Who rules the waves?







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Governance and
New Institutional Arrangements in
Dutch Fisheries Management in the Context of
the European Common Fisheries Policy

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Preface

As top down government ruling was often to take the blame for all ails of fisheries management, it came as no surprise that over time a shift towards more participatory fisheries governance became strongly advocated in the quest for a new fisheries management set up. Changing the interaction and roles of the state, the industry and society in fisheries management, and in its wake a change in role of science underpinning fisheries policy development, became pivotal in a search for fisheries management more effective, efficient and equitable in obtaining its economic, ecological and public goals. Dutch fisheries management had over the years seen the introduction of a number of more participatory policy arrangements. The question that came to mind was how will the Dutch system evolve in the coming years and how can the Dutch lessons be of use to others?

My journey started with a car ride during which I discussed this issue with Tuur Mol. And before I knew, it had been arranged: I was going to write a thesis on fisheries governance supported and supervised by Professor Tuur Mol and supported by Martin Scholten, Director of Wageningen IMARES. I am grateful to both of them for enabling this journey.

I want to thank all those individuals that have crossed my path in the last decade and shared knowledge, vision and experience on fisheries and its management with me, be it in the Netherlands, Brussels or anywhere else in Europe, from fishers, processors, traders and fishers' organisation representatives to administrators, managers and policy makers. Without your input and willingness to discuss this topic the research would not have been possible.

I like to thank all colleagues at the LEI fisheries research group, IMARES and ENP for providing me over the years with challenges and support. I am still grateful to Wim van Densen for back in 1984 having enabled two economics students to learn about fishery science, and 20 years down the line be around as a much appreciated colleague. Thanks to Marieke Verweij who on all of those Tuesdays in Wageningen was a very stimulating room mate and made discussing 'fish' fun. And Judith van Leeuwen who put me on track in getting it all started; and although it was not a race it was nice to simultaneously aim for the finish line. Alyne Delaney I thank for many discussions and the final English push. And of course all of the Marine PhDs at ENP who form a thought-provoking group of individuals, not that easily convinced of any idea you may come up with.

A special word of thanks goes to my supervisor Jan van Tatenhove: to say it was motivating is not doing justice to the energy and fun we generated. Still a lot of new things on the horizon, so there is still a lot we can do together; but watch out where the Huskies go and don't you eat the yellow snow.

I like to thank my 'brother in arms' Martin Pastoors; as Martin referred, we have from way back been a multidisciplinary twosome, but I may add, when together, a very inspiring perpetual generator of ideas. Let the Centre of Marine Policy be the start of something special.

A casual conversation at the photo copier made Bettina Bock walk into my life. The bearable lightness of being; thanks for immense support.

Finally, I like to thank my two daughters, Kyne and Loukie who, engaged in their own path of exploring the world, have been an example and inspiration for me over the years. And also ensured that during the two years of writing this thesis I had the weekends off and put my mind to other nice things in life.

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List of Abbreviations

ACFA	Advisory Committee on Fisheries and Aquaculture of the European Commission
Blim	Limited Biomass reference point
Bpa	Precautionary Biomass reference point
CFCA	Community Fisheries Control Agency
CFP	EU Common Fisheries Policy
DGENV	EU Directorate General Environment
DGMARE	EU Directorate General Maritime Affairs
ECJ	Court of Justice of the European Communities
ENGO	Environmental Non Governmental Organisation
EP	European Parliament
EU	European Union
F	Fishing mortality
FIP	Fisheries Innovation Platform
Hp	Horse power
Hp-days	Engine capacity in Horse power times number of days deployed
ICES	International Council for the Exploration of the Seas
IQ	Individual Quota
ITQ	Individual Tradable Quota
MAGP	Multi Annual Guidance Programme
MP	Maritime Policy
MS	EU Member State
MSFD	Marine Strategy Framework Directive
NEAFC	North East Atlantic Fisheries Convention
NGO	Non Governmental Organisation
PO	Producer Organisation
RAC	Regional Advisory Council
SSB	Standing Stock Biomass
STECF	Scientific, Technical and Economic Committee for Fisheries of the European Commission
TAC	Total Allowable Catch

Chapter 1

Introduction:

Dutch fisheries, management and the EU context

Worldwide, fisheries are perceived to be in crisis as fish stocks have declined following a discrepancy between available fish stocks and the level of fishing effort deployed. The declining fish stocks lead governments to limit overall catches to a more sustainable level by setting up limitations on total landings, fishing effort and access, including vessel and gear restrictions, area closures and days-at-sea constraints. Catch limits are now widely introduced in the form of Total Allowable Catch (TAC). These limitations have led to an economically inefficient and overcapitalised fisheries, while pressure on the natural fish resource (van Hoof *et al.*, 2007b) continues. The resource is not utilised in an optimal way. In addition, fishermen will always operate within the limits, and incentives, of the fisheries management framework, hence optimise operations within the given boundaries. Management frameworks, in turn, tend to induce their own adverse effects, for example discards under a TAC/quota regime.

Fisheries management today focuses on the sustainable use of marine resources, with primary attention paid to fish stock conservation. As such, conservation of the marine environment centres on the management of human activities, both terrestrial and out at sea, that impact the environmental status of the marine ecosystem. Fisheries activities are perceived in this as the most significant pressure interacting with 'good environmental status' (GES) as for example described under the EU Marine Strategy Framework Directive (Commission of the European Communities, 2005b). If an analysis of the management of human activities in the marine environment, in particular fisheries, is called for, then the North Sea presents an ideal case study because from a global perspective the North Sea is one of the areas where human impact is highest (Halpern *et al.*, 2008).

For the North Sea, as well as for the European Union at large, national fisheries management is embedded in the wider EU Common Fisheries Policy (CFP). Established in 1983, the CFP provides a policy framework aiming at conservation of fish stocks together with a sustainable development of the fishing industry and a supply of fish produce to the consumers. In the current European debate towards the revision of the CFP in 2012 there seems to be a wide spread consensus that the CFP is not reaching its goals (Commission of the European Communities, 2008).

Following the reform of the CFP in 2002, fisheries management has been redefined in terms of scope (from fish stocks to the more encompassing ecosystem) and partisanship (in terms of increased participation via the creation of Regional Advisory Councils). Utilisation conflicts, negative externalities,

and environmental degradation have increased, and the need for a comprehensive approach to ocean use management has become readily apparent to EU-decision makers (Commission of the European Communities, 2007c). In addition, science based, government led top-down rule making has been attributed as causing a loss of legitimacy of fisheries policy as science was not able to deliver the solid basis for policy development, nor was government able to deliver required results (cf. van Tatenhove, 1999; Arts and van Tatenhove, 2004).

In fact, the perceived failure of marine management to deliver good environmental status and discussions on the legitimacy, accountability and lack of stakeholder participation in fisheries policy have been the main drivers of the EU fisheries governance debate. Governance of fisheries, that is the sum of the legal, social, economic and political arrangements used to manage fisheries, has international, national and local dimensions. It includes legally binding rules, such as national legislation and international treaties, and it relies on customary social arrangements and the institutionalisation of (economic) activities. Effective governance of those engaged in capture fisheries is vital for the optimal and long-term use of marine fisheries resources. Recent European Union reforms have included the development of new regional fora designed to enable stakeholders and scientists to deliberate together about the nature of the fisheries crisis and its possible solutions (Griffin, 2009).

The fisheries crisis is often attributed to the nature of open access of marine natural resources; a resource held in common, bound for overexploitation. Hardin defined this dilemma as the 'tragedy of the commons' (Hardin, 1968) arguing that only state control could limit this drive for overexploitation (Berkes *et al.*, 1989) by regulating access to the common property resource. While there is agreement that free and open access to fishing is not an option, there is still an ongoing debate about the most effective and equitable way of authorising access and allocating resources. The existence of overcapacity (a miss match between fishing capacity and available fishing opportunities) adds considerably to the pressure on governments and fishing authorities to agree to, for example, larger quotas and a higher number of permits than otherwise tolerable for responsible and sustainable fishing. Restrictions to open access is an essential, though not always sufficient, condition for effective fisheries management. Rights, and institutions that surround these rights, need to create a set of incentives that encourage limiting fishing effort to what is consistent with the long-term optimal, sustainable productivity of the resource. But even where these types of rights exist, their enforcement is necessary.

The future challenges in fisheries management and the effectiveness of fisheries governance rests on whether such institutions - that is, an agreed sets of rules - can be established and the practical arrangements to monitor and enforce rule compliance as well as coordinate and manage conflicting claims for access to resources and markets, can be made. The capacity to form effective management entities with authority over the whole sea area normally occupied by a fish stock is crucial to achieving effective governance of that particular stock or fishery.

The set of rules agreed between states to govern the usage of global or e.g. EU fisheries resources also establishes a framework within which, at a national level, fisheries management arrangements are made. National fisheries management is itself a nested institution, or set of rules, nested in a supranational or global system of governance. Where management is devolved to a local level, the institutions developed to manage the fisheries are nested, in turn, within national fisheries management arrangements.

Recent trends in EU fisheries policy show that after some 25 years of fisheries management under the Common Fisheries Policy fishing capacity and fishing opportunities do not always tally and a great number of issues still needs to be addressed (cf. Commission of the European Communities, 2001, 2009). One method of seeking improvement is through greater involvement of stakeholders in the process of developing and implementing the CFP. This includes the establishment of fora such as regional advisory committees in order to involve stakeholders more effectively in policy-making as well as the decentralisation of certain management responsibilities in order to address local conditions and emergency situations. In this way the European community also responds to the increasing demand of the fishing industry and other stakeholders for greater transparency and openness in relation to fisheries policy making in Europe. But still, the crisis in fisheries is perceived to be imminent.

This thesis sets out to analyse the crisis in fisheries management from a governance perspective. The main question we will ask ourselves is how the perceived crisis in fisheries management emerged and how it is dealt with by the introduction of new management initiatives and institutional arrangements such as regional fora and decentralisation. I will study how the governance of fisheries has been changing over the years and how this relates to wider changes in governance practices as for example in environmental policy. Through this analysis I seek to develop insight into how the effectiveness of fishery governance could be improved.

Within Europe, the Dutch fisheries management system has, since the 1990s, been regarded as a best-practice model by the EU (Hentrich and Salomon, 2006). In this timeframe there have been three significant innovations made to the system which illustrate new ways of problem solving in the Netherlands: the implementation of tradable property rights (ITQs: Individual Transferable Quota), the introduction of co-management, and the introduction of covenants between state, industry and Environmental NGOs (ENGOs). I therefore decided to use the Dutch fisheries and fisheries management as a primary case-study for analysing how the governance of fisheries has changed both since the introduction of the EU Common Fisheries Policy and through the development of new institutional arrangements. This chapter continues with a description of the characteristics of Dutch marine fisheries. Sections 3 and 4 are devoted to describing the Dutch and wider EU context of fisheries management. In section 5, I will analyse to what extent there is an imminent crisis in fisheries, either an ecological, economic or societal crisis, and how this relates to failing management of the natural resource. In section 6, I will introduce the theoretical perspective used for analysing processes of fisheries governance. Finally, in section 7, I will detail the research questions that will be addressed in this thesis followed by the methodology used. The final section outlines the structure of the thesis.

1.1 The Dutch marine fisheries sector

Commercial sea fisheries in the Netherlands comprises two main fleets: the trawler fleet and the cutter fleet. Figures 1, 2 and 3 below, representing the composition of the Dutch marine fishing fleet in terms of number of vessels, engine capacity and turnover for the year 2007, illustrate that the cutter fleet is the largest segment in terms of number of vessels, capacity and turnover.

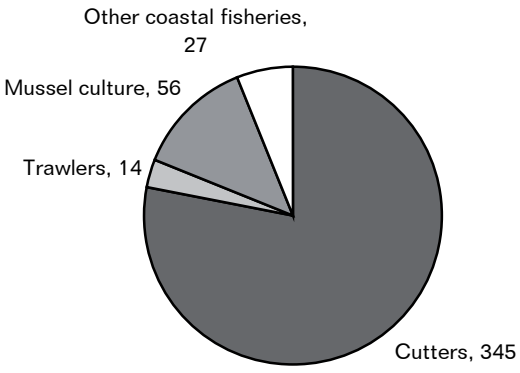

Figure 1: Composition Dutch marine fishing fleet in number of vessels, 2007 (LEI Statistics, Series)

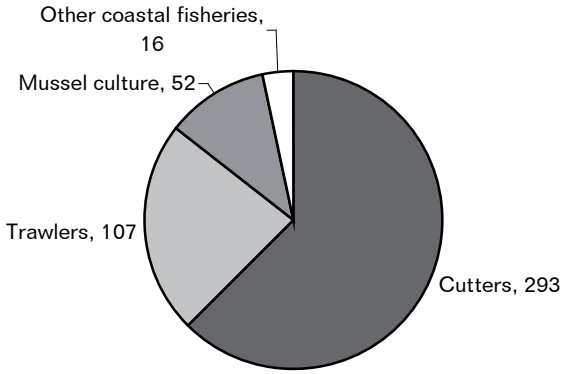

Figure 2: Composition Dutch marine Fishing fleet in engine capacity ('000 Hp), 2007 (LEI Statistics, Series)

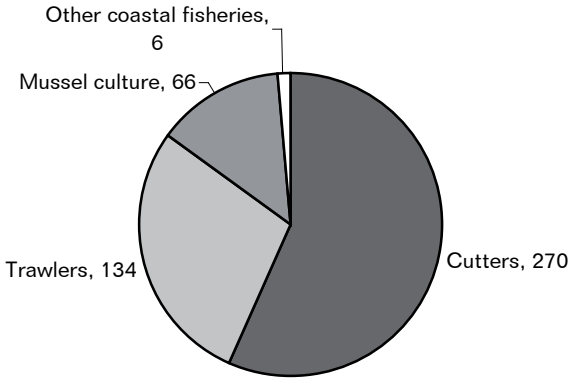

Figure 3: Turnover in million Euros of Dutch fishing fleet per segment in 2007 (LEI Statistics, Series)

The North Sea cutter fleet mainly trawls for flat fish and demersals such as plaice, sole, cod, whiting and haddock. The coastal fisheries consist of more regional-oriented fisheries for shrimp and mussels. The cutter fishery mainly consists of family owned businesses; most crew members operate under a '*maatschap*' or partnership contract, rather than as wage labourers, which makes them partners in a joint fisheries venture. The main markets for the cutter sector are Germany, France, Spain and Italy.

The Dutch pelagic freezer trawler sector consists of four ship-owning companies operating worldwide from the North East Atlantic, North Sea, Celtic sea area to the waters of Western Africa and South America. The main targeted

species are herring, mackerel, horse mackerel, blue whiting and sardinella which are all sorted, frozen and packed on board. The ship-owning companies are integrated businesses which encompass catching, processing and trade of fish. The main markets for the pelagic sector lay outside Europe in Western Africa and the far and near East.

Over the years, the Dutch fisheries sector has become much more internationally oriented. Dutch shipping companies are owners or co-owners of German, French and British trawler fleets. Dutch ship-owners are also very active in countries outside the European Union. The Dutch cutter sector has business interests in many EU member states such as through the operation of reflagged ships and joint ownership.

The Netherlands is an important distributor of fish. The main outlet is the European market. Exports mainly consist of processed and deep-frozen fish. A quarter of all fish exported is landed by the Dutch national fleet; the remaining three-quarters are imports. Eighty per cent of all fish is sold abroad which makes the Netherlands one of Europe's few net exporters, countries whose fish exports exceed their imports. Hence, the Netherlands can be much better characterised as a fish trading nation than as a fishing nation.

The fish auction is the essential trade step between fish landings and the trade. The Netherlands has eleven fish auctions where fresh fish is traded weekly. Auctions play a role in sorting and quality assessment.

Fish is often filleted, breaded, conserved or processed in one or another way before it is offered to the consumer. The Netherlands has approximately 400 companies involved in such processing and further trading. The processing of flat fish, crustaceans and shellfish accounts for the major part of turnover. The processing of herring and other pelagic species account for 15 per cent of turnover of the processing industry.

According to Salz *et al.*(2008) the size of the Dutch cutter sector has steadily declined in recent years. In Figure 4 the development of the Dutch marine fishing fleet in terms of total number of vessels, total engine capacity and nominal and real turnover for the period 1995 – 2007 is presented. The figure clearly depicts this downward trend. As for the composition of the fleet (Figure 5), the main reduction of vessels has been realised in the cutter segment. The other sectors remain relatively stable over time. This development has its roots in both biological and economic conditions, the main causes being deteriorating fish stocks and rising production costs.

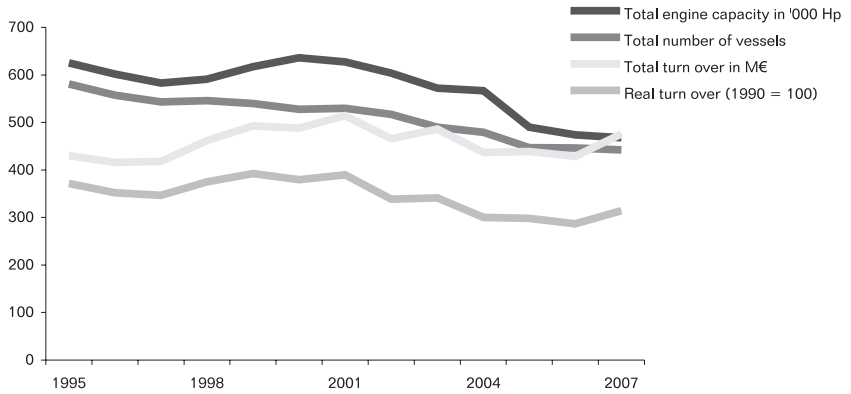

Figure 4: Development of Dutch marine fishing fleet in number of vessels, engine capacity, and total turn over in nominal and real (1990 = 100) terms over period 1995 - 2007 (LEI Statistics, Series)

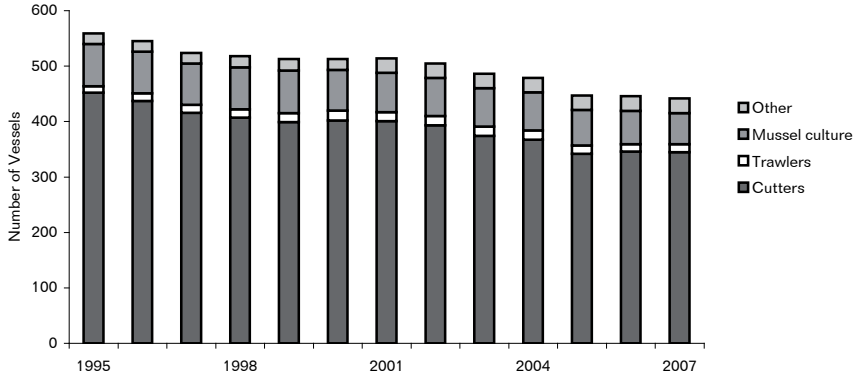

Figure 5: Development of Dutch fleet per segment, 1995 – 2007 (LEI Statistics, Series)

This development has a negative impact on the fishery communities, and the fishery value chain. The Netherlands has 23 municipalities in which marine fishery plays a role. In some municipalities the cutter fleet is an important employer. However, in most of the other municipalities the contribution of the cutter fleet and the total local employment is less than 0.5%. Since 1995, employment in the supply sector has declined from 1,000 to 700 jobs, due to a smaller fleet and a decline in intermediary supplies. As a result of the lower fish landings and productivity growth, the number of jobs at the auctions has

declined. Fish processing and trade provides employment at a reasonably constant level of 6,000 - 6,500 jobs (i.e. 5,200 FTEs in 2006), whereby a slight rise may have occurred over the years. The total number of jobs in activities associated with the fishery sector has remained fairly constant at around 8,500 (Salz *et al.*, 2008).

1.2 Organisations involved in Dutch fisheries management

Since 2009 the main government institution for fisheries management in the Netherlands is the *Directie Agroketens en Visserij* of the *Ministerie van Landbouw, Natuur en Voedselkwaliteit* (Directorate Agro-production chains and Fisheries of the Ministry of Agriculture, Nature and Food Quality). Under the auspices of the Minister, the Directorate is responsible for the development and implementation of fisheries management schemes. The *Algemene Inspectie Dienst* (General Inspection Service) is the agency of the ministry responsible for monitoring and enforcement of the fisheries legislation. Within the Ministry of Agriculture, Nature and Food Quality the *Directie Natuur, Landschap en Platteland* (the Directorate for Nature, Landscape and Rural Areas) has an influence on fisheries especially via the management objective for water quality through implementation of the European Water Directive.

The Ministries of *Verkeer en Waterstaat* (The Ministry of Transport, Public Works and Water Management) and *Volkshuisvesting, Ruimtelijke Ordening en Milieu* (Ministry of Housing, Spatial Planning, and the Environment) also have a direct, and increasing, bearing on fisheries management. Especially with EU environmental directives such as the Bird and Habitat Directives, Natura 2000, the Water Directive and most recently the Marine Strategy Framework Directive, the primacy of implementation of the directives lies much more with the latter than with the Directorate responsible for fisheries.

The Dutch Fish Product Board is a '*productschap*' or Commodity Board; under Dutch law a *productschap* is a public entity bringing together enterprises around a common raw material, in this particular case: fish. All sectors in the industry are represented in the Product Board: the catching sector, aquaculture, processing and trade on wholesale level, retail trade and trade unions. A *productschap* has an advisory function towards the government. In the past, the Fish Product Board has even played a role in the implementation and sanctioning of fisheries management such as in, for example, quota management.

Fisheries Producer Organisations (POs) were established in line with EU regulations as early as 1971, originally with a role in the common organisation of the market for fishery products. Until 1986 only two POs were established in the Netherlands. During the late 1980s and especially in the early 1990s with the establishment of the Dutch co-management system (see chapter 3) more POs came into existence. Since 1993, about 95 per cent of the Dutch cutter fleet are members of a PO (van Hoof *et al.*, 2005).

Next to producer organisations the sector is also organised in two interest organisations: the *Nederlandse Vissersbond* (the Dutch Fishers Union) and the *Federatie van Vissersverenigingen* (the Federation of Fishers Associations). *VinVis* is a network established in 2000 which brings together women who share a concern about fisheries and the fishing communities. *Sportvisserij Nederland* (Sport Fisheries the Netherlands) is the organisation that represents the interests of the sports fisheries. These organisations are linked to international umbrella organisations such as Europêche, the North Sea Women´s Network, and the European Anglers' Alliance and are all members of the North Sea RAC (see below).

Next to the direct organisation at the level of the fishers there is an array of organisations involved in the processing and trade such as the *Visfederatie* (the Dutch Fish Federation, organisation of fish wholesalers), the *Vereniging van Importeurs van Visproducten* (The Dutch Association of Fish Importers) and the *Verbond van de Nederlandse Visdetailhandel* (the organisation of fish specialty shops). Also the fish auctions are in contact with one another and some partake in the European Association of Fishing Ports and Auctions.

A large array of Non-Governmental Organisations have a bearing on fisheries management, ranging from international operating organisations such as WWF, Greenpeace and the World Conservation Union (IUCN), local organisations embedded in an international network such as for example the *Stichting de Noordzee* (North Sea Foundation) embedded in the Seas at Risk network, and local organisations such as for example *Vogelbescherming Nederland* (Bird Protection), the *Waddenvereniging* (Wadden Sea Society), *Stichting Wad* (Wad Foundation) and *Natuurmomnumenten* (Nature Monuments). Next to these Environmental NGOs (ENGOs) there are also other NGOs such as for example the *Consumentenbond* (Consumers organisation), the Marine Stewardship Council and super markets that play a role in the way fisheries and fisheries management is perceived and is evolving.

1.3 The EU institutional context of fisheries management

The Common Fisheries Policy was first established in 1983 (Council of the European Communities, 1983). Conservation of living aquatic resources is one of only five policy areas that is under the exclusive competence of the EU. Although the EU has exclusive competence, it is up to the member states to implement and operationalise the policy.

Since 1983 the policy has undergone revisions every ten years; in 1992/93 (Council of the European Communities, 1992) as well as in 2002 (Council of the European Communities, 2002) and the next major reform is scheduled for 2012. Over the years the primary focus of the CFP has, alongside the general development in fisheries management worldwide, increasingly shifted from ensuring efficient fishing fleets and well functioning markets for fish products to that of conserving the resource base, with which the sector ultimately stands and falls (Gezelius *et al.*, 2008).

The formulation, adoption and implementation of EU fisheries legislation is a process involving a multiplicity of actors and institutions operating on various levels in the political system. The standard procedure of EU fisheries policy-making starts with a unit within the Directorate General for Maritime Affairs and Fisheries (DGMARE), the relevant directorate-general within the Commission of the European Communities (Commission), drafting the legislation. In this process DGMARE can incorporate, depending on the nature of the proposal, input from stakeholders and/or scientific bodies. The draft proposal is forwarded to the European Parliament. Once adopted according to the internal rules of the Parliament, the resolution - usually in the form of suggestions for amendments - is forwarded to the Council of the European Union. The Council receives the proposal from the Commission at the same time as the Parliament, and it is technically the Council that consults the Parliament. The Council is, however, not obliged to implement the Parliament's amendments. The ministers in the Agriculture and Fisheries Council discuss the proposal and vote on it. Once adopted (possibly in a revised form) the proposal is passed on to the member states for implementation. Should disputes on the interpretation of EU fisheries legislation arise, it is ultimately up to the Court of Justice of the European Communities to make a ruling (Hegland and Raakjær, 2008).

The Scientific, Technical and Economic Committee for Fisheries (STECF) is the independent committee, appointed by the Commission, that advises the

Commission / DGMARE on matters where scientific knowledge is vital. The committee consists primarily of scientists with a background in marine biology or ecology, fisheries science, nature conservation, population dynamics, statistics, fishing gear technology, aquaculture, or the economics of fisheries and aquaculture (Commission of the European Communities, 2005a). STECF forms internal sub-groups, which can include experts from outside the STECF (Commission of the European Communities, 2003).

The Advisory Committee on Fisheries and Aquaculture (ACFA) is a consultative body set up in 1971 by the Commission to provide stakeholder input from European-level stakeholder groups and umbrella-organisations on fisheries matters. The mandate of the committee is to provide opinions and resolutions on fisheries issues and proposals emanating from the Commission. ACFA was reorganised in 1999 and 2004 and is currently organised with four working groups under it. The plenary committee consists of representatives of private ship-owners, cooperative ship-owners, employed fishermen, producer organisations, stock-breeders of fish, mollusc/shellfish stock-breeders, processors, traders, consumers, environmentalists, and development organisations. ACFA is numerically dominated by representatives of the fishing industry (Hegland, 2006).

The recent establishment of the independent Community Fisheries Control Agency (CFCA) is an integral element in the progressive implementation of the 2002 reform of the fisheries policy framework. The objective of the CFCA is to strengthen the uniformity and effectiveness of enforcement across the EU territory. This should be done by assisting with the organisation of operational cooperation and coordination of monitoring and enforcement activities among member states (Council of the European Communities, 2005). The powers of the CFCA are highly limited and it is specifically stated in its legal foundation that the agency does not have the power to impose additional obligations on the member states besides those outlined in the basic regulation of the CFP. Neither does the agency have any powers to sanction member states (Council of the European Communities, 2005).

The seven Regional Advisory Councils (RACs), set up under the CFP following the 2002 reform, are stakeholder fora consisting predominantly of representatives of the fisheries sector, defined as "the catching sub-sector, including ship owners, small-scale fishermen, employed fishermen, producer organisations as well as, amongst others, processors, traders and other market organisations and women's networks" (Council of the European Communities, 2004: art. 1), which according to the legal foundation should have

2/3 of the seats. The remaining 1/3 is to be filled with representatives of other interest groups, including "amongst others, environmental organisations and groups, aquaculture producers, consumers and recreational or sport fishermen" (Council of the European Communities, 2004: art. 1). The RACs are primarily meant to function as advisory bodies towards the Commission but also the member states can draw on the RACs for resolutions. The RACs are also mandated to issue resolutions on their own initiative (Council of the European Communities, 2002). The Commission (or the member state authorities) is not obliged to follow a recommendation from a RAC and, therefore, in practice the advantage of following a recommendation from the RAC will always be weighed against other preferences of those receiving the recommendation. The RACs are either organised along specific sea areas, roughly corresponding to large marine ecosystems / regional seas (five RACs), or specific types of fisheries (two RACs) (Council of the European Communities, 2004).

1.4 A fisheries in crisis?

A common opinion about fisheries is that it is in crisis because of ecological damage and low stocks, low economic returns and a failing management system. Here I will address this view of a fishery in crisis by briefly looking at the ecological stock aspects, economic returns, the public appreciation of fisheries and the managerial achievements. Again, I focus on the Dutch situation.

1.4.1 Ecological crisis?

The most important stocks for Dutch fisheries are the flat fish species plaice (*Pleuronectes platessa*; schol) and sole (*Solea solea*; tong) , the dermersals cod (*Gadus morhua*; kabeljauw), saithe (*Pollachius virens*; koolvis) and haddock (*Melanogrammus aeglefinus*; schelvis) and the pelagics herring (*Clupea harengus*; haring), mackerel (*Scomber scombrus*; makreel), horse mackerel (*Trachurus trachurus*; horsmakreel) and whiting (*Merlangius merlangus*; wijting). Based on LEI data (Taal *et al.*, 2009) presented in Figure 6 below, we can see that in terms of total national quota in European waters the pelagic species form the bulk of Dutch catches. In terms of quantity, the flatfish species and demersal species form a smaller proportion.

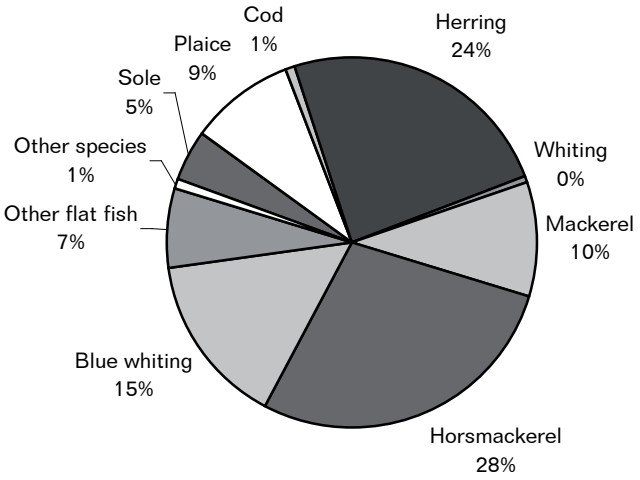

Figure 6: Dutch quota holdings of species for European waters 2008 data from (Taal et al., 2009)

Based on ICES data (International Council for the Exploration of the Sea, 2009) below, the development of the Spawning Stock (SSB; the part of the fish stock that is reproductive) and the Fishing mortality (F, proportion of a fish stock that is being caught in a fisheries) for several North Sea species relevant for Dutch fisheries is presented. Also in the graph the Precautionary Biomass (B_{pa}) reference level is represented. The dynamics of exploited fish populations can be highly uncertain and the precautionary approach to fisheries management addresses such uncertainties (Richards and Maguire, 1998). The status of fish stocks can be expressed relative to precautionary reference points. In Figure 7 below (based on Lassen, 2007) we see the relation between the status of a certain stock's biomass (B) related to the precautionary reference point (B_{pa}) and the limited reference points(B_{lim}). A similar relation, not depicted here, is defined for the relating fishing mortality: the precautionary reference point (F_{pa}) and the limited reference points(F_{lim}).

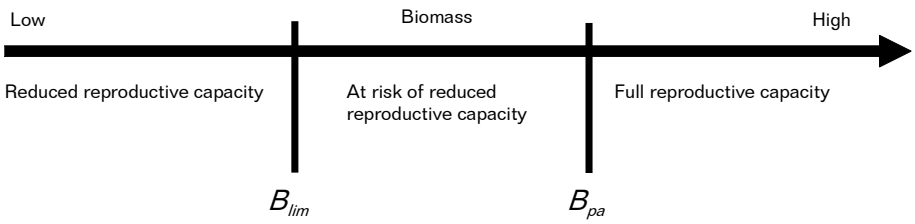

Figure 7: Biomass reference points (after Lassen, 2007)

In fact, when a stock's spawning biomass is above B_{pa} one could say that the stock is in relative good shape. A stock below B_{lim} is in dire straits. As such B_{pa} is the threshold value for the development of management measures. Fisheries management measures aim for a reduction of the fishing mortality in order to preserve the stock's spawning biomass. Usually this is translated into a TAC or Total Allowable Catch for a given period, defining the part of a stock that is allowed to be removed.

In Figures 8 – 12 the development of the SSB and F for sole, plaice, haddock, saithe and cod in the North Sea is presented. Also the B_{pa} reference level is presented in the graph.

