Chapter 36
The Dynamics of Small-Scale Fisheries in Norway: From Adaptamentality to Governability

Svein Jentoft and Jahn Petter Johnsen

Abstract Interactive governance theory emphasizes the two-way exchange that occurs between the system-to-be-governed and the governing system. Thus, in the case of small-scale fisheries, the working hypothesis is that their governability, and hence their survival, depends on the ability and readiness of the governing system to respond to changes that occur within the system-to-be-governed and vice versa. It follows that governability of small-scale fisheries would be determined within both systems, as well as in the way they interact. Using Norway as a case study, this chapter argues that the governability of small-scale fisheries is dependent on the ability and willingness of fishers to respond not only to changes in the socio-ecological environment, but also to actions or reactions of the governing system. Their inclination to adapt, "adaptamentality", is seen as the motivation for acquiring the necessary skills, knowledge and resources that make them able and prepared for change. It is argued that the institutional design of the governing system, as it has developed during the twentieth century, has been important for this adaptamentality, as it has facilitated constructive partnership with the government and generated mutual trust. Whether these qualities will remain with current institutional reforms, is a question that will be discussed.

Keywords Small-Scale Fisheries • Governability • Governmentality • Trust • Norway

S. Jentoft (✉) • J.P. Johnsen
Norwegian College of Fishery Science, UIT – The Arctic University of Norway, 9037 Tromsø, Norway
e-mail: Svein.Jentoft@uit.no; jahn.johnsen@uit.no

S. Jentoft, R. Chuenpagdee (eds.), *Interactive Governance for Small-Scale Fisheries*, MARE Publication Series 13, DOI 10.1007/978-3-319-17034-3_36

Introduction

Small-scale fisheries are not a well-defined category. Rather, small is always relative to large, and what is considered to be small in one context may well be viewed as large in another. Many reasons account for these differences, one of them being exposure to natural conditions which vary a lot from place to place. Relative wealth is another reason; fishers tend to reinvest in their vessel and gear, and hence often expand their operations. With economic development often follows a shift in the composition of the fleet from small to large. In Norway, nature was always on the side of small-scale fishers. Rich fish stocks, such as the northeast arctic cod (*Gadus morhua*),[1] migrate to coastal and inshore waters to spawn in the winter and the spring, and are thus easily accessible to small-scale fishers. Due to the Gulf Stream and other elements in the oceanographic system, the Norwegian coast is blessed with relatively warm and nutritious water that keeps the coast ice free throughout the year. This also creates favorable conditions for marine life and, hence, a thriving small-scale, coastal fishery.

Therefore, small-scale fishing, often in combination with small-scale, mainly subsistence, farming, has traditionally been the common source of livelihood along the Norwegian coast, particularly in the north. Because of the economic and social importance of small-scale fisheries, for instance in maintaining coastal communities, national fishery policies have aimed to protect and sustain commercial small-scale fisheries. Traditionally, for Norwegian fishers, natural affluence made access to fish and fishing grounds a minor political issue. Yet, due to technological development and at times oversupply and instable market prices, regulation was necessary. Historically, small-scale fishers were many and had a strong voice in Norwegian regional and fisheries politics. They also represented an industry that was important for the national economy, being the most important export earner. They were able to influence the government both directly through their organization, the Norwegian Fishers' Association, and indirectly through a Parliament that was willing to listen. Thus, small-scale fishers could convince the government to interfere in conflicts with the buyers in a way that benefitted them. The governance model of Norwegian fisheries was traditionally also a co-governance design, albeit characterized by corporatism rather than co-management (Jentoft and Mikalsen 2014). Nevertheless, the state was, by and large, regarded as an amiable partner, and rarely an adversary. With the introduction of an individual vessel quota system in 1990, the state became more assertive, and shifted its role from being predominantly reactive to proactive. The quota system divided fishers into groups with or without individual quota rights (Johnsen 2005; Johnsen et al. 2009b), resulting in the state now facing more opposition from small-scale fishers than it used to, which has increased the level of conflict within Norwegian fisheries governance.

In this chapter, which draws on decades of experience of working on small-scale fisheries in Norway, we argue that the institutionalized interaction has been

[1] If nothing else is mentioned, «cod» in this article refers to Northeast Arctic Cod.

conducive for the governability of small-scale fisheries, and indeed for the fisheries sector in Norway as a whole. Basic to this outcome is a readiness for change among small-scale fishers, what we in this chapter choose to call "adaptamentality". The adaptamentality can be seen in small-scale fishers' response to environmental and economic change, including their willingness to cooperate in good faith with government. It can also be recognized in their adoption of new technology, skills and knowledge, which the governing system can help facilitate.

In the next section, we discuss the meaning and relations between adaptamentality and governability. We also make use of the governmentality concept introduced by Foucault, which we see as bridging the two concepts. Thereafter, we describe small-scale fisheries in Norway and how they have changed over time. The design of current fisheries management is the subject of the two subsequent sections. Finally, we reflect on the governability of Norwegian small-scale fisheries, and what has made this fishery adaptable and governable.

Adaptamentality, Governability and Change

Foucault (1978a, b) introduced the term "governmentality," which we understand as the practices resulting from governing interventions and the responses to the interventions within the system-to-be-governed. Governmentality thus has a dual meaning. On the one hand refers to the governing system's apparatus for governing and the belief in its ability to govern. On the other hand, it is about the willingness of citizens to let themselves be governed (Song et al. 2013; Johnsen 2014). Together the interventions and responses constitute performative practices that change how actors perceive, interpret, and conceptualize reality. Governmentality is therefore an outcome of governing interactions. It is not a fixed product, but one that is continuously produced and reproduced.

