Trust and New Modes of Fisheries Governance

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Preface

Writing a thesis has always been one of my ambitions, but only under the condition that I was able to choose my own subject of research. I also felt I needed some experience in the field (and get my feet dirty) before being ready to take the step of conducting a PhD research. When I sent some of my LEI reports to my previous boss, Maarten Bavinck, he responded by saying:" Why don't you start doing a PhD research?" From then on things started to move. I put my ideas on paper, and discussed them with Maarten, Krijn Poppe, and Arthur Mol. Thanks to their support and inspiration I was able to start my PhD research in January 2008. I would like to thank them for that.

During the course of this PhD I met many other people who contributed in one way or another to this research. Special thanks goes to my dear colleagues at LEI: Hans van Oostenbrugge, Wouter Jan Strietman, Jan Willem van der Schans, Kees Taal, Wim Zaalmink, Ellen Hoefnagel, Erik Buisman, Rik Beukers, Arie van Duijn, Heleen Bartelings, Katrine Soma and Jos Smit (retired) for their support, and 'gezelligheid'. I would also like to thank Floor Quirijns, and Frans Veenstra van Imares for their help with the paper on the Study Groups.

Working as a PhD at environmental Policy also gave me new colleagues, and although I only worked in Wageningen one day per week, they all made me feel very welcome. I would like to thank my colleagues in Wageningen for their kindness, and in particular I would

like to thank Jan van Tatenhove, Arthur Mol, Simon Bush, Marieke Verweij, and the Marine Governance Group for their useful ideas, and time and effort, as well as Corry Rothuizen for her support.

Of course none of this could have happened without the people working in the fisheries industry. I am grateful to all the fishermen, their organisations, people working for the auctions, wholesale and trading companies, as well as the Ministry, and NGOs who were willing to talk to me and answer my questions. It is worth mentioning that none of them rejected my request for an interview, and I have to say I really love working with the fisheries industry.

Finally, my gratitude goes to my friends and family. I would like to thank, Sanne, Maria and Jacqueline for being there, and for the nice time we spent together. Also many thanks go to my parents, who taught me to be organised, to have discipline, and to be persistent. Last but least I would like to thank my partner for life, Carlos Alva, who brought the sun from Mexico, who is a great support, and who gave me the most precious gift, our little Oscar, who was born four weeks after the finalisation of this thesis.

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List of abbreviations

AID	General Inspection Service (Algemene Inspectiedienst)
CFP	Common Fisheries Policy
EC	European Commission
EEZs	Exclusive Economic Zones
ENGO	Environmental Non-Governmental Organisations
FPB	Fisheries Product Board
ITQ	Individual Transferable Quota
IQ	Individual Quota
MNCs	Multinational corporations
MPAs	Marine Protected Areas
MSC	Marine Stewardship Council
MSY	Maximum Sustainable Yield
MZI	Mussel Seed Collectors
PO	Producer Organisation
RAC	Regional Advisory Committee
TAC	Total Allowable Catch
VIP	Fisheries Innovation Platform

1
Introduction: fisheries, governance and trust

1.1 Introduction

The issue of governing the use of marine resources has enjoyed a remarkable increase in attention from social scientists over the past few decades, both as a field of applied research as well as an opportunity for theoretical reflection. This is not in the least because valuable marine resources, e.g. fish stocks, are vulnerable to overexploitation (Van der Schans 2001). The question is *how* and by *whom* these vulnerable resources can best be governed. It is not likely that in a modern society (marine) resource users will be able to govern the exploitation of natural resources all by themselves without the help of other parties, notably the state. Therefore, states have become involved in governing the exploitation of marine resources. States have done so by claiming an extension of territorial jurisdiction to adjacent seas, and by entering international agreements, for example the United Nations Convention on the Law of the Sea (1982) (Van der Schans 2001).

This all does not mean, however, that states have been particularly successful in preventing marine resource overexploitation. In fact, it is a commonplace today that many of the world's commercial fisheries are in a state of crisis. In 2000, the Food and Agriculture

Organisation (FAO) reported that 72-75 per cent of the world's major fish stocks were either "fully exploited, over-exploited, rebuilding or depleted" (FAO 2000). Much of the blame for this crisis is levelled at the way in which fisheries are managed (Gray 2005). This is often attributed to the mainly science based, government led top-down rule making systems, which caused 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 (Gibbs 2008, Gray 2005, Jentoft *et al.* 2009). Another reason is that overall, fisheries' management has remained relatively low on governments' agendas and attracted little public attention, except for those directly involved (Oosterveer 2008).