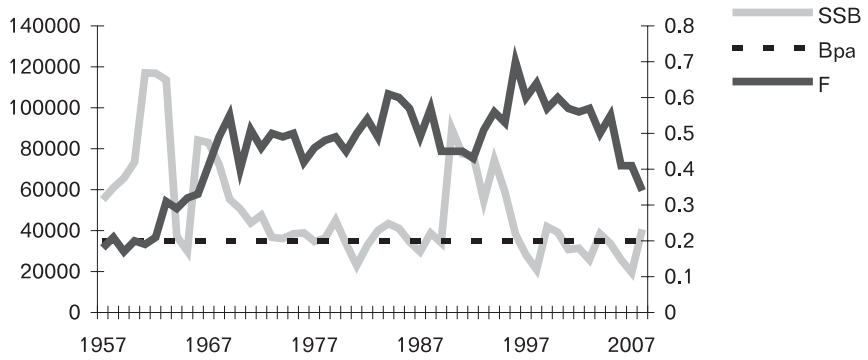

Figure 8: North Sea sole SSB and F, 1957 – 2008 (International Council for the Exploration of the Sea, 2009)

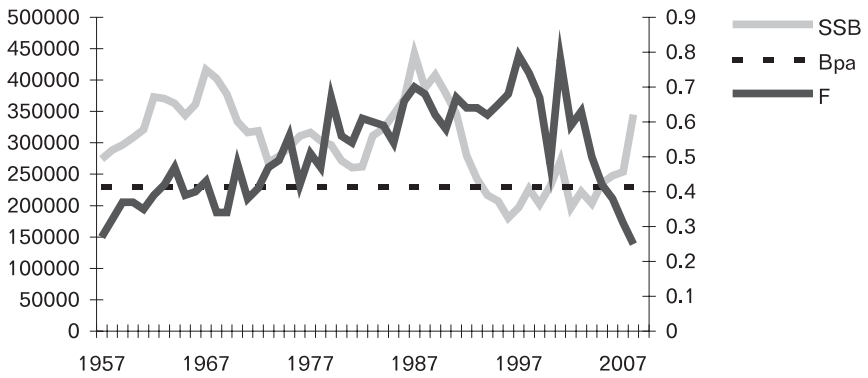

Figure 9: North Sea plaice SSB and F, 1957 – 2008 (International Council for the Exploration of the Sea, 2009)

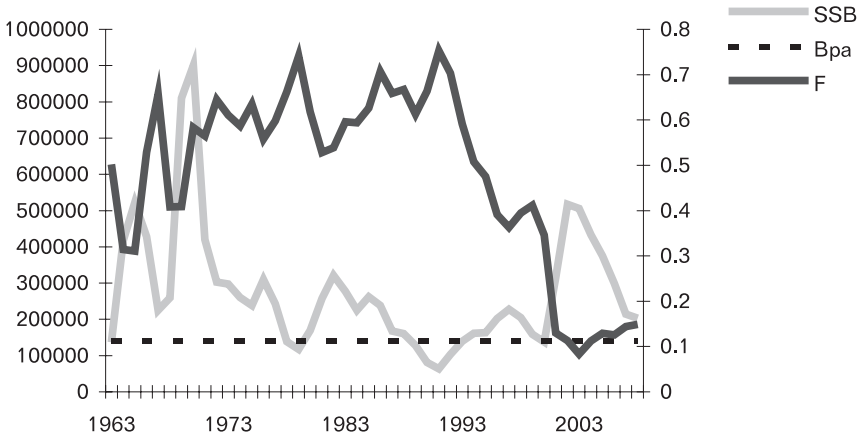

Figure 10: North Sea haddock SSB and F, 1963 – 2008 (International Council for the Exploration of the Sea, 2009)

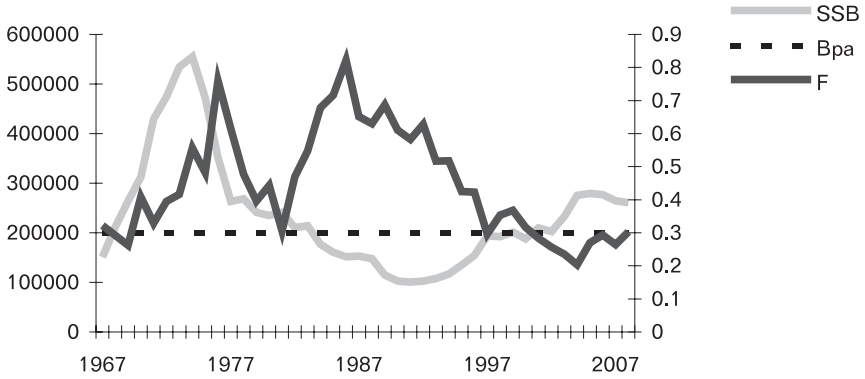

Figure 11: North Sea saithe SSB and F, 1967 – 2008 (International Council for the Exploration of the Sea, 2009)

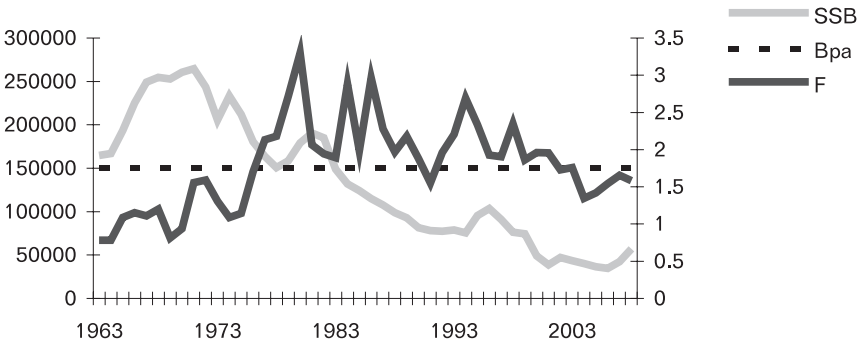

Figure 12: North Sea cod SSB and F, 1963 – 2008 (International Council for the Exploration of the Sea, 2009)

At face value the graphs above depict a number of issues. Currently, (figures for 2008), with the exception of cod, all species have a Spawning Stock Biomass above B_{pa} and hence could be considered to be in relative good health. Also, we can see that for some stocks there is a clear development apparent in the biomass (for example the downward trend of cod since the 1960s) for others, such as sole, there is no clear trend. Also, noting fishing mortality for all stocks presented here, we can observe an overall downward trend from the 1990s. This trend, of course, tallies with the earlier presented downward trend in the Dutch fishing fleet in terms of number of vessels, fishing capacity and turnover.

Interpreting these graphical presentations should be done with caution. For example estimates of stocks become more vulnerable to statistical uncertainty for the more recent years. Also a current upward trend may for several reasons alter in the near future. In addition, the observer tends to estimate the depicted development relative to the presented curve. For a large part of North Sea stocks there has been a notable increase in the stocks during the 1960-1970 period. In the Figure below, taken from van Densen and van Overzee (2008) the landings of the main demersal species of the Dutch fleet are presented. If we consider landings to be a direct reflection of stock sizes this graph shows that if one takes the 1970s as reference period, landings have after that period steadily declined and are now to be considered to be at an all time low. However, if one takes the 1950s as the starting reference period, landings over time have increased and after the 1970s decreased to earlier levels.

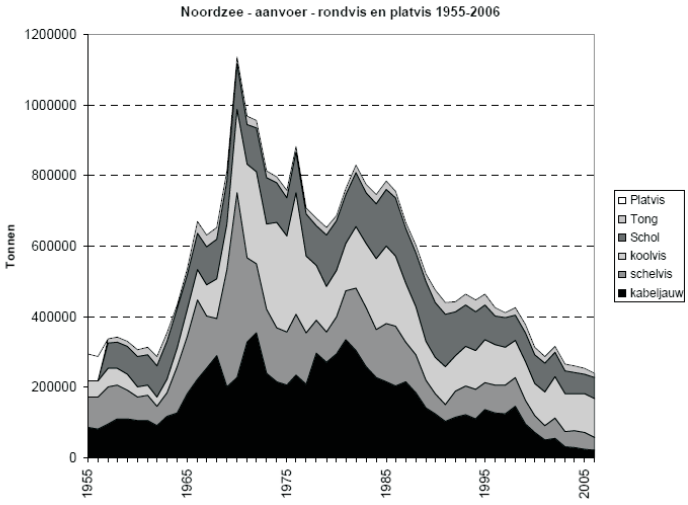

Figure 13: Dutch landings of demersal species form the North Sea, 1955 – 2006 (van Densen and van Overzee, 2008)

Hence, although some stocks are well below the B_{pa} reference point, some other stocks are doing much better. Especially over the last ten years, fishing mortality (F) has been reduced across the board. However, a remaining issue is at what level the target reference values should be set, which involves determining a reference period or reference state of the stocks. Also with the implementation of the Johannesburg agreed target of Maximum Sustainable Yield (MSY) for stocks by 2015 (United Nations, 2002), the discussion remains, for example, on what MSY implies for stocks in a multi-species fisheries. And, with natural changes especially in a highly dynamic eco-region such as the North Sea, the maximum sustainable levels of individual stocks change over time as well as the species composition in the ecosystem.

1.4.2 Economic crisis?

The development of the crude oil price during the 2000s and the resulting increase of fuel costs have clearly shown the economic vulnerability of fishing fleets throughout Europe. Especially for fishing vessels operating towed gears, such as for example the Dutch cutter fleet, this was clearly demonstrated. In the Figures 14 and 15 below some indicators for the economic performance of the Dutch cutter fleet are presented.

Whereas the average total revenue per vessel of the cutter fleet in nominal terms has increased in the 1990 – 2008 period, the real average total revenue has shown a downward trend over the period. Also the net result in real terms shows a steady decline over the period, although years of positive results are off set by years with negative results.

As illustrated in Figure 16, over the period 1990 – 2008 the costs for fuel and lubricants have steadily increased. As crew members fish in partnership and crew share is calculated based on expenses incurred[1], labour costs are a share of the trip's profit. Hence if the costs for fuel increase and the gross returns of a trip remain stable, the crew share and hence the remuneration for labour decreases. Consequently the wage per adult crew member has equally declined over the same period.

1 In Dutch fisheries crew members usually are not engaged as wage labourers but fish in partnership with the owner of the vessel. In the partnership contract the owner makes available to the partnership his vessel, gear and days at sea and quota allocation; the crew members make available their labour and skills. Crew remuneration is based on the crew share of the revenues of a fishing trip. The gross revenues of a trip are presented on the sale slip of the auction. From this gross revenue certain costs such as for fuel, hiring additional quota, handling and storing of the catch and auction costs are deducted. The remaining net revenues are shared between the owner (owner share) and crew (crew share) following a key determined in the partnership contract. The crew share is the remuneration for labour; the owner-share is a remuneration for the capital input in the partnership and, in case of a skipper-owner, a remuneration for labour.

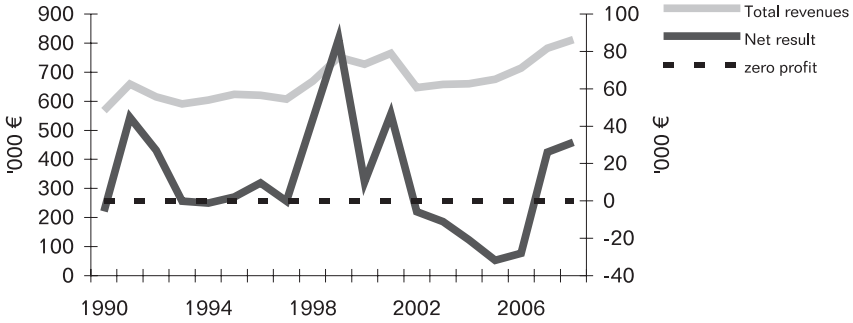

Figure 14: Dutch cutter fleet development in revenues (left axis) and net result (right axis), 1990-2008, nominal average per vessel (LEI, 2009)

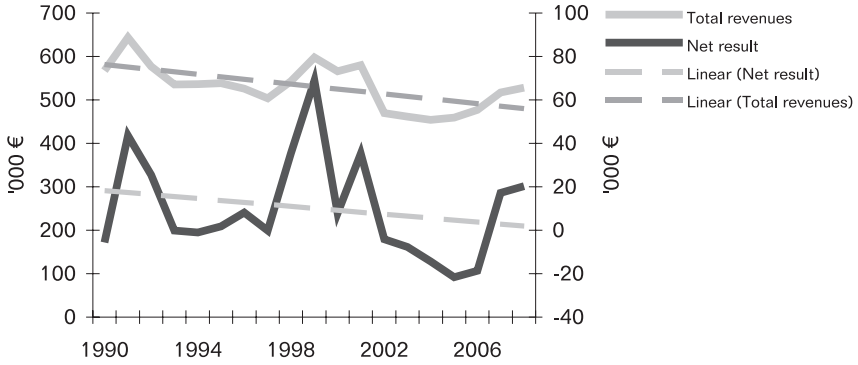

Figure 15: Dutch cutter fleet development in revenues (left axis) and net result (right axis), 1990-2008, real average per vessel with added linear trend lines over total period (LEI, 2009)

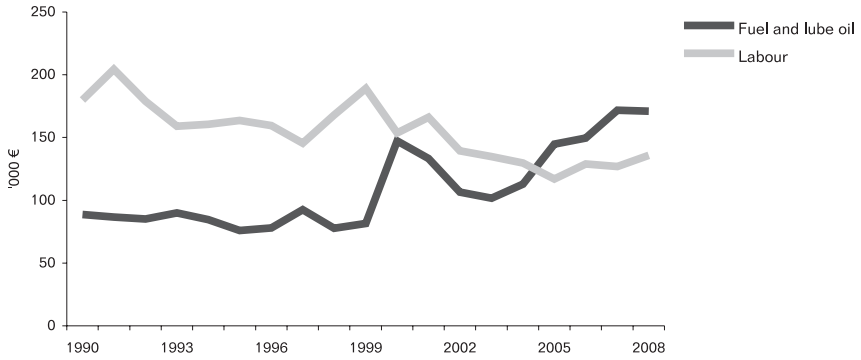

Figure 16: Dutch cutter fleet development in costs of fuel and lubricants and of labour, 1990-2008, real average per vessel (LEI, 2009)

Figure 17 illustrates a clear downward trend in employment and in fishing capacity (as measured in engine capacity in Horse power times number of days deployed in Hp-days). All the above indicates that the Dutch cutter fleet is, in economic terms, not doing very well. As a result of an imbalance between available capacity and fishing opportunities over time, the fleet diminished rapidly in size and level of activity with the returns also showing a downward trend. In Figure 18 the steady decline in number of ships of the cutter fleet and a trend towards ships with lower nominal engine capacity is illustrated. The reduction of the fleet, among others through fleet restructuring, has apparently not resulted in increased profitability of the remaining fleet.

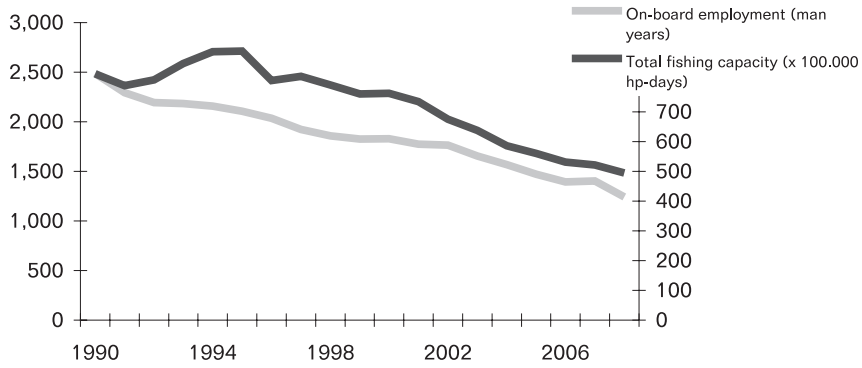

Figure 17: Dutch cutter fleet development of employment (left axis) and fishing capacity in Hp-days (right axis) 1990-2008
(LEI, 2009)

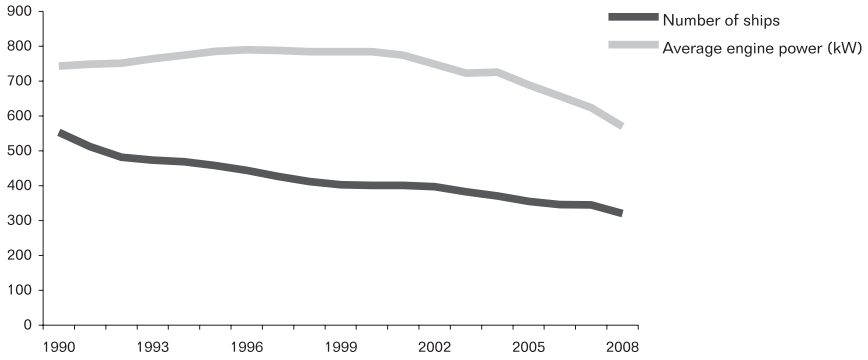

Figure 18: Development Dutch cutter fleet; number of vessels and average engine power, 1990-2008,
(LEI, 2009)

1.4.3 Social crisis?

Societal aspects of fisheries can be found around the development of fishing communities and the public perception of fishing activities. The development of stocks and the development of the fleets has resulted in a severe reduction in fishing activity and the fish processing industry. For example, employment in fisheries, although also affected by external factors such as oil prices and other job opportunities, is affected by the catching opportunities available to a fleet. With stable employment comes demographic and economic strength, in its turn facilitating the development and stability of social structures and hence the stability of a given community (van Hoof, 2009). The amount of change a fishing community will undergo as a result of e.g. reduced catching opportunities and a dwindling fleet will depend on the reliance and resilience of fishing communities with regard to the fishing activities (cf. van Hoof, 2009; Hatchard *et al.*, 2007; Hatchard *et al.*, 2006). Reliance is here defined as the extent to which the social and economic circumstances of actors, businesses, sectors and communities rely on fisheries and resilience as the extent to which actors, businesses and communities are able to adapt to changes in policy, the health of the stocks and market forces (Hatchard *et al.*, 2006; van Hoof, 2009).

The significance in economic terms of fisheries in the Netherlands is rather small and diminishing. Out of the 23 communities in the Netherlands with a significant cutter fleet the contribution to employment on average is less then 0.5% (Salz *et al.*, 2008) and diminishing. In addition, wage opportunities in other sectors have seduced crew members to opt for other jobs. Also, the fish processing and trade industry in the Netherlands has increasingly become less dependent on national landings and more involved in international trade flows. This diminishing significance of fishing and fishing related activities does have an impact on local communities, putting the social fabric in fisheries communities under pressure as fishing is becoming increasingly less important as source of income, employment, social network and identity.

As for the public perception of the fishing industry, a recent study commissioned by the Dutch Ministry responsible for fisheries (Senster *et al.*, 2009) concludes that in general the Dutch public has a very limited awareness of the fishing sector. Around 60% of the public has a neutral or no image of the sector whatsoever (Senster *et al.*, 2009). About 10% of the citizens have a negative image of the fishing sector. The negative image is especially related to the perceived environmental impact of the sector due to overfishing, discarding and harmful fishing technology.

On the other hand there is an ambiguous image of fish as a product. The positive image of fish as being a healthy source of omega 3 and 6 fatty acids is strongly promoted by government. At the same time increasingly Environmental NGOs (ENGOs) stress the negative impact of fishing and the failure of the fisheries management system. Increasingly ENGOs are invited to sit at the table when fisheries policy is being developed as can be illustrated by the coming about of the recent Dutch North Sea and Mussel covenants (see chapter 4).

In short, with a sector basically unknown by the wider public, a relatively small and further decreasing sector, and a public opinion fuelled by ENGOs being critical of the environmental impact of fishing, one could conclude that the legitimacy of fish resource use by fishermen is overall critical. With civil society questioning fishers' 'license to produce', and with fishing communities marginalising and losing identity as a result of diminishing fishing opportunities and a dwindling feet, one could indeed speak of a social crisis in fisheries.

1.4.4 Management crisis!

Above I have painted a picture of the realm of fisheries being under pressure ecologically, economically and socially: some stocks are in good shape others are not; the Dutch fishing sector is under economic pressure and over time especially the cutter sector is diminishing, affecting the social fabric of fishing communities; moreover, public opinion calls for a use of marine resources that accounts for environmental impacts. Fisheries management apparently has not been able over the past decades to achieve its main objectives: sustainable utilisation, economic efficiency and equity in access to resources.

This we can note both at a national, Dutch level as well as at the European level of the Common Fisheries Policy, to which we now turn. The constant process of redefining the CFP every 10 years, part of a predetermined process of evaluation, shows a permanent quest for new principles and tools to arrive at effective and legitimate natural marine resource management. If we take the current European Commission's communication on the reform of the CFP (Commission of the European Communities, 2009 p 8) the main problems of fisheries management in Europe today centre on:

- a deep-rooted problem of fleet overcapacity;
- imprecise policy objectives resulting in insufficient guidance for decisions and implementation;

- a decision-making system that encourages a short-term focus
- a management framework that does not give sufficient responsibility to the industry;
- lack of political will to ensure compliance, and poor compliance by the industry.

The conclusion must be that the management system itself, both in its legitimacy and underpinning by science as in its effective functioning (hence, its instruments and implementation) is being questioned (Commission of the European Communities, 2009). There may be discussion about the extent of the crisis in ecological, economic and social terms, but there is a general consensus that there is a serious problem with European and national fishery policies and governance.

1.5 Analysing fisheries governance

The ecological, economic and social crisis in fisheries has encouraged the reconsideration and reorganisation of European and national fishery policies and governance. It has, moreover, led governments to introduce new institutional arrangements, among which participatory arrangements such as co-management, voluntary agreements between public and private actors (covenants) and market based instruments such as property rights and ITQs (Individual Transferable Quota). This section will discuss the theoretical approaches that have recently been used to capture, analyse and explain such institutional changes.

To find solutions for the above-mentioned crises, governments, but also market parties and civil society actors, have looked for alternative ways to reach fisheries policy goals. A central question is whether new fisheries management institutions can be established and practical arrangements be made in order to coordinate and manage conflicting claims for access to resources and markets. In section 1.5.1, I give an overview of the general governance debate. In sections 1.5.2 and 1.5.3, the fisheries governance literature is discussed in relation to the general governance debate. This provides the background and building blocks for my approach to analysing new fisheries governance arrangements, such as co-management, ITQ's and covenants (1.5.4).

1.5.1 The governance debate

The concept of governance has not only become tremendously popular among social scientists (Van Kersbergen and Van Waarden, 2004; Treib *et al.*, 2007; van Leeuwen, 2010) but also in the realm of (European) fisheries. Changing the governance of fisheries management is perceived as an important way forward to overcome the deficiencies of the current system (Commission of the European Communities, 2001b, 2007, 2008). However, the use of the concept of governance is not univocal (see for example Kjaer, 2004; van Kersbergen and van Waarden, 2004; Rhodes, 2007, Treib *et al.*, 2007).

In general, governance refers to ''sustaining co-ordination and coherence among a wide variety of actors with different purposes and objectives such as political actors and institutions, corporate interests, civil society, and transnational organisations'' (Pierre, 2000). In this sense, 'governance' explores the changing boundary between state, market and civil society, referring to either a new process of governing, or a changed condition of ordered rule, or the new method by which society is governed (cf. Rhodes, 2007). For example, Kjær (2004), Van Kersbergen and Van Waarden (2004), Treib and colleagues (2007) and Rhodes (2007) give extensive overviews of the governance debate. Kjær discusses governance in the political science sub-disciplines of public administration and public policy, in international relations, European Union governance, governance in comparative politics, and good governance as extolled by the World Bank. Rhodes (2007) focuses on governance as governing with and through networks. Van Kersbergen and Van Waarden distinguish the following forms of governance: Good governance (see also Isham *et al.*, 1997; Commission of the European Communities, 2001a; OECD, 2005); Governing without government I: International relations; Governance without Government II: Self-Organisation (see also Symes, 2006; Rhodes, 2007); Economic Governance (with and without the state): Markets and institutions; 'Good Governance' in the private sector: Corporate governance; 'Good Governance' in the public sector: New Public Management; Governance in and by networks I: in general; Network Governance II: Multi-level governance; Network Governance III: Private – From hierarchies to networks (see also Sbragia, 2000; Jordan, 2001; van Tatenhove, 2003).

The common thread among these strands of literature that use the term governance is that they all describe and analyse 'shifts in governance' albeit at different levels and in different sectors of society. They all have a common concern for the problems of governability, accountability and, hence, legitimacy associated with 'shifts in governance'.

1.5.2 Three general models in fisheries governance

The debate and literature on fisheries governance partly draw upon this general governance literature, but has also developed along particular lines, classifications and arguments. According to Symes (2007), the institutional and governance frameworks for fisheries take on unique characteristics in relation to the common-pool nature of the resource and with respect to the need for collective bargaining in the management of shared stocks.

A mainstay in the fisheries management discourse for decades has been Hardin's analysis of common pool resource use and its pursuing Tragedy of the Commons (Hardin, 1968), leading governments worldwide to embark on a top-down state management of fisheries in order to counter the perceived crisis in fish resource use (cf. Arnason, 1993; Jentoft *et al.*, 1998; Arnason, 2009b). In this perspective fishermen are perceived as simply strategic, rational, atomistic players; and due to open access, overfishing is perceived as a typical example of market failure as fishing involves subtraction due to the fact that fishermen are drawing from a common resource pool where no-one has property rights. Therefore, the costs of overfishing are not internalised in transactions but treated as an externality. This eventually leads to the well-known 'Tragedy of the Commons' (Hardin, 1968; Ostrom, 1990; Jentoft, 2000).

In order to resolve the tragedy of the Commons three fundamental models have been developed:

(1) A hierarchical governance model with Hobbes' Leviathan-like strong presence of government in fisheries resource management in which centralised, hierarchical, 'command and control' forms of management are supposed to safeguard sustainable fish stocks (cf. Hobbes, 1651; Jentoft *et al.*, 1998);

(2) A market-based governance model, originally based upon the rational choice ideas and theories in which property rights, such as individual transferable quotas (ITQs), through a process of individual calculation of self-interest and the use of markets maximise economic returns and promote optimal economic efficient use of the natural resources (cf. Arnason, 1993, 2009a; Kelleher *et al.*, 2009);

(3) A participatory governance model based on the school of collective action in which communities are perceived to be able to play a pivotal role in resource management.

Gray (2005b) and also Kooiman and Bavinck (2005) distinguish between the theoretical foundations and practical implications of the three main modes of

fisheries governance. Whereas for hierarchical governance legitimacy lies in the formal system of parliamentary elections, the essence of legitimacy in the participatory mode lies in the involvement of stakeholders in decision-making, though the nature and extent of that involvement will vary from one type of participatory mode to another (Gray, 2005b). Although both market governance and participatory governance employ against hierarchical governance the argument that fisheries, ecosystems and regulations are too complex for government to manage alone, they draw different conclusions (Gray, 2005b). Market governance argues that only the market can provide solutions (cf. Arnason, 2007; Kelleher *et al.*, 2009), whereas participatory governance argues that only the collective knowledge of all affected parties can deliver answers. Much of the blame for the current fisheries management crisis is levelled at the 'top down' or hierarchical mode that characterises 'conventional' management systems (Gray, 2005b).

In the rudimentary 'Tragedy of the Commons' model, open access is the root problem. The way to avoid the destruction of the resource is to institute some set of rights, which can attach to individuals, groups, communities, or to the state, that does away with open access (cf. Arnason, 1993, 2000, 2001, 2009a). Most resource economists are in favour of private property solutions. Yet these solutions may accelerate the formalisation of the forms of property, further disembedding the resource from its social and cultural context (the community; LvH), and further reducing the social capital and ecological flexibility needed for effective management (Jentoft *et al.*, 1998). Jentoft further argues that by lifting out management tasks from the community to a distant bureaucracy, social solidarity within the community is eroded and as a consequence fishermen turn to behave like the rational, a-social, atomistic actors as described by Hardin, in fact turning the tragedy of the commons theory a self-fulfilling prophecy (Jentoft *et al.*, 1998, Jentoft, 2000). Rhodes (2007: 1251) concludes that we should not write the history of the 20th century as a battle between collectivism and the free market, because they 'advanced in tandem at the expense of other more traditional social arrangements such as philanthropy, the family and the local community'. Where Rhodes and Jentoft concur is the fact that during the 20th century gradually the local community has been pushed out of the governance equation, and hence Jentoft's call (Jentoft, 2000) to bring back in the community into fisheries management.

Bringing community participation in allows for another possibility to describe the shift in fishery governance. By contrasting 'governance' with 'government' the development towards a more informally-based, decentralised, shared, collective and inclusive decision-making structure, with multiple levels of engagement, is illustrated. Hence governance is about extending decision-

making outwards to embrace a wider public in which if government is founded on consent, governance is founded on consensus and a governing state that has been replaced by an enabling state that governs to a large extent by co-ordinating and facilitating other powerful actors in society (Gray, 2005b). Several authors describe the shift in fisheries governance as the inclusion of a broader range of stakeholders and interactions (Kooiman et al., 2005; Mahon *et al.*, 2010).

1.5.3 The logic of interactive and participative fisheries governance

Kooiman and Bavinck (2005) perceive governance as a hierarchical system in which there are those that govern (the governors) and those that are governed. Separating out the system-to-be-governed and the governing system allows us to understand that the governing system is a social system made up of institutions and steering mechanisms. The system-to-be-governed is partially social and partly natural, consisting of the ecosystem and its resources as well as the system of users of the resources and stakeholders (Jentoft *et al.*, 2007). It reflects the fact that we are in fact trying to analyse a complex socio-ecological system in which ecological, economic and societal/ political sub-systems interact; these systems are, moreover, characterised by competing claims on resource use and conflicting perceptions by governors, resource users and stakeholders of the aim of the management thereof (cf. Jentoft *et al.*, 2007; Arnason, 2009a, b; Jentoft and Chuenpagdee, 2009).

This complexity of the system brings to bear questions on the governability of marine resource use and what a governing system can possibly do. Limits to governability can be found in both the governing system and the system to be governed (Chuenpagdee *et al.*, 2005; Kooiman and Bavinck, 2005; Kooiman and Chuenpagdee, 2005; Jentoft, 2007). Kooiman and Bavinck (2005) argue that governability is shaped by diversity, complexity and dynamics of the (marine) system. To this can be added the vulnerability of the system (Jentoft, 2007), the resilience of the system, the dependency of a community on fishing and fishing related activities and the flexibility of the community to deal with outside induced changes (Lindkvist, 2000; Phillipson, 2000; Symes, 2000; Hatchard *et al.*, 2006b; Hatchard *et al.*, 2006a; Hatchard *et al.*, 2007).

In such framings top-down management is perceived not to be adequate or capable anymore to govern fisheries effectively. This is related to the mere complexity of the marine socio-ecological system – as there is no one single root cause problem to address but a complex system of causes and effects perhaps even stemming from outside the specific system. But it also relates to the perception that the existing knowledge of the functioning of ecosystem

and social system may be less than sufficient, that proper management tools may be lacking, and some realms of the system-to-be-governed may be out of its reach if, for instance, the users resist interference in their activities (Jentoft *et al.*, 2007). This inability to govern would be a major cause for the failure of government to address the complex problems and would urge for opening up to more participative, inclusive and deliberative forms of management.

The shift to more open forms of participative governance and the broadening of representation has become fashionable during the last decade, partly because of dissatisfaction with the performance of fisheries management systems across the world; partly because of the increasing interest in the notion of 'governance' as a substitute for 'government' in a variety of policy sectors; and partly because of the growing popularity of the concept of stakeholder participation in all areas of governance and decision-making (Gray, 2005b). In fisheries governance this has resulted in a variety of new governance models and concepts that focus on interaction and participation, such as adaptive co-management[2] (Armitage *et al.*, 2009) and interactive governance Kooiman *et al.* (2005). Interactive and participatory governance models depict governing systems as complex, heterogeneous networks, as political coalitions of more or less numerous and powerful stakeholder groups, who are partly internal and partly external to the system. Goals are not given ex ante and once and for all, but are relative to, and shift with, particular stakeholder compositions and interactions among stakeholder groups (Jentoft, 2007). These models work on the assumption that each group has interests to defend and contributions to make and the negotiation of conflict and the building of compromise or consensus are central. Consequently, governance is not so much about the exercise of authority as about political brokerage (Jentoft, 2007). Also, this means that the governing system is intrinsically unstable and dynamic. Governability would therefore be an outcome of an ongoing socio-political process that may break one way or another, depending on the relative bargaining power of stakeholder groups, individually or by coalition, at a particular point in time (Jentoft *et al.*, 2007).

1.5.4 Analysing new governance arrangements

Based on the discussion of fisheries governance this section will introduce the theoretical context that will be used in this study to analyse the cases studied. Focus will be on the fisheries governance system which is defined as

2 Adaptive co-management is based on merging the concepts of adaptive management and co-management, resulting in a flexible system of resource management, tailored to specific places and situations, supported by, and working in conjunction with, various organisations at different scales (Armitage *et al.*, 2009).

the sharing of policy making competences in a system of negotiation between nested governmental institutions at several tiers (international, (supra)national, sub-national) on the one hand, and state actors, market parties and civil society organisations involved in different maritime activities on the other (cf. Symes, 1997; Arts and van Tatenhove, 2004; Gray, 2005b; Gray, 2005a; Kooiman and Bavinck, 2005; Kooiman *et al.*, 2005; Symes, 2006; Jentoft, 2007; Jentoft *et al.*, 2007; Symes, 2007; van Tatenhove, 2008; Jentoft and Chuenpagdee, 2009).

However, because in fisheries policies "governance" and "management" are commonly used interchangeably (Raakjær, 2008), it is first important to make a clear distinction between these two concepts in order to be able to analyse fisheries governance. We make a clear distinction in the discussion between the content of a policy, its measures, implementation and enforcement on the one hand, and the dynamics of the policy making process on the other, in order to analyse whether the underlying cause for policy failure is related to the implementation of a policy (management) or the process of developing the policy (participation, rules). I follow Jentoft (Jentoft, 2006) in defining governance as the broader concept, inviting a more reflexive, deliberative and value-rational methodology, and distinguishing that from the instrumental, means-end oriented management concept.

A combination of multi-actor and multi-level governance and the mix of both 'old' and 'new' types of governance (Sbragia, 2000) is characteristic of fisheries governance. As a result, a diversity of fishery policy arrangements has emerged, ranging from corporatist to (transnational) participatory arrangements. Hence, we have to analyse and understand the chronological and synchronic development of different modes of governance, and their coexistence. The analytical concept of policy arrangements will be applied to do so. A fishery policy arrangement can be interpreted as the ordering of the fisheries policy domain in terms of coalitions, resources, rules and discourses (Arts and van Tatenhove, 2004). These policy arrangements stretch across different layers of government, and both besides and within the formal circuits of policy-making[3].

Fisheries policies are prepared in a way that resembles neither traditional international politics nor policy making by nation-states. With the concept of multi-level governance it is possible to capture the shifting locus of go-

3 The institutionalization of these arrangements is the result of processes of structural political and social change (political modernisation) and problem-oriented renewal of policy making by agents in day-to-day practices (policy innovation) (Arts and van Tatenhove, 2004).

vernance from the traditional state level to sub-national and supranational levels. More specific, it points at the sharing of policy making competencies in a system of negotiation between nested governmental institutions at several levels (supranational, national, regional and local) on the one hand, and private actors (i.e. ENGOs, producers, consumers, citizens, scientists) on the other (van Tatenhove, 2003).

As for the actors and their participation in the governing system, the changing role of governors, resource users and stakeholders will be a pivotal part of the analysis. The most prominent factor I will look at is how participation of the different actors in the policy processes and arrangements is changing. This is related to which actors can participate in the policy process, and how and to what extent these actors can and do participate. The forms and degrees of participation of different actors in (new) institutional fisheries arrangements relate also to the outcome of the policy processes, in terms of direct outcomes (rule compliance and reaching set objectives) but also in terms of legitimacy and accountability.

1.6 Research question

As presented in section 4 above, fisheries management Worldwide, in the EU and in the Netherlands can be depicted as being in crises. In ecological terms, as some stocks are not in good shape despite management effort, in economic terms as a large part of the fleets is not profitable and in societal terms as public criticism on fisheries practices is increasing. Moreover there is a perceived managerial crisis in fisheries management as it fails to reach its set goals and lacks legitimacy and accountability.

