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# **Governance, territoriality and local production systems in Norwegian fisheries**

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## **ABSTRACT**

This paper focuses upon the informal and institutional governance structures which are embedded within local production systems in Norwegian fisheries. Important issues concern the regional distribution of fish catches which results from the tendency in some regional production systems to use large fishing vessels and the negative consequences for peripheral regions and inshore fisheries. The influence of powerful central production systems is considered in terms of territorial dominance over fishing grounds.

## **THE SIGNIFICANCE OF CULTURE**

Fishing communities in many of the world's coastal regions often display well established fishing cultures. Most production activities which rely upon fisheries resources are, in fact, related to and influenced by traditions and value systems. Important elements of fishing competence and know-how are often developed through close contact with the material resources, rather than being learnt through formal education. Culture, therefore, represents an important concept and principle in the management of fisheries resources. It follows that the elaboration of management systems must take into consideration those cultural influences which permeate the fishing community and its participants. As fishing culture is located in communities on the coastal strip of fishing nations, it is identifiable as a spatial phenomenon (Lindkvist 1996).

In recent decades, it has been the case in Norway that some fishing communities have stood out as being more successful than others. This has been particularly true for more centrally located towns which have emerged as important fishing communities. These differ significantly from smaller, more peripheral coastal communities, in that they are less dependent on fishing for their economic activity and culture. In general, this situation seems to be symptomatic of modernisation processes which are influencing the spatial organisation

of the fishery system in terms of both the pattern of fishing communities and the nature of fishing culture.

This paper discusses institutional governance within the fishing industry and the effects of socio-cultural change in leading Norwegian fishing communities. It is argued that notions of dependency and culture should be included in the current discourse on fisheries governance among fisheries economists and social scientists. Attention is given to spatial phenomena and the influence exerted by large, central fishing communities upon decision making processes in fisheries and upon the sustainability of fisheries and culture in more peripheral, fisheries dependent communities. A theoretical context for this discussion is provided by the new contextual economic geography (Martin 1994, Knox & Agnew 1997, Storper 1997). The paper concludes by discussing the notion of territoriality, a spatial component within the fisheries governance model, and the role exerted by institutions and actors in influencing access to fishing grounds.

## **INSTITUTIONAL ECONOMIC GEOGRAPHY**

Economic geography was until the middle of the 1980s engaged in considering the location and dynamics of industrial activities and with the processes leading to unbalanced regional development. Location analysis of fish processing activities was partly characterised by a form of economic essentialism. It was assumed, for example, that industrial location and trajectories of economic development were decided according to universal and rational laws, as acknowledged by several neo-classical, Keynesian and Marxist economists (Martin 1994). Weber's (1929) classical least-cost theory is an example of rational decisions determining company locations. From such a perspective, fish processing plants would be considered to locate close to the fishing grounds. This was often the case for primary processing and where substantial parts of the fish were not included in the finished product. Within such an approach, other choices of location would have been considered unfavourable and even irrational. However, regional economic development is, in practice, often complex and influenced by many different and contradictory tendencies. For this reason, references to one or other influential locational factor are often unsatisfactory. Instead attention is required to globalisation processes, financial, technological and scientific factors, markets, the organisation of production and processes of negotiation, all of which are seen to play a role in producing "*a complex set of interrelated tendencies*" (Dicken, Peck & Tickell 1997, 161). These tendencies interact with each other in unforeseen ways and result in economic, demographic and socio-cultural effects with different consequences from region to region. For this reason, contemporary economic geographers are interested in geographical context and its contingent ability to explain regional economic activities based on local technical, social and institutional conditions (Martin 1994, Storper 1997). Furthermore, the abilities of actors or places to make use of opportunities in a global world are important in understanding unbalanced regional development and the location of companies (Amin & Thrift 1997). Often, rational choices of location may be disregarded for seemingly illogical reasons. Actors who identify with or have their cultural roots in one place may, for example, display location arguments not found in rational analysis. There may also be disputes within a community over the local priorities that should be allowed to determine decisions and these may influence choices relating to location or the use of production factors. Similarly, actors in one locality may also be able to use their influence to force the actions of those in another, in directions supporting their own regional strategies. At the same time, a region's ability to restructure

through innovation and learning processes may also result from collaboration among actors and agglomeration economies, initiated or performed with the help of institutional networks. As a whole, the social contexts of actors may therefore differ between regions or regional institutions, as a result of local culture and established institutions (Martin 1994). In this way, institutional economic geography discusses the influence of contextual forms of social organisation on economic actors.

The conception of governance by geographers focuses upon institutional or regional steering systems and is expressed as "...a routine, continuous and fairly intensive monitoring, regulation and administration of a wide range of activities in society..." (Painter 1995, 39). This interpretation underlines the informal aspects of governance, in contrast to legally organised administration and networks. Principal actors are at the forefront of this governance model and they act in accordance with contextual values, norms and capabilities. Culture is this seen to form an important element in regional governance.

