

DEVOLVING FISHERIES MANAGEMENT:

A Research Note

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Abstract Devolvement of responsibilities in fisheries management is currently on the political agenda. Managing the fisheries is a complex task, and it is increasingly appreciated that central government must rely on involvement and active co-operation of lower level institutions. What this means in practice and how it could be accomplished is, however, not at all clear. Devolvement poses important questions as to what kinds of intermediate organisations that would be able to carry the burden of management responsibilities, and what tasks and responsibilities that should be devolved. Is there an institutional infrastructure in place at the local and regional level that could be utilized for management purposes, or must new institutions be created from scratch? How inclusive should these institutions be, and what should be the scope of their power and jurisdiction? These are some of the questions where social science research should make a contribution and where it may, in fact, be helpful. In this paper, we present a wide range of research questions pertaining to fisheries management reform, and discuss why and how they should be addressed. We suggest that there is a need for systematic comparisons between countries as to how the issue of devolved management has been addressed, and as to what, if any, lower level institutions that have been created. Initiatives and solutions must be described and evaluated with reference to their historical and institutional context – with particular attention to the obstacles to, and possible impacts of, institutional innovation.

Our problem is most definitely not Lenin's problem captured in his famous question of 'What is to be done?' Instead our problem can be formulated as the logically prior question of 'who', i.e. what configurations of agents, might at all be capable of doing whatever 'is to be done' (Claus Offe: 'Civil Society and Social Order: Demarcating and Combining Market, State, and Community'. Archives Europeennes de Sociologique 41: 78-9, 2001).

We will not have good fisheries management until everyone is prepared to take their share of the responsibility. We should get the sector more involved in management decisions because ultimately it is the sector which has to put those decisions in practice (European Union commissioner Fishchler in 'The Common Fisheries Policy Beyond 2002' Seminar, Brussels, 27 June 2000).

Introduction

In fisheries management, as in most other areas of public policy, there is a balance to be struck between central governance and local or regional control (Symes 1999a). On the one hand, there are issues that require coordination and control at the national

– or even international – level. On the other hand, it can be argued that fisheries are too complex, dynamic and diverse to be governed single-handedly by a central agent and that other agents, such as regional or local authorities, must somehow be involved in a partnership where management functions are shared and devolved (Kooiman, van Vliet and Jentoft 1999, Hanna 1998). It is not hard to agree in principle; it is harder to concur on what it means in practice. Among whom should management functions be shared and devolved? What are the pros and cons of such partnership arrangements? What design options are there? Fisheries managers may find inspiration in the principle of subsidiarity now adopted as European Union (EU) policy –that decision-making authority should rest with the lowest possible level of organisation – and in the Jeffersonian argument that ‘...each might do for itself what concerns itself directly and what it can so much better do than a distant authority’ (Louks *et al.* 2002). Principles, however, are only cornerstones for a more comprehensive and complex construction. Thus, if adopted as guidelines for fisheries management, a whole range of questions must find practical answers. For instance: Exactly what decisions should rest exclusively with central government, and what problems are better left to local and/or regional institutions? What lower level organisations are we talking about? Should these organisations be designed anew or will those that already exist do? As Symes (1999b:216) reminds us: ‘Macro-institutional change – or the lack of it – poses important questions for what kinds of intermediate organisations would be able to carry the burden of devolved management responsibilities.’ Transfer of powers from central government to lower levels of authority can obviously take many forms. Concepts such as decentralisation, delegation and devolution are frequently employed interchangeably but allude to some important nuances. All three have legal connotations and are often defined somewhat differently from country to country (cf. Karlsen *et al.* 2002). A distinguishing feature is the extent to which the central agent retains control even after a management function is transferred to a lower level unit of authority. In this paper we will restrict ourselves to using the broader term *devolvement*, thus admitting to a certain lack of precision regarding the degree of autonomy obtained by lower level units. We regard this as one of the key design variables that fisheries management reforms must address, as it may have a strong bearing on their success or failure.

The purpose of the paper is to propose a research agenda and a methodology to carry it out. We start by discussing the issue of institutions, what they are and how they change. Thereafter, we propose four areas for social research on fisheries management reform: a) institutional history and social context; b) the rationale of current management arrangements; c) the preconditions and prospects of devolved management; and d) the issue of institutional design. For each of these main themes we suggest a number of concrete research questions that need systematic scrutiny in the years to come. Finally, we offer some reflections on research methods and the merits of comparative case studies for theory development.