As a response to this state of fisheries management over the past decades a large array of new initiatives has been deployed. I will mention a few of these new initiatives. In the Netherlands a system of ITQs and co-management has been introduced and over recent years, covenants are increasingly deployed as institutions to achieve fisheries management goals. Science and the sector are increasingly cooperating in the collection of data and fisheries advice given by, for example, ICES and by IMARES (the Institute for Marine Resources and Ecosystem Studies, the main supplier of Scientific Support to Fisheries policy in the Netherlands) is increasingly made more open and transparent. The introduction of the Fisheries Innovation Platform (*Visserij Innovatie Platform VIP*) and the *Kenniskringen* (Fishers' Study Groups), centring on innovations in the fisheries sector, bring industry and science toge-

ther in a new constellation, especially with central government relinquishing its top down management role for a more enabling role at a distance.

At the EU level, under the 2002 reform of the CFP, RACs have been established and more recent marine environmental legislation such as the Marine Strategy Framework Directive has been introduced. The current CFP reform debate centres on improvement of the performance of fisheries management, by increased co-operation between sector and research, regionalising of management, increased participation for example through institutions like RACs, co-management and result based management.

In short, it may be concluded that different alternative institutional arrangements have been developed in fisheries management in the past decades in order to counter the failure of fisheries management, and to live up to the desired policy objective of an economically, ecologically and socially sustainable fisheries. This study aims at understanding how and why certain innovative solutions were selected and how and why they functioned more or less satisfactorily. In doing so it seeks to understand the innovation of fisheries management from a governance point of view. The central questions in this research are the following: which new institutional arrangements have been developed to cope with the deficit in fisheries management, how and why did these new arrangements emerge, what have been the results and how do these new institutional arrangements relate to the current debate on a sustainable future fisheries governance?

In order to focus the analysis of changes in the governance set up of fisheries management I will centre on the development of fisheries governance in the Netherlands since the introduction of the EU Common Fisheries Policy in 1983. In the analysis, the focus is mainly on the institutions in Dutch fisheries management, and how these institutions developed over the past decades as examples of new policy arrangements and the change of a former neo-corporatist system.

The data for the analysis were obtained through extensive observations and interviews with the major players from the fishing communities, fisheries organisations, fishers, RAC members, Dutch and EU policy makers and the NGO community. The core of the study is based on some 10 years of participatory research, observations and interviews, both of the Dutch and EU fisheries and marine management system in the position of researcher of Dutch and EU fisheries policy and management. As such this study is a reflection on years of research and a re-interpretation of earlier findings combined with ad-

ditional interviews with key actors in government, industry and NGO community. In Annex I an overview of relevant implemented research is presented.

1.7 Structure of the thesis

In the chapters 2,3,4 and 5 I present the different case studies. Case 1 deals with the introduction of Individual Transferable Quota in the Netherlands. Case two focuses on analysing the Dutch system of fisheries co-management. Case 3 centres on the use of covenants in fisheries management and case four looks at the introduction of EU marine policy.

In cases 1 I analyse the introduction of Individual Transferable Quota (ITQs) in the Netherlands which occurred in the early 1990s. The introduction of ITQs was the introduction of a management instrument which simultaneously functioned as an environmental instrument, limiting catches, as an economic instrument, seeking optimal allocation of fishing capacity over fishing opportunities. Individual Transferable Fish Quota are perceived as a rights based fisheries management system that can effectively steer fleets away from overcapacity and overexploitation towards more sustainable fisheries. I will use the case of the management of the Dutch North Sea Beam trawl fisheries to explore the effect of the introduction of such a marked-based instrument and will translate these experiences to the current debate on the reform of the EU Common Fisheries Policy, which has an angle on rights based management. The questions I will seek to answer is: did the introduction of a marked-based instrument result in obtaining environmental objectives such as reduction of fleet capacity and total catches? How did the introduction of the ITQs affect the existing fisheries management institutional setting? And would such an instrument be applicable to other settings as well?

The second case, the introduction of the co-management system, can be perceived as an attempt by the Dutch government to increase the legitimacy of the management system and compliance by devolving management responsibility to the sector through the establishment of partnerships. This development in the early 1990s in the Netherlands is set opposite to the recently inaugurated EU Community Fisheries Control Agency (CFCA). I will use the Dutch fisheries co-management system to analyse whether such an institution can be instrumental in overcoming the perceived failure of fisheries management Worldwide. The development of partnerships between government and market actors will be used to analyse the increase of legitimacy and compliance. The question is how does a governance-type solution, such as

co-management, relate to a government-oriented solution such as the CFCA, and can a partnership between government and the market, as in co-management, serve as an alternative to direct government enforcement?

The use of covenants presents case 3. This, like the co-management system, centres on a system of devolved management. But where co-management is founded on cooperation between state and the industry in managing a fisheries, covenants usually are based on a specific voluntary agreement between two or three of the actors of state, market and civic society (NGOs). Covenants are frequently used to obtain environmental objectives, especially when government policy fails to obtain results. Also covenants are applied as instrument in a pacification attempt of government and effort to mobilise support for policy. The questions I will raise here are what is the role and function of covenants in Dutch fisheries management? What was the trigger for application of this instrument? And what are the results obtained?

Finally, case 4 looks at the development over the past decade of new EU marine policies such as the Marine Strategy Framework Directive and the Maritime Policy. Both policies aim at governing the marine environment, yet the two policies have a differing signature in policy formulation and implementation. From a fisher's perspective these policies present a change in institutional setting in terms of integration as well as participation. Major policy measures no longer descend from the EU Common Fisheries Policy alone, but increasingly are derived from general environmental policy developments. The questions raised are how these different policy arrangements affect fisheries management and how these new policy arrangements frame participation and compliance in marine resource management?

In chapter 6 I will draw conclusions. Reflecting on the experiences in the Netherlands and their significance for the EU context, I will try to postulate an outlook on how an institutional governance set up in the fisheries could develop in the future and how its legitimacy and effectiveness could be improved.

Chapter 2

Design or Pragmatic Evolution:

Applying ITQs as market-based instrument in Dutch fisheries governance

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For the fishing industry, the combination of high levels of uncertainty and a lack of assurance about their rights to resource use encourages a race for fish. The race creates an incentive to emphasize short-term gains and deemphasizes long-term incentives for stewardship (Hanna, 2001).The core question in fisheries management, as in other environmental and resource dilemmas, is how to bridge the gap between private decisions and societal and environmental impacts. Following Libecap (2009), the disparity between private and societal costs and benefits of exploitation of fish stocks results in externalities: harmful effects to third parties, in this case: overfishing. The absence of information about an alternative resource use (opportunity costs) results in a wasteful misallocation of resources (Libecap, 2009).

The resulting declining fish stocks have led governments over the years to deploy traditional government top-down measures, such as limiting overall catches by setting limits to total landings, fishing effort and access, including vessel and gear restrictions, area closures and days-at-sea constraints. These limitations have led to an economic inefficient and overcapitalised fishery[4] and, still, a remaining pressure on the resource.

In order to overcome the inconsistency between fish stocks and capacity, property rights have been introduced in some fisheries through the allocation of catch quotas. A major intended effect of quota management is the creation of economic incentives for owners of vessels to decrease their inputs of labour and capital to a fishery and to use the resource in an efficient, sustainable way (Committee to Review Individual Fishing Quotas, 1999). Transferable license and quota systems are the only recognised systems that effectively create exit strategies in the industry where the participants themselves adjust catch and processing costs to the potential income from the available quota (Trondsen, 2004).

Within the current debate in the European Union on the upcoming reform of the Common Fisheries Policy, rights-based management tools in fisheries have again been put on centre stage (Commission of the European Communities, 2007a, b, 2008a). Worldwide, marked-based governance instruments, such as transferable quotas, are increasingly being deployed by governments (Stavins, 1998, 2002) in order to mobilise the market in obtaining environmental policy targets.

4 In case of overcapitalisation a smaller fleet (in terms of vessels and employment) could produce the same amount of fish and in a more efficient way (Brandt and McEvoy, 2006).

In this article the case of Individual Transferable Fisheries Quota, as used by the Dutch government in managing the North Sea beam trawl fisheries, is used to assess whether controlling access to a fishery trough the privatisation and marketisation of catch rights creates sufficient incentive for a reduction of input of labour and capital to a fishery and to use the resource in a more efficient, sustainable way. In section 2 I will look at the principles of privatisation and marketisation as options for government to deploy market-based governance and economic incentives in environmental policy. In section 3 I will look more closely into the principles of tradable fishing rights. In section 4 I will describe the history of the Dutch system of fisheries management by using ITQs and analyse the effect (section 5) and impact of the system (section 6). Finally I will draw some conclusions and discuss the applicability of tradable fishing rights at an EU scale.

2.1 Fisheries and the neo-liberal paradigm as mode of governance

The fundamental question in natural resource utilisation in a market context is the occurrence of externalities for which the gains accrue to the entrepreneur and the costs are being passed on to society: is there a need for 'more' market force, to include the costs of externalities into the process of production or is there a need for state intervention regulating the externalities. The kind of state-initiated social engineering that dominated the better half of the last century, which was based on the assumed availability of synoptic, universally valid knowledge and of the ability of states to shape society and the market, no longer seems an option under late-modernist conditions (Loeber *et al*., 2005). Instead, governmental institutions, market parties and civil society representatives share decision-making competencies (van Tatenhove *et al*., 2006b) and focus on new institutional arrangements involving representatives of the state, the market and civil society (Glasbergen, 2007). At the interplay of state and market the state *governs* the economy (Gamble, 2000) but, more importantly, the state has an option to deploy marked-based instruments.

In the 1980s and 1990s we have witnessed a neo-liberalisation discourse in this process of (re)negotiation of the boundaries between state, market and civil society with increasingly areas being governed by an economic logic (cf. Castree, 2008b). This basically ranged from the introduction of a range of private sector management instruments into the public sector next to the emer-

gence of privatisation of state-owned enterprises or assets and the trend of using markets to allocate resources (cf. Megginson and Netter, 2001).

In order to analyse market based fisheries governance I will here define *liberalisation of environmental policy* as the (combination of) delegation, deregulation, privatisation or marketisation of State intervention in managing natural resources (cf. Hulsink, 2001; Letza et al., 2004; Yesilkagit and de Vries, 2004; Savas, 2005; Castree, 2008b, a). *Delegation* refers to the devolution of powers of (central) government to either other parts of government (decentralisation) or to the market (for example in public-private partnerships) (cf. Savas, 2005; van Hoof *et al.*, 2005). *Deregulation* can be defined as the process of reducing state control over an industry or activity so as to make it structurally more responsive to market forces (Hulsink, 2001). *Privatisation* is here referred to as the process of providing private rights to a (former) public domain. *Marketisation* is here defined as the process in which environmental policy implementation is shifting from government regulation and control to more deployment of market based instruments and market control.

In fact the state has the option to either exert full government control and regulation or deregulate and privatise resource management as well as any combination of the above. Following Arts and van Tatenhove (2004) in some areas of environmental policy we see the state withdrawing (energy and waste), while increasing its influence in others (infrastructure, agriculture). We see new arrangements between state and civil society being established, while elsewhere the state adheres strictly to its privileges. We see patterns of traditionally privileged interaction between state and market being broken down, while such patterns are re-established in other domains.

Public policy making in the Netherlands throughout the 1980s has demonstrated an increasing awareness that state intervention in the national economy had been over-ambitious and that a retreat of the state in favour of market forces was necessary. Privatisation became another instrument in redefining the boundaries between the public and private sectors. In the Dutch context, in which the State traditionally is small in assets and activities it performs (van Damme, 2004), privatisation does not so much refer to the transfer of ownership of assets from the State to private sector but more to making use of private actors and market mechanisms to achieve public goals (cf. van Damme, 2004). Especially during the latter part of the 1980s the general administration motto became: all services that do not necessarily have to be performed by the government are candidates for privatisation.

As fisheries policy in the European Union is the sole competence of the European Commission under the Common Fisheries Policy (Hawkins, 2005) the above raises important questions for the institutions at both the member state and the Community level involved, as to how to replace burdensome command-and-control legislation, public ownership and close government supervision with new flexible administrative systems to ensure that social, economic and political objectives are met (cf. Hulsink, 2001).

Following Mansfield (2004) in fisheries management the introduction of a neo-liberal signature dates way back to the 1950s and evolved from the perception of fish as a common property and the commons as a form of market failure. Rights based fisheries management in this neoclassical economic view would through individual rational decisions in free markets result in social and environmental welfare. Be it from a tragedy of the commons perspective or the tragedy of open access, the solution lies in defining property rights in such a way that access is limited, market incentives for conservation are provided and exit from overcapitalised industries is encouraged.

2.2 Transferable fishing rights

Across the European Union a variety of Rights Based Management systems is being deployed. Following the analysis as presented by MRAG *et al.* (2009) limited licensing is a common feature in EU fisheries management, and for stocks managed by Total Allowable Catch (TAC), member states have implemented a variety of individual non transferable catch quotas, ITQs and vessel catch limits.

Putting property at the centre of fisheries problems is a neoliberal, market-based approach to ocean governance starting from the problems in fisheries stemming from the ways that open access regimes inherently create irrational incentives representing a market distortion (cf. Mansfield, 2004). The solution, then, must eliminate the market distortion. From this neoliberal perspective, market incentives decrease capacity and increase efficiency as individuals or groups lease and sell privatized rights to fish; market incentives encourage conservation because each individual or group knows they can profit from the fish as much tomorrow as today, and thus they will fish more slowly and more carefully; the form of marketable property is presumed to lead to increased efficiency—as the least efficient operations sell their quota to the most efficient ones, thus reducing total capacity—and better stewardship of the resource (Mansfield, 2004).

Hence liberalisation of fisheries management evolves around privatisation: the creation of private property rights; marketisation: leaving the distribution of these rights to the rationale of the market; and on deregulation and delegation: no longer is government determining the outcome of the management system but the holders of fishing rights. Individual quota and group, community or ring-fenced quota are all forms of privatisation: rights formally held by society in general (open access common property resource) or by the state (Exclusive Economic Zone) are transferred to private rights. ITQs are a form of privatisation and marketisation: the private rights are made tradable.

Underreporting landings and discarding are among the major concerns of introducing a quota system. Although not exclusive to ITQ systems they undermine the perceived benefits ascribed to such systems. The problems can be attributed partly to the fact that ITQ systems do not create true property rights in the fishery. Holding a share of quota only gives a particular fisherman a right or privilege to harvest fish, it provides no real control over the resource itself (Squires *et al.*, 1995; Wingard, 2000).

Another main concern is the loss of access to the fishery of fishermen through a concentration of quota in the hands of a smaller number of fishers. Copes and Charles (2004) distinguish in this respect two forms of excessive concentration of fishery access rights that is taken place through capacity rationalisation. First, in terms of financial concentration; corporations and large investors in the fisheries sector may use their financial power to buy up larger aggregations of quota, thereby concentrating a substantial share of fishery access rights in their hands. Second, in terms of geographical concentration; ITQs are likely to produce a geographical concentration towards the larger ports where the quota owners have their main facilities. The long-term effect of the financial and geographical concentration of fishery access rights may be the formation of socio-economic class divisions or monopolisation of the fisheries, with a few who control access to the fisheries and the rest depending on those with access to the resource.

Although the capacity reduction that may be facilitated by an ITQ system is likely to generate economic benefits, the distribution of those benefits is widely considered to be inequitable (cf. McCay, 2004). Quota initially is given out free of charge to individuals who happen to be vessel license owners at the time the quota system is introduced. The first generation of quota-holders therefore benefits financially as their quota have become valuable assets with the introduction of an ITQ system. There is a notable inter-generational inequity involved in having initial recipients receive a free gift of quota from a

public resource, while subsequent generations face relatively high purchase prices or lease rates (cf. Copes and Charles, 2004).

Moreover, crew members are especially likely to lose out when ITQs are implemented (Copes and Charles, 2004). If a vessel owner decides to sell quota, crew members usually receive none of the proceeds of that sale, despite having been closely involved in creating the catch history which generated the ITQ in the first place. In addition, it is quite common practice that the costs for temporarily hired additional quota are shared between owner and crew, whereas the benefits of renting out quota accrue solely to the owner (van Hoof *et al.*, 2002; van Hoof *et al.*, 2005).

Another concern of concentration of fishery access rights into fewer hands is that it generates a negative effect on the socio-economic viability of (small) fishing communities. ITQs allocated strictly through the market will not reflect the broader needs of a community. Quota will flow to those with greatest access to capital, which may have little correlation with community dependence on fishing. Small, rural coastal communities with the greatest reliance on fishing (as a proportion of their total economy in terms of produce and employment) might have less access to capital than do urban corporations. Consequently, the access to the fishery will be withdrawn from the very areas with the greatest relative reliance on fishing. Reduction in employment and income may lead not only to a reduction in the number of fishers (short-term impacts), but can eventually lead to a reduction in size or even elimination of some fishing communities as with fewer active boats left, boat repair, baiting, processing, trade and other related activities are reduced, further reducing fishery-related employment.

The case of the introduction of fishing quota in the Netherlands' North Sea Beam Trawl fisheries is used to illustrate the outcome of the introduction of rights based management and examine the impact the marked-based management regime had on the development of the fisheries.

2.3 The Dutch ITQ system

The Netherlands do have a tradition of applying marked-based instruments in environmental policy. In the early 1970s charges and levies on water and air pollution were introduced. Over time other forms of market-based instruments such as ecological tax reforms, emissions trading and tradable permits were introduced. (cf. Jordan *et al.*, 2005).

Management of North Sea fisheries has been shaped over the past 30 years. After the establishment of the North East Atlantic Fisheries Convention (NEAFC) in 1964, being a first step for joint fisheries management, it would take up to the mid 1970s for NEAFC to develop concrete management measures (cf. van Densen and van Overzee, 2008). With the introduction of the 200 nautical mile Extended Economic Zone (in 1977 for the Netherlands; LvH), nations had the opportunity to claim the ownership of fish stocks within their zone (Andersen *et al.*, 2008), which in fact resulted in a sharing of the North Sea over its bordering Member States, a basis was provided for North Sea fisheries management.

As a consequence Dutch fishermen, up to the latter half of the 1970s had quite some freedom to decide on their operations; the level of regulation was rather modest. In 1975 the NEAFC established Total Allowable Catches (TACs) for several species of fish, including sole and plaice, the two most important species for the Beam trawl fleet. Dutch government responded by setting up a system of Individual Quota (IQ) for the fishermen. The IQs were distributed based on historic rights. The IQs could not be sold, leased, or used as collateral. One reason for this was that quota transfers would cause extra management problems; another was the fear that quotas would be concentrated in an undesirable way. Nevertheless "unofficial" transfers of IQs developed rapidly, for instance by transfer of vessels including their IQs to other enterprises, by merging or splitting of enterprises and by individuals switching from one firm to the other, taking IQs with them (Smit, 2001).

Up to the mid 1980s these IQs were perceived by the vessel owners as limitations rather than as rights and as enforcement of the quota was rather weak the fishing rights were perceived to be nothing more than 'a piece of paper' (Davidse, 2000). As the quota were not strictly enforced they did not provide secure property rights as the flatfish fishery would be closed once the national quotas for sole and plaice were exhausted. Since everyone knew that fishing could be closed any day, uncertainty spread end the fishermen's race for fish became even more stimulated than before (Dubbink and van Vliet, 1992).

With the establishment of the EU Common Fisheries Policy (CFP) in 1983 a change in North Sea fisheries management was marked. Prior to 1983 the European fisheries policy would follow the NEAFC management measures. As from 1983 the European policy not only aimed at the implementation of the TACs in the context of the conservation policy it also sees the introduc-

tion of the EU structural policy[5]. Under the CFP structural policy limits were set to the capacity of the North Sea fleets under the Multi Annual Guidance Programme (MAGP). In order to fulfil the obligations resulting from the first MAGP the Dutch Ministry responsible for Fisheries implemented a license scheme in 1984 which led to a horsepower ceiling for the fleet.

As the informal trade of IQs increased over time the Ministry responsible for Fisheries officially allowed in 1985 the trade of IQs for sole and plaice (cf. Davidse, 2000). This followed a growing political concern about the non-compliance with the quota regulations. In order to get fishing effort to be in line with allocated TACs a tie-up scheme was established in 1986; vessels were not allowed to go out to sea for a number of days. This was followed by the establishment of a days-at-sea regime in 1987 (van Densen and van Overzee, 2008).

Despite all these management measures the Dutch fishing industry was characterised by reports of illegal fishing, under-reporting of catches, grey and black trade circuits and inadequate policing and enforcement by the Dutch state (van Ginkel, 2005): the national administration was not prepared for a rather large system to keep track of landings (of each individual vessel in Dutch and foreign ports) and enforcement continued to be weak (Smit, 1997). Catches remained exceeding the national quota and as a consequence of failure to contain the problem a political crises evolved in 1990. Due to these enforcement problems government sought a new division of responsibilities between the state and the private fishing sector.

To arrive at a devolution of specific management responsibilities to fishermen, the fishermen had to organise themselves into groups[6]. Parliament threatened to introduce regulations to generically limit engine power should the fishing industry decide not to accept organisation into groups. Especially attributable to the latter threat of parliament, but also because group members were entitled to more days-at-sea than non-members and the period in which the latter can trade quota is restricted, ninety-seven per cent of all beam trawl fishermen (van Ginkel, 2005) joined the co-management system.

The aim of the management groups was twofold: first, to arrive at an effective and efficient system of quota compliance that is supported by the fishers; se-

5 The CFP consists in total of 4 policy areas: Conservation policy, Structural policy, Market Policy and External Policy

6 the so-called 'Biesheuvel groups', named after the chairman of the committee that advised on the new policy, former Prime Minister Barend Biesheuvel

condly, to improve economic performance within the quota restrictions. Each individual group member takes his individual rights to be managed within the confines of the group. This allows decisions which otherwise would be adopted by Government, such as the fishing season planning, to be undertaken by the fishermen themselves. In addition group members can constantly modify their initial right allocation; according to their necessities, the fishermen can buy, sell or rent their quotas and fishing days (Davidse, 2000). The group as a whole is responsible for the management of the quota uptake, ensuring landings to be in line with total group entitlements. In addition the group facilitates trade, hiring and renting of the ITQs between their members, which makes the system far more flexible.

The ownership of the rights remains with the individual holders. Since the fishing rights are owned by the fisherman and can be freely traded, the rights can be used as a collateral for a loan; in fact, the ITQs always serve as a security for the bank when a loan is acquired, for example to finance a new vessel (Davidse, 2000).

Whereas the ITQs are individual and freely transferable there are some government rules and restrictions as to the transfer of ownership. For example all transfers of ITQs have to be registered with the Ministry responsible for Fisheries. Also ITQs have to be attached to a principal vessel. Quota can be held independent of a vessel for only a restricted period of up to 5 years and only when the individual holding is part of a group holding. This period is meant to enable owners to lease out their rights within a period that they are in between vessels: a new vessel being under construction while the old vessel is already sold.

With a progressing development of bringing species under a TAC, such as for example the introduction in 1994 of quota for cod and the 1996 quota for herring and mackerel, the ITQ system was further extended. Today all of the mean species of the Beam trawl fisheries (plaice, sole, cod, whiting) are under the ITQ system. Only few such as ray, dab and brill have a national TAC and no individual quotation, and only the likes of red mullet and gurnard are not under any quotation restriction. In case a species is shared through ITQs the Ministry responsible for Fisheries does not share out the entire national TAC but retains a part for management purposes.

2.4 The impact of the introduction of ITQs in the Dutch system

If we look at the period starting after the introduction of the EU CFP in 1983 the following Figures present trends in development of the Dutch Beam Trawl fleet in terms of number of vessels, fleet capacity, investments, employment in terms of number of crew, landings, quota and profitability.

The downward trend in number of vessels, total engine capacity and crew over the period 1984-2007 becomes quite clear from Figure 19. Of course total employment on board has a straight forward relation with the number of vessels (average crew size remaining rather stable over time at just over 4).

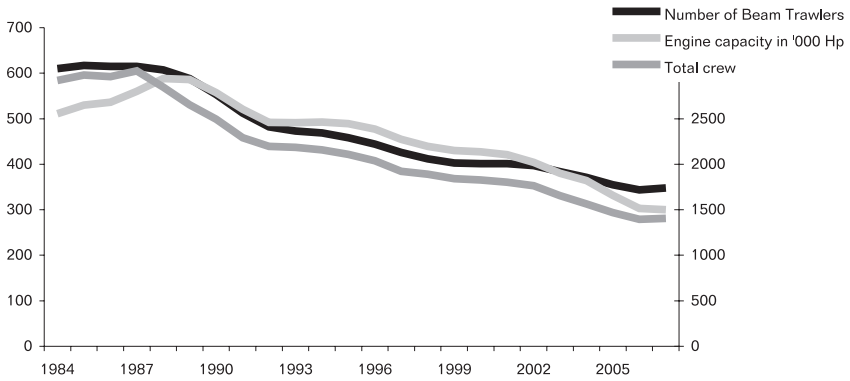

Figure 19: Development of the number of beam trawlers total nominal engine capacity and total crew employed (secondary axis) over the period 1984-2007; data from LEI 1985, 1990, 1995, 2000, 2008 (LEI Statistics, Series)

As Figure 20 shows, not only have total annual investments in the fleet (in real terms measured in million Euros) dropped significantly over the period, a logical consequence of a shrinking fleet, but also the annual investment per vessel in real terms has dropped from an average of about 80,000 Euro annually over the 1980s to 40,000 Euro annually in the 1990s and 2000s. The average capacity per vessel in nominal terms shows a downward trend since the late 1990s.

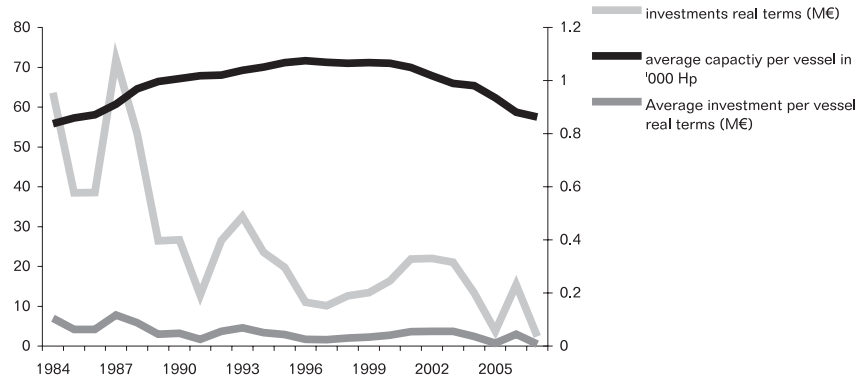

Figure 20: Development of the total investments in the fleet (primary axis) and average investments per vessel and average capacity of vessels of the Dutch Beam trawl fleet over the period 1984-2007.
Data from LEI 1985, 1990, 1995, 2000, 2008 (LEI Statistics, Series).

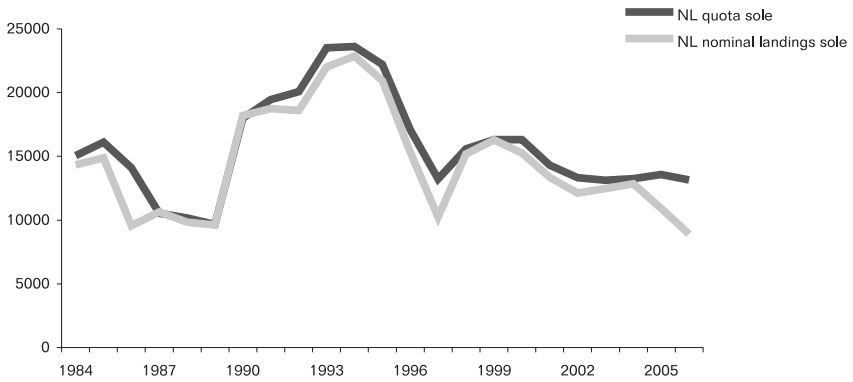

Figure 21: Dutch North Sea sole quota including swaps and nominal landings over the period 1984-2006
Nominal landing data from ICES ACFM (2007), Dutch quota data from LEI 1985, 1990, 1995, 2000, 2008 (LEI Statistics, Series).

Whereas for sole nominal landings have over the entire period been in line with the Dutch quota allocation of the total TAC (Figure 21), for plaice Figure 22 shows that after the 1980s, in which landings overshot allocated quota, landings were in line with Dutch TAC entitlement. As for discards, according to Catchpole *et al.* (2008) based on a rather limited sample over 2001 and 2002, the discard rate (including all fish and benthic material) was 77% of the catch.

As for profitability of the fleet, according to Davidse (2000) in analysing the 1983-1998 period the conclusion is that "the profitability level of the cutters

has improved. The sector has been profitable or at break-even level since 1991. This is a rather long period of good economic results in view of developments in the 1970s and the 1980s. Profitable years were followed by years with adverse results in that period. Fleet expansion through investments in new cutters after good years used to dissipate potential profitability."

Taking the data as presented in Figure 23 we can confirm Davidse's analysis for the 1990s. With the increase in oil price in the mid 2000s we see that the results of the fleet diminish rapidly.

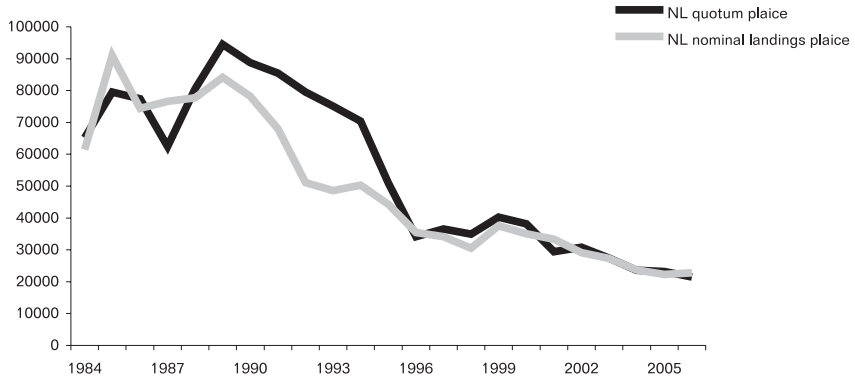

Figure 22: Dutch North Sea plaice quota including swaps and nominal landings over the period 1984-2006.
Nominal landing data from ICES ACFM 2007 (ICES, 2007), Dutch quota data from LEI , 1985, 1990, 1995, 2000, 2008 (LEI Statistics, Series).

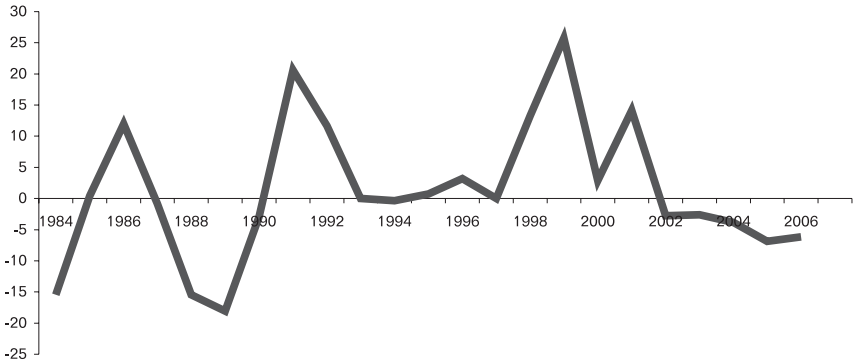

Figure 23: Net results Dutch North Sea beam trawl fleet in million Euro real value 1984 = 100. Data from LEI 1985, 1990, 1995, 2000, 2008 (LEI Statistics, Series).

2.5 Dutch ITQs as market-based fisheries governance

From the analysis in section 2.4 we can draw the conclusion that the Dutch ITQ system since the introduction of the EU CFP in 1983 has resulted in a smaller fleet, with less overall capacity. Catches of plaice and sole are in line with total Dutch quota allocation and at least for a period of 10 years (1991-2001) the net results of the fleet have been positive. Employment in terms of number of crew is reduced and also investments in the fleet have diminished.

In analysing the effects of the Dutch ITQ system we should realise that the management instrument has not been introduced in isolation but was part of a series of government management instruments among which the establishment of the co-management system, intensified control, a days-at-sea regime, a maximum gear width for double-beam trawls and, in addition, next to an overall limitation of fleet capacity under the MAGP, a maximum engine capacity of 2000 HP for new ships was set. In fact some of the instruments applied work in parallel. Court ruling in the Netherlands for example made clear that in case days-at–sea regulation and ITQ entitlement are conflicting, the right to fish an amount of fish prevails over a limitation of effort in terms of days-at-sea. Others, such as compulsory landing of catches at an auction greatly enhanced the monitoring and enforcement capabilities of the system.

From the perspective of the individual fisher the introduction of the ITQ system provided both a necessity and opportunity to bring individual quota holdings in line with the fishing capacity of the vessel. In addition the individual and perceived perpetual character of the ITQ, although perhaps not a real property right over the resource in the sense as meant by Squires *et al.* (1995) and Wingard (2000), since it provides no real control over the resource itself, is a right to fish that can be exerted and defended and can be used as a collateral.

Access to the group system allows the individual fisher to fine tune quota holdings and landings during the year by leasing out or hiring in additional quota; rather convenient in a mixed fisheries in which plaice and sole are never caught in fixed proportions. In fact what has been introduced as individual property rights is during the year managed as a cooperative catch right. The individual fisherman remains proprietor of the individual quota entitlement, but during the year the management of the uptake of the quota is collectively managed in such a way that landings match the total of the group quota holdings. The majority of quota transfers, either temporary (leasing) or permanent, primarily take place within the group.

In addition, groups can take an active role in acquiring additional quota. On the one hand this is done by collective buying of quota on the market: the quota become the property of the group hence quota transfers provide the opportunity for groups to "buy in" to certain fisheries. In addition, groups can take an active role in the so called quota swaps: the exchange of quota between EU Member States[7].

At the European level these quota swaps play a significant role. Some, known as 'traditional exchange' are quota that are usually each year exchanged between Member States. In addition there are the more ad hoc exchanges dependent for example on the development of a fishery (acquire additional rights for a species that is temporarily landed in large quantities) or more strategic exchanges, for example in times of high oil prices the search for the exchange of quota in more for away stocks (Skagerak/Kattegat) against stocks that are more near by (North Sea).

In fact the swaps mark the fact that the Dutch ITQ system is a three tier system in which the fisher is holding individual rights, manages the rights during the year collectively in a group next to the species (for example ray) with no individual allocation, managed at the national level against which all fishermen can fish. There are examples in which it is tried to at the European level between member states exchange individual quota managed by groups against species with no individual quota managed at the national level.

Quota swaps play an important role in group management of the quota. The groups play an active role in on the one hand ensuring landings to be in line with total quota holding and at the same time, by being involved in quota transfers and swaps, ensure that the quota holding of the group is in line with landings and desired catch opportunities.