The discussion of institutional and regional governance is influenced by the transition from an official and state dominated economy to a market economy (Dicken 1998). At the same time, the more global integration between actors and regions is based upon new ways of organising production and the flows of goods and services. Of particular importance are the financial services and new technologies of communication which enable actors and regions to collaborate on a basis of individual or company demands and according to requirements in markets. These integration processes may also affect the formal types of governance. Strange (1996) has shown, for example, how relations of power in the international economy can be transferred from smaller to mightier nations. The influence of state regulations is reduced for the benefit of markets and private actors. Thus, the principles of market governance and participatory governance seem to receive increased attention through the globalisation process.

Geographical regions function as environments for actors who display market power and governance in their economic actions. The influences of markets and actors are therefore increasingly contextual. In this respect Dicken (op.cit. 461) claims that "*all markets are socially embedded and constituted; all have to operate within socially defined rules*". Hirst and Thompson (1996) have also explained how institutional governance may be recognised at several different geographical levels. Thus, while the International monetary fund is a global institution, the European Union represents a regional constellation. Within a country governance institutions like, for example, the Norwegian *Råfisklaget*, have the power to make decisions on sales of fresh fish within certain regions. Local communities represent the smallest geographical level of institutional governance.

Already by the mid-1980s geographers had discussed those specific conditions of place which contribute to the development of local governance institutions (Sayer 1985, Harvey 1985, Massey 1985). Cox (1998) sums up this debate by asking what particular attributes in different places contribute to power for some places, while others remain even more powerless than before. Sayer (1985) claimed that power and interest were influenced spatially, but that the influence of place was less traceable. Others, however, disagree. According to Massey (1985) spatial conditions are constitutive of social relations connected to power and governance institutions. Harvey (1985) also contends that the social relations which decide social class are place-specific.

The inclusion of place and region in the question of institutional governance is related to the inclusion of social relations and culture as important elements of the governance discourse in fisheries. One important aspect of participatory governance, for example, is the knowledge local participants have of local fisheries and fishing grounds (Jentoft 1989). According to the debate, fisheries dependent regions are better able to manage the resources in a sustainable way and therefore secure the maintenance of communities. *"In such situations the local community can be expected to do everything it can to manage the local resource base sustainably in order not to destroy the very basis of its long-term survival"* (van der Schans 1999, 114).

## **FISHERIES DEPENDENCY AS A BASIS FOR MANAGEMENT**

The level of dependency on fisheries influences the culture of communities in a fundamental way. Norms and values are influenced by employment in fisheries and form the core of the social and cultural steering systems found within fishing communities. Fish gives work, identification and power. Thus, a continuous supply of fish is necessary to secure a sustainable fishing culture. Dependency is therefore shown through the material structures (boats, buildings, other constructions), actors and activities in communities. It is socially embedded within each local community and spatial in nature. Production structures, traditions and values within each community are determined and influenced by local possibilities and material and place-specific human resources (Cox 1998).

As fishing places depart from each other in terms of structures and activities, these places also differ in the intensity of their dependency. Some places only have limited opportunities for alternative employment to fishing while in others, and especially the larger places or towns, fishing activities represent only one out of many local industrial activities. These places are not dependent on fisheries (in fact, in this paper they are referred to as "independent"). The lack of alternative employment outside the fishing sector is therefore seen as an important operational criteria for dependency. Indeed, the main competitors for fisheries dependent localities are often those fishing communities or regions which may have significant alternative employment resources to draw upon. While, the fishing industry remains important for production in such regions, alternative industries offer much higher overall levels of employment and they are less reliant on fishing compared to the dependent communities.

Fisheries dependency, therefore, occurs at the interface between the exploitation of fish resources and the cultural values that the industry supports. The industrial activities connected to the utilisation of fish resources are expressed through material structures (fishing boats and processing plants both at sea and on land) as well as through cultural factors relating to competence and know-how in fishing. These factors further determine the practical decisions on which production activities are based. Two additional aspects need also to be highlighted. Firstly, dependency as a relational condition, arising from demands of necessity given that alternative opportunities are few and, secondly, the determining characteristics of those economic activities using local resources. Habermas (1984, 1987) argues that objectives of action may be achieved either through goal-oriented-action or through communicative action. Goal rational action assumes that reasonable tools are available for goal achievements. Communicative actions are developed through establishing communicative processes which use reason as a basis for debates and aim at communal interpretations of situations. However, the complexity of society is indisputable and this makes a shared understanding of a situation

or action particularly difficult. For this reason, Habermas accepts that the material reproduction of society may be decided "behind the back" of those involved.

Price mechanisms and bureaucratic procedural rules may contribute positively to the co-ordination of actions. Such systemic mechanisms for co-ordination must nevertheless take into account the "life-world" that people experience through their culture, knowledge and economic activities, (Simonsen 1990, 27), and which forms the basis to their actions. However, social and cultural reproduction alone cannot legitimate co-ordination of social actions. Co-ordination mechanisms can only be defended using rational considerations: "*In the final analysis it must be possible to back them up by good reasons*" (van der Schans 1999, 107).