Perspectives on Institutions

There is no general agreement in the social sciences as to what should count as an ‘institution’, or what constitutes an institutional *perspective* (Thelen and Steinmo 1992). Add to this the renewed interest in institutions in political science (March

and Olsen 1989, Young 1994), economics (Williamson 1985, North 1990, Eggertson 1994), and sociology (Scott 1995, Powell and DiMaggio 1991), and you have a situation where definitions of the concept tend to proliferate. We have adopted a fairly general definition where the concept of ‘institution’ refers to formal structures, rules and codes of conduct that define agendas and assign roles and responsibilities to participants in public policy-making (cf. Young 1994, Hardin 1996). Focusing on institutional change within a particular policy field – fisheries management – we are interested in how the rules and rationale of current management structures assign power and responsibility, and in the question of how such ‘assignments’ may affect the prospects and directions of reform. What follows is a discussion of the central issues and concepts involved.

Devolvement

The issue of devolvement pertains to a perennial challenge in modern democracies – and to a classic theme in political analysis: how to establish a workable trade-off between centralised control and local autonomy (Goldsmith and Page 1987). There are, of course, considerable variations across countries and policy areas as to the substance of such trade-offs, but the overall trend is for centralisation and standardisation to be balanced against values such as devolvement, participation and autonomy. This is neatly captured in Manuel Castells’s vision of a ‘network state’, where the state, in order to regain its legitimacy, engages in a process of devolution of power, decentralising responsibilities and resources to lower levels of government, including non-governmental organisations (NGOs) (Castells 2000). In natural resource management the idea of a partial devolution of authority from state agencies to local or regional institutions has been gaining in popularity – almost to the extent of becoming *the* solution in some quarters (Singleton 2000). As such, proposals and pressures for strengthening local and regional involvement in the management of natural resources are part of a global ‘ideology’ with an emphasis on subsidiarity and ‘strong democracy’ (Barber 1984) as a key ingredient in management decision-making. In Norwegian fisheries, for example, proposals for devolvement of management decision-making have followed in the wake of research indicating that there are local stocks of cod in several fjords in North Norway – making local-level management look like an idea whose time has come. But the Norwegian proposal is also inspired by the global discourse, where devolvement of management authority is regarded as the way forward. We would assume that the statement of Fischler quoted above, has similar roots. Partly it stems from an analysis of the current state of affairs in European fisheries – the problem as he sees it. Partly it is enthused by what is currently ‘in supply’ in the global marketplace for new remedies to the fisheries problem.

Devolvement in fisheries management can obviously mean different things. Those who advocate a larger role of the market in management, be it in the form of Individual Transferable Quotas (Neher *et al.* 1989) or so called eco-labelling (Sproul 1998, Long 1999), argue from the position of a deep scepticism to hierarchical control. The problem, according to Hannesson (1996), is a management process driven by politics rather than profitability; the solution more power and freedom to the individual fisher or consumer. Then there are those who favour devolvement but still emphasise the need for ‘exogenous’ management by public institutions. They argue from a belief in the merits of local government, and they are sceptical to the

capability of fishermen of adopting a stewardship role. For them regional and/or municipal authorities should be the principal recipient of devolved management authority. Finally, there are those who think that some form of co-management or 'partnership' involving users, civic institutions and local government is the solution to the management problem (Wilson, Raakjær Nielsen and Degnbol 2002). Acquiring the capacity to do whatever 'is to be done' (cf. Offe quoted above), resources have to be pooled. Relevant here is also the distinction, made by Fung and Wright (2001), between 'autonomous' and 'coordinated' decentralisation. In the former instance local units operate as autonomous and atomised decision-makers, while in the latter they are linked to each other and to higher-level units – in order to ensure communication and accountability. Which of the alternatives mentioned above key policy-makers have in mind when advocating more devolvement of management authority, and how they assess their relative merits, is a question we believe should be researched.

Institutional Creation

New regimes are seldom established in an institutional *vacuum*, but are superimposed on existing structures and arrangements. To paraphrase Petter Holm (1995:400): 'New institutions are not created from scratch but are built upon older institutions and must replace or push back pre-existing institutional forms.' Most management regimes will have a pre-existing history of relationships between central government and regional/municipal authorities, and any attempt at decentralising management authority and functions will have to take the context and history of the current regime into account. It is essential, therefore, to examine how socio-political context and historical experience may affect institutional change, and we will – in what follows – outline a few theoretical ideas that – in turn – will serve as a basis for specifying a set of research problems pertaining to the problems and prospects of devolvement in fisheries management. We believe that the assumptions underlying rational choice should be relaxed. Management regimes are rarely the outcome of conscious choice under ideal conditions but more often compromises that result from political struggles within a particular context that must be understood in a historical perspective. Ironically, the rationality of institutional reform is often discovered *ex-post* rather than *ex-ante*. Psychologists call this phenomenon rationalisation. Sometimes, preferences are the outcome of institutional reform rather than its cause.