ITQs are a marked-based instrument in which objectives are sought to be reached through regulations of a market. The transfer of quota results in a re-allocation of catch rights and a development towards increased efficiency of the activities. From the Dutch case we can learn that after the introduction of the market arrangement of ITQs the fishers utilised the group system to arrive at an arrangement of self regulation. Not only for the uptake of the group quota entitlement (as was the government's intention of the establishment of the groups) but also in managing the transfers and allocation of quota. The group takes the position of broker in the quota transfer process, taking a po-

7 After the TAC for a stock is determined the EU TAC is devised over the Member States according to the principle of Relative Stability: each Member State receives a fixed share of the TAC in order to provide relative continuity to its fishing activities

sition in the allocation process which makes the Dutch system one of a mix of individual and collective management of catch rights. The emphasis however tends to differ between the several individual groups with some emphasising the collective management and joint transfer of quota whereas other groups put more emphasis on the individual entitlement of a fisher and the provision of a platform of transfer of rights within the group.

This managerial role in quota trade the groups have taken might be the reason that within the Netherlands, despite worldwide evidence on fisheries in which quota tend to leave the primary fishing sector to be either accumulated by larger fleet owners or even the processing industry (as for example presented by Squires *et al.*, 1995; Copes and Charles, 2004; McCay, 2004), there is no clear evidence that quota have on a significant scale left the segment of family owned beam trawlers. Indeed the fact that individual quota holdings are being brought into a management group might have been a major contributor as in first instance quota transfers are being traded within the confines of the group.

Then again, it is true that the first allocation of quota privileges the original group of fishermen who received their quota share gratis. After the initial allocation the fishermen (owners) further invested in obtaining an appropriate quota holding, thus developing a market for the transfer of quota and setting a price. This of course puts a strain on new entrants to the sector: they have no access to a start up quota share for free. Also, in times that the quota holding is the main determinant of potential profitability of a vessel (assuming that the underlying amount of fish can be caught) competition for, and hence price of quota will increase.

Currently if one was to invest in a new beam trawler for flat fish fishery the required investment of about 8.5 million Euro would for up to as much as 30% consist of obtaining transferable licenses and quota. Not only is this total amount rather prohibitive for entering the fishery, it can be queried whether under the current circumstances in the market licences and quota will be available. On the other hand this is of course among the aims of establishing a ITQ system: a reduction of the over-capitalisation and rationalisation of capacity of the fleet. In Figure 24 below the relative share of investment required for the vessel, the licences and quota since the 1980s is being presented. We can observe that both in nominal as in real terms the price for investment in a vessel, licences and quota[8] has gone down over the past decades. This for one can be attributed to what for example Arnason (2002) and Squires *et al.*

8 Based on the purchase of a new 42 meter vessel with a GT licence and additional licence for 2000 Hp and the purchase of 100.000 kg sole and 150.000 kg plaice quota.

(1995) refer to as a thin market: markets with few participants and infrequent transactions in which price formation can be rather erratic. On the other hand this situation reflects the fact that today both within the sector as with the banks there is little confidence on the returns of such an investment and for example loans are almost impossible to obtain.

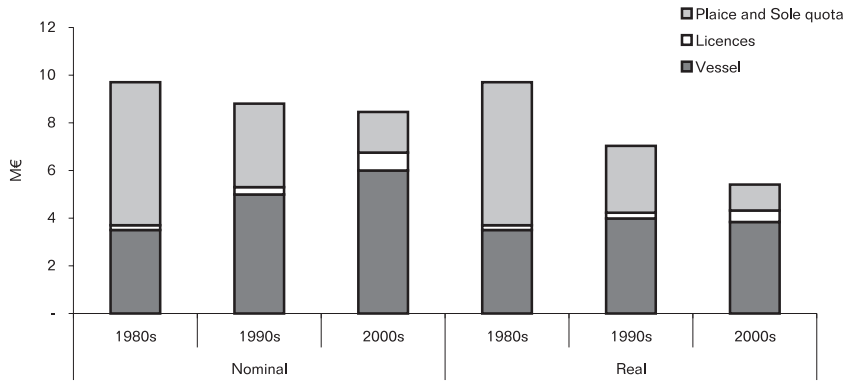

Figure 24: Calculated relative share of investment in vessel, licenses and quota Dutch North Sea beam trawl fleet in million Euro, real value calculated on price level 1984=100. Data from LEI, personal communication.

In the Netherlands the significance of fisheries is rather small and diminishing. Out of the 23 communities in the Netherlands with a significant cutter fleet the contribution to employment on average is less then 0.5%; only in communities like Den Oever (9%) and Urk (7%) the contribution to employment is more significant (Salz *et al.*, 2008). The communities are, compared to for example Iceland and Norway not very isolated. Of course the disappearance of fishing vessels and hence related fishery activities does have an impact on local communities. But then again, as these communities are closely linked to the wider economy, in recent years we have seen that wage opportunities in other sectors have been such that crew members have already opted to take other jobs. In addition also increasingly the fish processing an trade industry in the Netherlands becomes less dependent on national landings and more involved in international trade flows.

In the debate on safeguarding quota for local communities (for example Eythórsson, 1996; Crean, 1999; Jentoft, 2000; Wingard, 2000; LeDrew, 2003) the Dutch case shows that by managing the quota in groups the rights can be maintained. Although there are active fishermen that protest against the so called 'sofa' fishers (slipper skippers: former fishermen holding on to quota, leasing it out in stead of actively fishing on it) this phenomenon is of minor importance (Vissersbond, personal communication); on the one hand because only a small part of quota is currently owned by slipper skippers and the pe-

riod in which quota can be held without being attached to a vessel is limited. On the other hand these quota are made available to fishers to lease. In fact this illustrates the process in which ITQs can facilitate the gradual withdrawal of a fisher from the fisheries.

2.6 Conclusion and discussion

The case of Individual Transferable Fisheries Quota in the Netherlands, as used by the Dutch government in managing the North Sea beam trawl fisheries, shows that marked-based governance in fisheries management has had an effect in terms of reduction of fleet capacity, investments in the fisheries, employment and total catches. The introduction of the Dutch ITQ system created private rights to access to fish and a market for these access rights where one did not exist before. By embedding the ITQ system in a group-management setting the government at the same time deregulated and delegated monitoring and enforcement tasks. The embedding of the ITQ system into a joint management structure around groups of fishermen may well have cushioned off some of the negative effects associated with the introduction of an ITQ system such as the concentration of fishing rights in the hands of a few.

The fishermen used the group system not only for private optimisation of quota holdings but also for the collective management of quota uptake as well as to a degree for developing a collective quota holding of the group. By linking private owned quota to collective (group) management and the realm of nationally managed quota and international quota swaps the fisheries sector, as private entity, gained a navigating role in the steering mechanism of the state.

This system was not conceived and designed in one go but evolved over time; adjustments such as the tradability of rights were more of a pragmatic cooptation of practices of the fishers then stemming from a grand design. The system portrays an amalgam of privatisation, marketisation, deregulation and self-governance. Open access has been transferred into tradable private access rights. The privatisation of fishing rights enabled fishermen to plan their fishing undertaking and hence reduce the ‘race for fish’. The marketisation of these rights enabled an individual balancing of fishing capacity and access. The co-enforcement system, but more over the collective management of the groups’ quota holding, characterises a form of self-governance. But as for deregulation and delegation of fisheries management the Dutch government and the EU CFP still determine fisheries policy with no formal position of the fishing sector.

We can characterize the governance of Dutch fisheries management not so much as a transition from state to market but as a market-based government policy in a setting of self-governance by the fisheries sector with a partial deregulation of fisheries management.

At the EU level we see the coexistence of a liberal discourse of free movement of goods and people combined with a centrist, etatist (van Hoof and van Tatenhove, 2009) competence of the European Commission in fisheries policy. Assigning specific access rights to a privileged group of actors (the current group of fishers) is at odds with this liberal discourse. In fact the access to the resource is being privatised and marketised by ITQs, but not fully liberalised since government regulation still prohibits other than fishers access to quota. The question can be raised whether it is time to open up the ITQ market to for example recreational fisheries, whose landings of quota species at times are considerable, do not need quota nor do they have access to purchase quota. Opening up the possibility to recreational fishers, but also to Environmental NGOs, Fishing Communities and (local) governments would provide an instrument to other actors to play a role in fisheries management. For example fishing communities could safeguard access to the resource for their communities; a form of community fishing rights as we have seen for example emerge in Shetland (van Hoof *et al.*, 2002; van Hoof *et al.*, 2005; van Hoof *et al.*, 2007b).

Rights based management, such as through ITQs, is in fact the delegation of state management tasks to other actors, hence transferring competences in fisheries management. Opening up the trade in access rights, for example to other stakeholders or even other Member States' citizens, would fit the philosophy of liberalisation. Already international swaps of quota play an important role in EU fisheries management. And although the principal of relative stability regulates the distribution of Total Allowable Catches over Member States, swops between Member States and private ownership construction of companies already grant quite some leeway to move quota around.

A remaining issue is the fact that at this moment ITQs are a rather peculiar entitlement. On the one hand ITQs are a firm defendable and excludable right of individual fishers to access to a resource (access to the fishery itself is regulated through i.e. licenses and permits). On the other hand it is a rather insecure entitlement as the magnitude of fish to which the ITQ provides access varies from year to year based on scientific advice and the EU political process of negotiating TACs between Member States and third countries.


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Chapter 3

Co-management:

An alternative to enforcement?

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According to EU Maritime Commissionaire Joe Borg, developing a culture of compliance throughout the chain of activities related to fisheries from the fisherman to the consumer is the surest way of delivering sustainable and equitable fisheries in Europe (Borg, 2008). And apparently this change is direly needed since: "Today, those in the industry who uphold the law frequently witness offenders escaping sanction and making huge financial profits in the process. This is untenable in any context, and particularly in the current situation, with fish resources getting increasingly scarce" (Borg, 2008). In fact, according to Borg, the main stay of the problem of non-compliance lays not so much in the fact that the management system is insufficient in delivering the desired goals but " The current control system is so inefficient that it jeopardises our efforts to achieve sustainable exploitation and long term management of stocks" (Borg, 2008). Despite an overall expenditure of € 400 million a year on control "Any control policy falls apart like a house of cards if it is not properly implemented, and if infringements are not followed up" (Borg, 2008).

Hence, as a result of the 2002 revision of the EU Common Fisheries Policy (CFP) the emphasis is put on enforcement of measures (monitoring and control) and not so much on the basic fabric of fisheries management. The search is how to better get the policies enforced. The answer apparently lays in a government oriented solution: a Community Fisheries Control Agency (CFCA) to organise operational coordination of fisheries control and inspection activities by the Member States and to assist them to cooperate so as to comply with the rules of the Common EU Fisheries Policy in order to ensure its effective and uniform application.

In 1990 a similar enforcement crisis evolved in the Dutch fisheries management system. Fishermen lost their faith in government as agent of effective fisheries management and government failed to implement fisheries management rules effectively. Contrary to today's proposal of Borg, to reinforce government enforcement of fisheries management, in the Netherlands the solution was found in establishing a more participatory system of fisheries management involving fishermen and the state alike: co-management.

In this paper I will use this example of Dutch co-management and the participatory governance discourse to analyse whether a more participatory solution, as substitute for government rule making, can serve as alternative for enforcement. I will start by looking at the practice of fisheries management, compliance and the role of co-management. In order to further analyse co-management I will look at the current discourse on political modernisation and participatory governance. I will use the history of Dutch fisheries co-

management to analyse whether this new institutional setting has led to an increase in compliance with the formal government fisheries management. In the final part of the paper I will discuss these findings and theoretically assess possibilities of co-enforcement at a European scale.

3.1 Fisheries management and compliance

The call for fisheries management can be found in the open access natural renewable resource character of fish stocks. In the absence of property rights over the resource, individual fishermen will have little incentive to conserve the fish stock or to harvest the fish efficiently because the benefits of doing so may be appropriated by other fishermen. The obvious answer in fisheries has for long been to make the case for a strong presence of government in fisheries resource management (Jentoft *et al.*, 1998; Noble, 2000; Kearney *et al.*, 2007; May, 2008). Hence the development in the second half of the twentieth century of management of marine fisheries by central governments and international organisations with the characteristics of today: biology based measures (such as mesh size regulations, total allowable catch, area closures, nursery ground protection), measures directly affecting the economic operation of the vessel (such as restrictions on days at sea, fishing time, engine size and holding capacity of the vessels) and marked-based (e.g. tradable quota) as well as non-marked based instruments (e.g. subsidies for construction of new vessels) which affect the economic operation of the vessel more indirectly (Arnason, 2000; Sissenwine and Symes, 2007).

Compliance with regulations refers to the degree to which citizens adhere to rules and regulations, in this case in particular the various fisheries management regulations. The degree of compliance provides insight into the effectiveness of the management system of translating policy into concrete operational measures. On the other hand, the level of compliance provides insight into the way the measures are supported and perceived as legitimate by the people that have to operate by the rules. The decision of individual actors to comply or not is primarily based on a calculation of the (economic) gain to be obtained from bypassing the regulation compared to the likelihood of detection and the severity of the sanction. Increased enforcement activities can reduce or even prevent non-compliance behaviour among fishers, but there are limits to the amount of resources (human and capital) that can be used on enforcement activities, in particular if the aim is to strike a reasonable balance between the costs of enforcement activities and the profit to be obtained from fishing activities (Raakjær and Mathiesen, 2003).

Especially in a fishery with over capacity, as we will see later in the Dutch case, there is a strong economic incentive for non-compliance. Fishers often argue that they are forced to non-compliance behaviour in order to maintain in business (Hatcher *et al.,* 2000). Hence in terms of legitimacy, fishers feel threatened by a situation where the regulations are incompatible with their daily practice of fishery.

3.2 Fisheries co-management

The choice of type of instrument in fisheries resources management is largely government-driven although experiences worldwide show that various forms of partnership between government, industry and fishers strengthen management and produce results (Raakjær *et al.*, 2004). In fact fisheries management has been more concerned with the means, such as Individual Transferable Quotas (ITQs), than with institutional and organisational aspects (Noble, 2000). From the so called *Brundtland* report, the World Commission on Environment and Development report Our Common Future of 1987, we can learn that in order to arrive at sustainable development, and hence also sustainable management of natural resources, communities should have greater access to and control over decisions affecting their resources, in cooperation with government, economic and administrative functions (World Commission on Environment and Development, 1987). This idea of partnerships became even more internationally acceptable and promoted following the 1992 United Nations Conference on Environment and Development, the "Rio conference" and, even more strongly, after the Johannesburg World Summit on Sustainable Development of 2002 (Mol, 2007). Co-management is the application of this principle to fisheries management (Noble, 2000).

Fisheries management literature provides many examples of resource user participation in fisheries management. For example Jentoft and McCay (1995), Raakjær and Vedsmand (1995), Sen and Raakjær (1996) and Raakjær and Vedsmand (1999) provide a plethora of cases in which user participation is in operation, including African, Asian and also European cases such as those of the Netherlands, Denmark and Norway. Smith *et al.* (2008) provide the example of the Resource Assessment Groups operational in Australia. The co-management of the sand eel fisheries in the Ise Bay is a famous case in Japan, where the natural resource management is carried out through the interplay of fishermen communities, science and government (Ashida, 2009).

Participatory arrangements in fisheries management can range from historical fishers' organisations, such as the *Confradias de Pescadores* in Spain and the *Prudhomies* in France (Galle and Weber, 1992; Jentoft and McCay, 1995; van Hoof *et al.*, 2005) to safeguarding use rights of native groups of fishers such as in use in the system of Community Development Quota of the US North Pacific Regional Fishery Council to help bring economic and social development opportunities to Native Alaskan villages along the coast of Western Alaska (May, 2008). They can be rather ancient local systems, such as found in Japan (Ashida, 2009) and the Customary Fishing Rights Areas in Fiji (Sen and Raakjær, 1996) but can also be of more recent signature such as the management of the mechanised beach seine fishery in Mozambique and the management of Lake Malombe in Malawi (Sen and Raakjær, 1996). Today the United States government is moving toward a co-management model to fishery governance based on stakeholder engagement (May, 2008). There is compelling evidence that such participatory governance is crucial for contending with complex problems of managing for multiple values and outcomes to achieve ecological sustainability and economic development (Kearney *et al.*, 2007).

Although the cases above feature a form of resource users (fishers') participation in the management system, not all would be considered to be co-management. Co-management is here defined as a dynamic, collaborative and participatory process of regulatory decision-making in a setting of institutional and organisational arrangements using the capacities and interests of user-groups, complemented by the ability of the fisheries administration to provide enabling legislation and administrative assistance to reduce information and regulation costs to the government and improve decision making and regulatory effectiveness (Raakjær and Vedsmand, 1995; Sen and Raakjær, 1996; Jentoft *et al.*, 1998; Raakjær *et al.*, 2004; van Hoof *et al.*, 2005). If top down government control and fishers' self-management would be at the extremes of a management dichotomy, co-management would be found in between the two extremes.

Covering a variety of partnership arrangements co-management can be viewed as a set of institutional and organisational arrangements (rights and rules) which define the cooperation between the particular fisheries administration and its related user-groups. Raakjær and Vedsmand (1995, 1999) use the balance in the roles that both government and user-groups play to classify co-management into five broad types: instructive, consultative, cooperative, advisory and informative. In those cases in which government only informs users on the decisions they plan to make (instructive) or in which mecha-

nisms exist for governments to consult with users but all decisions are taken by government (consultative), although being participatory to a degree, do not qualify as co-management since government and resource users do not collectively develop, implement or monitor policy measures. Hence also those cases in which fisheries management boils down to being de facto resource users' self-management, such as community based management, do not qualify as co-management. Although in cases such as in Ise Bay in Japan and the Customary Fishing Rights Areas in Fiji, where local users' (community) institutions manage the resource and are sanctioned by government, the management itself does not constitute a cooperative process of policy making with the state. Consequently traditional marine tenure systems, traditional fisheries management systems and community-based resource management are not considered to be co-management because government is not involved in the decision-making process (Sen and Raakjær, 1996).

In order to analyse a system of co-management it should be viewed in its proper local historical and institutional setting. For EU fisheries this implies that in order to analyse co-management it should be put in the context of the EU fisheries governance extending from the supranational, national and regional to the local level. EU fisheries management, captured under the Common Fisheries Policy, is one of only five areas of exclusive competence of the European Commission. This extraordinary elevation of marine conservation reflects the complexity of fisheries management within the EU (Hawkins, 2005). Although the EU enjoys the ability to adopt binding legislation that requires no review or ratification at the national level, the responsibility for implementation falls upon member states (Jordan, 2001). Hence the EU Member States have within the context of the CFP regulations, a degree of freedom to develop national regulations and organise the way responsibilities in fisheries management are shared between the national authorities and stakeholder groups.

3.3 Partnerships and marine governance

Founded on great optimism about the possibility of progress by the application of rationality and the state's capacity to solve societal problems by rational policy making and comprehensive planning, early environmental politics can be characterised as being state-initiated, based on scientifically deduced standards, and presuming loyalty from both market and civil society in its actual implementation. Starting in the late 1960s and 1970s a gradual shift in environmental politics can be witnessed. Fuelled by scepticism about sci-

entistic optimism, a critique on the one-sided one dimensional character, the limits of rationality, and the (unforeseen and neglected) external effects of environmental policies developed. The criticism focussed on the lack of equality, emancipation, democracy and participation of prevailing environmental policies (van Tatenhove and Leroy, 2003). This call for increased participation and innovation of environmental polices was labelled political modernisation (van Tatenhove and Leroy, 2003). In this process of modernisation the centrality of the state as a political actor is decreasing, providing leeway for an increasing role for politicisation within other spheres of society. Hence in this process an increasing interweaving of state, market and civil society takes place, a process in which the common formulation of the problem and the design of its most adequate solution strategies are part of the policy-making process. These basic features are reflected in a variety of participatory, interactive and deliberative patterns and practices of policy-making that we witness throughout contemporary Europe (van Tatenhove and Leroy, 2003).

In such environmental partnerships between government and industry, through which solutions to environmental problems can be negotiated, a shift occurs towards a focus on tackling the source of environmental problems, not merely dealing with the impacts. Analysing these partnerships Glasbergen (2007) portrays a strong state no longer as a state that is able to run from a central position but rather as one that is able to stimulate the self-governing capacities of stakeholders on sustainability issues. To improve the regulatory capacities of governments a shift is made towards new institutional arrangements involving representatives of the state, the market and the civil society with the emergence of partnerships and other forms of 'co-' and 'self-'governance.

Looking at the examples of fisheries co-management described earlier, fisheries co-management presents such a partnership arrangement of a coalition between state and fishers. The coming about of a fisheries co-management arrangement presents a shift in the relationships between the institutions of state, market and civil society involved in fisheries management and implies new conceptions and structures of governance (Arts and van Tatenhove, 2004). However, identifying the fishers as representing the private domain driven by a market rationale, hence depicting fisheries co-management as a simple state-industry arrangement, does not seize the reach of the partnership. The majority of fishermen have a dual-actor position both as professionals and members of a local community, hence combine a rational economic efficiency paradigm with social and emotional drivers such as long term continuity of the family firm and a sense of belonging to the local community.

This is congruent with Glasbergen's (2007) description of a shift from the state-centred approach towards a more pluralistic approach in which the goal is to refine the definition of quality of life encompassing material welfare and social equity, recognising self-governing capacities of business and organisations in civil society.

Like for example in the US where fisheries governance extents from the federal to the regional levels (May, 2008), the EU fisheries governance extents from the supranational, national, regional to the local level. Today the vast majority of policy areas have some supranational characteristics, such as qualified majority voting and co-decision making with the European Parliament (Jordan, 2001). No longer is the nation state in control of the policy making process but shares responsibility at the regional and international level (such as the EU) and operates in an arena with non-governmental organisations and other private or quasi-private bodies. As Loeber *et al.* (2005) conclude: the nation-state in the later half of the 20th century has become a collection of social and economic actors who are, as inhabitants, nominally based in a country but who participate in diverse dynamic social and economic networks that stretch across national boundaries. Hence, fisheries co-management within the sphere of the EU CFP is a public-private partnership at (sub)national level, within the context of a multi-level participatory governance arrangement involving the national and supranational level.

3.4 Co-management in Dutch fisheries

After the Second World War, and particularly since the 1960s, the Dutch North Sea fishing fleet for flatfish developed rapidly. The growth of the sector was based upon a technical innovation, the double-beam-trawl, which was introduced at the end of the 1950s, and the development of an export market for flatfish. As a result, over the years the Dutch beam-trawler fleet has increasingly concentrated on flatfish, especially sole and plaice (Dubbink and van Vliet, 1992).

Towards the end of the 20th century Dutch fisheries management can be characterised as an ongoing process of restricting fisheries. Before 1975 Dutch fishermen had quite some freedom to decide on their operations; the level of regulation was rather modest. This fitted into the national political philosophy based on 'subsidiarity' and 'sovereignty in own circle' (van Hoof *et al.*, 2005). In an organisational sense this is exemplified by neo-corporatist institutions in fisheries (but also in agriculture and many other sectors) in which govern-

ment and organised interests (mainly trade unions and employer associations) jointly develop and implement social-economic policies. The government does not operate at a distance and organised interests do not have to lobby; they are welcome partners at the table. There is consultation at all stages of legislation and policymaking. Often this is institutionalised in advisory bodies, but much coordination takes place in an informal way.

In 1975, the North East Atlantic Fisheries Commission established Total Allowable Catches (TACs) for several species of fish, including sole and plaice. Based on 'historic rights' Dutch fishers were allocated over seventy per cent of the TAC for sole, and nearly forty per cent of the TAC for plaice. These TACs did not provide secure property rights as the flatfish fishery would be closed once the national quotas for sole and plaice were exhausted. Since everyone knew that fishing could be closed any day, uncertainty spread. The outcome, i.e. the fishermen's race for fish, became even more stimulated than before (Dubbink and van Vliet, 1992).

Hence with the system of a national TAC the race for fish was not eliminated and until the late 1980s the Dutch fleet was expanding, both in terms of total capacity (measured in horsepower), in supply of fish (in weight and real value) and in employment. In reaction, Dutch government organised an individual quota system for the two major flatfish species: sole and plaice (Smit, 1997), initially as Individual Quota which could not be sold, leased, or used as collateral, developing into an official system of IQ trade including a central clearing institution (Smit, 2001).

Because many fishermen had been investing heavily in fishing capacity throughout these years, many fishermen faced a discrepancy between their fishing rights and their fishing capacity: they did not obtain/have quota rights for their new and bigger ships, ships which were financed on the basis of easily accessible loans. As a result, "fishermen felt on one shoulder the weight of their financial burden and the banks that told them to keep on fishing and on the other shoulder the hand of the government that told them to quit fishing" (Dubbink and van Vliet, 1992).

According to Smit (1997) fishermen tried to dodge the system, putting up a smoke screen around landing declarations. This period of rapid expansion of the Dutch fishing industry was characterised by reports of illegal fishing, under-reporting of catches, grey and black trade circuits and inadequate policing and enforcement by the Dutch state (van Ginkel, 2005): the national administration was not prepared for a rather large system to keep track of lan-

dings (of each individual vessel in Dutch and foreign ports) and enforcement was weak (Smit, 1997). Catches continued to exceed the national quotas and as a consequence of failure to contain the problem a political crises evolved in 1990 in which it was clear that the command-and-control regulation failed to police fishermen's behaviour.

During the mid-1980s a growing political concern about the non-compliance with the quota regulations evolved. Until the late 1980s three factors enabled the fishermen to land considerable quantities of "black" and "grey" flatfish in addition to their legal quotas: (1) a weak monitoring and enforcement policy; (2) low fines for violations; and (3) logistical and administrative help from the auctions (Dubbink and van Vliet, 1992). A growing awareness occurred that the involvement of the public authorities in the continuation of illegal behaviour could no longer be tolerated (Dubbink and van Vliet, 1992). In order to regain legitimacy of the fisheries policy, negotiations between the fishers and fisheries managers on the establishment of co-management groups were devised. A simultaneous increase in the sole TAC helped to calm down the flatfish fishermen's discontent with the European and national fishery measures and led to greater compliance with quota regulations.

Aim was to give responsibility to the Dutch fishery sector through self-management. To arrive at devolution of specific management responsibilities to fishermen, they had to organise themselves into groups – the so-called 'Biesheuvel groups', named after the chairman of the committee that advised on the new policy, former Prime Minister Barend Biesheuvel. Parliament threatened to introduce regulations to generically limit engine power should the fishing industry decide not to accept organisation in groups. This became known as 'de stok van Mok'[9]. Because of this threat of limiting engine power but also because group members were entitled to more days-at-sea than non-members and the period in which the latter can trade quota is restricted, ninety-seven per cent of all beam trawl fishermen joined the co-management system.

The aim of the management groups was twofold: first, to arrive at an effective and efficient system of quota compliance that would be supported by the fishers; secondly, to improve economic performance within the quota restrictions. The Biesheuvel co-management regime to a large extent hinged on the idea of social control and peer pressure. The management groups are administered by a board, consisting mainly of fishermen but chaired by an

9 Mok's stick, named after the 1992 advice of the commission chaired by Mr M. R. Mok looking into a forced capacity reorganisation

independent chairman. The primary task of the management groups is to manage and control the quota of their members. Fishermen were free to choose their group. Within these groups the individual fishermen pool their individual quota and their days-at-sea. Fishermen remain the owners of their catching rights and days-at-sea but within the group they can easily and in the short term buy, sell or lease quotas and days-at-sea, in the event that they have a shortage or a surplus. In this way the individual fishermen gain more short-term flexibility and have more options to react to unexpected events. Fishermen have to deliver a "fish plan" to the board, presenting how they want to spread their days-at-sea and catches over the year (Dubbink and van Vliet, 1992).

Beam trawl fishers appreciate the co-governance system because it gives them a say in the management of the group and their own firm; it increases their flexibility because they can transfer quotas and days-at-sea; it provides them with the certainty to take their quota share at the time they deem economically most rewarding; and the likelihood that others will dodge the rules and regulations has decreased (van Ginkel, 2005). However, although the Biesheuvel regime has delegated considerable responsibility to fishers for quota management, government still is in control of fisheries management. In addition, fishermen do not perceive the co-management system as providing a platform to participate in the general cycle of policy design and implementation.

3.5 Dutch co-management system in perspective

The introduction of the Dutch co-management system clearly played a role in both bringing back legitimacy to the system as increasing compliance with the quota management. Since the start of the co-management system official landings of both plaice and sole have been below the TAC, hence in that respect the system has shown a clear improved performance. Also, especially compared to the period of great turmoil of the 1990's, the costs of the management system have been reduced greatly. In the early days of the system over the period 1989 – 1992 we see a reduction of costs of the inspection service of 20% and a reduction of registered infringements of 32%. Five years later the annual costs of inspections have been reduced by 45% and the number of registered infringements reduced by 90%. (Based on AID, 1991, 1992, 1993, 2000). In addition social costs (unrest and an unstable system) have been reduced. This has led internationally to the image of the fisheries control in the Netherlands ITQ system, which is largely based on self-responsibility

among the local producer organisations (management groups), to be regarded as a best-practice model by the EU (Hentrich and Salomon, 2006).

By inclusion of the fishers into the management system and founding the system in social control and peer pressure, the legitimacy of the system is increased. Also a shift is noticed in the driver for compliance, from an economic rational towards a more social normative rational. At the onset fishers approached compliance as a calculation of the economic gain to be obtained from bypassing the regulation compared to the likelihood of detection and the severity of the sanction. As the severity of the penalty was considered minor vis-à-vis the profit to be gained non-compliance became the rule. In fact the last haul of a week's fishing trip was considered to be the haul to pay for the fines. With the transition towards management in (local) groups with joint responsibility for the management of the quota the utility maximisation focus gave way for a more normative approach emphasising the social normative values of the fishers.

The Dutch fisheries co-management system is a public-private partnership, using the capacities and interests of user-groups, complemented by the ability of the fisheries administration to provide enabling legislation and administrative assistance. Looking at the experiences of the Dutch case and other examples from around the globe resource user participation, such as in fisheries co-management, proves to be a functioning alternative for top down centralistic government management of natural resources (Jentoft and McCay, 1995; Raakjær and Vedsmand, 1995; Sen and Raakjær, 1996; Kearney *et al.*, 2007; May, 2008; Smith *et al.*, 2008; Ashida, 2009).

The introduction of the co-management system in the Netherlands has brought about a change in the basic governance fabric of fisheries management by devolving part of management responsibilities from government to user-groups[10]. But then again, following Smit (1997) in his analysis of the Dutch ITQ system, the co-management system has to share the credit for success with other developments. Beginning around 1987, top down control was intensified, accompanied by licensing, input management (maximum days-at-sea), and maximum gear width for double-beam trawls. The days-at-sea restrictions had a strong impact, especially in the early years. A maximum engine capacity of 2000 HP for new ships was set and a development towards fleet reduction emerged. Decommission schemes and Dutch vessels being

10 Information based on a series of interviews with key players in the Dutch fisheries sector ranging from fishermen and their organisations and fisheries managers through other related organisations and ENGOs.

reflagged to fish under adjoining EU countries' flags have led to a capacity reduction in the Netherlands.

In fact, in real terms what is labelled a co-management system is in practice a mere ITQ management system. Hence the core of the system is not a joint management of fish stocks but a decentralised effort of monitoring quota uptake and keeping landings in line with set TAC. One can easily argue, as is also shown by the history of the coming about of the Biesheuvel groups, that the interest of the individual fishermen laid much more in gaining access to the ITQ trade system and additional days-at-sea under the threat of parliament to be subject to a generic cut in engine capacity, than a development towards a joint management of marine resources.

Using Raakjær and Vedsmand's (1999) classification of co-management, the actual management of quota at group level is an example of cooperative management, where responsibilities of government are devolved to user-groups. However, the user-groups have no direct input in the wider policy development process rather than a mere instructive role. In fact, in looking at the polity and politics aspects of Dutch fisheries management, it is still the Directorate for Fisheries leading the development and implementation of fisheries policy. Co-management takes places "in the shadow of hierarchy" (Sørensen and Torfing, 2005) as government has a pivotal role in providing the legal basis for the functioning of co-management arrangements (Raakjær *et al.*, 2004) and to fulfil a role in monitoring and control of the system. As shown for the Dutch case and as documented by Raakjær (2003) for Danish fishermen, groups of users will be reluctant to in fact police their operations among themselves. In the Dutch system the fishermen clearly look at government to fulfil a role in enforcement of the management rules of the system. In the Dutch case the 'stok van Mok', the threat of mass capacity reduction, portrays public authorities organising self-regulating governance networks backed by the threat of replacing the horizontal network governance with hierarchical rule.

One could argue that the current Dutch co-management arrangement is a system of limited participation and devolution. Fishers are not actively participating in an interactive process of policy development. Although for a minor part fishermen's participation in the management system has increased (quota administration and trade), in other areas of fisheries management their role has not been altered. The latter becoming very obvious when government, enthusiastic about the success of the co-management system and willing to embark on an increase of co-operation in more policy dossiers, sought the devolution of more (monitoring and control) tasks to the co-management

system, which was being turned down by the fishing sector. As stated by Ed Nijpels, chairman of the commission looking into a recalibration, extension and broadening of the co-management system, taking more responsibility in fisheries management is perceived as possible by the fishing sector but only if implemented under equal circumstances for all (North sea) fishermen (Nijpels, 2003). It is only after prolonged discussions between industry and government that in 2005 the co-management system was extended to also include the management of engine capacity (Anon., 2004; Hoefnagel, 2007).

In fact the Dutch system centres much more on a decentralised monitoring and surveillance system for a single objective: quota management (and since 2005 engine capacity management). In that sense the Dutch system does not represent an environmental policy instrument in which the constellation of state, market and civil society is fundamentally altered to accommodate common formulation of the problem and the design of its most adequate solution strategies as part of the policy-making process. Rather we see a shift from an arrangement of monitoring and control in which the state at first is directly involved in quota management and later operates more at a distance with the groups of fishers managing quota uptake.

So in conclusion, the Dutch co-management system only involves a relative small portion of fisheries policy: quota uptake management. And then again, one should realise that although some changes have occurred in the polity and politics of fisheries management, this has only accrued to a limited number of actors: the fishermen. Other stakeholders and interested parties do not form part of this arena, yet of course do have their separate fora to influence the policy process. In fact co-enforcement seems to be a more appropriate term; fishermen in their Biesheuvel groups and central government through the AID, the General Inspection Service of the Ministry of Agriculture together see to implementation of quota rules (set by the EU and government). This arrangement apparently does provide benefits to the fishers, such as access to a quota trade system and joint management of group quota, hence their willingness to partake.