Governmentality and governability is closely related; from governmentality follows governability. Thus, the lower the governmentality in a particular governance system, the bigger is the governability problem. This is the case when governing is hampered by indifference or resistance. Governability refers to the capacity for, and quality of as the governance, for instance with regard to the implementation of a particular policy or strategy targeting small-scale fisheries (see Jentoft and Chuenpagdee, Chap. 2 in this volume). According to interactive governance theory, the governability problem sits in the system-to-be-governed, the governing system and the governing interactions (Bavinck et al. 2013). So does governmentality, which is easy to see from Foucault's description of governmentality as characteristics of both the governor, i.e. in his case the state, and those who are being governed, i.e. citizens. Both concepts refer to the propensity for adaptive or transformative change both within the system-to-be-governed and in the governing system. It is in this context we introduce the concept of "adaptamentality" and claim that adaptamentality is among the conditions for governmentality and consequently governability.

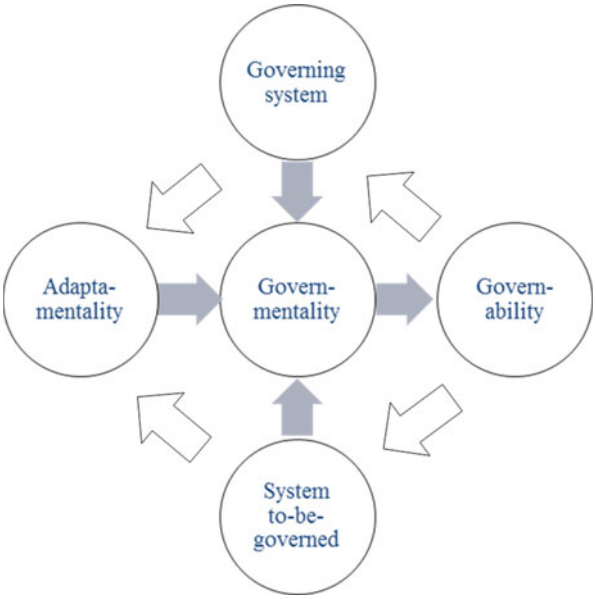

Fig. 36.1 Governability causal model

To improve the governability of small-scale fisheries, or fisheries in general, one must be able to elevate the degree of governmentality, which cannot occur without some form of interaction between the system-to-be-governed and the governing system. In our model (Fig. 36.1), the basic causal arrow goes from adaptamentality via governmentality to governability. Governmentality is also a co-product of the interactions that occur within and between the governing system and the system-to-be-governed, whereas governability as the outcome variable in the model affects both the governing system and the system-to-be governed by reinforcing the capacity and quality of governance, for instance by enhancing or reducing mutual trust.

What, then, causes adaptamentality in the first instance? The model suggests that in order to answer this question one would have to look at what is happening both within the governing system and the system-to-be-governed and how they have evolved and delivered over time. For that, we must include factors such as the culturally inscribed images that stakeholders who inhabit the system-to-be-governed and the governing system have of each other, the fishery that they are involved in, and the natural and social world around them (Kooiman and Chuenpagdee 2005; Jentoft et al. 2010; Song and Chuenpagdee 2014). In small-scale fisheries, it is particularly important when assessing adaptamentality to include the interaction that happens between the social and natural components of the system-to-be-governed and the images of that interaction that fishers and fish workers have and act upon. The governability, and the transaction costs involved in securing adaptamentality, is dependent on the degree to which the agents of both systems are sharing and agreeing on the same image, or at least recognize what the images are, acknowledge

their difference, and realize how different images may create governability challenges. Without agreement on how to frame the problem, which in small-scale fisheries are inherently "wicked" (Jentoft and Chuenpagdee 2009), the governing system will be less effective than it would otherwise be in addressing basic concerns, be they ecosystem health, food and livelihood security, or social justice (Bavinck et al. 2013).

As indicated in the model, the feedback mechanism from governability, via the governing system and the system-to-be-governed, to adaptamentality, must be taken into account in the assessment. Stakeholders will be more receptive to change, also those introduced hierarchically by government, if they have seen that reforms instigated by government are working for the better in the situation they find themselves in. Conversely, the adaptamentality and governmentality of small-scale fishers may be less if there is a history of marginalization and impoverishment and for instance if promises made by government in the past have not been met. When people decide how to respond, they tend to regard concrete initiatives in their broader social and political context. Then they think not only of what they hear but also who they hear it from. The message may sound fine but the messenger is perhaps not to be trusted.

Adaptamentality can, but does not have to be, subservient; it can also be assertive. It is about taking advantage of new opportunities, and to be adaptive and proactive. Thus, adaptamentality is fundamental to innovation, which is in itself a governability quality. Notably, this adaptamentality is not inherent or constant over time. Rather, it is nurtured through the system of interaction (between the governing system and the system-to-be-governed) that has generated mutual trust, which is a necessary provision for governability because it relieves those involved from the defensiveness and cautiousness that follow from a perception risk. Governability requires "creative governance" (Kooiman et al. 1999), which is particularly an issue in small-scale fisheries because small-scale fishers often find themselves in situations of marginalization and deprivation, and therefore in need of fundamental change and learning. What characterizes small-scale fisheries governance in Norway in this respect is what is discussed next.

System-To-Be-Governed

According to the 2008 Marine Resources Act and the regulatory system it proposed, it is reasonable to divide Norway's small-scale fisheries system-to-be-governed into a non-commercial and commercial sector. The non-commercial sector, which is basically reserved for recreational and/or subsistence purposes, is open to all Norwegian citizens and subject to few regulations as long as the activity and scale of the operation are under a certain level. The government regards recreational and tourist fishing as almost ungovernable due to the number of people involved, the topography of the coast, and the extensive border with Finland and Sweden that makes effective control and monitoring practically impossible (Solstrand and Gressnes 2014). On the other hand, the commercial sector is subject to a detailed set

Fig. 36.2 "Traditional Norwegian small-scale fishing vessel." (Photo; Gustav Rossness, Tromsø Museeum – The University Museeum)

of regulations. As a basic principle, all commercial fishing is banned in Norway and cannot be undertaken without a permit, issued by the government, which gives the fisher the right to fish commercially on a vessel specified in the license.