The organisation of fishing activities has been predominately characterised by specialisation, centralisation and capitalisation. While some towns and regions have gained increased influence in the development of fisheries, many fisheries dependent regions have not been able to benefit from the fish resources to the extent as would be expected by their level of dependency. Habermas (1984, 1987), in fact, sees it as legitimate that different interest groups should attempt to gain support for their situation, based on their values and norms. All groups have a legitimate claim to work for their interests. It appears, however, that through communicative actions within the existing governance framework, actors from fisheries dependent regions have been unable to argue rationally, defend their interests or attain acceptance for their main arguments.

## **GOVERNANCE PRINCIPLES**

The regulation of fisheries is aimed at resolving problems related to the exploitation of fish species (a biological problem), the excessive capitalisation of the industry (an economic problem) and the consequences for other marine animals when fish resources are exploited (an environmental problem) (van Vliet & Dubbink 1999). In Norway, official policy has also partially focused on the negative consequences of development in the fishing industry for fishing dependent regions (a dependency problem). Attention has been given to the workers and fishermen affected by declining catches and landings and to those fishing regions and communities facing decline in the industry and reductions in recruitment and population. The dependency problem, however, appears to have been given insufficient attention and has been underestimated, and this has prevented efficient adaptations within the industry. Instead, the problems of overcapitalisation and resource deficiency have dominated the Norwegian debate, based on questions of efficiency and rational use of resources, rather than focusing on issues of justice and dependency (Jakobsen 1997).

However, it has often been the case that important decisions in world fisheries have been legitimised by the dependency issue. For example, decisions taken by the International Court of Justice at the Hague in 1951 (involving Norwegian victory over the UK over fishing territories), Icelandic success in repelling foreign trawlers from their waters in the late 70s, and the expansion of economic zones in the same decade, were wholly or partly legitimised by the question of dependency of coastal nations on fish resources and on the argument that dependency meant coastal states were better qualified to conserve resources. Decisions of international courts and customs have often accepted that *dependency gives rights*. In similar terms, the Norwegian government has stated that the pattern of population must be defended

(St.meld. 1982-83, 1997-98) and that the fishing industry should contribute to developing working places and communities along the Norwegian coast. However, as long as communities remain undiversified, with few alternative industries to fishing, fisheries remains a question of survival for many fisheries dependent communities. These communities require a management system which addresses both biological and cultural sustainability. Here, the need is to improve access to resources in order to help communities to sustain their culture, fishing capabilities and employment.

It is often stated that the conditions of management and resources must be a basis for action (cf. Kooiman et al., 1999). However, different interests often oppose one another and there is no easy way to arrive at consensus over the means of improving management or the allocation of resources between groups or regions. In general, fisheries resources are managed according to three governance principles, *hierarchical governance*, *market governance* and *participatory governance* (Kooiman et al., 1999). The discourse concerning these principles of institutional governance embraces the influence of different types of actors over the distribution of resources. Dependency, as a formal principle of governance, is not in itself an accepted principle for determining how to manage regulations. Instead, dependency is relevant in terms of the political objectives of regulation.

All modes of governance consider the role played by the state in fisheries regulations. For example, the hierarchical principle presupposes that governance is implemented through the use of legitimate laws, and that governments "... *intervene on behalf of the public interest when the outcomes of unregulated social interactions is not in accordance with the perceived public interest*" (van Vliet & Dubbink 1999, 11).

The market principle regards resource problems as resulting from market failure. Like hierarchical governance, it contends that problems in fisheries management can be traced back to governments. The proponents of market regulation consider that governmental actions are unable to improve imperfect market adaptation. Instead, expensive regulative activities are required to control unwilling actors. It is therefore argued that motives of self-interest among fishermen would be better adapted for the achievement of policy aims. In accordance with this principle, fishery economists suggest that market governance is the most appropriate way to manage fisheries through implementing systems of individual transferable quotas (ITQs) (Hannesson 1991, OECD 1993).

The principle of participatory governance suggests greater collaboration between participants at different levels of organisation. However, a prerequisite for a successful participation strategy is that the participants at all levels change their attitudes. "*Both the regulator and the regulated have to operate on the basis of greater mutual trust*" (van Vliet & Dubbink 1999, 24). Another important condition is that actions among participants are based upon "communicative rationality" and "social control".

These governance principles have in common a demand for involvement among all actors. Hierarchical steering is only legitimate if members in democracies participate in processes of decision making. Market governance presupposes that the most efficient solutions among market actors also affect the content of official aims. Participatory governance intends to incorporate actors who are directly affected by decisions. All governance systems can potentially incorporate efficiency, justice and a legitimate division of power in society. This paper argues, however, that the division of power does not function as intended in practice. To a large extent, political science and sociological research have shown that the most

powerful, educated and wealthy often have the best opportunities to influence official aims, even in well functioning democracies. The same also holds true for individual regions, which face intensive competition from one another. It appears that governance systems are unable to resolve two important problems, the management of fisheries in a sustainable manner and the means of securing the participation of those actors dependent upon fisheries. Habermas' demand for communicative rationality is, in other words, difficult to satisfy if dependency is not fully accepted as a premise for management. Basing management upon claims of dependency might even be deemed to be irrational or inefficient, as it runs against the current tendency for fisheries management and co-ordination efforts to be based on arguments of efficiency and profit. As the present hierarchical governance of European fisheries is often characterised by confusion, arising from the division of responsibility among many institutional actors (van Vliet & Dubbink 1999), the situation is open for many players to exert influence. The management system is often geared to favouring those who have significant capital-based investments to protect.