We believe it is necessary to employ a broader perspective on the nature of institutions than the one offered by common property rational choice theorists, such as Ostrom (1990) and Oakerson, (1992). Institutions are more than simply 'the rules of the game' (North 1990). As Richard Scott (1995) argues, institutions are also 'embodiments' of values, norms and knowledge – in short culture. Fisheries management institutions, then, should not be considered as purely 'legalistic' structures, but also as representations of the culture – external and internal – within which the particular management system is nested.

We also believe in the idea of March and Olsen (1976) that problems do not only seek solutions; in many instances the process works in reverse. Fisheries management is probably a great test case for such a thesis considering the way particular solutions such as Individual Transferable Quotas and co-management schemes are now spreading globally. Presumably, they are not always introduced following a

thorough analysis of problems, alternative solutions and potential outcomes. Rather they are adopted because they are fashionable (*‘So ein ding müssen wir auch haben’* – we also want such a thing). Then, once adopted, they trigger a process that is often irreversible. Institutional reform reaches a point of no return, even if those that favoured it in the first place should have second thoughts based on what they have learned in the process of implementing it. One may also perceive a situation where decision-makers deliberately shield themselves from inputs on alternative problem definitions and solutions in order to make their situation less chaotic and complex. Elster (1979) mentions Ulysses who tied himself to the mast in order to resist temptations as a metaphor for this phenomenon. This may explain why user-groups experience that they often speak to deaf ears when they plead for management reform. Fisheries management decision-makers may simply have turned off their microphone to escape the noise.

One question that is sometimes raised when discussing the effectiveness of existing institutions is the following: ‘If given a clean slate, would we have come up with the same solutions again?’ It resembles the question sociologists often ask people about their life and career: ‘If you could live your life over again, would you have lived it in the same way as you have till now?’ The ‘solomonic’ answer to a question like this would probably be ‘yes and no, it all depends’. Yes, because careers (as well as institutions) are closely linked to the particular context within which they exist. The fact is that you never start with a clean slate. In social life there is no such thing as a vacuum to be filled. As Karl Marx pointed out, people make their own history, but they do so under conditions that are not of their own choosing. Daniela Weinberg’s or Elinor Ostrom’s idea of ‘nested’ structures (Weinberg 1975, Ostrom 1990, 1992) and Petter Holm’s distinction between ‘first-order’ and ‘second-order’ institutions (Holm 1995), are also pertinent here. Thus, institutions at the second level may well inhibit, and sometimes promote, changes at the first level. As Holm points out:

Sometimes an institution that is regarded as legitimate and efficient by its primary user group is swept away by more general institutional reforms. Sometimes an institutional innovation that has been unsuccessfully promoted for an extended period of time suddenly becomes possible because of shifts within the larger field of power and social structure (Holm 1995:400).

Institutional Inertia

Institutions are largely a product of their environments – be they natural, social, or cultural. This is why we often talk about a Scandinavian model of governance, a Dutch or a US governance model, indicating that individual countries are unique with regard to regulatory traditions and have their own models for crafting institutions and policies. This means that institutions in, say, fisheries management may vary from country to country, but within each country fisheries management institutions may not – in their *modus operandi* – differ fundamentally from regulatory institutions in other sectors of the economy. There are, to adopt a phrase from David Vogel (1986), distinct ‘national styles of regulation’. Therefore, new institutions would be shaped along the lines of existing ones.

Comparative fisheries research should therefore pay due attention to the distinctiveness of national management systems, and to the institutional context from

which they arise. According to Arthur Stinchcombe, contemporary institutions and organisations will display characteristics that stem from the environment within which they were originally created (Stinchcombe 1965). Therefore, studies of institutions should always entail historical analyses. Stinchcombe's thesis also suggests that institutions do not always adapt to significant changes in their environment. Rather, institutions exhibit considerable inertia to both internal and external pressures. Or, as Susan Hanna has argued with respect to fisheries management, the rate of change in management structures is much slower than environmental change, thus producing what she calls 'the underlying pathology of fisheries management institutions' (Hanna 1998:34). This is partly due to the fact that institutions, once they start to make an impact, become 'infused with values beyond the technical requirements of the task at hand' (Selznick 1984:17). Any attempt at change or reform that runs counter to the institutional 'identity' of an organisation, often fails due to resistance from those affected. We also tend to take institutions for granted; they become part of the natural order of things, and we stop regarding them as social constructs that can be changed through collective action. They become, as Berger and Luckmann (1967) argue, 'objective reality'. Furthermore, institutions are biased in the sense that they often, deliberately or not, are supportive of some interests while excluding others. Consequently, those that benefit from a particular institutional order would not only be inclined to resist any chance that may be in their disfavour; they will also have the tools necessary to succeed. It should not be too difficult to demonstrate the validity of this thesis in fisheries management. Again, from a research point of view, we should keep an eye on the mechanisms that give rise to inertia both within and outside the management systems under scrutiny. Sources of inertia may well be identified among stakeholder groups – including government agencies that may benefit from maintaining status quo.