Hence, over the past two decades policy-makers and scientists searched for new modes to effectively govern fish stocks. Where traditionally the focus was on legally binding law that sets specific rules, goals and standards, the current fisheries policy making process in the EU is nowadays, like in several other environmental policy domains, characterised by a more open, complex and interactive process in which various public and private actors participate, solve problems and strive for combined solutions (Arts & Tatenhove 2004). Therefore, new types of law and regulations are emerging, the so-called soft law and procedural regulation (Treib *et al.* 2007), in which social-relational factors, such as perseverance, empathy, and trust play a more important role (Buizer 2008). This new line of thinking in fisheries governance in Europe, and the increasing importance of relational factors such as trust is conveyed

in a quote from the European Commission where it is stated that " Trust between stakeholders and fisheries managers has a vital role to play in the future of the CFP" [Common Fisheries Policy, BdV] (Commission 2009a, pp.9). The literature on, and experimental practices of, new forms of fisheries governance is growing. This thesis falls into this new school of fisheries governance studies, but it has a particular emphasis: the focus is on trust.

In the Netherlands this focus on trust has also gained momentum in fisheries policy-making and implementation. In fact, already in the nineties, lack of trust between government and fishermen was the basis for the installation of a co-management system in 1993. The head of the steering committee that was responsible for investigating the reasons behind the lack of compliance, wrote in his report: ''At the start of the task of the Steering Committee, the visible lack of trust between the government and the fishermen and their representatives struck me.'' (Biesheuvel 1992). And just recently, the Dutch government explicitly mentioned in her vision on the European fisheries policy that the process of building trust among governments, but also among the various stakeholders that are involved in fisheries and the sea, is an important condition for sustainable fisheries (Projectgroep hervorming GVB 2010).

However, trust relationships are often difficult to establish, not only those between fishermen and regulators, but also those among fishermen themselves and between fishermen and other stakeholders, such as NGOs, scientists, and value chain companies. Fishermen are

independent in nature, and often live in closed communities. For a long time trust relationships were mainly based on family and locality, partly caused by the risky nature of their profession. Fishermen have always been organised in local, place-based homogenous groups, stereotyped by fishermen from other places and regions (and countries). Interactions between fishermen of other regions, let along with ENGOs, governments and scientists have always been scarce, difficult, conflict-ridden and full of distrust. Fishermen from other regions or organisations are often accused of illegal behaviour, scientists are accused of being unreliable and lacking knowledge, traders are accused of being lazy, and NGOs are labelled as the green mafia. In turn, also scientists, policy makers, NGOs, and traders tend to approach fishermen with a certain amount of suspicion. For a long time, this did not cause major problems, because the need for close cooperation did not really exist.

This started to change since the beginning of the new Millennium when the fisheries industry was confronted with severe criticism from outsiders. Declining stocks, impacts on the ecosystem (through discards, use of energy, and disturbance of the seabed), and poor compliance rates form the main criticism. In the beginning fishermen felt threatened by intrusion and criticism from outsiders, and preferred to ignore the criticism, strengthen group behaviour and aimed to continue business-as-usual. However in the current situation, with increasing demands for cooperation and joint governance to solve sustainability problems, closed-group behaviour does not function

anymore. Fishermen are more and more dependent on scientists, on value chain actors, on authorities, and even on environmental NGOs. At present, new arrangements are emerging in fisheries governance, in which trust relationships among stakeholders are changing as well. It is exactly these changing trust relationships that this thesis investigates.

This chapter sets the background and the scene, and develops the research questions for investigating trust relationships in fisheries governance. The next section provides a description of the characteristics of the Dutch fisheries industry. In section 3, I address the concept of fisheries governance, and this is followed by section 4, in which I will introduce the changes related to Dutch fisheries governance in the wider European context. Section 5 discusses different modes of trust in the relation to fisheries governance, and in section 6 I will detail the research questions that will be addressed in this thesis followed by the methodological choices and design used in this study. The final section outlines the structure of the thesis.