3.6 A role for a Fisheries Control Agency

If we try to translate the Dutch experience to the challenge raised by EU Maritime Commissionaire Borg in bringing about a culture of compliance in fisheries management, the first conclusion is that certainly the system of Biesheuvel groups to manage quota has in the Netherlands lead to a system that

brought about an increased compliance with the management system. The introduction of the Dutch system is a clear example of how an arrangement of fisheries management can be developed with greater fishermen involvement. However, still within the system there is a need for enforcement of the rules. If this takes place within a co-management system, such as in the Dutch Biesheuvel groups based upon self management and the principals of social control and peer pressure, there still is a need for an outside agent (perhaps at a distance) with vested monitoring and enforcement powers to be called upon by the actors within the system if required.

By inclusion of the private actors (fishers) into the arrangement of fisheries management the compliance to the rules of TAC and quota improved. In the Dutch case it resulted in a situation with increased compliance and lower costs both in terms of costs of monitoring and surveillance but also in reduction of costs of illegal and unreported landings and trade. Co-management in the Dutch case is a mixture of government set legal measures, economic advantages and peer normative control. If the problem of the fisheries management system is its enforcement (as is claimed by Commissioner Borg in introducing the Community Fisheries Control Agency) the Dutch example shows that in stead of introducing more enforcement and control one can also establish a system based on shared responsibilities and less government control in order to regain compliance.

Would such a system be an option for the EU at large? The essence of co-management is fisheries management implemented in conjunction with local groups of fishermen. This regionalisation of fisheries management is in line with the EU strive for bringing fisheries management to the regional level, such as for example illustrated by the introduction of the Regional Advisory Committees. As EU fisheries governance extents from the supranational, national and regional to the local level the question of scale and at which level to organise the management arrangement needs to be addressed. The co-management arrangement has to fit in with the local and national institutional setting. Hence it would be logical to organise management groups around similar regional practices such as for example metiers.

This then brings to bear the question of where in a EU co-management system to organise the enforcement. From the perspective of the CFP and fisheries management as supranational arrangement it would seem logical to organise enforcement at a central EU level, as for example is proposed in the Community Fisheries Control Agency. If organised and unified at a central level all arrangements would be controlled in a similar way, hence building

a level playing field. However, the sheer character of modern governance, fuels the development of varying local institutional solutions. On the one hand there is a shift in the focus of democratic politics and practices, from hierarchical and well-institutionalised forms of government towards less formalised practices of governance, in which state-authority makes way for an appreciation in politics of mutual interdependence (van Tatenhove and Leroy, 2003). On the other hand there is a shift in the locus of democratic politics: governance at subnational and supranational levels is gaining importance vis-à-vis the national level (van Tatenhove and Leroy, 2003). A continued call for increased local and activity specific participation, will result in a plethora of locally specific and divers forms of partnerships. In this case one can query the relevance of unified and universal agencies for control and enforcement at a European level.

Yet, it is right in this setting, with on the one hand a call for unification and a level playing field in control and enforcement and on the other hand a call for local specific (hence diverse and differing) arrangements, that a Community Fisheries Control Agency (CFCA) could take up a role. As the co-management arrangement will be locally specific, the national government will be responsible for enforcement at Member State level. The role of the CFCA could be one of enabling these local arrangements by unifying rules, maintaining standards and ensuring compliance. This can be operationalised by taking up the role of outside agent creating a level playing field by pulling together and standardising the generic CFP rules and enforcement practices, leaving ample room for (sub)national and regional co-management practices to be developed.

3.7 Conclusions

From the Dutch case we learn that co-management within the CFP is a viable option. Co-management is a specific local participatory arrangement fitting the local institutional setting. However, we also learn from the Dutch case that Dutch fisheries co-management is not so much a participatory interactive policy arrangement, with fishers actively involved in the process of policy development, but is an arrangement in which part of management and enforcement is devolved to the fishers, shared with the enforcement agent of the government: a situation of co-enforcement.

The EU Community Fisheries Control Agency can play a role in establishing co-management at a wider EU scale by providing an enabling environment in

which such subnational and national arrangements can be developed. On the other hand it can play a role in co-enforcement by taking up the role of enforcement agent at a distance, sharing this role with the national enforcement agencies.

Chapter 4

If you can't beat them:

Joint problem solving in Dutch fisheries management

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Declining fish stocks have led governments over the years to deploy traditional top-down measures which have led to an economic inefficient and overcapitalised fishery, a remaining pressure on the resource (van Hoof *et al.*, 2007a) and a fisheries management system in crisis (Raakjær, 2008). The lack of legitimacy is often perceived in EU fisheries management as the factor leading to governments failing to effectively govern fisheries (cf. Commission of the European Communities, 2001b; Hawkins, 2005; Sissenwine and Symes, 2007; Commission of the European Communities, 2008a).

In the wider field of environmental politics we can notice a gradual shift in political participation triggered by criticism on the state regarding both its ignorance of environmental effects of decisions and the lack of participation of the people affected. The criticism on the nation state of its fundamental incapability to protect the environment (Mol, 2007) was followed by a call for an innovation of environmental polices (van Tatenhove and Leroy, 2003). Challenges or risks in society post to the state today cannot be dealt with by the classical, state-centred system of the industrial society. A decreasing centrality of the state as a political actor, and an increasing interweaving of state, market and civil society, in which the common formulation of the problem and the design of its most adequate solution strategies are part of the policy-making process, is perceived as the way forward.

In Europe, fisheries management traditionally takes place in a neo-corporatist arena, in which government and organised fishing industry interests jointly develop and implement social-economic policies (van Hoof *et al.*, 2005). This neo-corporatist foundation has provided a stage in the Netherlands for the development of a co-management system in fishing quota management. Next to this joint policy implementation we have witnessed over the past years the coming about of new ways of policy making in Dutch fisheries by way of so called covenants: a social contract between state, market and society on fisheries management. In this article I will use these Dutch experiences of covenants to analyse the role and function of such covenants and seek to analyse their wider implication for fisheries management within the context of the EU Common Fisheries Policy (CFP).

In section 2 a theoretical frame for the analysis of covenants will be presented. In section 3 I will present the three fisheries covenants developing in the Netherlands: the management of engine capacity in the cutter fleet, North Sea cutter fisheries and Mussel fisheries. In section 4 I will analyse the role of Dutch fisheries covenants and in section 5 I will draw some conclusions.

4.1 Theory of covenants

After the first decades of modern environmental policy (1970-1990), in which environmental aims were translated into standards for products and production processes (Glasbergen, 1998) we can, following Chappin *et al.* (2009), see the transition from at first central management by means of coercion and incentives, via interactive management and internalisation (target group policy, covenants or voluntary agreements), towards self-management.

Covenants are more or less formal agreements between a governmental organisation (usually a ministry) and a representative of the private sector (usually a sector organisation) with the intent of achieving national environmental policy aims on a voluntary basis (Glasbergen, 1998). Covenants are a form of soft law, such as declarations of intent, social contracts, 'gentlemen's agreements' or simply 'agreements', in which the operationalisation and execution is delegated to social partners and organisations ('self-regulation'). Covenants are produced and implemented according to a procedure in which the government is integrated, but in which the social partners take the actual lead in delivering the goods. They regulate 'how' themes and issues of common concern can be tackled, and like most soft law are procedural rather than substantive (Korver and Oeij, 2005).

Following Korver and Oeij (2005), for government the advantage is that covenants may compensate for the defects of traditional legislation, substituting for the declining power of 'command and control'. With the covenant the government enlists the cooperation of non-public parties in order to achieve its goals. For the latter (for example, companies and social partners) the advantage is an enhanced predictability of the behaviour of public authorities: by binding themselves, they also bind the government. Paradoxically, though legally unenforceable, the covenant guarantees the non-governmental parties a measure of legal security they would not otherwise have. They are not like regular contracts, nor are they laws: they bind, yet not in a legal sense. Rather than prescribe, they create mutual commitment. They do not stress hierarchy, but emphasize reciprocal dependence, treating dependence not as a weakness to overcome, but as a model for discovering the advantages of cooperation.

Over time we have seen the nature of covenants change. According to Glasbergen (1998) in a first phase, single issue voluntary agreements for specific environmental issues (such as waste management, water management and energy efficiency) or for a certain product were developed. Gradually these

gave way for more complex 'second-phase' agreements, aimed at lowering the overall emissions of a sector of industry; they span a long period of time; and they call for a specific type of institutionalised co-operation between industry and government in which a consensual track (agreements on the basis of mutual trust) merges with the legal track (binding standards for products and production processes). To this we want to add the emergence of a third generation of negotiated agreements in which not only government and industry are involved but also the societal environmental concern, as represented by Environmental Non-Governmental Organisations (ENGOs) becomes part of the negotiated agreement. Hence a shift in government rule making from top-down policies towards more participatory policy development and from state centred stages to constellations involving state, market and society.

For a covenant to be successful, according to Bressers and Bruijn (2005), target groups need to have a clear motive for joining the 'voluntary' negotiations. This stick can have many forms. In some cases it is the government threatening to introduce tough regulations that drives industry to the negotiating table. In other cases it is public opinion that makes industry realise change was inevitable. Covenants need to be embedded in the policy system as other instruments can support the covenant, and vice versa; direct regulation can deal with free-riders, subsidies can help lift technological barriers. The sole use of covenants will be less effective than the design of a complete package containing many instruments. If all partners know the precise measures to be taken beforehand, it is questionable whether direct regulation would not be a more efficient way to proceed; as negotiation processes can carry on for years the transaction costs involved in the negotiation processes before and after concluding the covenant are substantial. The question of whether these efforts are justified is legitimate. This means that covenants are probably best used in a certain phase of a policy cycle, namely for dealing with problems that need further exploring before solutions are found.

Compliance is partially dependent on the idea that changes are inevitable (Bressers and Bruijn, 2005). Knowing that they will have to improve the environmental performance one way or another may create a sense of 'normality' to the induced changes, however what is rational on the level of the sector may not be so obvious on the level of an individual firm that may act as a free rider (Bressers and Bruijn, 2005). Hence there is an apparent need for a stick behind the door to ensure enforcement of the regulation and a stick before the door to create the sense of urgency needed to enter the agreement. While the operationalisation of public goals and policy implementation is delegated to social partners and organisations (the 'self regulation' aspect

of covenants), the government's role is to regulate self-regulation (Leisink and Hyman, 2005).

In analysing covenants, following Smit *et al.* (2008) two perspectives can be taken: a business administration perspective and a public administration perspective. The business perspective provides insights in the rationale of (actors in) supply chains and networks of firms, the public administration perspective focuses on policy networks dealing with the various actors, their interests, and the influence they try to exert on each other and on the policy to be formulated.

From the public administration perspective already two distinct uses of the covenant can be seen. On the one hand government can seek to deploy the instrument when top down regulation fails. By reaching an agreement between government and sector the state has an agreement to which the industry will have to comply. In this State – Industry agreement, basically the phase one and two agreements as described by Glasbergen above, industry gains participation in setting the rules in exchange for compliance to the rules.

Another option for government is the use of the covenant as a tool for conflict resolution. In case a discussion between for example industry and ENGOs has reached a stalemate, the covenant becomes a pivotal instrument in the negation process. Although government will still be part of the final agreement, it demands the quarrelling stakeholders to produce a path towards a solution. In this case the agreement will be between state, market (industry) and society (ENGOs).

Hence in order to analyse covenants we will have to analyse the role and position of the parties involved and, from both a business perspective and a public administration perspective, look at the scope and aims of the agreement reached. In addition, in analysing the way in which the agreement is translated into a concrete plan of action and the way the covenant is intended to be monitored and evaluated will shed some more light on the very nature of the agreement as rather a tool for conflict resolution or environmental policy implementation; a distinction can be made whether a concrete solution needed to be identified or whether the covenant creates leeway for a process of solution implementation. Analysing the role of government in the process of the development of the covenant, together with the wider set of policy instruments deployed (financial support, policy measures), will reveal the intend with which the instrument has been deployed. The consensus reached between the signing partners can bring to light the degree to which the covenant is instrumental in regaining legitimacy of (fisheries) policy.

4.2 Covenants in Dutch fisheries management

In a relative short period of 3 years a number of covenants have been signed in the Netherlands between the fishing sector and government and, with the exception of once case, Environmental NGOs. Following discussions between the Ministry responsible for fisheries[11] and representatives of the fishing sector in the mid 2000s steps were taken to address issues of engine capacity management and the wider sustainability of North Sea cutter fisheries. More recent the stalemate between the fisheries sector and ENGOs on mussel seed fisheries in the Wadden Sea has been addressed.

Management of Engine Capacity

In 1975 the European Commission limited engine capacity for vessels operating in the 12-mile zone to a maximum of 300 Hp and a maximum 50 GRT (Gross Registered Tonnes). In the early 1980s the maximum of 50 GRT is traded for a maximum vessel length of 24 meters. This resulted in the development what later became known as the 'Eurocutter' fleet; a fleet of vessels operating in the coastal 12-mile zone with on average a length of 23.95 meters (Hoefnagel, 2007) but considerable larger then 50 GRT, in fact at times larger than 160 GRT. This size of vessel could not be viably run on a 300 Hp engine and hence the sector dodged the rules and installed engines with larger capacity.

By the end of the 1980s also the engine capacity of the North Sea fleet was limited to 2,000 Hp. Fishermen of this fleet segment also were quite reluctant to reduce engine capacity. As both fleets operate a beam trawl, the success of the operation with such an active gear is directly related to the engine capacity. Despite a seal plan (in which engines were sealed at a certain capacity) and increased inspections during the 1990 and early 2000s, government did not manage to enforce the rules and increase compliance.

Following the introduction of an Individual Transferable Fisheries Quota (ITQ) system in the Netherlands in the 1980s a system of co-management was introduced in the 1990s. Groups of fishermen became responsible for the management of the quota uptake throughout the year. In the 2000s Dutch government, enthusiastic about the success of the co-management system and willing to embark on an increase of co-operation in more policy dossiers,

11 Currently the Ministry for Agriculture, Nature and Food Quality, before known as the Ministry for Agriculture, Nature and Fisheries; in the remainder of this chapter we will refer to it as 'the Ministry'.

sought the devolution of more (monitoring and control) tasks to the co-management system, such as the management of the engine capacity. This offer was turned down by the fishing sector. As stated by Ed Nijpels, chairman of the commission looking into a recalibration, extension and broadening of the co-management system, taking more responsibility was perceived as possible by the fishing sector but only if implemented under equal circumstances for all (North sea) fishermen (Nijpels, 2003).

Following the report of the Steering Committee Nijpels mid 2000s the Minister had a series of what is commonly referred to as 'fire place discussions' with representative of the fisheries sector during which the Minister conveyed his concern about the environmental sustainability of the beam trawl fisheries and the compliance of the sector. These discussions resulted in a joint statement in 2004 in which the Minister and the fisheries sector expressed their intention to establish a sustainable, viable and a social responsible cutter fisheries and their intent to embark on the required transition process (Anon., 2004). In this declaration it is stated that the fisheries sector itself will take responsibility to reduce the use of engines with a capacity larger then permitted in the fisheries license. It was felt that an approach in which the sector itself would regulate compliance to be an effective addition to the public control (De minister van Landbouw Natuur en Voedselkwaliteit, 2008).

The *'Werkgroep Motorvermogen'* (the engine capacity committee, a working group installed under the Nijpels committee) designed a private arrangement consisting of a framework of private inspections and sanctions. This arrangement became operational mid 2005 and is a voluntary arrangement to which 89% of the fishers signed up (Hoefnagel and van Mil, 2008). Fishers that sign up limit their engine to the capacity as permitted in their fishing license. To allow for a transition period those that have signed the agreement are allowed to at the start of the campaign have an engine capacity that can be no higher then 400 hp, after which it has to be reduced to a maximum of 300 Hp by 2009. For those that do not sign up, their engine capacity has to be brought in line with their fishing license immediately. Also the General Inspection Service of the Ministry (AID) performs random checks on 25% of those fishermen that have signed up for the arrangement but a 100% inspection on those that did not sign.

The fishermen groups that manage the quota uptake, also manage the engine capacity programme. If an infringement is found by the group members the culprit will be fined. If an infringement is detected by the AID an immediate reduction of the engine capacity is required in addition to the fine as set by the group in their management rules.

According to a preliminary evaluation of the arrangement both the AID, the Board members of the Fisheries Groups (responsible for implementation) as fishers seem to be content with the implementation of the arrangement; no infringements have been detected and engine capacity is set at the levels as agreed. However, two aspects have become clear: as the arrangement next to self control also aims at self financing of the implementation, and since no infringements have been detected, there is a financial deficit in the implementation of the arrangement. In addition, Board members of the fisheries groups experience a conflict in their roles, which on the one hand is enforcer of the public-private engine capacity agreement, on the other hand they are promoter of the interest of the fishermen (De minister van Landbouw Natuur en Voedselkwaliteit, 2008).

North Sea Covenant

In 2006 a Task Force Sustainable North Sea fisheries, established by the Ministry, consisting of representatives of the Ministry, the Fish Produce Board, fisheries sector and market organisations, Environmental NGOs, research institutions and fuelled by direct input from fishermen through a series of discussions, produced a report pinpointing the major challenges to reach sustainable fisheries on the North Sea. There were two motives for the establishment of this task force. On the one hand the rapid increase in oil price seriously affected the viability of the fleet, which was already confronted with diminishing catch opportunities for a prolonged period of time (Task Force Duurzame Noordzeevisserij, 2006). On the other hand the societal acceptance of fisheries dwindled. Civil organisations, such as ENGOs, increasingly gained access to policy processes and are very critical of the sustainability of North Sea Beam Trawl fisheries. This is amplified by a development in the market where increasingly retailers, especially supermarkets, request guaranteed sustainable fish production. The report concludes that in order to achieve a viable and sustainable fisheries, state, market, societal organisations and science institutions should cooperate. It is directly suggested a covenant to be signed between the sector and the most relevant civil organisations in order to regain the required societal acceptance of North Sea Fisheries.

During 2007 fisheries organisations and Environmental NGOs started the discussion. Early 2008 the Ministry was asked to join the deliberations and by June 2008 the North Sea Covenant was signed between the Ministry, two Environmental NGOs, the Fish Produce Board and the 5 Fisheries Producers' Organisations. The main agreements of the covenant were:

- Obtaining MSC certification for a number of fisheries between 2009-2012;
- Improve communication on sustainability aspects;
- Sustainable fisheries should become an integral part of the fisheries educational curriculum;
- Embark on a joint process of establishing goals and measures for the establishment of Marine Protected Areas, operationalising NATURA 2000 and OSPAR agreements;
- The management of flat fish stocks should result at stocks at Maximum Sustainable Yield level by 2015; a multi annual management plan, reduction of discards and a joint and transparent system of data collection and scientific support to policy should be developed.

For each of the 5 items above there are concrete tasks described for the state, industry and ENGOs to take up. In order to facilitate the required transition process of the cutter fisheries, government established a Fisheries Innovation Platform which could finance initiatives towards a more sustainable fisheries.

Monitoring of the process is agreed to be a joint activity and is part of a regular meeting (*Groot Beheer Overleg*, a semi-annual meeting of the main players from state, market and society). The signing parties agreed that each of them was responsible for the implementation of the covenant and had a task in both promoting this covenant publically and create support for the covenant in one's constituency.

Mussel Covenant

In October 2008 the Minister signed a covenant with ENGOs and the Mussel producers organisation to reach a transition in the mussel fisheries and restore nature in the Wadden Sea area. The signing of this covenant marks an end of a period commonly known as 'the war on the Wadden Sea'. Twice a year fisherman from the Zeeland province in the South West of the Netherlands come to the Wadden Sea in the North to collect mussel seed which is then spread out on the plots in the river Schelde estuary in Zeeland were the mussel seed grows to reach consumption size. Based on a fisheries, in fact the mussel sector is the largest mariculture sector in the Netherlands.

The Wadden Sea is a protected area, regulated under the Key Planning Decision Wadden Sea (PKB), the establishment of the State Nature Reserve Wadden Sea (falling under the Nature Protection Act), the Fisheries Act, the Flora and Fauna Act and the Interprovincial Policy Plan for the Wadden Sea

(EcoMare, 2009), next to EU regulation of Bird and Habitat directive, Natura 2000 area and the Water Directive. Ninety percent of the Wadden Sea has been designated as a State Monument. Fishery activities must fit in with the nature protection policy. That means that the effects of the fisheries on the environment must be taken into account: the benthic life, the marine mammals and the food supply for birds. Undesired effects must be managed by limitation of fishing activity. In 2005 and 2008, the Council of State decided, based on a judicial procedure initiated by a number of ENGOs, that the Ministry unrightfully issued licenses to the mussel seed fisheries. The seed fisheries on wild banks contradicts the European Bird and Habitat Directive. The spring fishing in 2008 was consequently cancelled and the autumn fishing was being threatened.

The judicial procedures frustrated further development and threatened the viability of the mussel sector. In order to reach a way out of these doldrums a Commission was established by the Ministry which prepared the draft covenant, which was signed in October 2008 by the Minister, the Mussel Producers Organisation and four ENGOs. The conservationists promised not to start any judicial procedure provided the mussel sector would do everything in its power to convert seed fishing and mussel cultivation into an environmental-friendly industry by 2020. The covenant states that the Wadden Sea is a nature conservation area in which human activities can be tolerated as long as they are not conflicting with the main goal of nature preservation. Also the covenant provides a period in which the mussel fisheries is allowed to embark on a transition process towards a more sustainable mussel seed harvesting technique.

Early 2009 the covenant was translated into a plan of action of concrete activities. Core of the plan is that by 2020 the traditional mussel seed fisheries is banned from the Wadden Sea and is being replaced by a method not interfering with the bottom. In fact at the start 20% of the Wadden Sea is closed for mussel seed fisheries and annually this closure will be extended to a larger part of the Wadden Sea (Waddenzee, 2009). The covenant at the same time stipulates that the transition process should allow for a viable operation of the sector. Noting the past volatile history of the conflict between fishers and conservationists it is not surprising that this covenant addresses explicitly the fact that implementation of the covenant is the task of all signing parties and that in case there is disagreement parties will not start a judicial procedure. More over, it is stated that the covenant cannot be legally enforced.

Following the signing of the covenant a work plan was developed by early 2009 which provided concrete and detailed actions. Again specific roles and tasks are defined for government, the sector and the ENGOs. Main target is the progressive closing off of the Wadden Sea for bottom disturbing gear. This agreement between signing parties does have an effect on fisheries that are not part of this covenant such as the shrimp fisheries and static gear fisheries. The plan of action states that these actors should be included in the implementation of the plan. However, they are not part of the covenant signing parties.

Monitoring of implementation is again a task for the signing parties. A detailed evaluation programme has been incorporated in the work plan, based on a monitoring and research plan. The covenant partners will agree upon research institutions that will fulfil the scientific role in the monitoring of the implementation and the effects it has on the ecosystem.

The Mussel covenant was severely put under pressure May 2009 as one of the ENGOs that was not signatory to the covenant (the 'Faunabescherming' fauna protection foundation) challenged the permit for mussel fisheries on the Wadden Sea in court. The Council of State ruled that a further limitation of the mussel fisheries was in order and reduced the permit as given by the Ministry for mussel fisheries on the Wadden Sea with an additional 25%. The Dutch House of Representatives, in debating the outcome of this procedure, queried the value of the instrument of covenants as apparently in judicial procedures any individual or organisation can claim to be stakeholder and challenge the agreement reached in the covenant, often after a lengthy process of seeking compromise (Tweede Kamer der Staten Generaal, 2009).

4.3 Analysing the character of Dutch fisheries covenants

Over the last decade the Ministry developed the motto of *'van zorgen voor naar zorgen dat'* (from taking care of towards enabling) which implies a shift in the position and role of government. Government seeks private initiative to reach policy goals, where before governmental rule making and enforcement were the preferred tools. In all the three Dutch fisheries management cases described above the government has opted for a voluntary agreement with industry to reach policy objectives.

In the case of the engine capacity arrangement main government concern seems to be to increase compliance to fisheries regulation. The existing rules and enforcement were apparently not sufficient to bring about the required industry behaviour. In fact the rules were easy to dodge, rules were not effectively enforced and punishment was not felt to be restrictive[12]. The incentive to increase engine capacity is eminent in an active towed gear fisheries in which engine capacity determines to a large extent catch success. Government tried for some time to get the industry to play a role in enforcement of these rules. Although at first held away, falling economic returns as a result of the prevailing high oil price which, as a side effect, induced a rationalisation of the use of fuel, hence engine capacity, and the pressure from society, ENGOs and the Minister to strive for sustainable production facilitated the industry to come to the negotiation table. As a result of the covenant compliance has increased based on a voluntary agreement but with the stick behind the door of inspections by the government control agency AID.

The engine capacity state-industry agreement has a very clear path of implementation and specific rules for those individuals not signing up to the covenant. Implementation is monitored by the state and by way of external evaluation at three moments in time the impact of the regulation is appraised. The necessity for the sector to comply is felt; in the light of the wider sustainability discourse the sector perceives the need to change and the urgency to obtain a licence to produce. The agreement plays a role in opening the prisoners dilemma in which fishers point at each other for non-compliance; individuals are only inclined to change conduct when free rider behaviour is no longer tolerated.

Whereas the engine capacity agreement is a bilateral state-industry agreement, the North Sea Covenant is a tripartite arrangement between state, industry and ENGOs. It aims at an environmental policy to obtain a viable and sustainable fisheries sector within the boundaries of a healthy ecosystem, yet bringing the environmental concern and the economic concern together to obtain an implementation plan.

From the industry's perspective the sector is confronted with dwindling returns and a public opinion and a market that demand sustainable fish production. In addition, the traditional neo-corporatist arena in which industry and government could negotiate policies is increasingly being influenced and in-

12 Fishers indicate that if punishment for excessive engine capacity would have been much stiffer (in the range of tying up vessels for a number of months and high fines) the rules would have been much more complied to (Hoefnagel, 2007).

vaded by public concern as expressed by ENGOs. By entering the agreement the sector gains time, political support and resources (through the Fisheries Innovation Platform (FIP) and European subsidies of the Fisheries Fund) to embark on a transition process. From a societal perspective the covenant on the one hand brings about a process of necessary change and on the other hand it provides a stage on which environmental concerns can be directly discussed with the fishing sector and become part of the covenant when it comes to implementation. For the state the covenant creates leeway for industry to become sustainable in an environmental and economic sense yet simultaneously creates a sense of urgency to make this transition and provides a tool to put into effect a process of innovation while protecting the industry.

Although greatly influenced by the high oil price, which favours any project that will safe fuel and reduce costs, especially the FIP, with the possibility to embark on innovative technological and managerial processes, creates momentum for the industry to change towards more sustainable production techniques. Form the side of the ENGOs it shows that government and industry are willing to make a major effort to change fishing practices.

The North Sea covenant and its consecutive work plan consist of 5 themes on which agreement could be reached. It mainly consists of the intention between the signatories to address an array of issues that need further operationalisation. For example discard reduction, if one looks at the past history, can prove to be a volatile subject in which vision of ENGOs and industry might not be easy to bring together.

As for the mussel covenant, from the perspective of government, the required transition of the mussel industry is hampered by mistrust and judicial processes between industry and ENGOs. In order to bring about a meaningful transition the stalemate caused by the 'War on the Wadden Sea" needed to be ended. Government took a leading role in orchestrating the coming about of this covenant. Industry and ENGOs were persuaded to compromise in order to change the stalemate into a process of change. Out of the three voluntary fisheries agreements the mussel covenant is the one that most clearly still emulates differences of opinion between the signing parties. Also it consists of two main objectives and courses of action: transition of the mussel fishing techniques and the development of a Wadden Sea Nature Conservation plan. The covenant, in contrast to the other two arrangements, details quite an array of actions to be undertaken by government.

For the industry the covenant provides a platform to continue operation while simultaneously embarking on a transition process. For the ENGOs giving up their resistance provides a role in the process of transition of the sector and simultaneously obtains the development of a nature conservation programme, which stretches beyond fishing activities. For government it provides a basis for meaningful change, providing a way to obtain time for the sector to adjust the production process to be able to continue operating in a nature reserve and ending a routine were all Minister's decisions were challenged in court.

The mussel covenant is the most clear example of using the instrument for conflict regulation. It is also the covenant which depends to a large extend on outside independent (scientific) monitoring and evaluation. It is an agreement that may have an effect on other fishers who were not signatories to the covenant.

So far the engine capacity covenant is perceived to be successful with no infringements and vessels having adjusted engine capacity. The North Sea covenant has facilitated a process of transition and an array of initiatives e.g. under the Fisheries Innovation Platform (subsidies for development of new fishing technology (pulse trawl, reduction of fuel consumption), improved marketing initiatives and sharing of knowledge among fishers) have been launched to support this process. The mussel covenant is put under pressure from parties not being signatory by contesting the agreement in court.

From a business perspective the three covenants differ in scope, incentives and rational to sign up to the voluntary agreement; the engine capacity agreement allows for a transition period for the industry to adapt to the rules. The stick behind the door of government control and sanctioning together with the carrot of industry self control and a transition period for adjusting to the rules provides a platform for change. The North Sea covenant provides incentives for change towards more sustainable fishery practices against the stick behind the door: a required licence to produce based on public opinion on the use of marine resources and especially supermarkets, requesting guaranteed sustainable fish production. The Mussel covenant provides the industry a way out of a stalemate on obtaining a fishing licence and hence allows for continuation of business.

From a public administration perspective government can have different roles and positions in the (process of arriving at an agreement of a) covenant. The engine capacity covenant is close to what Glasbergen (1998) refers to as a first phase single issue agreement for a specific issue between state and

industry. The state provides both stick (control and punishment) and carrot (transition period). In the North Sea covenant case government provides a carrot (funds and Fisheries Innovation Platform) and facilitates the process of industry and society conjointly developing a programme for more sustainable use of marine resources. In the Mussel case the carrot provided by the state (a conservation plan for the Wadden Sea) provided the leeway for industry and ENGOs to reach agreement on further use of the area for fisheries; hence government much more in the role of facilitator seeking to reduce conflict.

In all cases we see a repositioning of the state in relation to the actors from industry and society. The covenants are a manifestation of government negotiating fisheries policy in order to obtain a more sustainable use of marine resources. The degree of self-management differs between the three covenants. In the North Sea covenant quite some opportunity can be found for the covenant partners to (re)define policy whereas under the engine capacity covenant policy is not renegotiated at all; in the end the industry will comply with prior existing regulation.

Experiences from other sectors learn that at times the instrument of a covenant is used as no more than non-committal agreements to look into the issue again (Glasbergen, 1998). In Dutch fisheries, noting the fact that the pressure is put on the industry as their license to produce is under debate (quite literally as in the Mussel case), a sense of urgency is imminent.

4.4 Conclusions

In all of the Dutch fisheries covenants a form of joint problem solving can be found. Also in all covenants government plays a significant role either as direct party or as facilitating party. In fact a large part of the covenants deals with the emergence of a transition trajectory towards more sustainable production techniques. In such a trajectory the choice for a covenant by government seems logical: it is not government's role to define the how and who of a transition process, but government gains by stimulating that process and being involved in setting the (policy) goals.

On the other hand, the covenants define tasks for all signing parities, hence also specifically to government. In that sense a covenant is an instrument in which parties from industry and society can directly influence government policy.

Indeed in a transition in the role and position of government, from law maker and enforcer towards enabler, new instruments, such as negotiated covenants are required. A covenant in that respect is clearly a tool that reflects a repositioning of government: in dialogue with stakeholders, with at times different stakes and concerns, agreement is reached on (policy) goals and ways to achieve these. Government is still part and parcel of the process and indeed remains in the role of final enforcer of the agreed targets. However, implementation is transferred to the other actors.

The covenant takes the form of a social contract in which the parties agree upon the implementation of a work plan and all players are committed to the implementation of that plan. Government is final party as to the enforcement of implementation, but all parties can hold each other accountable for implementation.

The Dutch cases show clearly that the instrument is utilised by the state in three differing settings and hence in three different ways. In the agreement on the management of engine capacity the government is using the instrument as tool for increased compliance and enforcement of legislation. In the mussel covenant government uses the tool to pacify the nature conservation movement, which was obstructing policy implementation by taking all decisions to court. The covenant serves as a conflict resolving measure. In the North Sea covenant government uses the input of civil society to persuade the fishing sector to embark on a more environmental sustainable mode of production. In fact it is public opinion that forces the fishing sector to the table; government positions itself as facilitator to embark on an action plan.

Clearly government can chose to be initiator of a covenant (engine capacity management) or can line up with public debate and facilitate the coming about of a social contract. Especially in those cases were state, market and civil society team up in a covenant the transparency, openness and accountability of the policy cycle is greatly enhanced. As a result the legitimacy of a covenant, as opposed to traditional top-down management, is much larger. The fact that public policy makers show a willingness to use alternative policy instruments as a stick behind the door to deal with environmental problems (in case the negotiated agreement fails) is a crucial factor for the positive performance of negotiated agreements (Bressers and Bruijn, 2005).

The emergence of covenants as policy instrument may seem a logical development in Dutch fisheries as the fisheries was already managed under a form of co-management and the Netherlands are widely renowned for their

'polder model'; the corporatist arrangements that lie at the heart of the capitalist economies of the small Western European countries, including the Netherlands (Tjiong, 2005), in which a strive for negotiated consensus between government and industry is basis for conflict resolution. However in most of European fisheries management a form of neo-corporatism exists: a well-defined exchange relation between state, market and civil society actors in which policies are made and implemented jointly, based on a commonly agreed substantive discourse, in which the participating organisations are granted privileged influence on public policy-making in exchange for disciplining their constituency (the fishermen) and restraining their demands (Frouws and van Tatenhove, 1993; van Hoof *et al*., 2005). Hence governments already have an institutional setting in which agreements with the fisheries sector can be reached. Whether this will allow for a major shift across the EU from traditional top-down management towards more novel policy arrangements, such as the negotiated tri-partite covenants, remains to be seen.

Chapter 5

EU Marine Policy on the move:

The tension between fisheries and maritime policy

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In recent years a number of initiatives on EU marine policy have seen the light, among which the reform of the Common Fisheries Policy (CFP in 2002), the development of the Marine Strategy Framework Directive (MSFD, 2005) and the introduction of the Integrated Maritime Policy (MP in 2007). The CFP is traditionally the platform for the conservation of (commercially exploited) fish stocks and the development of the structure and economics of fishing fleets. The MSFD is designed from an ecosystem conservation perspective (water quality objective) and stands in a tradition of directives already influencing the marine sphere such as the bird and habitat directives and the water directive. The MP is an instrument seeking integration over a multitude of different sectoral policies (i.e. shipping, oil and gas extraction, fisheries) addressing a plethora of different challenges, stakes and their representatives.