The commercial sector consists of vessels registered in the fishing vessel registry (*Merkeregisteret*) and that are equipped and suitable for commercial fishing. Three decades ago, the fleet was made up mainly of small, open, wooden vessels 11 m and below with a small inboard engine, an eco-sounder, a gurdy, and sometimes one or two automatic jigging machines. According to survey data from 2007, normally one person fished alone on these vessels.[2] The image of the small-scale fisher was that of an older guy who was not interested in investing much in his activity but rather preferred to minimize effort (Maurstad 1997) (Fig. 36.2).

In reality, however, the contrast between this archetype and small-scale fishing today is striking. As illustrated in Fig. 36.3, the boats below 11 m are now of a quite different type. Increasingly, the fleet under 11 m consists of well equipped, very efficient "harvest machines" with high-end fish finding and navigation technology, fishing gear and gear handling equipment (Johnsen 2005). With the introduction and popularity of the fiberglass boats, the small-scale fishing fleet has also become

[2] In the project "Networks or markets", which researched the contemporary fisheries employment system, a survey was carried out in 2007 among 500 boat owners and 500 crewmembers. None of the crewmembers were crew on boats under 11 m and a very low number of the boat owners with boats below 11 m were boat owners with crew. Source: Networks and markets database.

Fig. 36.3 "Modern Norwegian small-scale "harvesting machines."" (Photos; Roger Larsen, Norwegian College of Fishery Science)

more standardized. The price of a new well-equipped fishing vessel below 11 m is now so high that only a very skilled fisher is able to keep the business running. Moreover, there has been a 64 % reduction of wooden vessels under 11 m from 1996 to 2012.

Governing System

Institutional Arrangement

The current Norwegian fisheries governing system has developed incrementally over a period of more than hundred years. Thus one can find traces in existing legislation regarding small-scale fisheries that date back to the nineteenth century. For instance, in the 2008 Ocean Resources Act, mention is made of co-management being introduced in the 1890s. Certain years stand out as particularly important in shaping the governing system, one being 1928 when the Norwegian Fishers' Association (NFA) was established. This organization still plays an important role in fisheries governance. Another landmark year was 1938 with the passing of the Raw Fish Act, which provided the impetus for building a network of fisher's cooperative sales organizations across the whole country. For the cod fishery in the north, the Norwegian Raw Fish Association (NRFA) controlled all dock side sales. Sales outside these organizations were illegal and the Act gave the organization the right to determine a minimum price that buyers had to accept. Members of the NFA were automatically members of the NRFA. Also the Raw Fish Act, (now named the Fishers' Sales Organization Act), the NRFA and the sales organization system are largely intact today.

These institutions turned the table for small-scale fisheries in Norway, as they helped to empower small-scale fishers both politically and economically, and brought them out of a situation of poverty and marginalization that they found

themselves in at that time (Hallenstvedt 1982). These institutions also eventually became effective instruments in a partnership between fishers and the Norwegian government due to the fact that they represented members of all local fishers' associations along the coast. These associations could nominate and vote for delegates from their own region to be part of the general assemblies and the boards of the institutions. The government got a unified and representative counterpart in the fishing industry that it could relate to and consult. Fishers on the other hand were able to influence fisheries policy making (Jentoft and Mikalsen 2014).

From a governmentality and governability perspective this arrangement has worked well till date. Fisheries in Norway were always a highly politicized issue with different interest groups and regions constantly at odds with each other on issues pertaining to strategy and distribution. But through this partnership arrangement, governing interactions were routinized. Thus, a constructive governing process was possible. The NFA, as a negotiating body, had to sell the outcomes of discussions with the government to their rank and file members. This reduced the level of conflict and helped create legitimacy and compliance. As a consequence, fisheries politics in Norway never got stuck in the trenches – or in what Rothstein (2005) calls a "social trap" or a situation where individuals, groups or organizations are unable to cooperate because of lack of trust.

Many (if not all) governance issues and challenges have changed over time, but the governing system has remained relatively intact. The system has thus proven to be adaptive while robust, capable of governing a highly dynamic sector without abandoning the basic governance principles and institutional design. Thus after UNCLOS (United Nation Convention on the Law of the Sea) in 1978 when the state assumed greater responsibility for fisheries resource management, regulatory interventions could be handled basically in the same way and within the same institutional framework as other issues had been handled before. This is also how fisheries management is currently addressed. The Marine Resources Act of 2008 gives the Ministry of Fisheries the final word on fisheries regulations, but knowing what it takes to design, enforce and implement fisheries management regulation, the Ministry rarely acts unilaterally without consulting with the NFA and other relevant organizations. Regardless of formal sovereignty, management solutions are most of the time developed in concert between the government and the fishers' organizations.

To illustrate, the government and the NFA in 1964 reached an agreement about subsidies to the fishing industry. The actual amount was to be negotiated annually between the two parties (Jentoft and Mikalsen 1987; Hernes 2000). From 1964 and throughout 1990s, Norwegian fishers adapted comfortably to a situation where the state guaranteed their income. But that was not a situation that would last forever. Subsidies to the fishing industry were gradually reduced throughout the 1990s and the formal agreement (*Hovedavtalen*), formalizing the subsidy scheme, was finally terminated on January 1, 2005. This happened largely as a consequence of EFTA and EU requirements. Fishers now had to adapt to a new economic situation with the government shifting its focus from social policy to resource management. The health of the fish stocks rather than the well-being of the fisher became the primary

concern (Holm 1996). However, the form and structure of the negotiating process involving the state and the NFA remained the same as with the subsidy scheme.