1.2 Characteristics of the Dutch marine fisheries industry

In 2009 the Dutch sea fishing fleet consisted of 515 vessels. The Dutch sea fishing fleet can be divided into (coastal) cutter fisheries (308 vessels), high sea fishery (14 vessels), and small scale fishery (193 vessels) (Taal *et al.* 2010). The most important species of the coastal fleet are sole, shrimp and plaice which account for 25%, 13%, and 11%,

respectively, of the total value of landings of the fleet (European Commission 2009c). The species are landed fresh. The number of vessels has decreased from 374 in 2003 to 308 in 2009, due to decommission programmes initialised by the government. The number of investments also decreased by 62.5% over this period, caused by financial insecurities, insecurities regarding legislation and regarding new techniques, and the economic crisis (Taal *et al.* 2010). The high sea fishery consists of 14 pelagic freezer trawlers, which are owned by four shipping companies. Since 2003, the number of vessels has decreased from 17 to 14. The number of investments has increased from 4 million euro in 2003 to 40 million euros in 2009. Important target species are herring, sardinella, horse mackerel, mackerel, blue whiting and other pelagic species. The trawlers fish in EU and non-EU waters (West African waters) and catches are frozen on board. Coastal water fisheries are the most important fisheries in the Netherlands. They account for 64% of the total value of landings of the Dutch fisheries whereas high sea fisheries accounts for 34% (European Commission 2009c).

The cutter companies are all family owned companies and their ownership can be in the hands of one to eight owners (the majority of which are relatives). A company with three owners is the most common situation (De Vos & Hoefnagel 2006). The cutter sector is a closed sector; starting a firm from scratch is impossible since outsiders cannot obtain a license and quota rights unless taking over another firm. Even continuing a family firm is extremely difficult, because high prices for quota have to be paid (Dubbink *et al.* 1994, Van Ginkel 2005). The sector

is capital intensive as well. Since the introduction of property rights in the 90s, companies were forced to invest in production-rights and thus less money was available for technological investments. The value of these rights was not very stable, as they not only depend on supply and demand, but also on the state of the stock (Salz 2002).

For a long time flatfish was caught with the beam trawl. The last decade, a lot of criticism is voiced on this fishing technique, both from a scientific point of view as well as from civil society (NGOs) and the industry itself, although for distinctive reasons. Already in 1994 an article was published that showed the negative impacts of beam trawling on benthic habitats (Bergman & Van Santbrink 1994). In the year 2000, NGOs discussed a ban on beam trawling in certain areas in the North Sea, especially in the less intensively fished areas. The reason for this was the disturbance of the sea bed, the high fishing pressure resulting in declining fish stocks, and the international debate on the establishment of Marine Protected Areas (Grafton *et al.*). These were seen by NGOs, scientists and governments as a way to put a hold to the damaging effects of the beam trawl.

Due to the negative publicity on the beam trawl, the beam trawl fishery more and more obtained a negative image. Such an image frustrated fishermen, because in their opinion it was only partly true and partly an exaggeration. This does not mean fishermen were not looking for improvements and change. The willingness to change became more visible when from 2003 onwards, the cutter sector experienced a tough period economically (see figure 1.1). After a period

of rather low fuel prices in the nineties, fuel prices almost doubled round the year 2000, arriving at a peak in 2008 (see figure 1.2).

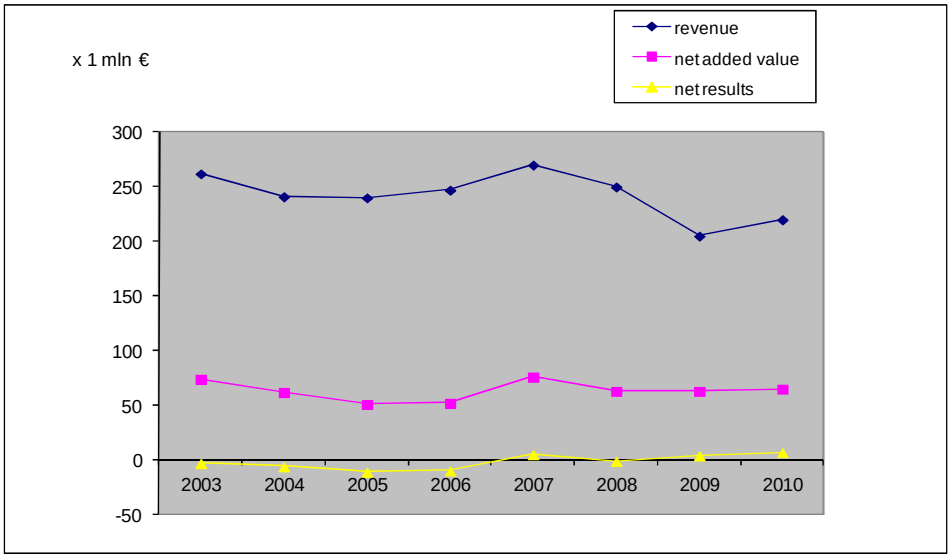


Figure 1.1: Net results of the cutter fisheries, 2003-2010, in million euros (Taal et al. 2010)