The development of the MSFD and the MP raises not only questions how the three sets of policies relate to one another, but also how the two major new marine initiatives affect the already existing CFP. The central question of this paper is: how is fisheries policy related to the new marine policy initiatives and how will the ecological and integrative objectives of MSFD and MP influence and affect the Common Fisheries Policy?

In section two the policy arrangement approach is presented. This theoretical framework makes it possible to describe and analyse the different policy arrangements of CFP, MSFD and MP and to explain the relations between MSFD and MP on the one hand and CFP on the other. In section 3 a start is made with the analysis of the fisheries arrangement. Dominant in the Common Fisheries Policy are neo-corporatist exchange relations and rules. This arrangement is both formulated and shaped on the level of member states, and on the level of the EU. The specific signature of the CFP-arrangement is analysed along the lines of the four dimensions of coalitions, resources, rules of the game and discourses. In sections 4 and 5 two marine policy arrangements are described and analysed: the Marine Strategy Framework Directive and the Maritime Policy. In section six the two marine arrangements are confronted with the fisheries arrangement; how does the co-existence and plurality of arrangements structure the institutionalisation of marine policies and in what way is fisheries policy influenced by the marine arrangements? In section 7 some conclusions are drawn.

5.1 A conceptual framework: the co-existence of policy arrangements

A policy arrangements can be defined as "the temporary stabilisation of the content and the organisation of a particular policy domain" (van Tatenhove *et al.,* 2000; Liefferink, 2006). The structure of a policy arrangement can be analysed along four dimensions, the first three referring to the organisational, the last to the substantial aspects of policy (Liefferink, 2006; Arts *et al.*, 2006):

- The actors and their coalitions involved in the policy domain;
- The division of resources between these actors, leading to differences in power and influence, where power refers to the mobilisation and deployment of the available resources, and influence to who determines policy outcomes and how;
- The rules of the game currently in operation, in terms of formal procedures of decision making and implementation as well as informal rules and 'routines' of interaction within institutions; and
- The current policy discourses, where discourses entail the views and narratives of the actors involved (norms, values, definitions of problems and approaches to solutions).

The policy arrangements approach is developed to understand and to analyse change and stability of policy processes, by studying the on-going institutionalisation of policy arrangements (van Tatenhove *et al.*, 2000; Arts and Leroy, 2006; Arts *et al.*, 2006). The institutionalisation of policy arrangements is the result of both the day-to-day interactions of actors in policy practices and processes of social and political change (political modernisation). Political modernisation refers to structural transformation processes within the political domain of society (van Tatenhove, 1999; Arts and van Tatenhove, 2006). In interactions actors use rules, resources and discourses 'to do things otherwise' (Arts and van Tatenhove, 2004). Processes of political modernisation result in a certain division of resources, specific rules and discourses which shape the interactions of actors within policy arrangements.

Political modernisation expresses the shifting locus and focus of politics. Politics and policy are no longer framed within the nation-state model alone, but within a diversity of society-centred forms of governance. Governing is increasingly a shared responsibility of state, civil society and market actors.

The shift in locus of governing refers to the emergence of new actors and new levels. Interest groups, fishermen, NGOs, firms, citizens and other non-state actors enter the arena of policy making both at the national and the internati-

onal level. The nation state model seems to have lost its exclusiveness, as it is paralleled by a whole series of local, regional and global arrangements, while the traditional divides between the state, the market and civil society have been crossed. More and more policy-making is the result of state, society and market interrelations and in international politics the access of non-state actors to the international arena is not any longer via the state, they now sit at the table directly. The increase of actors goes hand in hand with the increasingly multi-level character of political and policy processes. From the perspective of the nation state, one can witness an upward trend to the international and supranational level and a downward trend to the sub-national level. The shift in locus is accompanied by a shift in focus of policy and politics, referring to a shift in the rules of the game and steering mechanisms. New actors and multi-level forms of governance result in new practices of policy making in which the traditional formal rules of governing are challenged. In these new policy practices actors form state, civil society and market have the possibility to negotiate and even change the rules of the game. Moreover, state authority is making way for an appreciation of mutual independence in which tools and techniques are being developed to govern societal developments. This results in the co-existence of steering mechanisms; laws, international protocols and directives co-exist next to soft law, procedural regulation, covenants and best practices.

To understand the dynamics of marine politics and its influence on fisheries arrangements a typology of policy arrangements is used, based on shifting ideas about the relationship between state, civil society and market. This typology consists of a diversity of arrangements, such as etatist, liberal-pluralist, neo-corporatist, sub-political, reflexive, intergovernmental, supranational and transnational arrangements (based on van Tatenhove *et al.*, 2000; Liefferink, 2006; Arts, 2000; van Tatenhove, 2003).

Etatism refers to the situation where state actors dominate the policy arrangement. In etatist arrangements the political institutions are the ultimate locus of authoritative power and they therefore largely determine the contents and the organisation of policies. Crucial resources are controlled by the state and other than state actors are placed in a dependent position and have limited access to decision-making. *Liberal-pluralism* denotes a market-oriented model. No single actor dominates: resources are spread over a wide array of public and private parties (business, but also actors from civil society, such as NGOs). Characteristic for liberal-pluralist arrangements are rules, accommodating open competition between the parties involved. Competition also extends to the dimension of substantive discourses, with different actors promoting conflicting views of the policy problem at stake. *Neo-corporatism*

describes a well-defined exchange relation between state, market and civil society actors. In neo-corporatist arrangements political authority is shared by the state and some few accepted organisations of stakeholders. For other actors, gaining access is very difficult. Policies are made and implemented jointly, based on a commonly agreed substantive discourse. This is usually done in highly institutionalised settings, providing rules for negotiation and the search for consensus. In a neo-corporatist exchange relation functional interest organisations (for example fisheries organisations) possess a representational monopoly, co-operating between each other and with the state on the basis of a political-economic consensus at the top. The participating organisations are granted privileged influence on public policy-making in exchange for disciplining their constituency (the fishermen) and restraining their demands (Frouws and van Tatenhove, 1993; Frouws, 1993).

The shift in locus and focus of governance has given rise to the emergence of new types of sub-political and reflexive policy arrangements. State institutions at different levels and institutionalised methods of decision making are still relevant and form important contexts for action, but much political action either takes place next to or across such orders, or is meant to establish new institutional rules (Hajer, 2003). While the traditional arrangements (etatist, liberal-pluralist and neo-corporatist) are directed towards public policies mainly on the level of the nation state, the new arrangements focus on practices of policy making and politics outside the formal institutions of the state, challenging the established rules by re-defining the rules of the game. In the struggle to address problems that the established institutions fail to resolve in a manner perceived as both legitimate and effective, sub-politicisation, politics taking place outside the formal political institutions of the state and interfering of rule-directed and rule-altering politics, may take shape in the form of new policy arrangements bringing together actors from state, market and civil society (van Tatenhove *et al.*, 2006a).

Sub-political arrangements (Liefferink, 2006) are characterised by a membership, which is usually limited to stakeholders in the problem concerned. The role of the state is minimal, private actors control major resources. Usually, sub-political arrangements challenge the existing substantive discourse by presenting new, alternative discourses. Interaction within the arrangement is based upon the idea of 'bottom-up'. In *reflexive policy arrangements* (Pestman and van Tatenhove, 1998; van Tatenhove *et al.*, 2006) coalitions of public and private actors have the possibility to challenge and eventually change the rules of the game and to mobilise resources in order to reformulate policy and politics.

To grasp the dynamics of processes of European governance and to understand EU marine policy making the concepts intergovernmental, supranational and transnational arrangements are being introduced. In *intergovernmental arrangements* sovereign states are the loci of formal authority and legitimacy. A *transnational arrangement* is characterised by flexible coalitions of governmental and non-governmental stakeholders, global-local linkages, diffusion of power, rules based on the political legitimacy of stakeholders, and by integrative discourses. *Supranational arrangements* consists of the EU institutions (i.e. parliament, council, commission and court), and the diffusion of power among these institutions, member states and non state actors.

5.2 The signature of the CFP

Classifying the Common Fisheries Policy in terms of policy arrangements is not straightforward. Partly this stems from the fact that the CFP encompasses different policy domains reflected in the four main policy pillars: Conservation policy, Structural policy, Market policy and International policy. Under one umbrella one can find ecological aims, such as managing stocks and environmental impact of fisheries, next to economic aims, such as strengthening the competitiveness and the viability of operators in the sector and fostering the sustainable development of fisheries areas, as well as market and consumer considerations. The unification of the CFP is found in its focus on fisheries.

Partly this stems from the fact that different actors are involved in fisheries policy at different levels. Of course, with fisheries being only one of the five subjects in which the Commission has exclusive competence (Hawkins, 2005) the Commission plays a central role in setting policies. However, implementation of policies is left to the individual Member States. This results in a structure that can be classified as being simultaneously inter-governmental, supranational and transnational. Inter-governmental as the CFP accommodates to solve the conflicting interests of the Member States; for example the resource sharing (Jensen, 1999). Supra-national as the core competence lies with the Institutions of the European Union. Yet concurrently trans-national in its diversity of committees and European agencies in which co-operation between the sub-national, national and supra-national levels is shaped where policy ideas can be deliberated upon, policy proposals can be discussed and policy implementation can be monitored (van Tatenhove *et al.*, 2006). Examples of the later are ACFA, the advisory committee on fisheries and aquaculture, already created in 1971 to have stakeholder input into the implementation of

the rules of the CFP and the formulation of analyses and joint positions, and off late the establishment of the Regional Advisory Councils. But also more informal fora such as working groups and workshops are used.

The principle of subsidiarity, in which the State is seen to only interfere if the autonomous lower parts seriously fail to fulfil their tasks (Kickert, 2003), in fisheries management is interpreted in the European Treaty as fisheries management being the sole competence of the EU (CFP). Ironically, subsidiarity impedes the command and control form of fisheries management under the CFP since the Commission can only command management but it does not control implementation (Sissenwine and Symes, 2007).

Historically at Member State level, as demonstrated by several studies (Symes, 1996; van Hoof *et al.*, 2005), fisheries management shows a neo-corporatist signature. This can be shaped as a formal structure such as the consultative board in Denmark and the Management Council (*'Reguleringsrådet'*) in Norway, or as traditional structures such as the *prud'homies* in France and the Spanish *cofradias*, or have a more informal structure such as the several *'overleggen'* (an informal mix of discussions and negotiations) in the Netherlands (van Hoof *et al.*, 2005). The core of the neo-corporatist arrangement lies in the fact that government does not operate at a distance of fisheries but invites organised interest to the table, trading off participation in policy design against compliance from the sector. The fisheries sector and the state negotiate and agree upon resource management. The number of actors at the table is usually limited to representatives from the state and the fishing sector.

In the neo-corporatist setting at Member State (MS) level the discourse has a strong fisheries bias and focuses on reaching a balance between ecological opportunities and economic and societal implications. As fisheries policy is shaped both at the MS level and the EU level the CFP echoes the corporatist policy arrangement; fishermen's organisations gain influence on the CFP through their national representation, ministers travel to Brussels negotiating with the consent of their parliament and sector.

Although over time external pressure has been put onto the fisheries managers to incorporate stronger the environmental objectives in the fisheries policy and to more strictly adhere to the scientific advice for stock management, in fact promoting a much more technocratic management approach in which management measures derive automatically from the gap between set objective and current indicator value, the fisheries discourse has remained

one of seeking compromise between long and short term economic and ecological objectives. The discourse could be labelled as being in search for long term sustainability, in which environmental sustainability is perceived as instrumental for economic sustainability.

In fact a rather strong horizontal coordinating governance arrangement exists between policy makers, fisheries managers and the fisheries sector. In line with what is labelled in literature community of practice (groups whose members regularly engage in sharing and learning, based on common interests (Wenger, 1998; Lesser and Storck, 2001) and policy community (Coleman and Perl, 1999) a way of sharing public power among a select group of actors with a common set of beliefs, values and norms) the interplay between fisheries managers, scientists, fishers and policy makers can be labelled an *agora of communality*. Characterised as a highly informal and ad hoc structure, the agora of communality consists of the people involved in the sector, policy making and management, meeting frequently and exchanging views on issues currently under debate. As such, the agora functions throughout the levels of policymaking from member states and the inter-governmental stage to the supra- and trans-national. It bears characteristics of a community of practice, functioning as network for the development of novel management ideas. Although it has characteristics of a neo-corporatist policy community, with limited membership and a fisheries focused discourse, it does not contain the mechanisms for decision making. It can be classified as a back stage informal network (van Tatenhove *et al.*, 2006) for the exchange of ideas and probing support for policy initiatives. Its main stay is a communal strive for development of policy measures widely supported and allowing for an economic viable fisheries within certain ecological boundaries.

Hence both at the MS level as in the inter-governmental, supra- and trans-national fisheries arena the situation can be classified as a rather closed community of in-crowd sharing a common fisheries interest, yet from differing perspectives, with a discourse aimed at agreement.

One could say that with the review of the CFP in 2002 this arrangement has on the one hand been further institutionalised and formalised at the EU level by the introduction of Regional Advisory Councils (RACs). On the other hand this arrangement has been opened up (partly) to include more stakeholders and hence more stakes, implying a change to the exclusivity for the fishermen and their corporatist structure. In fact the introduction of RACs had two major effects on the existing agora of communality: a change of discourse and a change of arrangement. The existing institutionalised mode of exchange

between government and the fisheries sector of participation in policy design from the sector in exchange for disciplining its constituency under the neo-corporatist arrangement is replaced by a more participatory arrangement in which stakeholders are invited to give problem definitions and to find solutions. This opens the path for more interests and stakes to be represented at the table, hence more organisations entering the arena for debate. With more stakeholders at the table the discourse changes from fisheries centred to more ecological and multi-use centred.

The CFP can be perceived as a policy arrangement with limited number of actors in the inner circle (fishers and policy makers). However, whereas at the level of the Member States fisheries policy is clearly based on a negotiation process in which the major resources are controlled by both state and sector aimed at reaching agreement on the course to follow, at the EU level the CFP is not strictly a neo-corporatists arrangement. At the EU level, with inter-governmental and supranational characteristics, participation is still limited to a closed circle, yet the Member States and the supranational institutions control the resources with the Council of Ministers being focal point of authority.

5.3 The Marine Strategy Framework Directive

The Marine Strategy Framework Directive, agreed on between the European Parliament and the European Commission in December 2007, provides a comprehensive framework for the protection of water throughout its full cycle. The main objective of the Marine Strategy Directive is to achieve environmentally healthy marine waters by 2020. This will be achieved by establishing marine regions and sub-regions, which will be managed by member states in an integrated manner based on environmental criteria. In drawing up marine strategies for the waters within each marine region, member states will be required to cooperate closely. Each (sub)regional marine strategy consists of an action plan to be implemented in several stages. Member states will first need to assess the state of the environment and the main pressures in their respective marine regions, next to determining what can be considered as a good environmental status and then establish targets, indicators and monitoring programmes. Programmes with measures must be drawn up by 2015 to attain good environmental status by 2020.

European policy-making, to the extent that it concerns directives, does not end at the last stage of the legislative process in the Council of Ministers. After adoption, directives are further shaped by the member states when they

are put into national rules. In this process, and within the limits of Commission oversight, domestic actors can adopt an interpretation that somewhat deviates from the directive. In this way, EU policy-making is best described as a long chain of mutually dependent decisions that cuts across multiple levels of government (Steunenberg, 2006). In this vein, the mechanisms of a directive are seen by the Commission as preferable to that of a regulation or a decision that would be too detailed and restrictive, have a character of a 'one size fits all' approach, and thus, would be inappropriate to address the varied problems in each region (Juda, 2007).

The MSFD directive has, in line with other environmental directives, been developed not by the DG responsible for fisheries, but by the Environmental DG. As with other environmental directives, the development and implementation of polices by the environmental departments results in a rather technocratic approach in which science defines a measurable standard to which a phenomenon has to comply. Policy implementation in that case evolves around steering on indicators.

The MSFD, by being a directive, is an instrument that fits in a rather traditional command-and-control type of policy arrangement in the sense that a directive is an instrument, with relative little attention for integration and participation. The MSFD involves a move towards sustainable development with emphasis on ecological targets and little inclusion of socio-economic aspects. Whereas a directive, rather then a policy, provides room for local adaptation and implementation, as with the water directive, the marine directive is not detailed in a participatory way with inclusion of actors, but in an instrumental way with a focus on "good environmental status of the marine environment". The consultation process prior to the publication of the MSFD did not aim at balancing multiple objectives of ecological, economical and societal perspective but centred upon consensus *"on the magnitude of threats facing the marine environment, generating potentially irreversible or nonlinear changes to marine ecosystems, with wide ranging economic and social consequences"* (Commission of the European Communities, 2005b). Hence a rather limited discourses with a primary focus on environmental development.

In that sense the MSFD is closely related to an etatist policy arrangement: centralized government having control over planning and policy. Following Kaika and Page (2003) concluding on the development of the Water Framework Directive, " … the environmental lobby is becoming increasingly influential in shaping European water policy. The effectiveness of the green lobby is in part a result of internal shifts within the governing structures of the EU.

These internal shifts may be constitutional (as in the 'greening' of the treaty) or institutional (as in the increasing power assigned to the European Parliament through the Amsterdam Treaty). In either case, these changes have opened up a space in which individuals within the Commission, the Parliament and the Environmental lobby can find common ground and make considerable progress in producing regulations."

At the level of the EU the MSFD has characteristics of an imposed, state driven instrumental arrangement with a low number of actors involved. At Member State level the implementation of the MSFD can differ pending on the local institutional and governance setting and traditions. In the Netherlands operationalisation of the MSFD is taken up by the Ministry of Water Management. The ministry is currently in the process of defining good environmental status and developing indicators to be applied. In this process both the fisheries sector and the Fisheries Directorate of the Ministry of Agriculture are but marginally involved.

From the perspective of discourse resources and coalitions, the MSFD in fact is 'business as usual' in a tradition of environmental directives. The CFP already contained an environmental conservationist part, aimed at management of the natural renewable (fish) resource. The MSFD increases the focus on the sustainability discourse and extends it beyond the scope of the CFP into the larger marine environment reflected by the aim "to achieve good environmental status of the marine environment by 2021" (Commission of the European Communities, 2005b).

From the perspective of the CFP the introduction of the MSFD implies a shift in playing field as new actors legitimately enter the stage. But also a shift in stage is noted from the traditional fisheries platform to a stage at which DG Environment and ministries involved in water management play a leading role. A reduction of participation of the fisheries sector in the discourse is clearly noted. As such the MSFD can be an instrument that breaks open the national neo-corporatist arrangements in fisheries management.

5.4 The Maritime Policy

On the 10th of October 2007 the European Commission presented its vision for a Integrated Maritime Policy for the European Union. The vision document – also called the Blue book –seeks to establish an all-embracing maritime policy aimed at developing a *'thriving maritime economy in an environmentally*

sustainable manner' (Commission of the European Communities, 2007c), a vision for an integrated maritime policy that covers all aspects of our relationship with the oceans and seas. This innovative and holistic approach will provide a coherent policy framework that will allow for the optimal development of all sea-related activities in a sustainable manner (Commission of the European Communities, 2007c). The Marine Strategy Directive is regarded as the environmental pillar of this maritime policy (Kroepelien, 2007).

As experienced elsewhere, sectoral approaches have shown themselves to be inadequate and ineffective in the European context. Use conflicts, negative externalities, and environmental degradation have increased, and the need for a comprehensive approach to ocean use management has become readily apparent to EU-decision makers (Juda, 2007).

By seeking integration and participation, cutting across sectors the MP can be seen as an integrative and participatory policy arrangement. It seeks to bring together actors from a wide variety of sectors, hence also with an agenda covering a wide range of issues. As such it brings on board new actors or at least brings them together in a novel configuration.

The MP is an inclusive approach, embracing and incorporating CFP and MSFD. This integration raises the question of inclusion of increasingly heterogeneous stakes and stakeholders (shipping, oil and gas extraction, fisheries, conservation) and also raises the issue of balancing ecological and economic objectives.

The recently published Marine and Maritime Research Strategy (Commission of the European Communities, 2008b) – not a policy arrangement as such but part of the implementation of the Maritime Policy – reflects this emphasis on an "integrated approach to cope with complexity… and to find coherent solutions for exploiting all the economic potential of the seas within an ecosystem-based approach" similar to that of the MP, promoting a governance model in which "marine and maritime stakeholders (are involved in; LvH, JvT) … strategic marine and maritime research issues at pan-European and regional levels (and; LvH, JvT) marine and maritime stakeholders, in partnership provide support measures to enable screening of marine and maritime technology expertise to promote rapid transfer at EU level. From the perspective of fisheries management this marine and maritime research strategy is quite a novel arrangement, following the development over time from a highly science/biological driven research agenda, via attention for socio-economic impact assessment and integration of analyses towards a search for novel

management instruments such as the Ecosystem Approach to Fisheries Management, Rights Based Management, Spatially Managed Areas, Maximum Limits to negative Impacts and Improving fisheries assessment methods by integrating new sources of biological knowledge. Now even a further integration with other sectors, stakes and discussions will need to take place.

The MP presents a new configuration of stakeholders into the area of marine management. In fact its starting point lies in a search for integration over sectors and policy areas both to face challenges posed to the policy areas (such as increasing an conflicting uses of oceans and environmental challenges such as climate change) as well as posing challenges to the marine and maritime sectors to integrate the policy field. As such the MP forms an integrative discourse including the entire marine and maritime field of activities, sectors and stakeholders. As worded in the Blue Paper: "The new integrated maritime policy will truly encompass all aspects of the oceans and seas in a holistic, integrated approach: we will no longer look only at compartmentalised maritime activities, but we will tackle all economic and sustainable development aspects of the oceans and seas, including the marine environment, in an overarching fashion" (Commission of the European Communities, 2007d).

It emulates an integrated regional approach, incorporating activities ranging from shipbuilding and shipping, ports and fisheries, offshore energy (including oil, gas and renewables), coastal and maritime tourism, exploitation of mineral resources, aquaculture, blue biotech and emerging sub-sea technologies as well as the recreational, aesthetic and cultural uses and the ecosystem services provided (Commission of the European Communities, 2007c). The coordinated development of current sectoral policies also calls for integrated and crosscutting actions to create the necessary links between them. Tools such as spatial planning, an integrated approach to data collection processing and delivery, and the coordination of surveillance and monitoring activities and processes (Commission of the European Communities, 2007d) are examples of proposed integrative actions.

The holistic integrated approach (Commission of the European Communities, 2007c) aims at an integration beyond the sum of the individual parts. In order to establish this integration across activities and regions it is obvious that new rules will need to be formulated at the central EU level and resources (i.e. funds, research) be controlled by the EU. This in fact is already common practice both with the Common Fisheries Policy as with the Marine Strategy Framework Directive. Both are formulated at the EU level, with national implementation. The CFP a policy with a degree of stakeholder input through

i.e. RACs and ACFA, the MSFD a directive with relative low stakeholder involvement.

By seeking integration the MP will create a new playing field with an integrative discourse over activities and sectors, rules set at a central level and resources controlled at EU level. By creating a new playing field new collations of actors across sectors (with a regional focus) are likely to occur. The MP aims at formulating new rules, "Change the way we make policy and take decisions" (Commission of the European Communities, 2007c). Fishers together with e.g. the maritime transport sector, oil and gas extraction and tourism will seek new ways to plan and use the maritime space. An integrated Maritime Policy cannot succeed in a top-down statist arrangement but will require a reflexive arrangement in which coalitions of different activities and sectors renegotiate and reformulate the rules of the game.

5.5 CFP, MSFD and MP: the coexistence of policy arrangements

The Maritime Policy is clearly the new centre piece in marine and maritime management, encompassing the CFP fisheries management and the ecological MSFD. The MSFD has a clear environmental focus, while the MP is more encompassing and stresses the need for economic development as well as sustainability (Commission of the European Communities, 2007d). The MSFD and MP can be seen both as a two pillar system (Mee *et al.*, 2007) and as two contrasting frameworks for Integrated Marine Management (Sissenwine and Symes, 2007). It concerns on the one hand a policy designed to maximise the economic benefits from the rational use of the marine environment and, on the other hand, legislation designed to conserve the flow of economic goods and services from marine ecosystems whilst maintaining their resilience and biodiversity.

Integration of the frameworks of MP, CFP and MSFD has to deal with the different levels of scale of its constituting policies and the specific characteristics of the policy domains and policy arrangements. The MSFD has an environmental conservationist, statist signature, the CFP seeks to integrate conservation of fish stocks with sustainable exploitation of the resource, and the main stay of the MP is the search for integration of economic wealth and social well being in a sustainably way. The MP clearly represents a modern arrangement of new social and political values of marine governance: a less interventionist state and the greater protagonist of the various social agents (Suárez de Vivero, 2007).

Next to a difference of emphasis on either ecological or economic aspects, from the perspective of policy arrangements, the rather novel integrative and participatory policy arrangement of the MP can be found next to the more classical neo-corporatist arrangement and inter-governmental structure of the CFP and under the same umbrella the etatist arrangement of the MSFD. Resolving the problem of mixed competences, and particularly the Commission's exclusive competence in matters relating to fisheries, and the question of primacy between the CFP and environmental Directives, will be crucial to ensuring the efficient and effective implementation of either strategy (Sissenwine and Symes, 2007).

The challenge put to the MP lies in its attempt to integrate over sectors and policies, with differing sets of stakes and stakeholders, with different sets of policy resources and discourses. Where in shipping arrangements are made at an international level, in which individual member states are involved, the CFP is the exclusive competence of the EC and implementation of the MSFD is devolved to the Member states.

The dilemma of the MSFD lies in the fact that the operationalisation of the directive is devolved to the individual MS. This in practice has in the past for example with the Water Directive and Bird and Habitat directives lead to differing interpretations of the letter of the directive. And in practice implementation differs at the national and regional level. This hampers the development of a level playing field. Part of this can be attributed to the different institutional settings of the different countries (van Hoof *et al.*, 2005) in terms of national legislation and the practice of operationalising and enforcing measures, leading to different levels of conformity across the EU.

The challenge for the CFP lies in the fact that with the 2002 reform the corporatist signature of fisheries management was challenged, and the closed environment was opened up to a more open and participative governance structure. An example is the establishment of RACs. In addition, new stakes and stakeholders are also forced in through increased attention for environmental aspects such as through the MSFD. In this respect it is also noteworthy to focus on the fact that by establishing an MSFD, a directive with a sole environmental objective, it provides tools to some stakeholders to take control over the debate with the aid of the legal system: the directive will stipulate rules and regulations to which all have to adhere. It can be queried which policy will be leading when it comes to weighing environmental impact of fisheries versus the social and economic effects of fisheries on local communities.

The CFP is placed on a new stage, away from the national neo-corporatist setting. Where in the past organised sectoral interest of fishermen could be brought to bear in the international discourse through the national corporatist structure, in the new era CFP is embedded in MP and MSFD which implies negotiations increasingly shifting to the supra national stage with different policy objectives (integration, environmental status) and different stakeholders (from DGFISH to DGMARE and DGENV, from fishers to oil and gas extraction, shipping and environmental concerns).

The CFP is facing a general shift in locus from the national corporatist structure to the European and regional level, and a loss of competences with the introduction of the MSFD and the integration under the MP. This breaking open of the fisheries arrangement is intensified by the already ongoing development of increased influence of spatial planning and environmental policy on fisheries policy. The institutional framework for the protection of Europe's seas and oceans has become highly developed over the last 35 years, including milestones like the 1972 and 1974 Oslo and Paris Conventions (merged in 1992 into the OSPAR Convention on the Protection of the Marine Environment of the North-East Atlantic), the United Nations Convention on the Law of the Seas (UNCLOS), the 1992 Rio Agenda 21, the regional conventions for the protection of the Baltic Sea (HELCOM), the Black Sea, and the Mediterranean, as well as the Johannesburg Plan of Implementation (JPOI) of 2002. In addition, several international and EU initiatives focus on land-based sources of pollution with an impact on the marine environment like the IPPC Directive and the REACH initiative. Extensive environmental requirements for shipping developed under the auspices of the International Maritime Organization (IMO), and the work under the Climate Change Convention is another important element (Kroepelien, 2007). All these developments influence the CFP and raise the question whether there is still a niche for a specific policy aimed at managing fisheries.

5.6 Conclusions

As part of the governance era rather simultaneously policies can be developed that have a novel, participatory and integrative arrangement, such as the MP, whilst at the same time a more classical etatist command and control arrangement is devised within the same area of management.

Next to a difference in arrangement the policies also do have a difference in focus (between economic and ecological aims), include different stakes and

hence stakeholders and focus on different ways of setting rules (between challenging and integrative to instrumentally state imposed). Yet the overarching integrative MP seeks to incorporate the etatist MSFD and the neo-corporatist CFP.

The position of the CFP in this new policy arrangement is changing. Already the reform of the CFP called for opening up the traditional neo-corporatist structures to encompass new stakeholders. With the MSFD objective of good environmental quality the sole competence of the CFP to manage fish resource conservation issues is terminated. And with a further integration into a wider MP, with even more stakes from a larger group of actors, fisheries can easily turn out to be a field of relative modest political and economic importance. With a shift towards a leading principle of environmental status, away form sustainable production in an environmental, economic and societal sense, the already limited room to manoeuvre for the sector, both in the current dire economic straits and the narrow path of fisheries policies, is further closed.

Also, with a change of stakeholders and discussions, hence fora at which (marine and maritime) policies are shaped in order to maintain clout in the debate the fisheries sector will have to realise that the former neo-corporatist structure no longer ensures entry to the centre stage. The Netherlands show that implementation of MSFD is not necessarily controlled by the body of government responsible for fisheries but by the agency responsible for the Marine Environment to which both the sector as the DG for fisheries have rather limited access. The Marine Policy will also challenge the characteristics of the fisheries arrangements. More and more the dynamics, rules and discourses of other marine policy domains will affect the content and organisation of the CFP. May be this could be the end of separate sectoral marine policies in favour of an integrated marine policy, of which fisheries is just one of the aspects.

Chapter 6

Conclusions

6.1 Towards governable fisheries

Fisheries management worldwide, in the EU and in the Netherlands is perceived as being in crises: in ecological terms, as some stocks are in poor shape despite management effort; in economic terms as a large part of the fleets are not profitable and in social terms, as fishing communities are, as a result of diminishing fishing activities, losing identity and losing legitimacy as public criticism on fisheries practices is increasing. Moreover, one could say that there is a managerial crisis in fisheries management as it fails to reach its goals and lacks legitimacy and accountability.

As a response to this state of fisheries management, a large array of governance innovations has been deployed over the past two decades. In this thesis I have analysed Dutch initiatives in this area, such as the introduction of the system of ITQs, co-management and the use of covenants. Also, at the EU level governance innovations have taken place, of which the introduction of Regional Advisory Councils is the most notable innovation. In addition, there is the introduction of specific marine environmental legislation, such as the Marine Strategy Framework Directive. And the introduction of the Maritime Policy which seeks integration over activities and actors in the marine environment, as detailed in a number of EU communications such as the Action Plan Maritime Policy, a European Strategy for Marine and Maritime Research, a Roadmap towards maritime spatial planning by Member States, a Strategy to mitigate the effects of Climate Change on coastal regions, Reduction of CO2 emissions and pollution by shipping and a Review of EU labour law exemptions for the shipping and fishing sectors.

In this thesis I have analysed and assessed a number of these policy and governance innovations. This study aimed at understanding how and why certain solutions were selected and how they functioned. In so doing, it sought to answer the central question of which new institutional arrangements have been developed in fisheries management, how and why these new arrangements emerged, what have been the results and how these new institutional arrangements relate to the current debate on the future of fisheries governance? This chapter addresses the research questions raised and formulates conclusions of this study. In the next section I will take stock of the lessons learnt from the several cases studied. The main focus will be on the (changing) roles of actors from state, market and society in devising and implementing fisheries policy and the way in which the new arrangements changed participation. In section three I will go beyond the specific new management initiatives and institutional arrangements and look at the more overarching trends

and developments in fisheries management, in particular how participation of the different actors in the policy process is changing. This is related to questions regarding which actors can participate in the policy process and to what extent these actors can participate. In section four I will take the analysis a step further by looking at the governance trends as described in section three and how these trends will be drivers of a future fisheries governance.

6.2 Coping with the fisheries management crisis

We have seen that the top-down, government-controlled fisheries management system has reached its governance limits and failed to produce the required economic, ecological and social results. As a reaction to the crisis in fisheries management, an array of initiatives have been developed in the Netherlands and at the EU level. In this thesis I examined 4 such developments: the introduction of ITQs, co-management and covenants in the Netherlands and the coming about of new EU level marine policies: the Marine Strategy Framework Directive and the Maritime Policy. These 4 new arrangements affected the steering principle of the fishing management system. Did the innovations in fisheries management result in a better functioning system in terms of effectively obtaining specific economic, ecological and social goals? And how did the new arrangement affect the roles of the actors from state, industry and society and the way they participate in the policy process?

6.2.1 The introduction of ITQs

The Netherlands does have a tradition of applying marked-based instruments in environmental policy. With ITQs, a management instrument was introduced which simultaneously functioned as an environmental instrument limiting catches, and as an economic instrument seeking optimal allocation of fishing capacity over fishing opportunities.

From the perspective of the individual fisher, the introduction of the ITQ system resulted in individual quota holdings being brought in line with the fishing capacity of the vessel and provided a right that can be exerted and defended and can be used as collateral. Access to the group system allowed the individual fisher to fine tune quota holdings and landings during the year by leasing out or hiring additional quota. In addition, groups take an active role in acquiring additional quota, either by collective buying of quota or by facilitating the exchange of quota between EU Member States. Fishers utilise the group system not only for the uptake of the group quota entitlement (as was

the government's intention of the establishment of the groups) but also in managing the transfers and allocation of quota. The group takes the position of broker in the quota transfer process, taking a position in the allocation process which makes the Dutch system one of a mix of individual and collective management of catch rights.

The Dutch ITQ system can be characterised as a three tier system in which, first, the fisher is holding individual rights; secondly, during the year the rights are managed collectively in a group; and thirdly, the government manages at the national level, those species with no individual quota allocation. The Dutch case shows that by managing the quota by fishermen's groups the rights can be safeguarded for local communities.

With the introduction of the ITQ management system (embedded in the co-management system which was introduced during the same period) the fleet capacity was reduced and catches were brought in line with the Total Allowable Catch (TAC). Hence the number of vessels and fishing pressure was reduced and compliance with catch restrictions increased. The ecological objective of reduction of fishing pressure and fishing within set TAC levels was obtained. However, as reflected in the net result of the Dutch cutter fleet, the ITQ system has not resulted in a long term economically healthy cutter fleet able to absorb, for example, changes in fuel prices.