The Quota-System

April 18, 1989, proved to be another watershed moment when the Ministry of Fisheries decided to close the north-east arctic cod fishery for vessels less than 28 m. This was the beginning of the new era. The following year the Norwegian government introduced a quota system also for this fleet segment and hence restricted access and put limits on catch (Hersoug 2006). This led to the establishment of a regulatory system based on individual vessel quotas (IVQs). Since then, the fishery has become increasingly restricted and nowadays the cod fishing vessels are divided into two groups, a closed group with a guaranteed IVQ and an open group that has to fish on a limited group quota. After the 1990 closure, more than 90 % of the cod has been allocated to closed group vessels. The remaining part of the TAC is reserved for the open group, comprised of registered fishers who have vessels without an IVQ.

Participation in the closed group requires that the skipper holds an annual permit for a specific vessel. These permits are given on certain conditions and allocated every year, and participation one year automatically qualifies for participation the next year. The closed group is divided into a number of length groups. In the cod fishery, each length group is allocated a certain amount of fish, originally based on the historical share of the length group. The IVQ depends on the length of the boat and will be a part of the total group quota. A part of IVQ can be in the form of "over-regulation", which means that at the beginning of the year, normally the total amount of fish allocated as individual quota is a bit bigger than that of the group quota. The difference in percentage between the group quota and the sum of the IVQs is the overregulation. This "overregulation" is a flexible instrument that reduces the need to reallocate quotas within the group over the year. The overregulation is normally very high for the smallest vessel group (up to 45 %), where many due to weather conditions and availability do not catch their entire quota. The percentage declines gradually up to zero for the larger vessels, which normally fish 100 % of their quota allocation. The idea is that overregulation shall advantage the most effective vessels in the different length groups, maintain a principle of competition for a part of the quota, and importantly, make it possible for the smallest vessels to fish hard when the fish is available.

Originally, participation in the closed group was based on the catch of cod the previous years before the closure. However, as cod also represented an important catch share for those who did not reach the limit, a small share of the TAC was set aside as a group quota for all registered fishers who did not qualify for an IVQ. Since everybody in Norway can register as a fisher, as long as their income from other sources does not exceed a certain limit, there is in principle and practice an open access entry to fish on this group quota.

Traditionally, especially in northern Norway, it has been quite common to combine fishing with other livelihood activities such as small-scale farming; the split into two regulatory groups makes an opening for such combinations. Moreover, to protect the small-scale indigenous Sami fisheries in the fjords in the northern part of the country, an additional quantity is allocated today to small-scale vessels registered in certain municipalities with a big Sami population (NOU 2008, 5).

Notably, fishing in the open group does not qualify for a quota in the closed group. Nevertheless, a full-time registered fisher can, on certain conditions, buy into the closed group when boats here (with fishing permits) are up for sale. During the early 1990s, the remaining quota percentage (10 %) was allocated as a "competitive quota." Later on, as the cod biomass grew, each vessel obtained a guarantee for a limited amount of cod that could be caught regardless of whether or not the group quota was exhausted. In addition to this competition quota for cod, the open group vessels could have similar arrangements in other species fisheries, where they were allowed to fish a small percentage of the TAC. According to Fisheries Directorate statistics, the number of vessels that have participated in the open cod fishery has steadily decreased from 3,354 vessels in 2002 to 2,281 vessels in 2012. However, this decrease does not necessarily imply that all the vessels have left the fishery, as fishers in the open group may have bought IVQs and have thus been transferred to the closed group.

Structural and Institutional Changes

The number of active fishing vessels and fishers has decreased throughout the whole post WW2 period, partly due to a policy directed towards increased industrialization of the fishery. Despite this down-scaling of the small-scale fishing fleet and the fishing population, the government and the NFA agreed that a more regulated fishery was necessary, and that closure and fleet restructuring was unavoidable. However, the industrialization and restructuring was controversial within the industry and triggered a heated discussion, including within the NFA. This eventually led a big group of mainly small-scale fishers to break with the NFA in 1988 and form their own organization, The Norwegian Coastal Fishers' Association (NCFA), based on the same organizational model with local associations as in the case of NFA. A major effort of this organization has been to convince the government to abandon the IVQ system, reopen the commons and lift the restrictions on small-scale fisheries. The NCFA, after a number of years of functioning, also gained importance within the overall governing system, if not to the extent of the NFA.

With a more fragmented organizational structure and the subsidies gone, some predicted that NFA and the fishers would lose its position in the overall governance system and therefore its power (Holm 1995). However, NFA was able to shift attention to quota allocation. Again, the organization assumed the role of compromise-maker between different groups within its own ranks, and thus helped to reduce the political pressure on the government due to the controversies related

to the quota system. This also helped to reinforce the rather centralized corporative governing system. As a consequence almost all quota allocation principles and mechanisms in Norway have either been constructed by, or modified through, input from the NFA (Hernes et al. 2005).

To summarize, or the Norwegian governing system is complex as it tries to accommodate the diversity that exists within the fishery where small-scale vessels have needs that are different to those of large vessels. The awareness of diversity and the complexity that follows are partly a result of the fishers' influence in the system. In addition, it is also flexible enough to allow for the dynamism that characterizes the system-to-be-governed, where conditions often vary with natural fluctuations.

Discussion

Norway figures high on the list of the world's major fisheries nations. Historically, fisheries were the most important export industry, and continue to be ranked second after oil and gas. The fishing industry is an important contributor to the overall national economy and society and therefore a major governance issue.