Institutional Reform

There are reasons to suggest that given a clean slate, we might come up with management institutions that truly differ from those abandoned. First of all, we may have learned something from our experience with the original 'format' – having accumulated the kind of experience that enable us to make a more informed choice among the alternatives available. Those who say, 'yes, I would have lived my life again exactly as I have lived it', have, one would assume, lived a happy life. Those that have been unhappy would opt for change. Whether or not we would choose the same management system might, then, depend on our experience with a particular institutional design. Thus, it is an interesting research question how fisheries managers and other prominent stakeholders would characterise current institutions, and to what extent their experiences have altered their views on management structures and policies. Second, environments and context change, spurring new preferences among stakeholders and institutional adjustments that may amount to major changes in management structures and policies. Stinchcombe (1965) has pointed to crises as events that would often bring about institutional change. When a crisis hits, existing solutions are questioned, their effectiveness debated and their rationalised order de-legitimised. Typically, supporters of prevailing institutions will find themselves defending a state of affairs that is no longer considered legitimate, rational and necessary.

Again, the fisheries are well suited for pursuing such ideas – given the fact that crises frequently do occur, with ensuing calls for major institutional change like the one expressed by Fischler (quoted above). Therefore, crises should draw our attention as harbingers of change. We should, of course, also keep an eye on the ideas and innovations – however marginal – that may come out of any attempt at redefining management ‘reality’. Where do these come from and who are ‘pushing’ them? To what extent are ideas and innovations exchanged across national borders? Richard Scott’s point about imitation is relevant here: when designing new institutions we seldom come up with entirely new solutions. Rather, we select from a menu of ready-made dishes – not from a set of available ingredients. Government agents, when crafting institutions and policies, are usually not the chef but rather the guest. In some cases, however, governments do prepare the dish more or less from scratch. By doing so, they may create something that is yet to be included on any menu.

Institutional Innovation

If there are innovations in fisheries that are truly original and self-made, we should certainly seek them out. The Dutch Biesheuvel system may be a case in point (cf. van der Schans 2001, Langstraat 1999). The system introduced transferability of quotas in ways that encouraged social integration based on the formation of fisher-groups with a common territorial basis. At closer inspection, however, it may not be as original as it is sometimes claimed to be. Some of the mechanisms of this regime is, for instance, also built into the British ‘sectoral quota allocations’ system where local Producers’ Organisations play a prominent role (Goodlad 1998, Phillipson 1999). Furthermore, some of the features of the ‘Community Development Quota System’ – where local groups, civil associations and municipal authorities created formal organisations that acquired quota rights under certain conditions determined by the state – were not truly original as its design benefited from lessons learnt under the Alaska Native Claims Settlement Act (Anonymous 1999).

The fact that lessons have been learnt and utilized does not detract from the uniqueness of these particular innovations in *fisheries management*, but it supports the argument that new institutions seldom come out of the blue. Moreover, institutional change is often incremental – with outcomes that differ only marginally from the starting point. As pointed out by Ostrom (1990:140), creating new institutions is usually viewed as non-incremental and costly, whereas changing existing ones is considered incremental and less costly. Even under conditions that allow for experimentation and innovation, managers, according to Cyert and March (1963), are likely to look for solutions in the proximity of existing ones. Search is biased because prevailing institutions serve as lenses that constrain the view of ‘entrepreneurs’. Institutions provide their members with a certain mindset. Conventional wisdom as to what is real and true will affect beliefs about reality and channel the attention and energy of individual members in certain directions.

Managers intended on reforming their institutions may well take the same approach. They will look in familiar places where the search is easy, but where the prospects of finding genuine and interesting alternatives are slim. From a research perspective this is an assumption with interesting implications for research in fisheries management. Taking it seriously we should not only ask users and managers

about their experiences with current institutions and practises, and about their thoughts on the pros and cons of these. We should also inquire into their ideas and perceptions of possible alternatives to existing institutions, and ask why and how current institutions should be reformed. If the Norwegian fisheries debate is anything to go by, we would assume that managers, fishers and other stakeholders – when confronted with questions about institutional reform – will come up with only marginal revisions of prevailing arrangements. By way of illustration we could point to the fact that in spite of the obvious and widely recognised shortcomings of the Norwegian quota system, there is little enthusiasm among stakeholders for fundamental change. When academics and NGOs, for example, suggest more radical reforms, say, in line with the Dutch, the British, and the Alaskan models, they are quickly rejected as being out of touch with reality. This observation begs for further scrutiny: What do various stakeholders hold as realistic and utopian in fisheries management reform? We should not only assume that stakeholder groups differ on this issue, but that there is considerable cross-national variation among users. In other words, what Norwegian fisher's may find impossible could be a daily experience and a fact of life for fishers in Holland or Britain.

