Marine Policy 85 (2017) 65–70

Contents lists available at ScienceDirect

Marine Policy

journal homepage: www.elsevier.com/locate/marpol

"Fish as food": Exploring a food sovereignty approach to small-scale fisheries

Charles Z. Levkoe[a,d], Kristen Lowitt[b,*], Connie Nelson[c]

[a] Department of Health Sciences, Lakehead University, 955 Oliver Rd., Thunder Bay, Ontario, Canada P7B 5E1
[b] Department of Geography and Environment, Mt Allison University, 62 York St, Sackville, New Brunswick , Canada E4L 1E2
[c] School of Social Work, Lakehead University, 955 Oliver Rd., Thunder Bay, Ontario, Canada P7B 5E1
[d] Canada Research Chair in Sustainable Food Systems, Canada.

ARTICLE INFO

Keywords:
Food sovereignty
Food systems
Food security
Sustainable fisheries
Sustainable fishing communities
Social-ecological systems

ABSTRACT

This article explores how conceptualizing fish as food, rather than primarily as a resource or commodity supports a shift towards more systems-based approaches to engaging with fisheries (i.e. considering the relationships between ecosystems, people, management and policy). A "fish as food" lens is operationalized by drawing on the theory and practice of food sovereignty. While fishing people and communities have always been a core part of the food sovereignty movement, there have been limited efforts in the academic literature to explore these connections directly. Drawing on examples primarily from a Canadian context, it is argued that a deeper engagement between fisheries and food sovereignty is long overdue, particularly as a growing body of research on small-scale fisheries seeks to address social-ecological relationships and issues of power that are also at the core of a food sovereignty approach. This article identifies the opportunities and limitations of engaging with food sovereignty in the context of small-scale fisheries and suggests a series of key questions for future fish as food research and policy.

1. Introduction

Small-scale fisheries play a vital role in the health and livelihoods of people across the globe [28]. Fish provides over one-third of the world's population with nearly 20% of animal protein intake [16], with small-scale fisheries contributing nearly two-thirds of the catches that go directly to human consumption [17]. The lifestyles, rituals and daily practices surrounding fish consumption and fishing are deeply integrated into the cultures of communities [33,36]. Small-scale fisheries also tend to have a lesser ecological impact compared with industrial fisheries and thus have an important role to play in addressing the crises of overfishing and degradation facing the world's ocean and freshwater environments [32,43,44].

Despite these social and ecological complexities, fisheries continue to be narrowly managed for the purposes of economic efficiency and profit, treated primarily as a natural resource [6,39]. The implications have been devastating for ecosystems and biodiversity but also for the communities that rely on fisheries for food and livelihoods [44,48]. This "resourcist" perspective (*see* [6]) prevails, to the detriment of acknowledging the full range of values surrounding small-scale fisheries, while also disempowering and alienating fishing communities from decision-making. Further, recent research by Fisher et al. [17] shows that when fish is considered in food systems analyses, it is more often viewed as a commodity to be traded for economic benefits than as a local food source – with interconnected social, economic and ecological implications. Even within the food studies literature, scholars have pointed out that research placing fish within a complex food systems framework is limited [30,35]. In this context, scholars and practitioners from around the world have recognized a need to re-think how to understand small-scale fisheries as a part of renewed relationships among people, markets, and ecosystems [40,47]. As part of these efforts, there have been growing calls to re-envision "fish as food" ([27,39]; Too Big To Ignore, 2013).

Drawing on examples primarily from a Canadian context, this article critically engages with the idea of how conceptualizing fish as food, rather than solely as a resource or commodity, may support a shift towards more systems-based approaches to engaging with fisheries. It suggests that thinking about fish as food means to consider the interdependencies between aquatic and terrestrial ecosystems including outcomes for ecological and human health, food security, economically and culturally viable livelihoods, and community well-being based in principles of justice and democracy. The article argues that a fish as

* Corresponding author.
E-mail addresses: clevkoe@lakeheadu.ca (C.Z. Levkoe), klowitt@mta.ca (K. Lowitt), cnelson@lakeheadu.ca (C. Nelson).

http://dx.doi.org/10.1016/j.marpol.2017.08.018
Received 21 May 2017; Received in revised form 22 August 2017; Accepted 22 August 2017

food lens offers a way of (re)valuing fish, while also providing a pathway to additional social, cultural, and ecological questions that have direct implications for how we understand fisheries [39].

To operationalize a fish as food lens, the theory and practice of food sovereignty is used. While fishing people and communities have always been a core part of the food sovereignty movement, there have been limited efforts in the academic literature to explore these connections more directly. It is argued that a deeper engagement between fisheries and food sovereignty is long overdue, particularly as a growing body of research on small-scale fisheries seeks to address social-ecological relationships and issues of power that are also at the core of a food sovereignty approach. At the same time, this engagement opens up a new set of critical questions and directions for food sovereignty related to the governance of fish as a common-pool food resource. Based on a review of existing literature and the authors' reflections on their own research experiences, key connections between food sovereignty and evolving perspectives on small-scale fisheries and their management are identified. Some of the opportunities and limitations of engaging with food sovereignty in the context of small-scale fisheries are then explored and questions for future fish as food research and policy are posed.