Small-scale fisheries were never a major contributor to the frozen, filleting industry, which instead relied on the supply from trawlers and larger coastal vessels; however, they were always and still are crucial in the fresh fish domestic market and in the dried- and salt-fish export trade. Small-scale fisheries were also the backbone of coastal communities scattered along a long coast because of the employment it provided to the local population. It also helped to maintain a decentralized settlement structure in Norway. Therefore small-scale, coastal fisheries were not a marginal issue in Norwegian politics. Their situation and fate were of both national and regional concern and had to be legislated accordingly. The perceived threat to these fisheries played a major role when Norway, through two national referendums, decided not to join the European Union. It is also the reason why fisheries are excluded from the extended economic agreement that Norway now has with the European Union. Norway is not part of the Common Fisheries Policy of the EU.

Governability Through Interaction

Most of the governance principles and systems that are basic for the ways fisheries are operating in Norway today have, as explained in this chapter, a deep history, in some instances dating back to the nineteenth century. Important legislation was enacted throughout the 1930s and 1950s. What has happened later is not so much the introduction of entirely new governance principles and laws, but needed adjustments to changing circumstances. Norway has also learned the hard way through crises in the fishery, such as in the herring fishery in the 1960s and the cod fishery in the 1990s, both of which had a major impact on the formation of the fisheries governing system.

Since the 1930s, when the Raw Fish Act introduced radical change, new legislation has often built on the already existing one, often with marginal alterations. Thus, for instance, when the Raw Fish Act in 2014 changed its name to the Fishers' Sales Organization Act, the content largely remained, although some new paragraphs were added to give these organizations a more consolidated role within the fisheries governing system, which since the 1990 onwards has focused more and more on natural resources and the management of fish stocks. Historically the Raw Fish Act and the sales organizations were key instruments in the empowerment of small-scale fishers in Norway, often to the dismay of the fish buyers and exporters who wanted to see this law ended and the sales organizations lose their monopoly power.

The institutional design of the Norwegian governing system must be understood in a historical context. It was the outcome of class struggle and power at a time when the number of small-scale fishers was much higher than today and when their voice counted because of that. Over the years, these institutions have not only acquired a central role in fisheries governance but they are also being taken seriously. They have acquired a considerable level of legitimacy and trust, and for most people in the industry it is hard to imagine how Norwegian fisheries would have functioned without them. The Raw Fish Act is popularly named as the "Fishers' Constitution," which says a lot about the status of this law in the fishing industry. Those who want it removed need to provide a convincing argument.

The Raw Fish Act has helped to lower the transaction costs of fisheries governance in Norway, as price and other issues related to resource management are negotiated collectively on a routine basis rather than individually and ad hoc. Similarly, the NFA has established long term agreements on how to divide the TAC among groups, for instance with the so-called "Trawl Ladder", which allocates a larger quota share to the coastal fleet when TAC is low as compared to when it is high. Within the coastal fleet a similar arrangement exists between size groups (Hernes et al. 2005). Once these arrangements are established, there is less to negotiate about until next time the agreements are up for evaluation. What happens in between is a technical matter. This is in itself an indication of the degree of governability within a governance system. Fishers may frequently express dissatisfaction with the price they receive for their fish and the quotas they are allocated, but they rarely question the system *per se*, which they feel committed to because they have been heavily involved it its making. They do not question the basic meta-governance principles that govern these institutions. They hardly ever go on strike as that would be mean protesting against themselves and their own organizations as well as the government who has allowed them a major role in decision-making.

That the government interacts formally and informally with the NFA and other fisheries organizations as part of policy- and decision making is perceived as a natural thing. This has been the arrangement for many decades. The need for some kind of quota system is not in dispute, although its concrete manifestation may cause problems at times. The opposition to the quota system that was introduced in 1990 has largely disappeared as fishers have become used to it and have adapted accordingly, especially because the details of the system have been hammered out by the fishers themselves through the NFA (Hernes et al. 2005). The reduction in the

number of vessels and fishers in Norway has not changed the relative tranquillity of governing interactions and the governability of small-scale fisheries. Fewer fishers see the advantages of a larger share of the quota pie and a higher income for those who remain. Those who criticize the system are not those who benefit from it, but those who in the coastal communities see that jobs in small-scale fisheries get lost and a cultural heritage disappearing.

Despite of the above mentioned concern, a general lesson can be learned about the role of institutions for the overall governability of small-scale fisheries. Although institutions, such as legal measures, are essential, it matters how they are actually designed. They must allow for interactions between the governor and those who are governed and the effective sharing of power between the two parties in a way that makes both proactive and responsible. This can only work if there is mutual trust and adaptamentality.

Governability and Trust

Studies show that Scandinavians trust their governing system and its institutions more so than people in most other countries (Skirbekk and Grimen 2012). Norwegian small-scale fishers are no exception to this rule. This trust is the outcome of a combined set of policies historically that were in their favor and often a response to their own demands. The Raw Fish Act is an important but not a unique example. This particular law would hardly have seen the day of light if the fishers did not ask for it and almost unanimously voted for it in a referendum. In addition to this act, throughout the twentieth century a series of initiatives, laws and regulations were introduced in order to support the small-scale fishery, like a State Fisher's Bank (1919) which helped to provide cheap and secure finance, the Trawler Act (1937) which banned trawlers from inshore waters, The Ownership Law (1956), which required that fishing vessels can only be owned by active fishers, to name but a few.