Research Themes

A) Institutional History and Reform

As argued, institutions must always work within in some social and cultural context. They originate from a social process in which the past informs both present and future choice. We should therefore try to hypothesise the possible impacts of the socio-cultural environment on institutional performance. It is very likely that some institutions fail because they do not fit well with their environments. For instance, the failure of co-operatives in fisheries is often explained by their inability to adjust to the institutional forms that exist at the community level or in the wider society (Jentoft 1986). The difficulties of exporting management models from one country to another also indicate the need for adjustment to the particular situation that exists where the new model is introduced. For instance, although the Individual Transferable Quota-model is now spreading globally, we know of no country that has simply adopted the concept without adding or subtracting some elements to make it congruent with the local context (Hersoug 2002, Apostle, McCay and Mikalsen 2002). Here of course, decision-makers are restricted by their own cognitive limitations and learning capacities. The interpretation of new ideas is always contextual, as is the meaning attributed to models imported from 'abroad'. Thus, we believe that we need to focus, not only on management institutions as such, but also on the actors who create and sustain them, on how they perceive their own resources, capacities and agendas, and on the question of how they learn from experience and from the general discourse on fisheries and fisheries management that goes on 'out there'. They may well put more trust in what they know from personal experience than in what they learn from global experts – social scientists included.

Research Questions

- *History*: is there a history of local and/or regional involvement? Given that management – at any level – requires co-operation, we should try to find out if there are any traditions for collaboration at the local and regional level that may contribute to a smooth transition to more formalised structures and rules.
- *Institutional environment*: we should pay attention to the already existing ‘second order’ institutions into which fisheries management systems are ‘nested’. What pressure do these institutions put on management systems, what degrees of freedom for fisheries specific solutions do they allow for? To what extent can we identify some nation specific styles in the particular design of fisheries management? Are actual management designs in fisheries predominantly ad hoc and problem driven – for instance a response to crisis?
- *Alternatives*: when key stakeholders reflect on the current affairs in fisheries and call for change, what alternative management approaches do they point to? How do they perceive the shortcomings of existing institutions and which outcomes of institutional reform do they foresee, and which roadblocks do they anticipate? This would allow us to ‘measure’ the extent of agreement among stakeholder groups regarding problem definitions and solutions, and to what extent certain alternatives are ruled out and why.
- *Learning*: how do stakeholders ‘summarise’ the main lessons that can be learnt from experiences of previous and current management systems? Have expectations been fulfilled? What particular management measures have proved ineffective or counterproductive? Learning also occurs at meta-level: What do stakeholder say regarding management as an exercise? What conditions, internal and external to the fishery, do they identify as the key to management success or failure? What expectations are realistic?
- *Innovation*: where do ideas come from? Who are promoting new and original concepts? To what extent are management measures adopted from other industries and from abroad? Can we identify true entrepreneurship in fisheries management? If so, who are the innovators? Do they work with government, with industry, with NGOs – and at what level? What obstacles exist to the implementation of bold initiatives?

B) The Rationale of Management Systems

Assuming that the devolution of management responsibilities requires institutional change and innovation, three themes or issues must be addressed: First, we should examine current institutional set-ups with an emphasis on the actual division of management responsibilities. Contemporary structures (and policies) reflect histories and contexts that may constrain or facilitate attempts at reform, and a realistic assessment of the possibilities for change must account for the (unique) traditions of the case under scrutiny. Second, we need to identify the crucial preconditions and dimensions of institutional change in fisheries management. Third, we should trace and describe some ‘classic’ examples of devolved fisheries management, and examine the relevance of these as models for future regimes within, for instance, the framework of the European Union Common Fisheries Policy.

Pondering the prospects of institutional change, one should examine the rationale of existing structures. Why is fisheries management organised the way it is? Taking the Norwegian management system as an example, its most basic feature is that it combines centralised control and selective consultation – with a ‘corporatist’ body, the Management Council, at the core of management proceedings. If we were conducting a comprehensive study of this particular management system we would ask: Why this particular form or format? This is a question that could be put to stakeholders – in order to map their views on the roots of current arrangements, and as a first take on the prospects for institutional change.