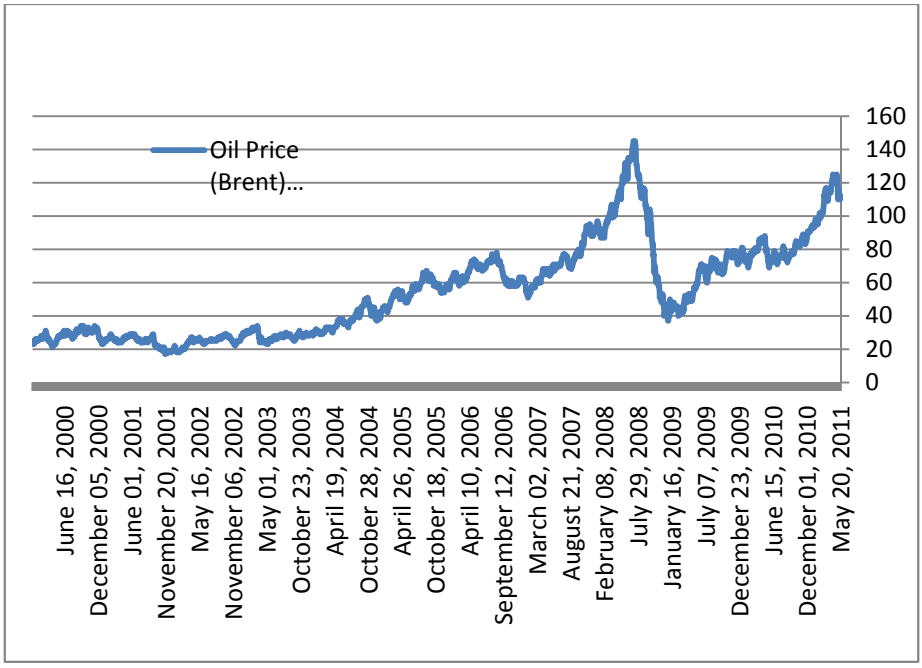


Figure 1.2: The development of the oil price since 2000 (adapted http://www.mongabay.com/images/commodities/charts/crude_oil.html 22 May 2011)

This development became especially crucial for the cutter fleet, which consumes high amounts of energy. Other economic forces were: the difficulty to find crew members due to a decrease in income following higher costs, decreased international price levels of fish products, among others as a result of the fast development of aquaculture, and increased imports of fish from low wage countries, such as Vietnam. In addition, the annually decreasing quota further put a hold to the earnings. The criticism of fishermen was not only focused on these economic forces, but also on other more social aspects, such as a

lack of long term policies and quota levels, no level playing field within Europe, scientists ignoring fishermen knowledge when making quota advice, and the negative public image of fishermen.

The Netherlands plays an important role in the trade of fish within Europe. Especially the logistical position of Schiphol airport and the Harbour of Rotterdam contribute to that position. The demand for fish products is still growing and the European production cannot fulfil this demand, and heavily depends on imports, mostly from Asian countries (see Figure 1.3) (Taal *et al.* 2010).

