Sociocultural institutions in Norwegian fisheries management

Andrew Tirrell

Department of Political Science and International Relations, University of San Diego, 5998 Alcala Park, San Diego, CA 92110, USA

A R T I C L E   I N F O

A B S T R A C T

Many policymakers attribute the success of fisheries management regimes to the design and implementation of particular regulatory tools. While sound design and effective implementation are crucial elements of any successful regulatory action, fisheries policymakers and regulators should also account for the heterogeneous sociocultural institutions of partner communities. The success of fisheries policies relies on compliance and, ideally, cooperation (accepting policies, i.e. not protesting or otherwise strongly agitating against the system) from fisheries stakeholders. Even a policy that is sound in design and flawless in execution is at risk of failure if target stakeholders obstruct or otherwise undermine the system. This paper investigates how institutions, at various levels of scale and formality, play a role in determining the degree of compliance and/or cooperation that a fisheries management regime enjoys. In particular, it will examine the issue of Individual Vessel Quotas (IVQs) in Norway, and the response of fishing communities to the trade liberalization of IVQs.

1. Introduction

According to the Food and Agriculture Organization (FAO), over 80% of fisheries worldwide are fully exploited, overexploited, or significantly depleted [1], p. 7. Moreover, many researchers have predicted the collapse of the majority of global fisheries by the middle of this century [2]. In response to these dire forecasts, many countries, especially developed countries with large fisheries sectors, have established fisheries management systems to ensure the sustainability of fish stocks. Yet, despite research supporting the efficacy of centralized fisheries management approaches (e.g. [3–5]), several decades of concerted management efforts have produced mixed results across numerous and diverse national fisheries regimes. Among these mixed results are dramatic collapses of some fish stocks, so extreme in the case of the northern cod that Newfoundland shuttered its cod fishery in 1992, and it has remained closed with scant evidence of northern cod stock rebound.

Some have claimed that the "top-down, bureaucratic" approaches that have characterized fisheries management in the developed world have been "tarnished" by mismanagement leading to overexploitation of fish populations and suboptimal socioeconomic outcomes [6], p. 423. One explanation for the unexpected failures of centralized fisheries management generally, and specifically the class of regulatory approaches reliant on catch shares or other quota-based systems, is the "wicked" nature of the problems they attempt to solve. Building upon Rittel and Webber's seminal article [7], which describes the extreme

complexities of some policy dilemmas, it is not difficult to see that fisheries management can be as "complex, tricky, or thorny" [8], p. 1 or "unstructured" [9], p. 156 as many other "wicked" problems. After all, fisheries management, and especially the management of inshore fisheries, is not solely about determining the conditions for ecological sustainability—that is, setting appropriate Total Allowable Catch (TAC) limits—it also requires fruitful engagement with fishery users and the socio-cultural settings in which their livelihoods are embedded. Despite often being conceived of as a problem to be solved by political authorities, "successful resource management requires successful governance of people and thereby a minimum level of knowledge of relevant social processes" (10, p. 1).

In response to the limitations of top-down management, many scholars have explored the issue of stakeholder compliance in fisheries management (e.g. [10–13]). This paper investigates how institutions, at various levels of scale and formality, play a role in determining the degree of compliance and/or cooperation that a fisheries management regime enjoys. In particular, it will examine the issue of Individual Vessel Quotas (IVQs) in Norway, and the response of fishing communities to the trade liberalization of IVQs.[1] The analysis centers on relationships between local social, cultural, and political institutions in ten Norwegian fishing communities and the national fishery regime that governs fishing from the ministerial level downwards. Based on data collected through qualitative research from 2013 through 2015, this paper examines the connections between national and local institutions as well as the nesting/meshing of these local institutions

with the national fisheries regime and its attendant institutions. Finally, community compliance or cooperation is explained through a vertical slice, institutional analysis of the regime.

1.1. What are institutions?

Conceptually, institutions are troublesome to define, especially if the inquiry is expanded beyond formal organizational structures to explore institutions of a socio-cultural nature. Some theorists describe informal institutions as a subset of culture; Veblen, for example, calls them "settled habits of thought common to the generality of man" [14], p. 239. Others, such as Parsons, define institutions based on their relational characteristics—norms that "regulate the relations of individuals to each other" [15], p. 367. Perhaps most familiarly, North describes them as "the rules of the game for society" and "humanly devised constraints that shape human interactions" [16], p. 3. Kiser and Ostrom take this concept a step further, describing institutions according to their decision-making value as "rules used by individuals for determining who and what are included in decision situations, how information is structured, what actions can be taken and in what sequence, and how individual actions will be aggregated into a collective decision" [17], p. 179. While there is much debate about the qualities of institutions, scholars such as Agrawal [18] and Young [19] agree that institutions are durable, robust, and sticky; once in place, they do not easily conform to changing social or political desires.