Through these initiatives, the government built trust with the small-scale/coastal fishery that not only fostered govermentality, i.e. a positive attitude to government intervention, but also governability, the willingness to cooperate with the government. Small-scale fishers came to perceive government as the solution to problems they were facing, but did not sit still and wait for government to intervene. The government, on the other hand, found an ally among small-scale fishers. Catering for this group paid off as votes in the next national election. Thus, for decades, small-scale fishers helped to keep the Labour party, which had introduced many of these reforms, in power. The mutual trust that was built through these new institutions generated social capital that could later be converted into support and compliance. For instance, most fishers accepted stricter rules and procedures for catch and quota control and reporting. These rules were largely co-produced by the government and the NFA. The government did not have to use brute force to implement them. Studies show that after more than 20 years Norwegian fishers accept the need for

regulations, and that they have been willing to comply with them (Gezelius 2002; Johnsen and Eliasen 2011).

The lesson we can learn from this experience is: when there is mutual trust among small-scale fishers and the government, governability is enhanced. Such trust must be proven through actions that make it deserved. For this there must be institutions that allow for interactive governance based on power-sharing, participation and transparency to take place.

Institutional Change

In April 2014 the government circulated a consultation paper about transferability of quota rights within the group of vessels less than 11 m with IVQs (Anon 2014). This proposal became an object for intense discussion within this fleet segment and in fisheries dependent communities. The NCFA was clearly against while the NFA the opinion was positive. The two political parties that form the current government are split on this matter. Many of the fisheries dependent communities that have witnessed the down-scaling of small-scale fisheries in recent years remain skeptical. The widespread fear is that transferability will bring a further reduction of small-scale fisheries. For fishing communities, particularly in the north of Norway, that would be an existential risk. Those who support the proposal argue that transferability is necessary to secure a better economic foundation for the small-scale fleet which, according to the official economic survey, is quite vulnerable to natural or economic fluctuations (Anon 2014). A leaner small-scale fishery sector is then the price to pay for a more profitable fishery, they say.

The variety of arguments and alliances made it difficult to get clear support for the proposal and consequently the Ministry has decided to let the case rest for now. However, the debate about transferability may help make people warm to the idea and thus prepare for the needed adaptamentality that such a reform would require. In the 1990s, there was strong opposition to the new quota system. NFA could originally only accept it as a temporary measure, but members soon learned to live with it, and today the organization has become an ardent supporter. Now it is generally perceived as a fact of life, especially among those fishers who are so young that they never experienced the other reality. The organization and its members have demonstrated adaptamentality, but it did not occur instantly. According to Johnsen et al. (2009a, b), Norwegian fisheries have become both more self-regulatory and more governable due to the development of a common governmentality among fishers. It could be argued that such governmentality was already there when the quota system was originally introduced. If not, the government would have had a much harder sell with the "sea change" that the closing of the commons involved. Still, the quota system was always controversial, especially among small-scale fishers for whom it meant the most substantial change in their long established fishing practice.

After years of complaints about how the quota system affected the small-scale fishery, the Ministry on January 1, 2014 decided to reintroduce open access for vessels

less than 11 m. The maximum quota for the open group and IVQs with overregulation for the vessels in the closed group was thus abolished for these vessels. This applied regardless of what group they belonged to. Open group vessels thus engaged in so-called Olympic (competitive) fishing in the first months of 2014; both because of very good weather and expected, closure due to intense fishing. However, the number of vessels that have participated in the first few months has been pretty stable, which indicates that open access does not change participation in the short term.

The reopening of the small-scale fishery from January 2014 was an experiment that may not be continued into the future. Due to a decreasing number of processing plants, the increased landings caused quite a demanding market situation in the short and intense winter fishery when the cod is readily available. The problem could be seen in terms of both reduced price and quality of the landings. In January and February 2014, due to favorable weather, the vessels that originally belonged in the closed group under 11 m landed more than half of the original group quota, while the vessels in the open group under 11 m caught almost 50 % more than they had in the previous year for the same period. The number of vessels just increased 2 %. The most recent figures of the NRFA indicate that the increase in catch is not due to an increase in participation of vessels, but due to increased activity on each vessel. Hence, as a response, on March 24 the Ministry decided to stop the open fishery and to return to maximum quotas. Later, in May the Ministry increased the minimum guaranteed catch for the vessels in the indigenous Sami fishing districts.

Every time institutions that people have come to accept as a given are put in play, governability, and the trust that underpins it, is threatened. Trust cannot be taken for granted, it is vulnerable. The proposal of removing the limitations on small-scale fisheries to get involved in quota transactions is raising questions with regard to the government's intentions. The proposal has, however, been put on hold, while the restrictions on fishing effort of this fleet segment are lifted. While the former idea has been met with skepticism, the latter initiative has been well received among small-scale fishers. Government has by this move demonstrated adaptamentality, i.e. that it is not stuck on conventional dogmas.

Adaptamentality and Innovation

The increase of fish landings and the subsequent closure illustrate that the small-scale fleet is very efficient, especially when the weather is good and the fish is available. This is also an indication that this vessel group is operated by skilled fishers with the needed adaptamentality. The small-scale vessel group cannot therefore be regarded as backward, as is often the perception. Instead, they have sufficient adaptive capacity to cope with natural variations in the fishery. Today, with increasing costs partly caused by the quota that small-scale fishers must shoulder, they hardly have another choice. Small-scale fisheries in Norway are sophisticated and innovative with the most recent catch and information technology installed. New technology, new ways of operating and organizing has been met with a willingness to

experiment, also within the small-scale fisheries sector. The move in the markets, away from frozen to fresh products, is favoring small-scale fisheries and may result in a new era within small-scale fisheries that again will rely on adaptamentality. That mentality may be encouraged by the shift in the way fish is talked about in Norway these days. Fish as a concept is being replaced by the more trendy "sea-food" (*sjømat* in Norwegian) term. Not only does it represent a positive view of fish and small-scale fishing in the minds of the consumer, it also provides new meaning and identity in the mind of the small-scale fishers for whom fresh, newly caught fish is what they are particularly good at. Small-scale fishers would now be inclined to see themselves as a crucial element in the modernization and innovation of a fish distribution chain that extends beyond the dock-side.