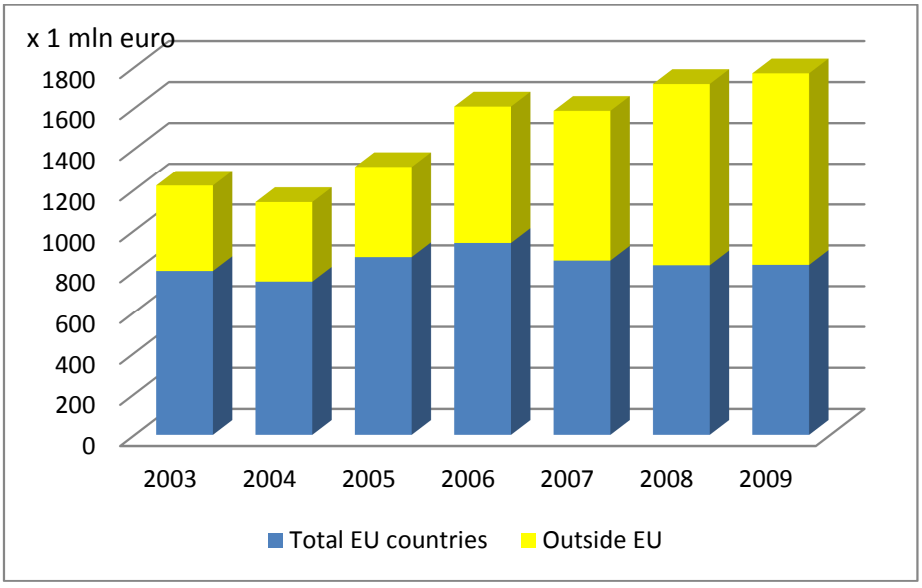


Figure 1.3: Dutch fish imports and their origin (adapted from Taal et al. 2010)

Exports consist of processed, deep-frozen and fresh fish. The fish is mainly exported to other European countries, and a small part goes to countries outside the European Union (see Figure 1.4). A quarter of all

fish exported is landed by the Dutch national fleet; the remaining three-quarter are imports (Van Hoof 2010).

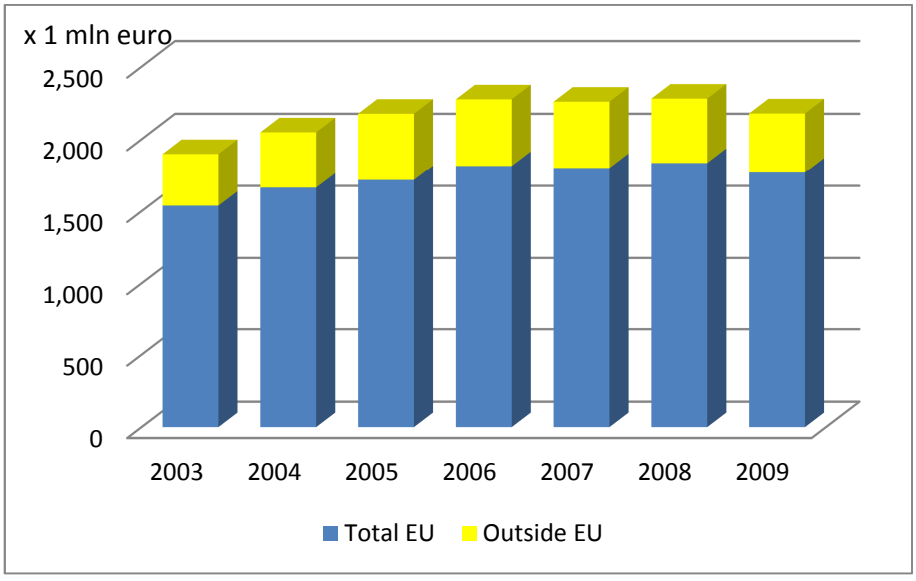


Figure 1.4: Dutch fish exports and their destination (adapted from Taal et al. 2010)

In the Netherlands, fish is sold at the auction. The Netherlands has eleven fish auctions (see table 1.1) where fresh fish is traded weekly. Fishermen are obliged to sell their fish at the auction. This obligation is part of a private agreement that was made in 1993 at the same time the co-management system was installed. It brought transparency and trust between fishermen, government, and buyers as the period of illegal black landings belonged to the past.

Other European countries did not have this obligation, and as a result direct selling was, and remains more common abroad than in the Netherlands.

Auction	Ownership
1. Urk	Owned by fishermen and PO (united with Harlingen)
2. Stellendam	Since 2000 company (BV), united with Scheveningen and Colijnsplaat. Three municipalities own shares
3. Scheve ningen	Since 2000 company (BV), united with Stellendam and Colijnsplaat. Three municipalities have ownership of shares
4. Colijnsplaat	Since 2000 company (BV), united with Scheveningen and Stellendam. Three municipalities own shares
5. Vlissingen	Municipality, partnership with Breskens
6. Breskens	Municipality, partnership with Vlissingen
7. IJmuiden	Owned by Municipalities of Ijmuiden, Velsen, Katwijk and traders
8. Den Helder	Since 2007 together with Den Oever *Visafslag Hollands Noorden.* Fishermen Cooperative (30 members) (partnership)
9. Den Oever	Since 2007 together with Den Helder *Visafslag Hollands Noorden.* Fishermen Cooperative (partnership)
10. Harlingen	Owned by fishermen and PO (united with Urk)
11. Lauwersoog	Owned by province, municipality of Marne, fishermen and traders