The introduction of the ITQs had an effect on fisheries management as the allocation of catch rights became subject to market forces where earlier government had allocated the rights. The state transferred the allocation of catch opportunities to the market and, embedded in the system of co-management, the fishers themselves steered quota distribution. Hence today, the quota market is (partly) a 'free market' based on the willing seller – willing buyer principle with no steering role for the state. However, the market is only partly free as quota can only be bought by licensed fishermen. Fishers within the confines of their group direct quota transactions. Opening up the quota market to, for example, recreational fishermen or NGOs, or to government itself in that respect, would allow other stakeholders to also exert their market power by purchasing quota.

The question whether the Dutch system of ITQs would be applicable to other countries and fisheries as well is difficult to answer based on the Dutch experience alone. The Dutch case shows that ITQs can function well in obtaining certain management goals (fleet reduction, compliance with quota). By embedding the ITQ system in a system of co-management, which gave fishers

control over the distribution of the quota, some of the negative effects usually associated with the introduction of market based instruments such as ITQs (concentration of rights, communities losing fishing rights) did not occur on a large scale. Hence the effect of the introduction of ITQs will depend on the institutional setting in which it is being introduced. If the quota market would be opened to other players (recreational fishermen, NGOs, government) there is the possibility that a concentration of rights and fishing communities losing fishing rights will occur.

As for participation in the policy process, this innovation was introduced top down by government. The industry participates in the system by exerting its market force; the Dutch ITQ system created private rights for access to fish and a market for these access rights where one did not exist before.

6.2.2 The introduction of co-management

In the same period as the introduction of ITQs, a public-private partnership between the state and the industry for the management of quota uptake was established. The introduction of the Dutch co-management system clearly played a role in increasing compliance with the quota management system. By including fishers into the management system and founding the system on social control and peer pressure, the legitimacy of the system increased. Also a shift is seen in the drivers for compliance: from compliance as an economic calculation of gains and sanctions towards a more normative approach emphasising the social normative values of the fishers.

The introduction of the co-management system in the Netherlands has brought about a change in the basic governance fabric of fisheries management by devolving part of management responsibilities from government to user-groups. However the core of the system is not a joint management of fish stocks but a decentralised effort of monitoring quota uptake and keeping landings in line with set Total Allowable Catch (TAC). It is a form of cooperative management, where responsibilities of government are devolved to user-groups but the user-groups have no direct input in the wider policy development process beyond 'tokenism' (Arnstein, 1969). Although fishermen's participation in the management system has increased slightly (quota administration and trade), in other areas of fisheries management their role has not changed. In that sense the Dutch co-management system does not represent an environmental policy in which the constellation of state, market and civil society is fundamentally altered to accommodate a participatory interactive policy arrangement, with fishers actively involved in the process of

policy development. Rather it is an arrangement in which part of enforcement is devolved to the fishers, shared with the enforcement agent of the government: a situation of co-enforcement.

The introduction of the EU Community Fisheries Control Agency, a top down government type solution, existing side by side with the Dutch state-market partnership, illustrates the possible co-existence of different policy arrangements. The EU Community Fisheries Control Agency can play a role in establishing co-management at a wider EU scale by providing an enabling environment in which such sub-national and national arrangements can be developed. On the other hand, it can play a role in co-enforcement by taking up the role of enforcement agent at a distance, sharing this role with the national enforcement agencies.

6.2.3 The use of covenants

The introduction of covenants and of co-management centres on a system of devolved management. But where co-management is founded on cooperation between government and fishers, covenants are based on voluntary agreements between two or three of the actors of state, market and civic society (NGOs). From the perspective of the state, the use of covenants signifies a shift in the position and role of government since government seeks private initiative to reach policy goals, whereas before governmental rule making and enforcement were the preferred instruments.

In Dutch fisheries management we have seen three cases of covenants: an agreement to extent the co-management system to include management of the cutter fleet engine capacity; an agreement between state and industry on the development towards sustainable fisheries on the North Sea; and an agreement mainly between NGOs and industry to solve a dead lock in attaining sustainable fisheries on the Wadden Sea.

In the case of the engine capacity arrangement, the existing co-management arrangement on the uptake of quota had been extended to increase compliance to the fisheries engine capacity regulation. The agreement played a role in opening up a dead- locked situation in which individuals are only inclined to change conduct when free rider behaviour is no longer tolerated. Within the groups, engine capacity management is sanctioned with government having final responsibility for compliance.

Whereas the engine capacity agreement is a bilateral state-industry agreement, the North Sea Covenant is a tripartite arrangement between state, industry and ENGOs. It aims at a policy to obtain a viable and sustainable fisheries sector within the boundaries of a healthy ecosystem, bringing environmental concerns and economic concerns together in an implementation plan. By entering the agreement the sector gains time, political support and resources to embark on a transition process towards more sustainable operations. From a societal perspective the covenant brings ENGOs and industry together to discuss environmental concerns and reach agreement on a process of change towards more sustainable fisheries. For the state the covenant creates leeway for industry to become sustainable in an environmental and economic sense, yet simultaneously creates a sense of urgency to make this transition.

The mussel covenant was a tool to open up a dead lock situation in which a transition towards sustainable production was hindered by the stalemate caused by the "War on the Wadden Sea" between the industry and ENGOs. Government took a leading role in orchestrating the coming about of this covenant. The mussel covenant is the most clear example of using the instrument for conflict regulation. This covenant depends to a large extend on outside independent (scientific) monitoring and evaluation.

So far, the engine capacity covenant is perceived to be successful with no infringements and vessels having adjusted engine capacity. The North Sea covenant has facilitated a process of transition and an array of initiatives e.g. under the Fisheries Innovation Platform (subsidies for development of new fishing technology such as pulse trawl and reduction of fuel consumption, improved marketing initiatives and sharing of knowledge among fishers) have been launched to support this process. The mussel covenant is put under pressure from parties not being signatory by contesting the agreement in court.

In all cases we see a repositioning of the state in relation to the actors from industry and society. The covenants are a manifestation of government negotiating fisheries policy in order to obtain a more sustainable use of marine resources. The degree of self-management differs between the three covenants. In the North Sea covenant, covenant partners have quite some opportunity to (re)define policy goals, whereas under the engine capacity the policy objectives are not renegotiated at all; in the end, the industry will comply with prior existing regulations.

6.2.4 New EU marine policies

Over the past decade new EU marine policies such as the Marine Strategy Framework Directive and the Maritime Policy have been developed. Both policies aim at governing the marine environment, yet the two policies have a different signature in policy formulation and implementation. From a fisher's perspective these policies present a change in institutional setting in terms of integration as well as participation.

In a governance era contrasting policies can be developed simultaneously. The Maritime Policy is a novel, participatory and integrative arrangement. The Marine Strategic Framework Directive developed more or less in the same period, has a more classical etatist command and control arrangement. In addition to a difference in arrangement, the policies also have a difference in focus (in balancing economic and ecological aims), include different stakes and hence stakeholders and focus on different ways of setting rules.

The position of the Common Fisheries Policy (CFP) in a new marine policy arrangement is changing. With the Marine Strategic Framework Directive objective of good environmental quality, the sole competence of the CFP to manage fish resource conservation issues is terminated. And with a further integration of the CFP into a wider Maritime Policy, with even more stakes from a larger group of actors, fisheries can easily turn out to be a field of relative modest political and economic importance. The balancing act of the Common Fisheries Policy, in which conservation objectives are sought in conjunction with goals for fleet and market development, is easily taken over by concrete marine environmental indicators defined outside the realm of the CFP. In fact, whereas the Common Fisheries Policy concerns the sustainable development of fisheries, the Marine Strategy Framework Directive clearly defines fisheries as one of the most important pressures on the marine environment (Commission of the European Communities, 2005b). While in this policy discourse it is widely acknowledged that economic and environmental concerns should both be taken into account, the emphasis increasingly falls on putting the environment as top priority: without a healthy ecosystem, economic activities and society will not flourish. This illustrates a change in discourse from a fisheries management focus towards an environmental conservation policy focus.

It is too early to asses whether the new EU policies result in a better functioning system in terms of effectively obtaining specific economic, ecological and social goals. However, the new policies do have an influence on the constellation of stakeholders and the way they can participate in the policy

process. As Hatchard (2005) correctly states, the concept of stakeholder participation has only recently begun to spread in the actual governance of European seas. Direct input of stakeholders in actual policy development is modest. Regional Advisory Councils can advise the EU and on request national governments, but their advice is not per se taken into account in policy development. In the Netherlands the implementation of the Marine Strategy Framework Directive illustrates rather limited stakeholder input in marine governance. Participation of stakeholders only takes place in the early steps of operationalisation of the Marine Strategy Framework Directive and most often involves providing information into the policy development process rather than through actual involvement of stakeholders in defining issues, setting the agenda and defining measures. Actual implementation in the Netherlands is perceived as a rather technical, science driven matter, which is not subject to participation. The coming about of this environmental directive was staged by the EU's DG Environment, while Dutch implementation is spearheaded by the Ministry of Water management. Traditionally fisheries policy is developed by DGMARE and implemented by the Dutch Ministry responsible for Fisheries: the Ministry for Agriculture, Nature and Food Quality's directorate for Agro-supply chains and Fisheries. Hence the forum at which to participate and how and when to participate is moving away from the traditional neo-corporatist fisheries arrangement.

6.3 New institutional arrangements

When going through the case studies, from the introduction of the ITQ system and co-management in the Netherlands, the Dutch use of covenants in fisheries management and the introduction of the Marine Strategy Framework Directive and Maritime Policy at the EU level, we see the chronological introduction of new fisheries management arrangements. The common denominator in the new Dutch institutional arrangements is an increase in participation of stakeholders in the policy process. At the EU level, increased participation of stakeholders is an issue (e.g. the introduction of RACs) but the integration over activities and stakeholders is also an important trend. So, though stakeholder participation has increased, the nature of participation in these various new arrangements is not the same. Consequently, in this section I analyse and compare the commonalities and differences of the new arrangements and try to explain their emergence, while placing them in a wider geographical perspective.

If we first concentrate on the Dutch cases, why did the new institutional arrangements emerge? In all cases the starting point has been the failure of

government to effectively implement fisheries policy. The introduction of ITQs and co-management and the extension of the co-management arrangement with the engine capacity covenant all emerged when the fishing sector refused to comply with fisheries policy. The North Sea and Mussel covenants illustrate government's frustration over the deadlock situation emerging between ENGOs and fishing sector over the development towards a more sustainable fisheries.

In all cases it is the government that takes the initiative to develop a new institutional arrangement. In all new arrangements the government opts for stakeholders gaining increased opportunity for participation in policy development; yet the participants and the modes of participation differ between the different arrangements. I note a difference in signature for those arrangements directly between government and the fisheries sector and the arrangements directly involving ENGOs. For the arrangements between government and the sector the main stay is the handing over of responsibilities from government to the sector, either through the market (ITQs) or by devolving responsibilities to groups of fishermen. In the cases involving ENGOs the signature of the arrangement is much more on joint problem solving. Hence, in terms of participation and following Arnstein's ladder of participation classification (Arnstein, 1969) and Raakjear and Vedsmand's typology of fisheries co-management (Raakjær and Vedsmand, 1995, 1999), the arrangements between government and sector are not so much cases of co-management (a joint development and implementation of policy) but rather of co-enforcement (the devolution of enforcement tasks to the sector, while policy development remains a task of the state). A dual situation emerges in which, in fisheries policy implementation through co-enforcement, fishers' participation, using Arnstein's classification[13], moves towards a form of 'citizen's power' as enfor-

13 Arnstein's ladder of participation classifies the rungs into three groups: non-participation, tokenism and citizen's power. The bottom rungs of the ladder are (1) Manipulation and (2) Therapy. These two rungs describe levels of "non-participation" that have been contrived by some to substitute for genuine participation. Their real objective is not to enable people to participate in planning or conducting programs, but to enable powerholders to "educate" or "cure" the participants. Rungs 3 and 4 progress to levels of "tokenism" that allow the have-nots to hear and to have a voice: (3) Informing and (4) Consultation. When they are proffered by powerholders as the total extent of participation, citizens may indeed hear and be heard. But under these conditions they lack the power to insure that their views will be heeded by the powerful. When participation is restricted to these levels, there is no follow-through, no "muscle," hence no assurance of changing the status quo. Rung (5) Placation is simply a higher level tokenism because the ground rules allow have-nots to advise, but retain for the powerholders the continued right to decide. Further up the ladder are levels of citizen power with increasing degrees of decision-making clout. Citizens can enter into a (6) Partnership that enables them to negotiate and engage in trade-offs with traditional power holders. At the topmost rungs, (7) Delegated Power and (8) Citizen Control, have-not citizens obtain the majority of decision-making seats, or full managerial power. (Arnstein, 1969)

cement tasks are delegated to the sector, whereas in general fisheries policy development participation remains at levels of what Arnstein calls 'tokenism', in which the sector is only informed about policy and at best consulted. With a joint search for solutions and resolving deadlocks, the arrangement between government, sector and NGOs in the North Sea and Mussel covenants is much more of a 'cooperative arrangement' (cf. Raakjær and Vedsmand, 1995) and as partnership with delegated power a move towards Arnstein's 'citizen's power' (Arnstein, 1969), a higher rung on the ladder of participation.

Hence, government responds to a crisis in fisheries management by searching for and allowing more participation. But this participation has at least two different objectives, from a governmental policy point of view. First, participation of fishermen has to improve the implementation of environmental policy (fish stock conservation). Secondly, with participation beyond fishermen the government (and also the sector) aimed to increase legitimacy and support of fishery policy. And this all follows from a crisis in the neo-corporatist arrangement in which fisheries policy was developed and implemented originally. The crisis in the neo-corporatist system emerged when the rank and file of the fisheries organisations did not comply with the management rules agreed between their representative elite and government. As the neo-corporatist fisheries management setting fell apart, the privileged relation between government and sector was further challenged by other actors (ENGOs) that also claimed a stake in particular in the environmental concerns of fisheries management. When the closed neo-corporatist relation between fisheries representatives and government was no longer capable of devising a policy supported by the industry, new ways of cooperation and legitimacy had to be invented.

It has been illustrated in this dissertation that the new arrangements were successful in the sense that compliance with the rules increased and deadlock situations were resolved. The most recent covenants, in which state, industry, and ENGOs reached agreement on sustainable fisheries development, in particular, illustrate a situation where leeway is created for economical development while ensuring ecological targets to be obtained, supported by different stakeholders. Where the agreements between government and fishing sector focus on enforcement and compliance with existing fisheries regulations, the agreements involving ENGOs focus much more on reaching environmental goals.

The most recent covenants between government, fishing sector and ENGOs illustrate these developments in three ways. Already mentioned above are

the developments in fisheries policy towards increased stakeholder participation in fisheries policy and in addition an opening up of the traditional neo-corporatist arrangement to include more stakeholders. In addition we see a development of legitimacy and accountability in fisheries management. In the traditional top-down government lead fisheries management policy arrangement, it is the state which is responsible and accountable for fisheries management. The legitimacy crisis of fisheries management induced government to share fisheries management tasks with stakeholders (quota and engine capacity management with the sector; sustainable fisheries development with sector and ENGOs). With increased involvement of stakeholders in fisheries management the legitimacy and accountability of actors in the arrangement also changes. The traditional right to fish, granted by government to the industry, is replaced by a 'licence to produce' that the fishing sector has to obtain in negotiation with state and ENGOs. This affects the accountability in the arrangement and on the 'burden of proof' by shifting responsibility from government and society showing harmful impact, towards the industry having to show sustainable resource use. Also the forum at which to be accountable to shifts, from fishers being accountable to government (compliance with the rules) and government being accountable to society, towards a situation in which the fishers are directly accountable to the parties involved in the agreement (covenant). It is in the aspects of accountability and legitimacy that the covenants show an Achilles heel of such a participatory policy development; as the covenant is only signed between a limited number of parties there are always actors left outside the agreement. The parties who were not allowed to participate can challenge the agreement in public, disqualifying it as a private matter between a non-representative group of parties, or even challenge the agreement in court as they are not bound by the arrangements of the agreement[14]. By applying this outside pressure the compromise reached in the covenant can be challenged.

In analysing the commonalities and differences in the emerging new governance arrangements we have mentioned the state or government as if it is a single actor. However the cases illustrate clearly that there is not one single state but a multi faceted government, which also partly explains differentiations in participatory modes. The state sometimes arranges implementation of fisheries measures and enforcement in a more participatory way, yet at the same time in other parts of policy in a top down fashion (for example setting TACs and quota); sometimes it invites stakeholders to partake in fisheries

14 The mussel covenant explicitly states that the signing parties will co-operate in a constructive way and will in case of difference of opinion not seek a solution via a legal action nor though public actions directed at one and other. (Anon. (2008). article 6)

policy development[15], yet in other cases severely limits participation in operationalisation of environmental policies (such as the national implementation of the EU Bird, Habitat, Natura 2000, Water and Marine directives); following the EU CFP, the Netherlands has a specific fisheries policy, yet it devises policies affecting fisheries operations outside the fisheries policy setting. Government in this regard can be perceived as a descendent of Janus, having two faces facing opposite directions; part of government is involved in fisheries policy, part of it in environmental policy. This is evidenced through the deployment of participatory instruments as well as top down management such as the EU Community Fisheries Control Agency and implementation of the Marine Strategy Framework Directive. Meanwhile, with co-management and covenants, government on one hands seeks the cooperation with the sector to reach policy goals, yet on the other, still imposes measures on the sector. Similar, seemingly contradictory sides can also be identified at the EU level with the simultaneous development of sectoral policy (revision of the EU CFP) as the need for integration over sectoral activities in an overarching marine integrated policy.

New fisheries arrangements beyond the Netherlands

The question can be raised to what extent the Dutch solutions to the fisheries management crisis are typical inventions of a national policy style that has been known throughout the years for its cooperative and collaborative character. Are these new fisheries arrangements applicable to other situations, to other national styles of policy making? In this I will limit myself to looking at European countries and specifically those of the EU, since they all operate under the umbrella of the CFP.

In looking at strategies to abate fisheries management crisis in other countries we easily can conclude that the solutions chosen in the Netherlands are not specifically Dutch. ITQs have been used in for example Iceland and New Zeeland and in the EU the UK system resembles to a large extent an ITQ system (van Hoof *et al.*, 2002). Co-management, in varying forms, is a widespread phenomenon in fisheries management and can be found in for example Denmark, Spain (*Confradias*) and France (*Prudhomies*). The use of covenants is also widely used in environmental policies (such as waste management, water management and energy efficiency in a wide array of countries (Mol

15 In fact at the onset of the development of the Mussel covenant, although the state took the initiative for its development, it aimed at reaching an agreement between industry and ENGOs without government being part of the agreement; the industry and ENGOs explicitly brought back the government into the agreement.

et al., 2000). The fisheries management systems across Europe have had a neo-corporatist signature (van Hoof *et al.*, 2005), and the collapse of this neo-corporatist arrangement is widespread. And as one of the main failures of contemporary fishers management, in particular in the EU, is perceived to be lack of participation, the Dutch solutions could be examples applicable to other countries as well. However, in doing so one should render count of the specific national, regional and local settings, political and institutional traditions in which fisheries management takes place. Hence, while we can expect and indeed do see similar types of solutions following a fisheries management crisis in quite a number of EU and other OECD countries, the specific layout and fine-tuning of these new arrangements is dependent on the national and local settings in terms of institutions, policy cultures, and participatory traditions. A covenant or co-management system does not look the same throughout the European countries and one should be careful with claims of isomorphism in studying these new fisheries arrangements. But of course, especially in the EU the CFP and other common marine policy developments mean that isomorphism is more likely within the EU than between EU member states on the one hand and, say, the US or Canada on the other.

As fisheries management in Europe takes place under the umbrella of the CFP, starting point for national fisheries policy are the regulations as set at the European level. The main challenges for the current CFP reform and future fisheries policy are perceived to be (Commission of the European Communities, 2009 p 8):

- a deep-rooted problem of fleet overcapacity;
- imprecise policy objectives resulting in insufficient guidance for decisions and implementation;
- a decision-making system that encourages a short-term focus
- a management framework that does not give sufficient responsibility to the industry;
- lack of political will to ensure compliance, and poor compliance by the industry.

Can the Dutch new institutional arrangements address these issues? As for the sharing of responsibility in fisheries management and to overcome poor compliance the Dutch solutions have proven their worth. Also transferable fishing rights have proven their valuable role in adjusting fleet capacity, albeit not to the full extent of bringing about a stable equilibrium between fishing capacity, fishing opportunities and a viable fishing fleet. ITQs, in combination with co-management, have proven to increase compliance by devolving responsibilities. As for the focus of fishing policy, being short-term and impre-

cise, the Dutch covenants have shown to be able to address this. Together stakeholders were able to develop a long term management perspective in which policy objectives with an economic, environmental and sustainability focus were translated into an operational plan.

Besides the revision of the CFP a new setting has evolved, in which fisheries policy has to be integrated with other sectoral interests in a wider maritime and marine environmental policy framework. Marine policy becomes less sectoral and more integrated over sectors and activities changing the constituency of (fisheries) policy including an increased number of stakeholders. In taking these new developments and perspectives into account the new institutional arrangements introduced in the Netherlands were mostly answers to the fisheries management problems of the past. They were hardly designed to address the new challenges and management demands that are now starting to shape the policy agenda of the future common marine policy. What are the challenges of the future for a fisheries governance that is integrated in a wider marine governance?

6.4 Challenges for future fisheries governance

Based on the analysis and conclusions presented in this thesis I will draw some trends regarding the future fabric of fisheries governance, focusing on three aspects: participation, globalisation and the role of science in supporting fisheries policy development.

For the future development of fisheries policymaking and the institutional set up of marine resource management two main trends can be noticed: increased participation and cooperation between state, market and civil society, and integration of policy. A spin-off of these trends is a changing fisheries discourse from a focus on sustainable resource use and production towards ecosystem integrity and sustainability. As a result the traditional right to fish is replaced by a 'licence to produce', shifting accountability and 'burden of proof' from government and society towards the industry.

6.4.1 Participation in fisheries management

Following Jänicke, van Tatenhove and Arts, and others (Weale, 1992; Jänicke, 1993; Mol, 1995; van Tatenhove, 1999; Arts and van Tatenhove, 2000; van Tatenhove and Leroy, 2003; Arts and van Tatenhove, 2004; Arts and van Tatenhove, 2006) a general trend of political modernisation both in the Ne-

therlands as within the EU can be noted. According to ideas of political modernization, participation of citizens, non-governmental organisations, firms and other stakeholders changes from reactive to more reflexive and pro-active ways of participation. This comes together with a shift from legislative procedures towards extra-legal processes, often resulting in experiments with participatory (or interactive) policy making, and a progressive interweaving of state, industry and society. This development is reflected in arrangements such as co-management between state and users, bi- or trilateral policy contracts such as covenants between stakeholders and between stakeholders and the state, and Regional Advisory Councils.

These participatory tendencies come together with questions on who can participate, and who determines who can participate; what are the rules for participation and who makes those rules; where in the policy cycle is participation possible or even required; and what type of participation should be aimed for (informative, constructive, decisive)? Behind these questions of designing participation are the fundamental problems of legitimacy, accountability and effectiveness of fisheries governance. What participatory arrangements are most successful in contributing to a legitimate, accountable and effective fisheries governance?

These issues can be expected to remain leading themes in future fisheries governance. In this respect the Dutch cases, although presenting best practices that might be used to overcome deficiencies in contemporary fisheries management, might very well not stand up to the contemporary and future challenges for integration of policies and changes in participation. With the shift in accountability from government towards fishers (as the latter need a societal licence to produce; and the burden of proof for sustainable fisheries moves to fishermen) fishermen end up in an entirely new position and role in fisheries management. Regional Advisory Councils, with a limited focus on fisheries and a limited stakeholder representation in an advisory role, make fisheries policy more participatory, but do not provide the forum at which fishers can take the lead in devising fisheries policy. To be able to take the lead in devising fisheries policy is essential when accountability for sustainable fisheries is put in the fishers' hands.

Also, in a context in which polices shift from sectoral policy to integrated marine environmental policies, a sectoral forum such as RACs, becomes superfluous. If a stakeholder platform for participation in policy development is required at all, this will have to entail a representation of *all* stakeholder categories represented in the policy. In this the question that needs answering is: when fishers are increasingly held accountable for the development

of sustainable use of marine living resources, at which forum do they need to render count? Who can be participant in this forum? Should that still be a government or set of governments? Or is the logical consequence that wider fora, which include other societal interest, are to be addressed in terms of legitimacy and accountability of fishermen?

The current CFP reform does not reflect this forward looking integrative and participative aspects. Integrating fisheries (policy) in a process of marine spatial planning, with fishers (and other sectoral interest groups) being fully engaged and responsible, would require a much more radical form of participation than is currently envisaged in among others the RACs. Then the sector should be invited to develop sustainable operations, while making it fully responsible and accountable for these living marine resources.

6.4.2 Analysing the state in fisheries governance

In all these new governance arrangements, as well as in the literature on fisheries governance as summarised in chapter 1, the role of the state seems a diminishing one: other actors and institutions are taking over. Rhodes (2007) explains the 'hollowing out of the state' by pointing at the reduced ability of the state as core executive to act effectively, making government less reliant on a command operating code and more reliant on diplomacy. But in my study, I find a situation in which the state deliberately opts to transfer authority to other parties in order to achieve policy goals. What is perceived from the outside as a weakening of the role of the state in the development and implementation of fisheries policy might in fact be a strengthening of the state's position in obtaining policy objectives. From the Dutch cases it shows that it can be the state that deliberately chooses to broaden the hierarchical governance model to include more market and participatory oriented arrangements, hence to shift from a rather etatist arrangement to a more participatory arrangement. Also the development of the covenants and co-management illustrates that these more participatory arrangements call for a strong role of the state by monitoring and enforcing the arrangements between industry and other stakeholders. The covenant parties explicitly call for a strong state, but at a distance.

Further, our study illustrates that in the process of re-institutionalising fisheries and marine management, the state can opt for the synchronic introduction of different arrangements (for example an etatist arrangement for the Marine Strategy Framework Directive and an integrative and innovative arrangement for the Marine Policy). This lines up with the perceived complexity of the system-to-be-managed and the 'wicked nature' (Jentoft and

Chuenpagdee, 2009) of the problem (cf. Chapter 1). It reflects the fact that we are trying to analyse a complex socio-ecological system in which ecological, economic and societal/political sub-systems interact; these systems are characterised by competing claims on resource use and conflicting perceptions by governors, resource users and other stakeholders. Hence each (sub) set of problems encountered may call for a different type/arrangement of solution. But also it reflects the fact that *the* state in fisheries management is a complex entity, with different parts of government (ministries, agencies, levels) addressing different issues and from different traditions, hence preferring and resulting in different policy arrangements.

This also adds to our understanding of the temporal dimension of shifts in fisheries management. The conventional idea in fisheries governance is a chronological emergence of more participatory modes of fisheries governance over time. Yet synchronically etatist or statist solutions are introduced or exist next to participatory and integrative arrangements. This reflects the dynamics and complexity of the system and the temporary coagulation of a mode of governance in a continuous process of redefinition of the roles of state, industry and stakeholders.

Although the traditional neo-corporatist relationship in policy development between the state and industry has been opened up, to allow other stakeholders such as ENGOs in, there exists still a rather closed circuit (for example in RACs) of parties having access to the process of fisheries policy development. In fact, we could label this neo-neo-corporatism in policy development, in which the traditional neo-corporatist partners are being replaced by a new, but still limited, set of participants.

In conclusion, what we need to further reflect upon is the complex position that the state takes in this process. This complexity emerges from the synchronic development of different policy arrangements and modes of governance (partly based on the current zeitgeist, partly determined by polymorphism within governments) as well as the state's role in preferring some arrangements over others (next to an overall process of redefining the role of state versus market and society). In that sense it further underlines the governance literature: the state is clearly not 'one' actor, with 'one' intention and therefore does not act in one uniform way. In fisheries governance, as much as in some of the other governance sectors, the state is not simply weak or strong – it may share power or 'give away' authority in one step of the policy process and thereby gain grip and control over the realisation of policy goals.

6.4.3 Globalisation and scale of fisheries management

The wider economic, political and socio-cultural trend of globalisation has specific meaning for the fisheries sector. Simultaneously, the world fish market has become integrated and the production chain has been globalised. The traditional Dutch fish markets for sole and plaice find stiff competition from alternative products such as tilapia and pangasius, resulting in the fact that scarcity of North Sea fish produce is not quite reflected in producer prices. On the other hand, processing activities such as filleting are easily outsourced to for example China (fish) or to Morocco (shrimp). Following Thorpe and Bennett (2001), next to the globalisation of production (e.g. Dutch trawlers operating worldwide from the North East Atlantic, North Sea, Celtic sea area to the waters of Western Africa and South America) and trade in capture fisheries, there is also the globalisation of regulation. The globalisation of regulatory control has resulted in a burgeoning body of rules and guidelines affecting the fisheries at all governing levels creating complicated – and often confusing – regulatory patterns. All these forms of globalisation contribute in different ways to the complexity of fisheries and their governance.

A consequence for fisheries management is that the dimension of scale has to be considered. This becomes very clear in current developments within the EU fisheries management. The exclusive competence of the EU in fisheries management, together with the Member States as implementers of policy, is already questioned by the general discussion on regionalisation of marine policy. Although not foreseen in the EU treaty, in EU marine management the regional level seems to be the most appropriate level at which to organise marine policy development and implementation. The triplet Member State, regional seas, EU needs to be redefined in terms of partisanship and competence. For instance, the implementation of EU environmental directives, such as the Bird and Habitat directive, Natura 2000 and the water and marine directives show an institutional void; there is no equivalent regional governance level between the EU level and the Member States. For stakeholders the creation of RACs provided a regional level forum, in which the Member States are lacking.

Moreover, noting globalisation and the fact that the failure of fisheries management is a world wide phenomenon, in which European fleets are actors at a global scale, fisheries management needs to be addressed also in a global institutional setting. The Johannesburg summit, in which the EU agreed to a fisheries management target (to have stocks at Maximum Sustainable Level by 2015), forms an example of such a development. But it can only be seen as the start of global fisheries management.

Embedding the European fisheries system in a global institutional framework further entrenches the national fisheries management systems in a nested local, national, regional, international, supranational setting. Of course, this will affect new arrangements of policy formulation and implementation, much beyond the four case studies I have reported upon in this thesis. Displacement of fishing capacity does not tally with a global strive for ecosystem conservation. Local effects of either economic exploitation or ecological conservation will have to be viewed on a more wider global scale. Production, market organisation, conservation and sustainable development, but also participation, legitimacy and accountability, have to be addressed in an integrated global perspective. For Dutch fishers and Dutch fisheries policy makers and managers this implies that the arena – that already had to be opened up to accommodate more local and regional stakeholders and competing uses of the marine environment – has to be further opened and redefined to put policy in the more global perspective. This brings to bear the question at which level (international, national, regional, local) decisions should be taken and policies should be implemented and who decides at which level to decide?

6.4.4 The role of science in fisheries management

For quite some time science, scientific information and scientist played a key role in fisheries management, not unlike the situation in many of the environmental and natural resource controversies. Because the "expropriation of the senses" (Beck, 1986) has always been more dominant in fisheries governance compared to for instance forest or environmental governance, fisheries governance depended even stronger on science than the other two. However, the change in governance setting of fisheries management (especially the increased participation, the diversification of resource users) will affect the role of science and scientific support in fisheries policy development and implementation radically. For one, as the actors in policy formulation change, advice needs to be rendered not just to governmental agencies but to an appropriate institution that includes wider constituencies. This development is already illustrated by the frequent Regional Advisory Council requests for scientific advice. Secondly, as the core fabric of fisheries policy changes, from top down, sectoral legislation and enforcement towards integrated co-management, licence to produce and results-based management, a different kind of scientific evidence is needed. Hence a change from a rather linear decision-making process (Lane and Stephenson, 2000) in which science, industry, Ministers and managers each contribute in an independent fashion to the final decision, its implementation, and its consequences, towards an institutional setting accounting for the integrated complexity of fisheries

management involving a wide array of concerns, issues and subjects. Addressing these in a coherent manner requires knowledge of the biological, economic, social and cultural aspects of fisheries. Many academic disciplines have therefore been attracted to fisheries management, each with a focus on issues and implications relating to their specific area of expertise (Degnbol *et al.*, 2006). In order to fit the modern world of fisheries management there is a need for the development of much more interdisciplinary and integrated science. Thirdly, science, scientists and scientific information are increasingly becoming part of controversies and policies in fisheries management, and will not succeed to remain the kind of objective outside institutions that only provide disinterested information. In other words, science will lose its undisputed authority. Scientific information will no longer be take for granted because it is provided by scientists or scientific institutions. Hence, new forms of authority for 'scientific' information need to be developed, and the answers might very well lie in a much more participatory science, a 'citizens science', where the involvement of stakeholders in scientific investigations are fundamental for the authoritative power of such investigations and information.

This can also be formulated in a different way. Most dissertations end with a call that "*more research is required*" and that is of course also valid for fisheries management. But within fisheries management it is as much true that not only more but also that another kind of research is required for developing an adequate future fisheries governance.

As fisheries governance is changing, science, the role of science and the role of scientists has to equally be changed. From scientific advice supporting (government) policy development, which is academic, investigator-initiated and discipline-based, towards co-working with a wider group of stakeholders who, in differing constellations of actors, seek to reach agreement and legitimacy on measures to be undertaken in highly complex and uncertain situations. This calls for interdisciplinary and participatory science. This calls for an opening up of the scientific process, becoming more transparent and involving stakeholders in the process. And this requires a reflexive science community researching its own role and position within the complexity of fisheries governance.

Chapter 7

Addendum

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Annex I: Material used in this thesis

In this annex I present studies implemented by the author in the period 2000-2009 of which the results have been used and re-analysed in this study.