2. Evolving perspectives on fisheries management

Since the 1940s, fisheries management has been based on a particular view of how nature and society operates, stemming from a combination of Enlightenment Age ideas and twentieth century science. As described and critiqued by Berkes [6], key features of this 'conventional resourcist' view include: the separation of humans and nature; the commodification of nature, scientists and managers as independent and objective experts; positivistic science that treats the world as predictable and controllable; and the use of reductionism (p. 15). Within this utilitarian and mechanistic approach, managing fish and people for profit and efficiency are key objectives [25,6]. This resourcist view also developed with the purpose of exploiting resources taken away from Indigenous people and putting in place a new political and economic order [6].

A more recent extension of this view is the imposition of neoliberal policies to fisheries, evidenced in a movement towards greater enclosure, privatization and deregulation (Mansfield, 2004; [48]). Key examples include reducing the number of small-scale fishing enterprises due to perceived economic inefficiencies – instead favouring fewer, larger boats – and strengthening private property rights through Individual Transferable Quotas (ITQs). ITQs are permits which allow the holder to catch or transfer a fixed share of a total allowable catch (TAC). These permits have become a tradable commodity akin to stock on a market, with relatively few restrictions on who can purchase them [48,49]. While ITQs ostensibly constrain catches, and reduce overexploitation, they have been widely critiqued on the grounds of social justice and equity, with studies demonstrating that they concentrate wealth and ownership where they have been introduced [48,52].

Over the past several decades, these tenets underlying conventional fisheries management have been increasingly critiqued [44,6]. This shift in perspective has seen a movement towards social-ecological systems thinking (i.e. seeing the social and ecological aspects of fisheries as interconnected) [40]; ecosystems based approaches that consider the whole fisheries ecosystems rather than only individual fish stocks [46]; attempts to draw on fishers' knowledge rather than conferring decision-making to managers and technical experts [22]; a consideration of complexity rather than predictability and control [9]; and, in efforts to think about justice in resource access rather than narrowly defined conceptions of economic efficiency [2,9].

Within these evolving perspectives, a range of different management approaches have emerged. One example is the practice of co-managed fisheries, where responsibility is shared between resource users and the state. These approaches have a long history around the world, with studies showing that they can lead to benefits for sustaining aquatic ecosystems and the human communities that depend on them [4,21,53]. There are also experiments with new forms of resource allocation that prioritize community access and economic development, such as the community development quota program in Alaska (NOAA Fisheries, n.d.). In international development, a sustainable livelihoods approach has been used to help align fisheries policy with poverty reduction goals while not placing additional stress on fish stocks [3]. Rights-based approaches have also emerged, advocating that fishing rights (i.e. the rights of an individual or community to have access to the fishery) need to be linked to a broader vision of the social, economic, and human rights integral to achieving community well-being [2,7].

As part of these efforts to re-think conventional management practices, more attention is beginning to focus on a fish as food lens. For example, at the international level, food security is increasingly understood as an important household and community benefit tied to sustainable fisheries governance [27,8]. In 2015, the FAO published *Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication*, the first internationally agreed upon instrument dedicated to small-scale fisheries. Further, the goal to "conserve and sustainably use the oceans, seas and marine resources for sustainable development" is listed as one of the seventeen UN Sustainable Development Goals (*see* sustainabledevelopment.un.org), with provision of food recognized as one of the key ecosystem services tied to achieving this goal.

Accompanying these broader perspectives, local and regional-level studies have begun to document the contributions of fisheries to local food security in fisheries-dependent regions, including their pivotal roles in supporting food access, nutrition and public health, and maintaining traditional foodways and sharing economies [13,27,31,5]. More popular examples of the increasing interest in fish as food include certification and eco-labeling schemes, a form of market incentive that identify fish that have been caught or raised in environmental and socially sustainable ways [20]. In general, these schemes identify fish that have been caught or raised in environmental and socially sustainable ways (e.g. U.K. based Marine Stewardship Council, SeaChoice's seafood guide ⟨http://www.seachoice.org/⟩). While these approaches might be part of the solution, they are limited in their ability to impact fisheries on a systemic level. Besides offering sometimes a narrow set of information about the final product with no universal standards (Sundar, 2016), they rely on the market as the main locus for change [19]. Other popular solutions include shortened supply chains and establishing local markets connecting fishers and consumers through direct sales (e.g. Eat the Fish ⟨http://eatthefish.com/⟩ in Ontario, Canada and Off the Hook Community Supported Fishery ⟨http://www.offthehookcsf.ca/⟩ in Nova Scotia, Canada). These solutions offer alternatives to the industrial food system and could be part of a fish as food approach, but need to be supported by other policy measures addressing issues of equitable resource access and distribution to impact fisheries on a systemic level.

Building on these critiques and recent research directions, in what follows, this article draws on the evolving theory and practice of food sovereignty in an effort to operationalize a fish as food lens.

3. Food sovereignty

Food sovereignty helps to explore the complexities embodied in a fish as food approach, including the interconnections between social, ecological and economic wellbeing as well as governance structures. Using this perspective draws attention to the ways that fisheries are power laden and subject to the neoliberal logics of the corporate, industrial food system. Food sovereignty demands that fisheries be conceived of as part of complex social and ecological systems and that there must be a more central role for community-based, small scale fishers in decision-making surrounding management.