Research Questions

- *Regulatory traditions:* a system of ‘centralised consultation’ in fisheries management may have been a foregone conclusion – given the Norwegian style of policy-making: compromise and conflict resolution through corporatist arrangements based on an intricate network of committees and councils – all of which are a part of a long standing tradition of functional representation in Norwegian politics (Apostle et. al. 1998). Could it be that the centralised structure of the system owes more to political traditions and a general approach to regulatory politics than to the particular sector or policy problem involved? Searching for appropriate institutions, government may have looked no further than towards other, but similar sectors or activities. This may well have been the case in other countries as well.
- *The public interest:* fish stocks are commonly defined as a public resource and a national ‘property’, and one could argue that management is better left to institutions that are expected to govern in the public interest. According to Arthur Schlesinger Jr. ‘local government is characteristically the government of the locally powerful’. If, so, devolving responsibility to regional or local institutions may privilege special interest groups and the ‘locally powerful’ – and undermine the role of science in fisheries management (McHugh 1972: 152). Does it, then, appear ‘natural’ and reasonable to stakeholders to vest the authority to manage the fisheries in the hands of national government? Does the centralised structure follow from the assumption – held by dominant stakeholders – that a national, common pool resource is best managed by institutions whose jurisdiction and authority transcends special interests as well as regional and local boundaries?
- *Straddling stocks:* the fact that most fisheries and fish stocks straddle local and regional borders may be a good reason for centralised decision-making. Has centralisation been considered the only feasible strategy given the fact that fisheries management is about managing ‘migratory’ actors, activities and resources? If so, this may explain why consultation – as a means to legitimacy and compliance – has been a question of conferring with industry rather than with regional agencies or local-level associations (Mikalsen 1998).
- *Expertise and accountability:* management institutions and practises do confine, in some cases severely, the independence and autonomy of fishers. The formal legislation underpinning management measures and policies gives considerable discretionary powers to those agencies and officials that are assigned management tasks. Two questions follow, both pertinent to the choice of management structures: Is it a common perception among key stakeholders that since the

exercise of discretion requires legal expertise, the authority to manage should be vested in central government agencies where such expertise is 'on tap' as it were? Is it also conceived that since, in a democracy, public officials should be accountable to their political 'masters' and the public, administrative discretion needs to be checked, and that – in fisheries management – this is best achieved through standard procedures of political oversight and control where Parliament and the Ministry of Fisheries are key actors?

- *Scarcity*: fisheries management is very much about the allocation of scarce goods (e.g. licenses and quotas) among individuals claiming – often rightly so – the same rights and needs. Scarcity, in other words, implies 'cruel' choices whose legitimacy may be strengthened if traditional civil service norms of impartiality, adherence to formal rules and consistent decision-making are observed. Does the propensity to centralise, and the unwillingness to delegate, stem from perceptions – among politicians, managers and representatives of the fishing industry – that the chances of these norms being observed will increase if management decision-making is located at the very top of the fisheries bureaucracy? Are regional and local institutions perceived as lacking the political authority and administrative capacity to intervene effectively in these new areas of conflict and dispute? Is the centralisation of management responsibilities, then, a response to the zero-sum games often created by management measures and policies?
- *Shared stocks*: one does well to remember that important stocks are often shared among several countries. For example, more than eighty per cent of Norwegian fisheries are directed at stocks shared, and thus managed in common, with other partners – notably Russia and the EU. Is the centralisation of management then, considered a necessity given the fact that fisheries management is a question of international negotiations, which tend to be the exclusive domain of central government? Again, this is an issue that could also be raised for other countries.

C) Preconditions and Prospects of Devolved Management

Even though there may, indeed, be rational explanations and arguments for the centralisation of decision-making, these do not necessarily preclude a devolvement of responsibilities and power. To begin with, management decisions will – more often than not – have a direct impact at the local and regional level. Assuming that centralised arrangements are biased towards a standardisation of policy across territory, decisions will tend to ignore interests and problems stemming from the distinctive characteristics of communities and regions. One likely consequence of this is that management decisions – based as they are on standardised and centrally administered rules – do not adequately reflect the differences among coastal communities in fleet structure and harvesting strategies. Management decisions will also have unintended consequences to which central decision-makers may be oblivious, but that certainly are felt locally. Norwegian examples that come to mind are the effects of the 'maximum quota scheme' on the economic viability of fisher-farmers, and the effects of licensing policies on the geographical distribution of the purse seine fleet.

Furthermore, fisheries management entails decisions that vary widely in kind and scope – from the setting of Total Allowable Catch (TAC) and the allocation of

this among different users to more ‘technical’ decisions on gear restrictions, closed areas and fishing periods. Fisheries management then, requires the acquisition and application of various types of knowledge and information – on stocks and harvesting technology as well as on fishers and local communities. The organisation of management decision-making is largely a question of how this can be achieved. The need for varied – and locally generated – information may, in itself, be an argument for reconsidering the present system of hierarchical governance and selective consultation.

