Atlantic Salmon in BC Waters." Vancouver, BC: David Suzuki Foundation.

White, Bruce. 2006. "Alaska Salmon Enhancement Program 2005 Annual Report." Juneau: Alaska Department of Fish and Game.

White, Kathryn, Brendan O'Neil, and Zdravka Tzankova. 2004. "At a Crossroads: Will Aquaculture Fulfill the Promise of the Blue Revolution." Washington, DC: SeaWeb.

Wilkinson, Charles F. 1992. *Crossing the Next Meridian: Land, Water, and the Future of the West*. Washington, DC: Island Press.

Wilkinson, John. 2006. "Fish: A Global Value Chain Driven onto the Rocks." *Sociologia Ruralis* 46:139-153.

World Health Organization. "Global and regional food consumption patterns and trends." Geneva, Switzerland: World Health Organization Accessed at http://www.who.int/nutrition/topics/3_foodconsumption/en/print.html on November 9, 2006

World Wildlife Fund. 2007. "Agriculture and Aquaculture." Accessed at http://www.worldwildlife.org/cci/ on April 10, 2007.

Worm, B., E. B. Barbier, N. Beaumont, J. E. Duffy, C. Folke, B. S. Halpern, J. B. C. Jackson, H. K. Lotze, F. Micheli, S. R. Palumbi, E. Sala, K. A. Selkoe, J. J. Stachowicz, and R. Watson. 2006. "Impacts of biodiversity loss on ocean ecosystem services." *Science* 314:787-790.

Wrigley, Neil. 2001. "The Consolidation Wave in U.S. Food Retailing: A European Perspective." *Agribusiness* 17:489-513.

Wynne, Brian. 1991. "Knowledge in Context." *Science, Technology, & Human Values* 16:111-121.

—. 1992. "Misunderstood misunderstandings: social identities and public uptake of science." *Public Understanding of Science* 1:281-304.