This new mind-set involves adapt a mentality. It is nourished by the broader view of one's own role within the larger fisheries system, which makes small-scale fishing into a more meaningful and hence more attractive occupation. The challenge for the small-scale fishery in Norway is its seasonal nature, with the overall majority of the landings in the first half of the year. For many years this fleet has had an open fishery in the fall, but with limited ability to catch due to low fish availability and bad weather. Due to the decrease in the number of processing plants, landings are also concentrated in fewer and fewer harbors. The 2014 opening of the small-scale fishing commons was an important experiment by the government that proved that the governability challenge for small-scale fisheries and communities is not related to lack of skills and ability to fish. Rather it is about how to deal with seasonal variation and how to increase the value of the fish through more efficient marketing. The problem is that the market does not only demand a high quality product but also needs a steady supply throughout the entire year. This is a major governability problem that must be addressed for small-scale fisheries to thrive.

This problem cannot be solved through a fisheries policy focused only on resource management and fleet profitability. It is also a question about food policy. Norway produces fish mainly for export, while the domestic market for fish is not well developed. Norwegians consume 22 kg of fish per person pr. year, which is less than 50 % of the annual meat consumption per person. The small-scale fleet has the potential to fill this gap. The adaptamentality in the small-scale fleet indicates that given the right conditions, this fleet should be able to meet an increased domestic demand for fish. This is now perhaps the most important governability challenge and opportunity for small-scale fisheries in Norway. By increasing domestic demand, the small-scale fleet can demonstrate to society at large that they represent great social value, which they have to do in order to convince government that they and their local communities are still worth conserving.

Conclusion

In Norway, small-scale fishers have not only proven their adaptability, but also their readiness for change, including change initiated by the government. The latter, which in this chapter is termed adaptamentality, is not an inherent feature of

small-scale fisheries but a constructed quality nurtured by trust that has taken many decades to build. Small-scale fishers have even been able to ensure that government legally secures their interests, as in the case of the Raw Fish Act and a series of other progressive legislative measures. This can be measured in high governability and willingness to comply, cooperate and adapt all positives which have seen Norway rank high amongst the countries that conform to the FAO Code of Conduct for Responsible Fisheries (Pitcher et al. 2009).

Although the governability, and the adaptamentality and govermentality that are fostering it, have been a characteristic of small-scale fisheries in Norway so far, it will not remain stable with institutional change. Institutions build and require trust, and trust builds adaptamentality and governmentality. The Fishers' Sales Organization Act, the cooperative sales organizations, and the rules regarding ownership of fishing vessels, which are all fundamental for the governing system in Norway as we know it, have so far been able to withstand pressure to abolish the Act, particularly from the processing and export interests. But it remains to be seen how long it lasts now that the current government is entertaining the idea that they perhaps need major reform. Small-scale fisheries can still continue to call the Raw Fish Act as their "constitution", even after the 2014 legal reform, but for how long?

These institutions probably depend on a critical mass of small-scale fishers. The close connection and common destiny of small-scale fishers and coastal communities are also important. The fewer they are and the more dis-embedded the small-scale fishery becomes from the local community the more difficult it would be to uphold them (Grytås 2013; Sønvisen 2013). The NFA has said that they do not any longer think that the fishing industry has a responsibility to maintain a decentralized settlement on the coast nor ensure fisher community wellbeing. It may not have thought through what the long term consequences of this position would be for the institutions that it supports. Making fishing rights into a commodity that can be bought and sold is likely to further exacerbate this development. Norway has not yet gone as far as Iceland and Denmark (see chapters by Høst (Chap. 17) in this volume) in introducing this system. Instead, the quota system has rules to counteract concentration of fishing rights, but these rules are now under pressure, as mentioned in this chapter.

Initially, we talked analytically about the link from adaptamentality to governmentality and governability. In reality it is hard to say what comes first and perhaps not important to do so either. The fact they are there and that they nurture each other is what counts, and that each of them must be "worked on" simultaneously through a governance process that is interactive. While adaptamentality and governmentality are basically about mind-set and attitude, governability is about actual capacity for, and quality of governance, such as having the resources, including the institutional power to implement decisions in a way that is effective, transparent and democratic (Kooiman 2003, 2008). Adaptamentality helps to elevate governmentality, which again is conducive to governability. In other words, we are talking about governance as a virtuous circle. The lesson from Norway is that institutions can do a lot to facilitate the adaptamentality and governmentality that governability hinges on, but only in so far as they are capable of delivering on their promise to make a positive difference for small-scale fishers. But with the recent developments in

Norwegian fisheries, the future might be a lot different, as a virtuous circle can easily develop into a vicious one.

References

Anon. (2014). *Strukturkvoteordning for kystflåten under 11 meter heimelslengd*. Høyringsdokument. (Consultation paper for a structural quota system for vessels under 11 m). Ministry of Trade, Industries and Fisheries.

Bavinck, M., Chuenpagdee, R., Jentoft, S., & Kooiman, J. (Eds.). (2013). *Governability of fisheries and aquaculture: Theory and applications*. Dordrecht: Springer Verlag.

Foucault, M. (1978a). Lecture 1 February. In M. Sennellart, F. Ewald, & A. Fontana (Eds.), *Security, territory, population lectures at the College the France 1977–1978* (pp. 87–114). Basingstoke: Palgrave Macmillan.

Foucault, M. (1978b). Lecture 11 January. In M. Sennellart, F. Ewald, & A. Fontana (Eds.), *Security, territory, population lectures at the College the France 1977–1978* (pp. 1–27). Basingstoke: Palgrave Macmillan.

Gezelius, S. (2002). Do norms count? State regulation and compliance in a Norwegian fishing community. *Acta Sociologica, 45*(4), 305–314.