## **NETWORKS AND LOCAL PRODUCTION SYSTEMS**

Institutional economic geography describes and analyses the regional effects of economic activities based on institutional and contextual forms of social organisation. The concepts of networks, region and local production system are particularly important to consider when discussing regional power from an institutional perspective. A *network* comprises patterns of stable and binding relationships between actors and where membership in the network is characterised by a sense of community and common purpose. Within networks individuals are "... engaged in reciprocal, preferential, mutually supportive actions" (Powell 1990, 303) and participants are dependent on resources controlled by other members of the network. Networks may also be related to geographical areas and *regions* where systems of industrial interaction or territorial production are established.

A local or territorial production system broadly comprises the production equipment (fishing fleets, processing facilities and ancillary services), the technological culture and the particular competence or skills necessary for utilising these assets. Thus, the knowledge of how local and regional labour markets function, how specific technologies operate and how markets relate to local products are all integral features of the system. Together, these physical and intellectual assets give the territorial production system its specific regional characteristics (Crevoisier & Maillat, 1991; Conti, 1993; Grotz & Braun, 1993).

Economic institutions or their representatives represent important components of local production systems (Crevoisier and Maillat 1991, Lindkvist 1994, 1997a). These representatives are typically referred to as protagonists or principal actors. They work according to the accepted cultures and meaning systems found in the geographical areas which contain the production system, and from a common basis of interpretation and understanding of events. They must also operate within a regional production environment, which includes elements of organisation, technical culture and competence and which may be influenced by imbalance in the geographical division of production. Within production systems it is crucial that knowledge of international fisheries, competition, new technology and markets for fish products are understood from a local, as well as from an external and global perspective.

An increasing geographical concentration of production in Norway is closely connected to the way fishermen and other actors organise themselves when competing for scarce resources. Figure 1 illustrates some of the processes at work in terms of contrasting local production systems. In traditional fishery dependent systems, for example, actors are flexibly organised, which allows them to cope with fluctuations in the availability of fish within the local fishing grounds. Both individuals and institutions are organised through a set of dependency relations, where actors perform their own specific tasks and conform to the basic values of the local community (Wadel, 1980; Jentoft & Wadel, 1984; Seierstad *et al.*, 1985). Mutual dependence demands that the community as a whole strongly supports these basic values. For this reason, actors in the traditional production systems are often sceptical towards radical changes which may appear to threaten the established fishing culture.

By contrast, modern production systems are typically located in towns and communities which are less dependent on fisheries and which are often more centrally placed. These are mostly characterised by offshore or deep sea fishing activities and larger processing plants. In these more modern, centrally located fishing communities, vessel owners, shipyards, consultancies, banks and, in some cases, research institutions are able to collaborate in the construction of larger, efficient fishing vessels. This enables them to exploit more distant fishing grounds and to break their traditional links with local fisheries. Indeed, modern factory trawlers, often processing their catches on board, may often gain access to fishing grounds exploited by inshore fishermen using small boats and less sophisticated gears.