The "nested" nature of institutions is another key characteristic; institutions can (and often by necessity, do) exist within one another [20]. Institutions may be linked vertically and horizontally, and linked institutions may aggregate to form a larger institution, just as parts of a large institution may become distinct enough to break into smaller institutions (often nested within their parent institution). Moreover, though they are durable and slow to change, institutions are constantly evolving, and are rarely self-controlled because they never exist in a social, cultural, or political vacuum [21]. Because of fishing's traditional relationship to culture and livelihoods, fisheries institutions may be especially difficult to forecast or direct. Some scholars wonder whether actors can hope to change deeply set institutions such as those in fisheries "if their actions, intentions, and rationality are conditioned by the very institution they wish to change" [22], p. 398.

National fishery regimes are themselves a type of institution, connected vertically and horizontally to other institutions (both formal and informal). How a regime is designed, and how the regulations of that regime are implemented and enforced, are but a few (admittedly essential) characteristics of that institution. Fishery regimes are nested within other national-level institutions, including informal ones such as political ideals and organization, cultural values regarding cooperation and individualism, and values about livelihoods, the environment, and natural resources.

At the community level, national regimes are linked to both to regional and local regulatory actors (formal institutional players) as well as formal and informal community stakeholder institutions, including cultural values, political ideals and organizations, and social attitudes toward authority, governance, and citizenship. These community-level institutions may operate independently, or they may be interconnected to form local fisheries management systems. Further, local fisheries institutions may be nested within national-level institutions. If local fisheries institutions are not well connected to, or nested within, the national fisheries regime, then the way the regime interacts with these independent institutions is critical in determining local levels of compliance and cooperation.

2. Methods

2.1. Vertical slice analysis

This research employs vertical slice analysis, or what Laura Nader

calls "studying up" [23]; that is to say, understanding a system by tracing the power structures of that system from the bottom up.[2] In this technique, ethnographic methods commonly applied to the detailed understanding of cultures and societies are used to map human political systems. In the case of this research, this means understanding the relationships of power and influence and of contention and cooperation within the fishery regimes that form the "vertical slice" of our analysis. In examining the system of institutional relationships from the ground up, the various stakeholders are seen as individual actors within a policy system that the fishery regime hopes to unify. This is similar to how individuals or family units are viewed within a traditional ethnographic study examining a community, culture, or society.

There are several advantages to vertical slice analyses. First, they allow the problem to be considered at various levels of scale without losing track of the connections between those levels. In fact, the end goal of such a study is often to better understand the connections between various levels by tracing the flow of power, influence, and information between institutions operating in, and across, differing scales. In essence, studying up allows ethnographic research to go beyond mere scientific goals to also achieve social goals by making research outcomes more directly policy-relevant [23]. Since institutions are slow-moving and difficult to change, perhaps the most feasible policy intervention points lay at the connections between institutions across socio-cultural boundaries and institutional levels of scale.

Additionally, vertical slice analyses can often be achieved without the requirement of complete immersion that is typical of traditional ethnographic studies. In the current digital age it is increasingly possible to conduct remote ethnographic research, especially when the focus is on policy institutions that keep public records of meetings, reports, and other exchanges of information and ideas between stakeholders. Of course, a strong understanding of these stakeholders is still necessary to correctly interpret the documents that lack the context and tone of directly observed interactions. Such an understanding, however, might be established through several months of direct qualitative research with stakeholder groups, rather than the years of immersion traditional ethnography often requires.

Finally, as Gusterson notes, studying up allows polymorphous engagement, that is, "interacting with informants across a number of dispersed sites" and "collecting data eclectically from a disparate array of sources in many different ways" [24], p. 116. This kind of engagement enriches the type of information a researcher is able to collect, and it is increasingly appropriate even when studying the most far-flung communities, as "virtual space increasingly becomes a real space of social interaction" [24], p. 116 regardless of the socio-cultural, political, or geographic context. In this case, my interviews spanned a number of physical and social settings. Interviews were conducted where and when possible, including on docks, in homes, in pubs, on the floor of fish processing plants, on the open sea, and on a few occasions, in cyberspace.

2.2. Multi-sited ethnography

This research also takes a multi-sited ethnographic approach, utilizing "macrotheoretical concepts and narratives of the world system" without "relying on them for the contextual architecture framing a set of subject" [25], p. 80. This allows the investigation of the "life world" of not only the ethnographic subjects, but also the systems in which they take part. In this study, the research subjects are both the target communities and the fisheries regimes that regulate them; this framing goes beyond simply controlled comparison because

---

[2] In this case, the analysis focuses first and broadly on the community level, and then considers the increasingly specialized fishery management structures at higher levels of governance in Norway.