- In the period 2000-2002 at LEI (the Agricultural Economics Research Institute of Wageningen UR) studies were conducted into fishing capacity (Data Envelopment Analysis) and linking the economic and ecological analysis of fisheries. Among others focus has been on technological developments and capacity issues in the Dutch fisheries.
- The international implemented EU RESPONSIBLE project (2002-2005) was a study undertaken in Norway, Denmark, Shetland, Netherlands, France and Spain in the way responsibilities were shared between government and the fisheries sector. This e.g. analysed forms of co-management such as in the Netherlands and the Prudhomies in France and Confradias in Spain.
- Since 2002 a number of studies and reports into the functioning of ITQ systems have been undertaken. Comparisons with the systems of Iceland, New Zealand, the Netherlands and the UK have been undertaken next to analysing possibilities of the introduction of an EU wide system of ITQs.
- Since the 2000s regularly discussions have been held with the fishing sector, fishing organisations, NGOs and fisheries managers on the economic impact of fisheries policy. In particular this has included studies into the structure and role of the Dutch Cockle fisheries, valuing the Cockle fisheries and advising on possibilities for a more sustainable Cockle fisheries; the effect of the introduction of the concept of Maximum Sustainable Yield as target for fisheries management and the analysis of the costs of moving towards a more sustainable form of fisheries in the Netherlands.
- The importance of the Dutch coastal zone and the role of fisheries has been analysed in several studies among which the development of an integrated cost-benefit analysis methodology applicable to multi-functional marine use in the North Sea and coastal zone; for the implementation of the EU Water Directive an analysis has been made of Dutch fisheries in the river basins (as defined under the Water Directive); the impact on fisheries of the introduction of constructions at sea and the analysis of a regional strategy for the development of the fish processing and trade chain.
- The Self regulation of the Dutch shrimp industry and the conflict with the anti-trust law has been studied since its start in the early 2000s up to today.

- At several instances discussions have been held with fisheries managers, sector representatives, policy makers and NGOs on ways to set up a fisheries management system which takes ecological and socio-economic perspectives into consideration addressing issues such as participation, accountability, transparency and legitimacy.
- Studying the saline fringe (the coastal border) focused on possibilities of participatory plan development trying to overcome user conflicts. This resulted in a methodology used in the north western parts of the Netherlands to study the potential impact of climate change and sea water rise and land use planning. In addition a study was conducted into the potential of saline production in the coastal zone: alternative agricultural use of saline cultures.
- Since 2006 the author has been involved in studies and methodology development on gathering social data from fishing communities and integrating these data in wider ecological and economic support to policy development. This led to the development of a framework for the assessment of social impacts of fisheries management plans.
- The FEUFAR project, implemented between 2006 and 2008 focused on the development of a future research agenda for the EU in the fields of Fisheries and Aquaculture. The project was implemented as a step wise scenario building process with involvement of stakeholders from government, industry and NGO communities in every step of the process.

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Abstract

Fisheries management World wide is facing multiple crises. In ecological terms, as some stocks are not in good shape despite management effort; in economic terms as a large part of the fleets are not profitable and in social terms as fishing communities are, as a result of diminishing fishing activities, losing identity and losing legitimacy as public criticism on fisheries practices is increasing. Moreover, one could say that there is a managerial crisis in fisheries management as it fails to reach its goals and lacks legitimacy and accountability.

This thesis uses a governance perspective to analyse these crises in fisheries management. It looks at how the crisis in fisheries management emerged, how it is dealt with by the introduction of new innovative management initiatives and institutional arrangements and how these new institutional arrangements relate to the current debate on the future of fisheries governance.

In order to analyse innovations in fisheries management, the Netherlands presents a useful case. Over the past decades an array of innovations (ITQs: Individual Transferable Quota; a system of co-management and in recent years the introduction of covenants between state, industry and Environmental NGOs) have been introduced in Dutch fisheries management. Within Europe the Dutch fisheries management system has since the 1990s been regarded as a best-practice model. In addition, the Dutch fleet is one of the main players in the North sea. From a global perspective the North Sea is one of the areas were human impact is highest.

In addition we will look at innovations in the EU Common Fisheries Policy (CFP) such as the introduction of Regional Advisory Councils and the introduction of specific marine environmental legislation, such as the Marine Strategy Framework Directive, and the initiative of the Maritime Policy to seek integration over activities and actors in the marine environment.

In order to analyse these innovations in fisheries management I have looked at the fisheries governance and the (changing) role of state, market and society. The most prominent factor to look at is how participation of the different actors in the policy process is changing. This is related to which actors can participate in the policy process and to what extent these actors can participate. Part of analysing (new) institutional arrangements will be looking at the outcome of the process: does the (new) arrangement reach its objectives? Next to the direct output of a policy and for example rule compliance this can also relate to aspects of legitimacy and accountability.

The central questions in this research are the following: noting the steering deficit in past fisheries management, which new institutional arrangements have been developed to cope with the deficit in fisheries management, how and why did these new arrangements emerge, what have been the results and how do these new institutional arrangements relate to the current debate on a sustainable future fisheries governance? Centre of attention is the development of fisheries governance in the Netherlands since the introduction of the EU Common Fisheries Policy in 1983, in particular on the institutions in Dutch fisheries management, and how these institutions developed over the past decades as examples of new policy arrangements and the change of a former neo-corporatist system. The data for the analysis were obtained through extensive observations and interviews with the major players from the fishing communities, fisheries organisations, fishers, RAC members, Dutch and EU policy makers and the NGO community.

The introduction of Individual Transferable Quota (ITQs) in the Netherlands occurred in the early 1990s. In 1975, Total Allowable Catches (TACs) were introduced in the North Atlantic, and hence the North Sea, for several species of fish. Dutch government responded by setting up a system of non tradable Individual Quota (IQ) for the fishermen. In a reaction to the growing informal trade of these IQs over time, the Ministry responsible for Fisheries officially allowed the trade of IQs hence creating ITQs in 1985.

With the introduction of ITQs a management instrument was introduced which simultaneously functioned as an environmental instrument (limiting catches), and as an economic instrument (seeking optimal allocation of fishing capacity over fishing opportunities). From the perspective of the individual fisher the introduction of the ITQ system resulted in individual quota holdings being brought in line with the fishing capacity of the vessel and provided a right that can be exerted and defended and can be used as a collateral. As fishermen manage their quota uptake in groups the Dutch system is a mix of individual and collective management of catch rights.

As a result of the introduction of the ITQ system (embedded in the co-management system which was introduced during the same period) the number of vessels and fishing pressure was reduced and compliance with catch restrictions increased. The ecological objective of reduction of fishing pressure and fishing within set TAC levels was obtained. Most likely because the ITQs were managed in fishers' groups, accumulation of quota and communities losing catch rights had been very limited. However the ITQ system has not resulted in a long term economic healthy cutter fleet.

The introduction of the ITQs had an effect on fisheries management as the allocation of catch rights became subject to market forces where earlier government had allocated the rights. The industry participates in the system by exerting its market force; the Dutch ITQ system created private rights to access to fish and a market for these access rights where one did not exist before.

The second case, the introduction of the co-management system, can be perceived as an attempt by the Dutch government to increase the legitimacy of the management system and compliance by devolving management responsibility to the sector through the establishment of partnerships. By the end of the 1980's a growing political concern about the non-compliance with the quota regulations, introduced in the mid 1970s, evolved. Until the late 1980s fishermen were able to dodge regulations due to a weak monitoring and enforcement policy; low fines for violations; and logistical and administrative help from the auctions. In order to regain legitimacy of the fisheries policy, negotiations between the fishers and fisheries managers on the establishment of co-management groups were devised. The aim of the management groups was twofold: first, to arrive at an effective and efficient system of quota compliance that would be supported by the fishers; secondly, to improve economic performance within the quota restrictions.

The introduction of the Dutch co-management system clearly played a role in increasing compliance with the quota management system. By inclusion of the fishers into the management system and founding the system on social control and peer pressure, the legitimacy of the system is increased. Also a shift is noticed in the drivers for compliance, from compliance as an economic calculation of gains and sanctions towards a more normative approach emphasising the social normative values of the fishers.

The introduction of the co-management system in the Netherlands has brought about a change in the basic governance fabric of fisheries management by devolving part of management responsibilities from government to user-groups. However the core of the system is not a joint management of fish stocks but a decentralised effort of monitoring quota uptake and keeping landings in line with set Total Allowable Catch (TAC): a situation of co-enforcement.

The use of covenants presents case 3. This, like the co-management system, centres on a system of devolved management. But where co-management is founded on cooperation between state and the industry in managing

a fisheries, covenants usually are based on a specific voluntary agreement between two or three of the actors of state, market and civic society (NGOs). Covenants are frequently used to obtain environmental objectives, especially when government policy fails to obtain results. Also covenants are applied as instrument in a pacification attempt of government and effort to mobilise support for policy.

In the Netherlands we have seen the emergence of three covenants. The first, the management of engine capacity, in fact is an extension of the co-management system. Despite engine capacity regulations, a seal plan (in which engines were sealed at a certain capacity) and increased inspections during the 1990 and early 2000s, government did not manage to enforce the engine capacity rules and increase compliance. A working group was established which designed a private arrangement consisting of a framework of private inspections and sanctions to which the sector signed up. The agreement played a role in opening up a dead lock situation in which individuals are only inclined to change conduct when free rider behaviour is no longer tolerated. The groups manage their engine capacity, while government has the final responsibility for compliance.

In 2006 a Task Force Sustainable North Sea fisheries, established by the Ministry, consisting of representatives of the Ministry, the Fish Produce Board, fisheries sector and market organisations, Environmental NGOs, research institutions and fuelled by direct input from fishermen through a series of discussions, produced a report pinpointing the major challenges to reach sustainable fisheries on the North Sea. An important motive for the establishment of this task force was the rapid increase in oil price. This seriously affected the viability of the fleet, which was already confronted with diminishing catch opportunities for a prolonged period of time. A covenant was signed in June 2008 (the North Sea Covenant) between the Ministry, two Environmental NGOs, the Fish Produce Board and the 5 Fisheries Producers' Organisations to facilitate the required transition process towards sustainable fisheries. Whereas the engine capacity agreement is a bilateral state-industry agreement, the North Sea Covenant is a tripartite arrangement between state, industry and ENGOs. It aims at a policy to obtain a viable and sustainable fisheries sector within the boundaries of a healthy ecosystem, bringing environmental concerns and economic concerns together in an implementation plan. By entering the agreement the sector gains time, political support and resources to embark on a transition process towards more sustainable operations. From a societal perspective the covenant brings ENGOs and industry together to discuss environmental concerns and reach agreement on a pro-

cess of change towards more sustainable fisheries. For the state the covenant creates leeway for industry to become sustainable in an environmental and economic sense, yet simultaneously creates a sense of urgency to make this transition.

The mussel covenant was a tool to open up a dead lock situation in which a transition towards sustainable production was hindered by the stalemate caused by the 'War on the Wadden Sea" between the industry and ENGOs. The annual permit given to mussel fishers' allowing them to fish for mussel seed in the Wadden Sea (A protected area) was every year challenged in court by the ENGOs. The judicial procedures frustrated further development and threatened the viability of the mussel sector. Government took a leading role in resolving this deadlock situation by orchestrating the coming about of a covenant between sector and ENGOs. The conservationists promised not to start any judicial procedure provided the mussel sector would do everything in its power to convert seed fishing and mussel cultivation into an environmental-friendly industry by 2020. The mussel covenant is the most clear example of using the instrument for conflict regulation.

So far, the engine capacity covenant is perceived to be successful with no infringements and vessels having adjusted engine capacity. The North Sea covenant has facilitated a process of transition and an array of initiatives e.g. under the Fisheries Innovation Platform (subsidies for development of new fishing technology (pulse trawl, reduction of fuel consumption), improved marketing initiatives and sharing of knowledge among fishers) have been launched to support this process. The mussel covenant is put under pressure from parties not being signatory by contesting the agreement in court.

In all cases we see a repositioning of the state in relation to the actors from industry and society. The covenants are a manifestation of government negotiating fisheries policy in order to obtain a more sustainable use of marine resources. The degree of self-management differs between the three covenants. In the North Sea covenant, the parties have quite some opportunity to (re)define policy goals, whereas under the engine capacity the policy objectives are not renegotiated at all; in the end the industry will comply with prior existing regulation.

Finally, case 4 looks at the development over the past decade of new EU marine policies such as the Marine Strategy Framework Directive and the Maritime Policy. Both policies aim at governing the marine environment, yet the two policies have a differing signature in policy formulation and imple-

mentation. From a fisher's perspective these policies present a change in institutional setting in terms of integration as well as participation. Major policy measures no longer descend from the EU Common Fisheries Policy alone, but increasingly are derived from general environmental policy developments. In a governance era contrasting policies can be developed simultaneously. The Maritime Policy is a novel, participatory and integrative arrangement. The Marine Strategic Framework Directive developed more or less in the same period, has a more classical etatist command and control arrangement. The position of the Common Fisheries Policy (CFP) in a new marine policy arrangement is changing. The introduction of the EU Community Fisheries Control Agency, a top down government type solution, existing side by side with the Dutch state-market partnership, illustrates the possible co-existence of different policy arrangements. The EU Community Fisheries Control Agency can play a role in establishing participatory management arrangements at a wider EU scale by providing an enabling environment in which such sub-national and national arrangements can be developed. On the other hand it can play a role by taking up the role of enforcement agent at a distance, sharing this role with the national enforcement agencies.

From the case studies we see that the common denominator in the new institutional arrangements is an increase in participation of stakeholders in the policy process. In addition at the EU level the integration over activities and stakeholders is a main trend. Hence government responds to a crisis in fisheries management by searching for and allowing more participation. But this participation has at least two different objectives: to improve the implementation of environmental policy and, with participation beyond fishermen, to increase legitimacy and support of fishery policy.

The traditional neo-corporatist arrangement in which fisheries policy was developed and implemented originally changed dramatically as the rank and file of the fisheries organisations did not comply with the management rules agreed between their representative elite and government. The privileged relation between government and sector was further challenged by other actors (ENGOs) that also claimed a stake in particular in the environmental concerns of fisheries management. When the closed neo-corporatist relation between fisheries representatives and government was no longer capable of devising a policy supported by the industry, new ways of cooperation and legitimacy had to be invented.

With increased involvement of stakeholders in fisheries management the legitimacy and accountability of actors in the arrangement also changes. The

traditional right to fish, granted by government to the industry, is replaced by a 'licence to produce' that the fishing sector has to obtain in negotiation with state and ENGOs. This affects the accountability in the arrangement and on the 'burden of proof' by shifting responsibility from government and society showing harmful impact, towards the industry having to show sustainable resource use. Also the forum at which to be accountable to shifts, from fishers being accountable to government (compliance with the rules) and government being accountable to society, towards a situation in which the fishers are directly accountable to the parties involved in the agreement (covenant).

The solutions chosen in the Netherlands are not specifically Dutch. As one of the main failures of contemporary fishers management, in particular in the EU, is perceived to be lack of participation, the Dutch solutions could be examples applicable to other countries as well. However, in doing so one should render count of the specific national, regional and local settings, political and institutional traditions in which fisheries management takes place.

Marine policy becomes less sectoral and more integrated over sectors and activities changing the constituency of (fisheries) policy including an increased number of stakeholders. In taken these new developments and perspectives into account the new institutional arrangements introduced in the Netherlands were mostly answers to the fisheries management problems of the past. They were hardly designed to address the new challenges and management demands that are now starting to shape the policy agenda of the future common marine policy.

There are three main areas to address in a future fisheries governance. One will be answering the questions of organising participation: who can participate, who makes the rules and who decides. The second area is that of globalisation, in terms of fishing, processing and trade and regulation. Thirdly, as fisheries governance is changing, the role of science and the role of scientists has to equally be changed from scientific advise supporting (government) policy development towards co-working with a wider group of stakeholders.

Samenvatting

Wereldwijd wordt visserijmanagement geconfronteerd met verschillende crises. Een ecologische crisis, omdat vissoorten worden bedreigd; een economische crisis, omdat grote delen van de vloot verlies maken, en een maatschappelijk crisis omdat als gevolg van een afname van visserijactiviteiten visserijgemeenschappen hun identiteit verliezen en, door toenemende maatschappelijke kritiek, de visserijsector haar legitimiteit verliest. In feite is er sprake van een visserijmanagementcrisis omdat visserijmanagement er niet in slaagt de gestelde doelen te bereiken, er onvoldoende verantwoordelijkheid voor wordt genomen en lijdt aan een gebrek aan legitimiteit.

Om deze visserijmanagement crisis te analyseren gebruik ik in dit proefschrift het '*governance*[16]' perspectief. We kijken hoe de crisis in visserijmanagement is ontstaan, hoe er geprobeerd wordt deze crisis af te wenden door innovatieve management initiatieven te ontwikkelen en institutionele arrangementen te introduceren, en hoe deze innovatieve arrangementen bijdragen aan het huidige debat over de toekomt van visserij-governance.

De Nederlandse situatie is zeer geschikt om innovaties in visserijmanagement te analyseren. De afgelopen dertig jaar kenmerkt het Nederlands visserijbeheer zich door verschillende innovaties, zoals ITQs (Individuele Verhandelbare Visrechten), een co-management systeem, en, van meer recentere datum, het gebruik van convenanten tussen de overheid, de visserijsector en milieuorganisaties. Sinds 1990 wordt het Nederlandse visserijbeheer in Europa beschouwd als een *'best-practice'* voorbeeld. Tevens is de Nederlandse vloot een belangrijke speler op de Noordzee. De Noordzee is op wereldschaal één van de gebieden waar het effect van menselijke activiteiten het grootst is.

We zullen ook kijken naar innovaties van het EU Gemeenschappelijke Visserijbeleid (GVB) zoals de introductie van Regionale Adviesraden (RACs) en de introductie van specifieke marine milieuwetgeving zoals de Kaderrichtlijn Marien (*Marine Strategy Framework Directive*) en het EU geïntegreerde Maritiem Beleid (*Maritime Policy*) dat streeft naar integratie van activiteiten en actoren in het marine milieu.

16 In deze samenvatting zal ik de Engelse term 'governance' gebruiken. De Nederlandse vertaling 'bestuur' dekt niet de lading van het begrip governance; tevens is het woord governance ook in de Nederlandse literatuur ingeburgerd.

Om deze innovaties van visserijbeheer te analyseren heb ik gekeken naar visserij-governance en de (veranderende) rol van de staat, de markt en het maatschappelijk middenveld. Centraal daarbij stond de vraag hoe de deelname (participatie) van de verschillende actoren in het beleidsproces is veranderd. Nieuwe institutionele arrangementen worden ook bekeken op hun resultaat: behaalt het (nieuwe) arrangement de gestelde doelen? Naast het directe resultaat van het uitvoeren van beleid, en bijvoorbeeld de mate van naleving van de regels, heeft dit ook te maken met de legitimiteit van het beleid en het nemen van verantwoordelijkheid voor het beleid.

De centrale vraag van dit onderzoek is: uitgaande van falende sturing van visserijbeheer in het verleden, welke nieuwe institutionele arrangementen zijn er ontwikkeld om deze tekortkoming van visserijbeheer aan te pakken, hoe en waarom zijn deze nieuwe arrangementen ontstaan, wat zijn de behaalde resultaten en hoe verhouden deze innovaties in visserijbeheer zicht tot het huidige debat over een toekomstig duurzame visserij-governance? We concentreren ons op de ontwikkeling van visserij-governance in Nederland sinds de introductie van het EU Gemeenschappelijk Visserijbeleid in 1983. Meer specifiek is de analyse gericht op de veranderingen van de Nederlandse visserijinstituties als gevolg van het eroderen van het neo-corporatistische systeem en de ontwikkeling van nieuwe beleidsarrangementen. De gegevens voor dit onderzoek zijn verkregen door uitgebreide observaties en interviews met de belangrijkste spelers van de visserijgemeenschappen, visserijorganisaties, vissers, leden van de RAC, Nederlandse en Europese beleidsmakers en de milieuorganisaties gedurende de periode 2000-2009.

In 1990 werden in Nederland Individueel verhandelbare Vangstrechten (ITQs) geïntroduceerd. Daarvoor waren in 1975 al *Total Allowable Catches* (TACs), maximale vangsthoeveelheden, voor een aantal soorten vis geïntroduceerd in de Noord Atlantische Oceaan en dus ook in de Noordzee. De Nederlandse overheid vertaalde direct de TACs naar een systeem van niet verhandelbare Individuele Vangstrechten (IQ). Door de groeiende informele handel in deze IQs besloot de Nederlandse overheid in 1985 de rechten officieel verhandelbaar te maken en zodoende ITQs te introduceren.

Met de introductie van ITQs werd een beleidsinstrument in het leven geroepen dat zowel fungeerde als milieubeleidsinstrument (beperken van vangsten) als een economisch instrument (het realiseren van een optimale allocatie van vangstrechten en visserijcapaciteit). Het ITQ systeem gaf individuele vissers de mogelijkheid de individuele vangstrechten aan te passen aan de vangstcapaciteit van het schip. De vangstrechten kunnen worden opgeëist en

worden verdedigd en kunnen als onderpand worden gebruikt. Omdat vissers hun individuele quota in groepen beheren is het Nederlandse ITQ systeem een mix van individueel en collectief beheer van vangstrechten.

Als een gevolg van het introduceren van het ITQ system (dat ingebed werd in een system van co-management) nam het aantal schepen in de Nederlandse vloot af, en daarmee dus de visserijdruk. Tevens nam de naleving van de regelgeving toe, waarmee het ecologisch doel van verminderde visserijdruk en vissen binnen de TAC limieten werd bereikt. Waarschijnlijk door het beheer van quota in groepen is er geen vergaande concentratie van vangstrechten opgetreden en hebben visserijgemeenschappen niet in grote mate vangstrechten verloren. Het ITQ systeem heeft echter niet geresulteerd in een vloot die op de lange termijn economisch rendabel opereert.

Het introduceren van ITQs verandert de structuur van het visserijbeheer. Voorheen verdeelde de overheid de vangstrechten, in het system van ITQs wordt deze allocatie overgedragen aan de markt. De visserijsector participeert in dit system door op de markt te opereren. Het Nederlandse systeem van ITQs creëerde private toegangsrechten tot vis en een markt voor deze rechten waar er voorheen geen bestond.

Het tweede voorbeeld, de introductie van een system van co-management, kan gezien worden als een poging van de Nederlandse overheid om de legitimiteit en naleving van de regels van het beheersysteem te vergroten door managementverantwoordelijkheid te delegeren aan de visserijsector. Tegen het eind van de jaren ‘80 van de vorige eeuw groeide de politieke bezorgdheid over het niet naleven van de quotaregulering. Vissers konden de regels ontduiken als gevolg van een zwakke inspectie en handhaving van het beleid, lage boetes, en logistieke en administratieve hulp van de visafslagen. Om de legitimiteit van het beheersysteem te herstellen ging de overheid in onderhandeling met de vissers over de mogelijkheid van co-management. Het doel van deze managementgroepen was tweeledig: het opzetten van een efficiënt en effectief system van quotabeheer ondersteund door de vissers, en het verbeteren van de economische resultaten van de visserij binnen de geldende quotalimieten.

Het introduceren van het co-management system speelde een duidelijke rol bij het verbeteren van de naleving van het quotamanagement. De legitimiteit van het beheer werd vergroot door de vissers deel te laten uitmaken van het systeem en door naleving af te dwingen via sociale controle. De afweging tussen naleving en overtreding verschoof van een economische afweging tussen

verwachtte winsten en mogelijke sancties naar een meer normatieve benadering waarin de sociale waarden en normen van de vissers centraal staan.

De introductie van co-management heeft het fundament van visserijbeheer in Nederland veranderd door managementverantwoordelijkheid te delegeren naar de vissers. Maar concreet is het Nederlandse co-management systeem niet een gemeenschappelijk beheer van visbestanden tussen overheid en sector maar een gedecentraliseerd quotumbeheer en een management van aanlandingen binnen de *Total Allowable Catch*. Het betreft hier met andere woorden een situatie van gezamenlijke handhaving.

Het gebruik van convenanten in het Nederlandse visserijbeleid is de derde case die ik heb onderzocht. Net zoals co-management is een convenant een instrument gebaseerd op gedelegeerd beheer. Maar waar co-management is gebaseerd op de samenwerking tussen de overheid en de industrie zijn convenanten meestal gebaseerd op een specifieke vrijwillige overeenkomst tussen overheden, maatschappelijke partijen en marktpartijen. Convenanten worden om verschillende redenen gebruikt. Bijvoorbeeld wanneer het overheden niet lukt de beleidsdoelstellingen te behalen, of om conflictsituaties te pacificeren en om steun voor beleid te genereren.

In de Nederlandse visserijsector zijn in de afgelopen periode 3 verschillende convenanten ontwikkeld. De eerste, het beheer van motorvermogen, is in feite een uitbreiding van het eerder opgezette co-management systeem. Ondanks het bestaan van een motorvermogenregulering, een zegelplan (waarbij motoren op een bepaald vermogen werden verzegeld) en toenemende controles bleek de overheid niet in staat om de motorvermogenregulering te handhaven. Een werkgroep werd opgericht met als opdracht een privaat arrangement van controles en sancties te ontwikkelen. Het convenant, dat door de visserijsector werd ondertekend, maakte een einde aan de impasse waarin individuele vissers pas geneigd zijn hun gedrag te veranderen als het niet nalaven van de regels door anderen niet langer wordt getolereerd. De co-management groepen beheren het motorvermogen; de overheid heeft eindverantwoordelijkheid voor de naleving van de regels.

In 2006 werd de 'Task Force Duurzame Noordzeevisserij', bestaande uit vertegenwoordigers van het Productschap Vis, de visserijsector, milieuorganisaties en onderzoeksinstituten, door het Ministerie opgezet. Op basis van input van de vissers werden de voornaamste uitdagingen die er lagen om tot een duurzame Noordzeevisserij te komen vastgelegd. Een belangrijke reden om deze werkgroep in te stellen was de snel stijgende olieprijs die een grote

bedreiging vormde voor de levensvatbaarheid van een visserij die al voor langere tijd met verminderde vangstmogelijkheden werd geconfronteerd. In juni 2008 werd het Noordzeeconvenant getekend tussen de Minister, twee milieuorganisaties, het Productschap Vis en 5 Visserij Producentorganisaties. Waar het motorvermogenconvenant een overeenkomst is tussen de overheid en de sector is het Noordzeeconvenant een tripartiete arrangement tussen overheid, sector en milieuorganisaties. Het convenant poogt een levensvatbare en duurzame visserijsector te bewerkstelligen binnen een gezond ecosysteem, door economisch en ecologische belangen in een actieplan bijeen te brengen. Door het convenant te ondertekenen krijgt de sector tijd, politieke steun en middelen om dit transitieproces aan te gaan. Vanuit een maatschappelijk perspectief brengt het convenant de milieuorganisaties en vissers bijeen om milieubelangen te bediscussiëren en zo tot een meer duurzame visserijpraktijk te komen. Met het convenant legt de overheid de verantwoordelijkheid bij de sector om economisch en ecologisch duurzamer te worden. Het convenant creëert voor de sector de ruimte voor deze ontwikkeling maar houdt tegelijkertijd ook de druk op de sector om de benodigde veranderingen daadwerkelijk te realiseren.

Het mosselconvenant was een geschikt instrument om de impasse op de Wadden Zee te doorbreken. Doordat milieuorganisaties de jaarlijkse vergunning voor de mosselzaadvisserij bij de rechter aanvochten, was er een patstelling tussen milieuorganisaties en vissers ontstaan, die een transitie naar een duurzame mosselvisserij in de weg stond. De overheid nam het voortouw om deze impasse te doorbreken door de partijen bij elkaar te brengen om een convenant op te stellen. De milieuorganisaties zegden toe geen juridische procedures meer te starten en de mosselsector zegde toe al het mogelijke te doen een duurzame zaadvisserij te realiseren in 2020. Het mosselconvenant is een duidelijk voorbeeld van hoe dit instrument kan worden ingezet om conflict te pacificeren.

Het motorvermogenconvenant wordt tot nu toe als succesvol beschouwd; schepen hebben hun motorvermogen aangepast en er zijn geen overtredingen geconstateerd. Het Noordzeeconvenant heeft geresulteerd in een proces van verandering met een reeks aan initiatieven onder auspiciën van het Visserijinnovatie Platform (VIP), zoals subsidie voor de ontwikkeling van nieuwe technologie (pulstrawl, reductie brandstofgebruik), het verbeteren van de marketing en het delen van kennis tussen vissers in zogenaamde Kenniskringen. Het mosselconvenant staat onder druk omdat één van de partijen die het convenant niet heeft ondertekend alsnog een juridische procedure is begonnen tegen de mosselzaadvisserij.

In alle genoemde voorbeelden zien we dat de rol van de overheid verandert ten opzichte van de industrie en maatschappelijke partijen. De convenanten zijn een voorbeeld van hoe de overheid afspraken maakt met de sector teneinde een meer duurzaam gebruik van de zee te bewerkstelligen. De mate van zelfmanagement verschilt tussen de drie convenanten. In het Noordzeeconvenant hebben de partijen tamelijk wat ruimte om beleidsdoelstellingen te (her)formuleren, terwijl bij het motorvermogenconvenant die doelstellingen niet ter discussie staan: uiteindelijk zal de sector moeten voldoen aan bestaande regelgeving.

De laatste case betreft de ontwikkeling van nieuw EU maritiem beleid zoals de Kaderrichtlijn Marien (Marine Strategy Framework Directive) en het Maritiem Beleid (Maritime Policy). Beide richten zich op het beheer van het marine milieu, maar hebben een totaal verschillende signatuur in beleidsformulering en -uitvoering. Vanuit het perspectief van vissers vertegenwoordigen deze twee nieuwe EU beleidsinitiatieven een verandering in de institutionele ordening van visserijbeleid in termen van participatie en integratie. Belangrijke visserijwetgeving wordt niet langer alleen bepaald door het Gemeenschappelijk Visserijbeleid (GVB) maar in toenemende mate ook door andere beleidsterreinen, zoals milieu, of vanuit de wens sectorale maritieme activiteiten te integreren.

In het tijdperk van governance kunnen contrasterende beleidsvormen tegelijkertijd worden ontwikkeld. Het Maritiem Beleid is een innovatief, participatief en integratief beleidsarrangement. De Kaderrichtlijn Marien, ontwikkeld in ongeveer dezelfde periode, heeft een meer klassieke etatistische *'command and control'* signatuur. De positie van het GVB in een nieuw marine beleidarrangement is aan verandering onderhevig. En het EU *Community Fisheries Control Agency*, een traditionele inspectie instantie, bestaat naast het Nederlandse participatieve co-management arrangement.

De nieuwe beleidsarrangementen illustreren de toenemende participatie van belanghebbenden in het beleidsproces. Daarnaast is op EU niveau een belangrijke trend de integratie van sectoren, activiteiten en belanghebbenden. Met andere woorden, overheden reageren op de crises in het visserijbeheer door te zoeken naar meer en andere vormen van participatie. Door toenemende participatie van zowel de visserijsector als de milieuorganisaties wordt de legitimiteit van het visserijbeleid vergroot.

Het traditionele neo-corporatistische visserijarrangement veranderde ingrijpend toen de overeenkomsten gesloten tussen de visserijelite en de overheid

niet meer op steun van de achterban konden rekenen. De speciale band tussen sector en overheid werd verder onder druk gezet door de milieuorganisaties die ook een belang en rol in visserijbeheer claimden. Op het moment dat het neo-corporatistische arrangement tussen visserijvertegenwoordigers en overheid niet langer in staat bleek een gezamenlijk gedragen beleid te genereren moesten er nieuwe wegen voor samenwerking en nieuwe vormen van legitimiteit worden gezocht.

Met een toenemende betrokkenheid van belanghebbenden in visserijbeheer verandert de legitimiteit en de verantwoordelijkheid van de actoren in het arrangement. Het traditionele recht om te vissen, door de overheid aan de vissers gegeven, wordt vervangen door een *'licence to produce'* (een vergunning om te produceren) die de visserijsector moet zien te verkrijgen in onderhandeling met de overheid en de milieuorganisaties. Dit heeft geleid tot een verandering in verantwoordelijkheden en voor de bewijslast. Moesten voorheen de overheid en maatschappelijke partijen aantonen dat de visserij schadelijk gevolgen had, nu moet de visserijsector aantonen dat haar activiteiten duurzaam zijn. Ook het forum aan wie verantwoording moet worden afgelegd verandert; van een overheid die verantwoording aflegt aan de maatschappij en vissers regels oplegt, naar een situatie waarin de vissers direct verantwoordelijkheid afleggen aan de andere publieke en private convenantpartijen.

De Nederlandse oplossingen zijn niet specifiek Nederlands. Omdat in de hele EU gebrek aan participatie wordt gezien als één van de voornaamste redenen voor een falend visserijbeleid, zouden de Nederlandse oplossingen dan ook goed toepasbaar kunnen zijn in andere landen. Hierbij moet wel rekening worden gehouden met het feit dat visserijmanagement in elke situatie, in elk land, in een eigen nationale, regionale en lokale politieke en institutionele context plaatsvindt en dat de oplossing daar dus bij aan moet sluiten.

Marien beleid streeft steeds meer naar een integratie van sectoren, actoren en belanghebbenden. Dit streven naar integratie heeft gevolgen voor het (visserij)beleid, dat wordt geconfronteerd met een toename van het aantal belanghebbenden. Met oog voor deze ontwikkelingen zijn de oplossingen die zijn ontstaan in Nederland in feite een antwoord op een probleem uit het verleden. Zij zijn namelijk niet toegerust op het geven van een antwoord op de uitdagingen die vandaag de dag de beleidsagenda van het toekomstige Gemeenschappelijk Visserijbeleid bepalen.

Er zijn drie hoofdvragen waar het toekomstige visserij-governance zich op moet richten. Ten eerste, het beantwoorden van de vragen rondom participa-

tie: wie mag meedoen, wie maakt de regels en wie bepaalt dat? Ten tweede is globalisering voor de visvangst, de verwerking, de handel en voor toekomstige regulering, een bepalend onderwerp. Ten derde, met het veranderen van visserij-governance zal ook de rol van wetenschap en wetenschappers moeten veranderen: van mono-disciplinair, wetenschap gedreven academisch advies ter ondersteuning van het ontwikkelen van overheidsbeleid, naar meer interdisciplinaire en participatieve advisering in een proces met een grote groep van belanghebbenden op zoek naar legitimiteit en support voor beleidsmaatregelen in een zeer complexe en ongewisse omgeving.

About the author

Luc van Hoof was born in Zandvoort in 1962. He finished his secondary education at the Van der Puttlyceum in Eindhoven in 1980. At Wageningen University (1980-1988) he studied economics and obtained an M.Sc. majoring in Development Economics and Marketing and a minor in Fisheries Science.

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Today he is employed by the Institute for Marine Resources and Ecosystem Studies (IMARES) in the Netherlands, responsible for European research development. He is Executive Secretary of EFARO, the Association of European Fisheries and Aquaculture Organisations; he is member of the Board of MARE, Centre for Maritime Research, and member of STECF, the Scientific, Technical and Economic Committee on Fisheries of the European Commission. He is involved in the Wageningen UR Centre for Marine Policy initiative and is associated with the Environmental Policy Group of Wageningen University. In July 2009 he has been elected President of the European Association of Fisheries Economists (EAFE).

Colophon

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