Grytås, G. (2013). Råfisklova – tid for tale ved grava? In S. Jentoft, J.-I. Nergård, & K. A. Røvik (Eds.), *Hvor går Nord-Norge? Politiske tidslinjer* (pp. 317–330). Stamsund: Orkana Akademisk.

Hallenstvedt, A. (1982). *Med lov og organisasjon*. Tromsø/Oslo/Bergen: Universitetsforlaget.

Hernes, H.-K. (2000). *Forhandlingsmakt eller argumentasjonsbyrde? En analyse av Hovedavtalen for fiskerinæringen og avviklingen av fiskeristøtten*. Doctoral thesis, University of Tromsø, Tromsø. Retrieved from http://hdl.handle.net/10037/286

Hernes, H.-K., Jentoft, S., & Mikalsen, K. H. (2005). Fisheries governance, social justice and participatory decision-making. In T. Gray (Ed.), *Participation in fisheries governance* (pp. 103–118). Dordrecht: Kluwer.

Hersoug, B. (2006). *Closing the commons. Norwegian fisheries from open access to private property*. Delft: Eburon.

Holm, P. (1995). The dynamics of institutionalization: Transformation processes in Norwegian fisheries. *Administrative Science Quarterly, 40*(3), 398–422.

Holm, P. (1996). Kan torsken temmes. In E. O. Eriksen (Ed.), *Det nye Nord-Norge: Avhengighet og modernisering i Nord* (pp. 109–142). Bergen: Fagbokforlaget.

Jentoft, S., & Chuenpagdee, R. (2009). Fisheries and coastal governance as a wicked problem. *Marine Policy, 33*, 553–560.

Jentoft, S., & Mikalsen, K. H. (1987). Government subsidies in Norwegian fisheries: Regional development or political favoritism? *Marine Policy, 11*(3), 217–228.

Jentoft, S., & Mikalsen, K. H. (2014). Do national resources have to be centrally managed? Vested interests and institutional reform in Norwegian fisheries governance. *Maritime Studies, 13*, 5. Retrieved from http://www.maritimestudiesjournal.com/content/13/1/5

Jentoft, S., Chuenpagdee, R., Bundy, A., & Mahon, R. (2010). Pyramids and roses: Alternative images for the governance of fisheries systems. *Marine Policy, 34*, 1315–1321.

Johnsen, J. P. (2005). The evolution of the "harvest machinery": Why capture capacity has continued to expand in Norwegian fisheries. *Marine Policy, 29*(6), 481–493.

Johnsen, J. P. (2014). Is fisheries governance possible? *Fish and Fisheries, 15*(3), 428–444. doi:10.1111/faf.12024.

Johnsen, J. P., & Eliasen, S. (2011). Solving complex fisheries management problems: What the EU can learn from the Nordic experiences of reduction of discards. *Marine Policy, 35*(2), 130–139. doi:10.1016/j.marpol.2010.08.011.

Johnsen, J. P., Holm, P., Sinclair, P. S., & Bavington, D. (2009a). The cyborgization of the fisheries. On attempts to make fisheries management possible. *Maritime Studies, 7*(2), 9–34.

Johnsen, J. P., Murray, G., & Neis, B. (2009b). North Atlantic fisheries in change – From organic associations to cybernetic organizations. *Maritime Studies, 9*(2), 55–82.

Kooiman, J. (2003). *Governing as governance*. London: Sage Publications.

Kooiman, J. (2008). Governability: A conceptual exploration. *Journal of Comparative Policy Analysis, 10*(2), 171–190.

Kooiman, J., & Chuenpagdee, R. (2005). Governance and governability. In J. Kooiman, M. Bavinck, S. Jentoft, & R. Pullin (Eds.), *Fish for life. Interactive governance for fisheries* (pp. 325–349). Amsterdam: Amsterdam University Press.

Kooiman, J., van Vliet, M., & Jentoft, S. (Eds.). (1999). *Creative governance: Opportunities for fisheries in Europe*. Aldershot: Ashgate.

Maurstad, A. (1997). *Sjarkfiske og ressursforvaltning*. Dr.Scient. Doktoravhandling, Universitetet i Tromsø, Tromsø.

NOU. (2008:5). *Retten til fiske i havet utenfor Finnmark – Utredning fra et utvalg oppnevnt ved kongelig resolusjon 30*. juni 2006. Avgitt til Fiskeri- og kystdepartementet 18. februar 2008. Departementenes servicesenter Informasjonsforvaltning.

Pitcher, T., Kalikoski, D., Pramod, G., & Short, K. (2009). Not honouring the code. *Nature, 457*, 658–659.

Rothstein, B. (2005). *Social traps and the problem of trust*. Cambridge: Cambridge University Press.

Skirbekk, H., & Grimen, H. (2012). *Tillit i Norge*. Oslo: Res Publica.

Solstrand, M. V., & Gressnes, T. (2014). Marine angling tourist behavior, non-compliance, and implications for natural resource management. *Tourism Management, 45*(0), 59–70. doi:http://dx.doi.org/10.1016/j.tourman.2014.03.014.

Song, A. M., & Chuenpagdee, R. (2014). Exploring stakeholders' images of coastal fisheries: A case study from South Korea. *Ocean and Coastal Management, 100*, 10–19.

Song, A. M., Chuenpagdee, R., & Jentoft, S. (2013). Values, images, and principles: What they represent and how they may improve fisheries governance. *Marine Policy, 40*(0), 167–175. doi:http://dx.doi.org/10.1016/j.marpol.2013.01.018.

Sønvisen, S. A. (2013). *Coastal communities and employment systems: Networks and communities in change*. PhD, UiT The Arctic University of Norway, Tromsø.