Table 1.1: Eleven auctions in the Netherlands and their ownership status (based on interviews, 2010)

In Iceland and Spain, for example, two third of whitefish is sold directly to processors who often own the fishing vessels as well as the fishing rights (Nielsen 2005). Iceland only has fish auctions since the end of the eighties. In Iceland fish is mainly canned and frozen or dried, which give processors a stable market price (Graham 1998), and less need for an auction. In the Netherlands on the other hand all fish is landed fresh, leading to fluctuations in prices, and supply. The auction plays then an

important role as price setter. Also in Denmark, Sweden, the UK, and Norway the majority of white fish is sold through the auction (Nielsen 2005). In Scotland, fish is increasingly sold directly between boats and agents acting for the processors, because of the widely disseminated market price information caused by the increased use of electronic clock auctions since the nineties (Graham 1998).

The revenues of the Dutch fish auction are currently under pressure. Therefore, many auctions are seeking partnerships with other auctions in order to reduce costs (see Figure 1.5). In 2009, the Dutch fish auction generated a total revenue 273 million euro, down 9% from the previous year. The quantity of fish supply increased, but the prices for a number of important species (especially plaice and shrimp) dropped considerably, resulting in a drop in turnover of 27 million euro (see Figure 1.6). This is caused by growing imports, increasing demands regarding quality and sustainability, sustainability demands and a weak market position (Taal *et al.* 2010).

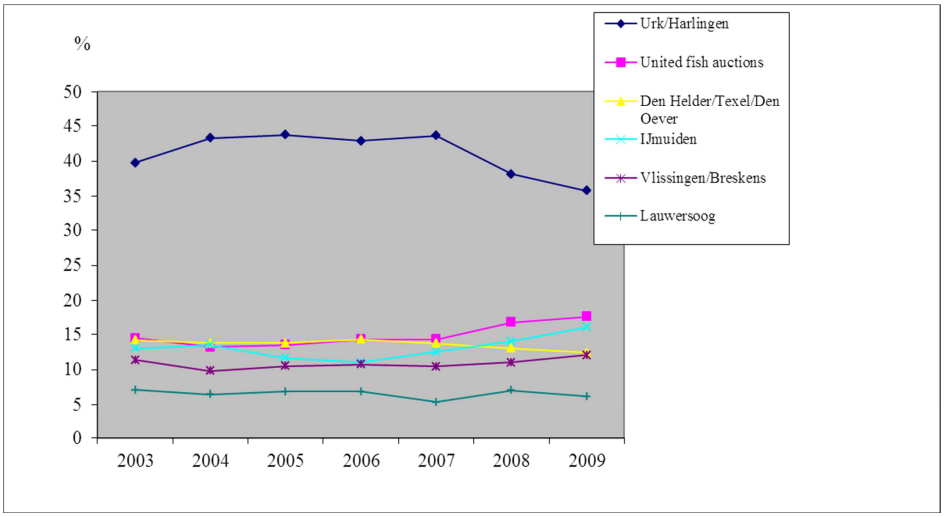


Figure 1.5: Market shares of the auctions (Taal et al. 2010)