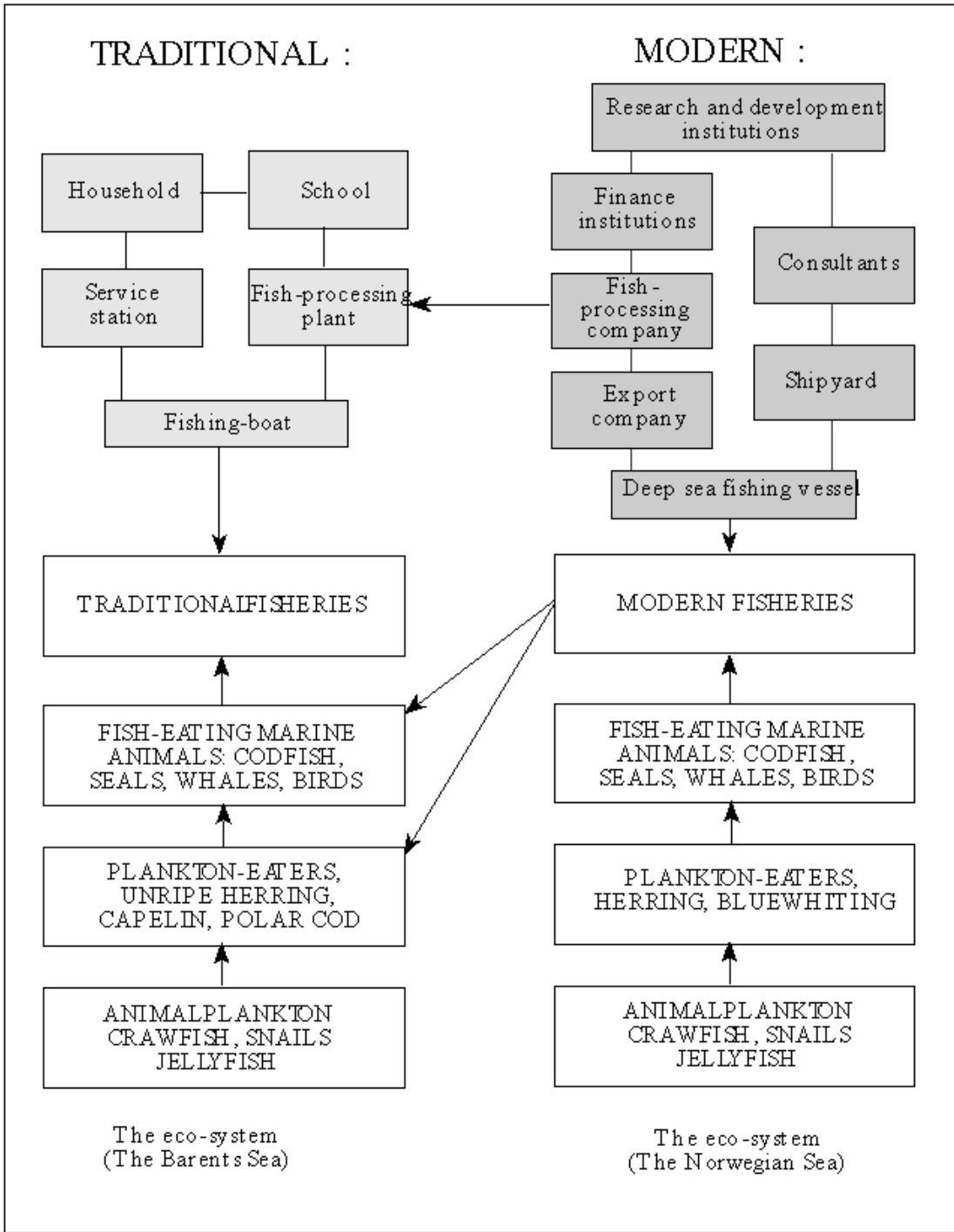


Figure 1: Changes in traditional and modern fishing industries (Lindkvist 1999)

The region of Ålesund, which represents the main area for fishing within Møre and Romsdal county on the western coast of Norway, has in recent decades become an important centre of Norwegian fisheries and is a typical example of the modern production environment. The region has dynamic and varied industries controlled by an expanding business environment. Here, leaders of companies interact through informal social networks which serve to secure the competitive position of the locality in relation to other Norwegian, as well as international fishing regions. They are also experienced in adapting to competition, coping with official

regulations and seeking funding opportunities. The local fishery system is further characterised by a number of research and educational institutions as well as expert vessel consultancy firms and specialised shipyards. In addition, the region benefits from hosting one of Norway's largest banks which channels substantial flows of capital to the Norwegian and the international fishery systems. Together this agglomeration of financial, shipbuilding and research capabilities produces particularly favourable conditions for fishing companies and the fish processing industry of the region and notably in the development and funding of modern fishing trawlers able to compete successfully in both national and international waters (Mariussen 1990, Lindkvist 1993, 1994, 1997). This combination of locational advantages has in recent decades allowed Ålesund to exert increasing influence over a greater share of Norwegian fisheries.

## **EXPANDING TERRITORIAL PRODUCTION SYSTEMS IN ACTION**

Global fish landings have increased fivefold since 1950. This development has mainly been due to the increased use of modern technology in fisheries. Large deep-sea fishing trawlers, with advanced machinery and modern production equipment, have been able to fish on distant fishing grounds and store the catches for weeks on end without detriment to fish quality. The increase in world fisheries production has, however, also been accompanied by a series of conflicts between deep-sea going trawlers and inshore fishermen. Large modern trawlers have a number of advantages over inshore vessels; they are often able to arrive first at fishing grounds; they can land larger quantities of fish and they are able to move from one fishing ground to another. The situation is such that coastal fishermen in Norway, for example, have often faced increasing difficulties from large trawlers (Lindkvist 1994, 1996a,b).

The production systems of modern capital intensive fisheries, based in central fishery "independent" communities, are also seen to depart from traditional forms of organisation, as well as from meeting the demands for sustainable fisheries exploitation. In a European context, these systems are geographically concentrated within a narrow range of fishing nations (FAO Fisheries Database 2000), including Russia (ranked no 4 in the world in 1997 measured by catches of marine species, metric tons), Norway (ranked 8), Iceland (11) and Spain (16) and particular regions (notably Murmansk, Ålesund, Reykjavik and Vigo). Ålesund, for example, accounts for about 80 per cent of Norwegian factory trawlers (Lindkvist 1994, Sanden Nilsen 1994). Local production systems in these regions commonly display internal socio-cultural, technological and economic factors which may produce particular competitive advantages. In some cases, for example, actors are able to make use of externally initiated technology. Furthermore, they are able to restructure their economic activities when necessary and organise themselves politically, as well as being able to adapt to international resource situations and market demands. The regions emerge as the winners in world fisheries and the holders of the greatest degree of influence over approaches to fisheries governance.