Research Questions

- *Stocks*: devolving management responsibilities may be more feasible – and make more sense – in some fisheries than in others, due to characteristics of the fish stocks: What stocks are being harvested and how are these fisheries managed at present? Are we looking at migratory or ‘stationary’ stocks? Is the existence of ‘local’ stocks perceived as a precondition for devolved management?
- *Institutional infrastructure*: is there an organisational base on which to build? Management requires that local and regional interests, needs and demands be identified and articulated, which again requires a minimum of local or regional organisation. Besides, the existence of institutions that – on fairly short notice – can take over management responsibilities may increase the prospects of devolvement.
- *Basic principles*: is there agreement on the basic principles of resource management, for instance as to whether there should be open access to local and regional commons? Disagreement on fundamentals increases the likelihood of conflict and reduces the prospects of reaching decisions that can be effectively enforced.
- *Government policy*: what, if any, is the official, that is government position on the issue of management reform? Is there any understanding at all among government officials for the need and rationale for devolvement of management responsibilities? In most polities, the scope and content of local and regional government are defined by the state. This, presumably, also holds for the fisheries. Devolving management responsibilities may require formal legislation or, at least, a decision by the relevant ministry.
- *Stakeholder attitudes*: is there general agreement, say, within the fishing industry that devolvement is a good thing? In order to succeed, attempts at devolving management responsibilities must have the support of key stakeholders, and mapping their attitudes may tell us whether devolvement is politically feasible.
- *The power of vested interests*: how will dominant and powerful stakeholders react to attempts at devolvement? To what extent – and how – can powerful stakeholders veto reforms? Management reform invariably means a ‘disruption’ of existent power relationships, and it should come as no surprise that key stakeholders – anticipating a lesser role in management decision-making – may go against proposals for reform, or even try to stifle public debates by seeking to control the fisheries management agenda (cf. Bachrach and Baratz (1970) on the ‘politics of non-decision making’).

D) Key Issues in Institutional Design

Translating ideas, principles, and proposals for devolved management into concrete institutions and workable procedures raise a set of questions that are ‘practical’ and ‘political’ rather than ‘scientific’. The actual design of new management structures involves decisions on a range of issues where research – at its best – would make stakeholders capable of making more informed choices. Acting as advisor to Machiavelli’s Prince is a role unfamiliar to most social scientists. In social science, description and explanation tend to take precedence over prescription. However, since the input of social scientists is increasingly being called for, and since we may have something to contribute, we should have *something* to say on matters more practical and political; matters that are bound to come up in any attempt at building new management institutions – or reforming existing ones. Obviously, our advice would be much improved – and also appreciated – if we were able to demonstrate how the design issues listed above have been addressed in concrete management settings, and trace the consequences of particular choices and solutions. In other words we have an obligation not only to be critical but also constructive (Jentoft 1998).

Research Questions

- *The locus of decision-making*: at what level should which management decisions be made? Are new institutions to be established at the community, municipal or regional level? Should devolvement be ‘autonomous’ or ‘coordinated’ – to use the terms coined by Fung and Wright. On this point solutions will probably depend on the type of stocks to be managed, and on whether there already is an institutional infrastructure in place that can be utilised for management purposes.
- *Power and jurisdiction*: what should be the functions and power of devolved institutions? Management responsibility must imply the power to make binding decisions within a specified domain – not just an advisory role. Should the jurisdiction of ‘local’ arrangements span the whole range of management issues – from allocation of quotas to decisions on gear, fishing periods and areas?
- *Representation*: who – what groups and interests – should be represented in management decision-making? There are many who could claim an interest – or a stake – in fisheries management, and how the group of stakeholders is defined or delineated has implications for participation (cf. Mikalsen and Jentoft 2001, Mikalsen 1998). In a situation where fisheries management is rapidly becoming part of the environmental agenda, the stakeholder issue is bound to become more salient and affect the design of management institutions and practices.
- *Influence*: should the impact of various stakeholders be ‘weighted’ so that some groups or interests are given more votes than others? One could, for example, argue that those who stand to lose the most if particular stocks are decimated – because they have no quota in other fisheries – should have greater influence than those who can easily ‘diversify’.
- *Enforcement*: how can rules and regulations be effectively enforced within the framework of devolved regimes? Management – at any level – will not work unless violations are detected and sanctioned. Must enforcement necessarily be a responsibility of an external agent, or can user-organization also be mobilised?
- *Appeal procedures*: should there be ways of appealing management decisions?

If so, to whom? Illegal or 'unreasonable' decisions should not be left standing without a critical evaluation by a third party. One problem though, is that while provisions for appeals may strengthen the legitimacy of management institutions and decisions, frequent use of these provisions may undermine the power and authority of local institutions.