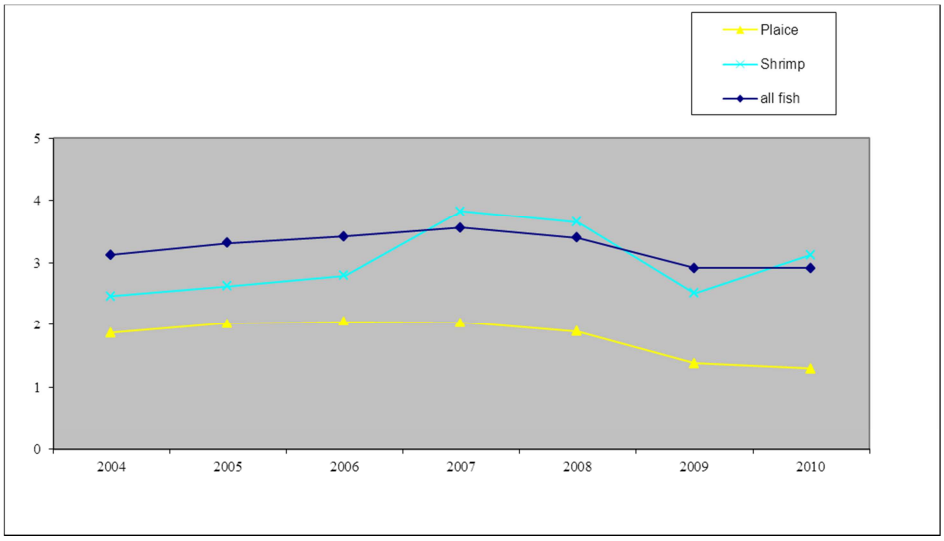


Figure 1.6: Fish prices at the auction, in euro per kg (Taal et al. 2010)

1.3 Fisheries governance in Europe

1.3.1. Common Fisheries Policy

The Common Fisheries Policy was formally created in 1983, but its origins dates back to the early 1970s, when fisheries were originally part of the Common Agricultural Policy. The main concern of national Ministers of fisheries in those early days was to avoid conflict between Member States, at a time when many countries around the world were extending their territorial waters, until they finally created Exclusive Economic Zones (EEZs), which extend 200 nautical miles from their shoreline (Commission 2009a).

The establishment of Exclusive Economic Zones (EEZs) was considered to be the most significant innovation in relation to the governance of marine fisheries resources during the second half of the twentieth century, because it gave the coastal state "sovereign rights for the purpose of exploring and exploiting, conserving and managing the natural resources, whether living or non-living". The coastal state had for example the right to set a total allowable catch within this area on the basis of the best scientific evidence available to it. By the time that the UNCLOS came into force in 1982, more than 80 coastal states had declared EEZs, mostly of 200nm (370.4km). (http://ec.europa.eu/trade/creating-opportunities/economic-sectors/fisheries/governance/February 15, 2011).

However, the establishment of EEZs could have been problematic if the Member States of the European Union had simply

followed this path without any further form of coordination. At that time Europe's fisheries were already highly 'international', with many fleets fishing a long way from home. To avoid problems of the newly established EEZ regime, the emerging European institutions brokered a deal under which Member States agreed to grant free mutual access to each other's waters, so that each nation's traditional fishing grounds and practices could be preserved (European Commission 2009a).

Another important, and old, element of the CFP is the principle of 'relative stability'. The question of how to divide fishing opportunities into national quotas was sparked by the setting of the first catch limits affecting EU fleets by the North East Atlantic Fisheries Commission (NEAFC) in 1975. Ever since the adoption of the CFP in 1983, Total Allowable Catches (TACs) for each fish stock are shared between the Member States of the EU according to a fixed allocation scheme, based on historic catches. The purpose of relative stability is to prevent repeated arguments over how quotas should be allocated, and to provide fishermen with an environment in which they can plan their business more effectively, because of fewer fluctuations in TACs and quota (European Commission 2009a).

Over the past twenty five years, the CFP has gone through two major reforms, and the next major reform is scheduled for 2012. The first reform, in 1992, contained a reduction of the fleet and a limit to the number of days fishermen were allowed to spend at sea. This formed the start of the greening of the CFP. The next major reform took place in 2002, and implied greater stakeholder participation through so called

Regional Advisory Councils (RACs). Also a Community Control Fisheries Agency (CFCA) was created to ensure a more coordinated approach to control and enforcement. Finally, multi annual fishing plans instead of yearly set quota were installed to ensure more stability for the fishermen. The third 2012 reform should address:

- The problem of overcapacity
- Clearer policy objectives
- Focus on the long term
- More responsibility for the industry
- A culture of compliance

Over the years the primary focus of the CFP has shifted from a focus on economic sustainability to a broader definition of sustainability, which includes ecological and social aspects. At present, discussions focus on how fisheries industries should be governed. These discussions are influenced by the broader and international debate on governance. I will now introduce the three modes of governance that are commonly used in fisheries, and which represent the shifts that are taking place.

1.3.2. Modes of fisheries governance

In literature roughly three modes of fisheries governance are often distinguished: hierarchical governance, market governance, and participatory governance (Gray 2005, Van Vliet & Dubbink 1999). Features of the hierarchical style of governance include its top-down structure, and its emphasis on legality, political legitimacy,

centralisation, bureaucracy, interventionism, command-and-control, scientific elitism and exclusivity, and a sense of public responsibility.