## **REGIONAL CONCENTRATION IN FISHING CAPACITY**

It is a fact in Norway that the level of fish landings, technological sophistication and quota holdings are closely connected to size of fishing vessel (Lindkvist 1996). In Norway, these

vessels are more spatially concentrated within certain regions (Figure 2), in Møre and Romsdal, including the Ålesund region (the cod fisheries), and Hordaland (the pelagic fisheries). Together these western counties have progressively increased their relative share of the Norwegian fleet over 30 m. Indeed, the development of the high value cod fisheries demonstrates well the importance of large fishing vessels in determining the volume of catches for different Norwegian fishing regions. Thus, cod landings by vessels from Møre and Romsdal have increased in terms of their share of Norwegian catches from 24 per cent in 1980 to 33 per cent in 1995. In contrast, the largest relative decrease is seen in Finnmark, which faced a reduction from 19 per cent to 15 percent over the same period (Data from Fiskeridirektoratet 1998).

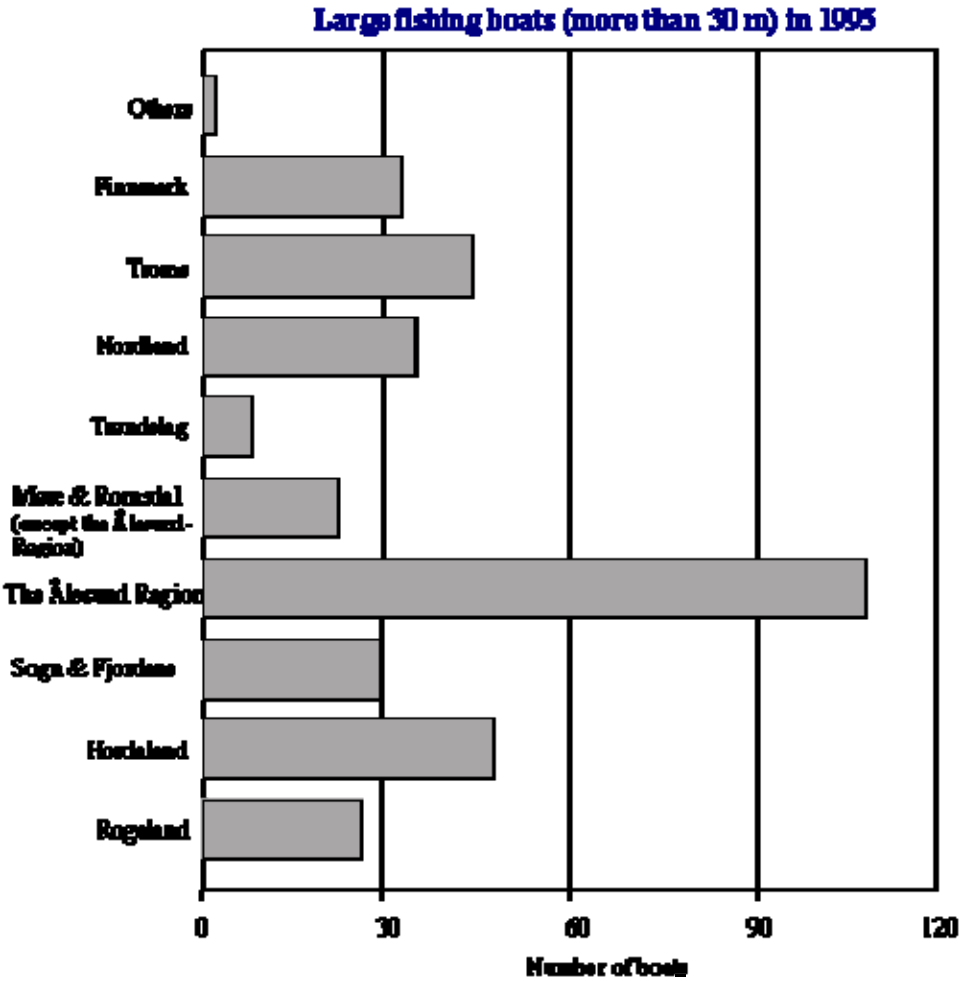


Figure 2: Geographical distribution of large Norwegian fishing boats of more than 30 metres

Table 1: Relative share of catches (volume) in Norwegian cod fisheries

	1980	1995

Møre and Romsdal	24%	33%
Finnmark	19%	15%
Rest of Norway	57%	52%
Catches in 1000 tons	560	707

Source: The fishery database and Fiskeridirektoratet

A similar regional concentration has also taken place in the herring, sprat, mackerel and capelin fisheries. Here, the county of Hordaland has dominated regional changes between 1980 and 1995 (Table 2).