Research Method

We would certainly not exclude other research designs but it is our experience that questions such as those listed above are well suited for the case study method (cf. Apostle *et al.* 1998, Jentoft and McCay, 1995). For instance, as we did in the comparative study of the fisheries crisis in Canada and Norway, we selected fisheries that are fairly similar with respect to resources and technology, and then compared the effects of management institutions that are different. Our data were for the most part drawn from intensive interviews with key bureaucrats, stakeholders and decision-makers at national, regional and local levels. Admittedly, country case studies can be a demanding research design to employ, particularly on a larger scale, but it is no doubt possible.

Such case studies should be explanatory: they should answer both *why* and *how* questions. They should also be explorative: They should be instrumental in generating new research questions and hypotheses, and they should also be descriptive: They should tell a story, be a good read, and present the actors' point of view on the events leading to institutional reform, as well as giving the reader clues as to the nature of the interaction among the agents involved, how they deliberate and compete for positions and power. They should also depict institutional mechanisms that guide and shape the involved actors' behaviour and worldviews. Following Ostrom's idea of 'nested institutions', case studies should emphasise the structures within which management systems are embedded. They should not only investigate formal structures, but also look for the subtle cultural conditions underpinning those institutions (cf. Dryzek 1996); in other words those things the actors involved tend to take for granted because they are part of moral fabric of the whole society and only implicitly part of the fisheries management design as such. Case studies should also look for what Bonnie McCay (1998) calls 'constitutional moments', or points in time where legal doctrine and the interpretations of situations are articulated in ways that preserve them for future use.

Case studies are often, undeservedly so, criticised for lacking the rigor necessary to be called a scientific method, mostly due to their predominantly qualitative and narrative approach and the claim that their findings cannot be generalised. First of all, there is nothing inherently sloppy in the case-study method, even though it is true that in many instances case-study research may deserve such a label. As to generalisation, it is often precisely because the case is unique that it is interesting from a research point of view. As Yin (1989) points out, case studies are 'generalisable to theoretical positions'. They can be used to develop theories, for instance pertaining to fisheries management devolution. Much would be gained if multiple case studies were designed to be comparative. By selecting cases for comparison, one can keep some variables constant while studying the effect of varying others. Case studies are

more useful for theory development than for theory verification. Discoveries made in one case study can be pursued qualitatively or quantitatively, in a new case study or in a survey. Case study findings may thus be added, compared and synthesised into a fairly comprehensive general theory of fisheries management devolution. For this, social research still has a long way to go. A good case study speaks to one or several of the issues discussed in brief above. A case study is neither pure description nor simple story telling without focus and message. It is an obligation of the researcher to be both empirically thorough and theoretically relevant. The ideal case study is both theoretically informed and theoretically informative. As researchers we should attempt to make a point, present a general argument, and try to draw a lesson from our own findings as well as those of others. Only when our research addresses a general analytic theme will it be of interest from a comparative perspective.

Epilogue

The reason why many of us find fisheries management devolvement theoretically interesting is because it pertains to issues and concepts with a long history within our disciplines, such as democracy, representation, legitimacy, compliance and power. The authors of this paper have found inspiration in political theory and have sought to bring some of its concepts and concerns into the fisheries management debate. Our most recent work (Jentoft, Mikalsen and Hernes 2002), for example, is on the issue of representation in fisheries management and on the question of what roles that may be assigned to stakeholders who represent, or speak for, a larger constituency. As we see it, one does well to remember that the concepts of representation and democracy have been at the core of social and political theory for a long time. Rousseau, Hobbes, Burke, Madison, and Schumpeter – to mention but a few – all had relevant and interesting things to say on this subject. They were concerned with the question of what constitutes a representative government: When is a government truly representative of its people? We can easily replace government with fisheries management and ask: what does it take to make fisheries management systems genuinely representative of user groups and other stakeholders? The question is no doubt an important one. It is very useful to know how social and political theorists have struggled with the answer.

Following Barney Glaser and Anselm Strauss (1967) we should distinguish between ‘substantive’ and a ‘formal’ theory. The latter is at a higher, more abstract, level than the former. For example, governance is, theoretically, at a higher, more general level than the issue of fisheries management devolution. Theories of organisational learning are more general than theories of learning within fisheries management institutions. Substantive theory is developed with a particular empirical area, such as fisheries management, in mind, while formal theory pertains to a more general, conceptual area, such as participatory democracy, power sharing, and institutional change. As social scientists specialising in fisheries research, we should be able to draw from and switch between both levels of theory. Only then can case studies on fisheries management reform be integrated and made truly comparative. And only then shall we be able to generate new theories – both substantive and formal – that are of interest to people outside our own ‘camp’.

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