Table 2: Relative share of catches (volume) in Norwegian pelagic fisheries

	1980	1995
Hordaland	26%	33%
Rest of Norway	74%	67%
Catches in 1000 tons	1703	707

Source: The fishery database and Fiskeridirektoratet

## **TERRITORIALITY**

The market principle of governance has not been fully adopted in Norwegian fisheries. The introduction of modern fishing vessels with improved fishing capabilities, supported by expansion into new fishing grounds, has provided sufficient gains in terms of efficiency to satisfy vested interests in the Norwegian fishery system. Furthermore, instead of opting for a system of individual transferable quotas (ITQs), Norway has evolved an informal system of transferable licences (ITLs) and a flourishing market in the buying and selling of vessels and quota licences. The main emphasis has been placed upon the introduction of improved vessels and upon funding of projects intended to strengthen the regional participation in the fisheries.

According to the definition of institutional and regional governance identified at the outset of this paper (Painter 1995) attention should be given to the control, monitoring and regulation of fishery-based activities in society. This paper has stressed the importance of the spatial aspects of governance in relation to local production systems and the activities of principal actors in leading fishing regions. As long as the leading actors in these geographical delimited

regions are able to introduce new types of efficient fishing vessels and collect more quotas through the purchase of vessels, they will continue to wield significant levels of control within the Norwegian fishery system. This has important distributional consequences in terms of regional development and conditions for participation in fisheries, and in the fulfilment of policy objectives.

It seems to be the case, therefore, that actors located in central fishing towns in Norway have increasingly exercised what geographers call (cf. Sack 1986) *territoriality* in terms of their domination of fishing activities and fishing grounds. Territorial power or governance is recognised in the way that actors from within or outside a region can affect, influence or control the actions or the admittance of other participants. Actors from fisheries "independent" communities appear to defend territoriality in several ways. One group of actors may secure their right to fish, in terms of increased quotas or larger fishing vessels, through communicative actions, for example by writing reports or through posing convincing arguments. More often, leading actors will use technology and capital to establish efficient production regimes, which serve to alter the conditions of production in their favour. This exercise of power is seen in the examples of efficient Norwegian fishing vessels which switched the location of their catches from coastal areas to the more distant fishing grounds around 1980 and which forced other coastal fishermen to follow the new patterns of production (Lindkvist 1994).

Territorial governance also resembles a centre-periphery relationship when powerful territorial elites are able to influence systems of both value and production in such a way that others must adjust their activities (Lindkvist 1996). The use of large fishing vessels in central towns is associated with, and defended according to, a particular cultural and normative perspective of technology. In contrast, the values which are embedded within coastal production systems in northern Norway, reject the use of modern, deep-sea based fishing technology. Actors from central regions are, in effect, free to expand their territories and functions without significant competition from the periphery. The result is a territorial governance regime established through the use of technology, capital and culture.

## **CONCLUDING REMARKS**

This paper has considered the effects of informal power relations upon fishing activities and the regional distribution of fish resources. This has involved positioning the concept of territorial or regional governance within the discourse of fisheries management. Mechanisms of informal governance are seen to be related to place-specific characteristics, for example an efficient production system, the presence of competent actors or the availability of necessary capital, and are considered to represent important factors influencing the development of European fisheries. Geography, therefore, clearly matters, and this calls for more concerted attention upon the issue of territoriality as a governance principle and the way large fishing municipalities influence fishing dependent communities.

## **Literature:**

Amin, A. and Thrift, N. 1997: Globalization, socio-economics, territoriality, pp 147-157. I Lee, R. and Wills J. (eds): *Geographies of Economies*. London: Arnold.

Conti, S. 1993: The network perspective in industrial geography: Towards a model. *Geografiska Annaler B*, 75:3, 115-130.

Cox, K.R. 1998: Globalization, Governance, and "the Difference that Space makes". Paper presented at the meeting of the Norwegian Geographical Association, Oslo, January 7-8, 1998.

Crevoisier, O & Maillat, D. 1991: Milieu, industrial organization and territorial production system: towards a new theory of spatial development. I Camagni, R. (red.): *Innovation networks: spatial perspectives.*, 13-34. London: Belhaven Press.

Dicken, P., Peck, J. & Tickell, A. 1997: Unpacking the Global. Fra Lee, R. & Wills, J. (eds.) 1997: *Geographies of Economies*. London: Arnold; 158-166

FAO 2000: FAOSTAT Fisheries Data, Fish Catches (Web.edition)

Grotz, R. & Braun, B. 1993: Networks, milieux and individual firm strategies: empirical evidence of an innovative SME environment. *Geografiska Annaler B*, 75:3, 149-162.

Habermas, J. 1984: *The theory of communicative action. Vol. 1* Boston: Beacon Press

Habermas, J. 1987: *The theory of communicative action. Vol. 2* Boston: Beacon Press

Hannesson, R. 1991: En samfunnsøkonomisk lønnsom fiskerinæring. Struktur, gevinst, forvaltning. *Arbeidsnotat nr. 21/1991*. Bergen: SNF

Harvey, D.. 1985: *Urbanization of Capital*. Baltimore The John Hopkins University Press

Holm, P. 1994: *The Decline of Corporatist Order in Norwegian Fisheries*. Project report NFR 1301-500.139. Tromsø: Norges Fiskerihøgskole.

Jakobsen, S. 1998: Den politiske reguleringen av aktivitetene i det norske fiskerisystemet i etterkrigstiden – regulering for stabilitet eller konkurranse? *SNF-rapport 21/98*. Bergen: SNF

Jentoft, S. og Wadel, C. 1984: Lokale sysselsettingssystemer i fiskerinæringen. Fra Jentoft, S. og Wadel, C. 1984: *I samme båt*. Stavanger: Universitetsforlaget.

Lindkvist, K.B. 1994: *Regionale utviklingstrekk i norsk fiskerinæring*. (Regional development of the Norwegian fishing industry). Volume 1 & 2. Dr. polit. thesis. Bergen: University of Bergen.

Lindkvist, K.B. 1996a: Norwegian fisheries and the basis of regional development. *Norsk geogr. Tidsskr.* Vol. 50, 171-186. Oslo.

- Lindkvist, K.B. 1996b: The struggle for fishery resources. *Geojournal*, vol. 39 (2), 1996, pp. 195-202.
- Lindkvist, K.B. 1997: Næringsomstilling i perifere fiskerisamfunn. Hvordan møter lokale aktører utfordringene. (Economic restructuring of peripheral fishery communities. How are local actors meeting the challenges?) *SNF-Arbeidsnotat* 06, 1997, Stiftelsen for Samfunns- og Næringslivsforskning, Bergen
- Lindkvist, K.B. 1999: Dependent and independent fishing communities in Norway. In Symes, D. (ed.) 1999: *Fisheries Dependent Regions*. London: Fishing News Books, Blackwell Science
- Mariussen, Å. 1990: Nettverk i fiskeriregioner, en sammenligning mellom nord og sør. I *NIBR-notat* 1990:137 "Svolvær-seminaret 1990". Oslo: NIBR.
- Martin, R. 1994: Economic Theory and Human Geography. From Gregory, D., Martin, R. and Smith, G. 1994: *Human Geography. Society, Space and Social Science*. London: Macmillan.
- Massey, D. 1984: *Spatial Divisions of Labour - Social Structures and the Geography of Production*. London: Macmillan
- Massey, D. 1985: New Directions in Space. In Gregory, D. & Urry, J. (eds.): *Social Relations and Spatial Structures*. London: Macmillan
- OECD 1993: The use of individual quotas in fisheries management. *OECD documents*, 1993. Paris : Organisation for Economic Co-operation and Development.
- Painter, J. 1995: *Politics, Geography & "Political Geography. A Critical Perspective*. London: Arnold
- Powell, W.W. 1990: Neither Market nor Hierarchy: Network Forms of Organization. *Research in Organizational Behaviour*, Vol. 12, pp 295-336
- Sack, Robert D., 1983: Human Territoriality: A theory. *Annals of the Association of American geographers*, 73(1), s 55-74.
- Sayer, A. 1985: The Difference that Space Makes. In Gregory, D. & Urry, J. (eds.): *Social Relations and Spatial Structures*. London: Macmillan
- Schans van der, J.W. 1999: Governing Aquaculture: Dynamics and Diversity in Introducing Salmon Farming in Scotland. In Kooiman, J., van Vliet, M., Jentoft, S. 1999: *Creative Governance. Opportunities for fisheries in Europe*. Aldershot: Ashgate
- Seierstad, S., Sagdahl, B og Sanberg, A, 1985: *Kystsamfunn på kår. Nord-Norge som oljeprovins*. Tromsø: Universitetsforlaget.
- St. meld.* nr 93 (1982-83): Om retningslinjer for fiskeripolitikken. Oslo: Fiskeridepartementet.
- St. meld.* nr 51 (1997-1998): Perspektiver på utvikling av norsk fiskerinæring. Oslo: Fiskeridepartementet

Storper, M. 1997: *The Regional World. Territorial Development in a Global Economy*. New York: Guildford Press.

Vliet, van, M., Dubbink 1999: *Evaluating governance: State, Market and Participation Compared*. In Kooiman, J., van Vliet, M., Jentoft, S. 1999: *Creative Governance. Opportunities for fisheries in Europe*. Aldershot: Ashgate

Wadel, C. 1980: *Lokalsamfunn, hushold og bedrift: Noen aktuelle næringspolitiske koordineringsproblemer i kyst-Norge*. I Høst og Wadel (red) 1980: *Fiske og lokalsamfunn*. Trømsø: Universitetsforlaget.

Weber, A. 1929: *The Theory of the Location of Industries*. Chicago: University of Chicago