Within fisheries governance relative stability, adjusting price levels and the designation of special boxes fit in this type of governance. Market governance is based on the economic forces of supply and demand. It entails limited government interference, although it is government-supported by the legal security of property rights (Gray 2005). In the case of fisheries this means introducing a system of individual transferable quota (ITQs) (Van Vliet & Dubbink 1999).

Finally, as a response to the first two modes, a third mode was created: the participatory mode of governance. This type of governance is influenced by post-material values, a loss of faith in experts, and the importance of interactive communication and dialogue in order to reach more reasoned decisions (Gray 2005). In fisheries governance, co-management is a typical example of the participatory mode of governance, as is the introduction of RACs.

The hierarchical mode of governance is currently being seen as failing to respond to the increasing complexity that characterises the fishery policy making process. Today many fisheries industries are facing a crisis, which is related to sustainability, and this asks for a new approach in governance. As a solution, the policy making process has changed from a state centred process to a more open, complex and interactive process in which various public and private actors participate, solve problems and strive for combined solutions (Arts &

Tatenhove 2004, Gibbs 2008, Jentoft & Chuenpagdee 2009, Kooiman 2003).

The political system is increasingly characterised by multi-actor and multi-level features. This all leads to an increasing interweaving of state, market and civil society in new fishery governance arrangements. Numerous non-governmental organisations (NGOs) have emerged on the local, national and global level, sometimes bypassing the state in their attempts to influence policy making and implementation. Multinational corporations (MNCs) have become political actors as well (Van Leeuwen 2010).

The increasing influence of NGOs and MNCs is reflected in the establishment of the Marine Stewardship Council (MSC) certification scheme. In 1997 the multinational food-processing company Unilever and the environmental NGO World Wide Fund for Nature (WWF) established the MSC with the aim to influence behaviour of fishermen through the market (by changing consumer demand).

Besides the increasing participation of non-public actors in fisheries governance, another feature that is mentioned in the governance literature is the growth of international regimes and the importance of international rule making (EU) (Weale 2009). Environmental and natural resource policies, such as those on fisheries, have become increasingly transboundary and transnational in character. The establishment of the Common Fisheries Policy in 1983 is a clear example of that. Policy making, and even more policy implementation, has become more a matter of negotiation rather than authoritative

imposition (Weale 2009). 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 (Armitage *et al.* 2009), and interactive governance (Kooiman & Bavinck 2005). In these new models the governing system is intrinsically unstable and dynamic (Van Hoof 2010). The state is adapting to new circumstances by transforming its role from one based on constitutional powers towards one of being a facilitator and co-operative partner (Hysing 2010, Pierre & Peters 2000). In the next section I will show how dynamics in Dutch fisheries governance can be understood as exemplary of this more general trend.

1.4 Changing fisheries governance in the Netherlands

Ever since the introduction of the Common Fisheries Policy by the European Commission in 1983, fisheries governance in the Netherlands is strongly influenced by the European context. The Council of the European Union is the EU's main decision-making body, and represents the Member States. The Council passes European laws, jointly with the European Parliament (http://europa.eu/institutions/inst/council/index_en.htm, Feb 17, 2011). In addition to the European legislation, Member States also have national regulative frameworks. The Netherlands has for example a national co-management system in operation since 1993.

Since 2010 the main government institution for fisheries management in the Netherlands is the Directorate Agro Production Chains and Fisheries of the Ministry of Economic Affairs, Agriculture and Innovation. Under the auspices of the Minister, the Directorate is responsible for the development and implementation of fisheries management schemes. The General Inspection Service (Andamari *et al.*) is the agency of the ministry responsible for monitoring and enforcement of fisheries legislation (Van Hoof 2010).

The Netherlands (like Germany) has a long history of neo-corporatism, and both agriculture and fisheries have been regarded for a long time as the prime examples of this neo-corporatist system (Kickert 1997). Neo-corporatism describes a well-defined exchange relation between the state and some acknowledged intermediate interest organisations of stakeholders (Frouws 1997, Frouws & Tatenhove 1993). In the Netherlands this representation is organised through the Fish Product Board, and regional Producer Organisations (POs).

The Fish Product Board was created in the 1950s together with other product boards (PBs) with the enactment of the Corporate Association Act. The Product Board's task is to support the sector with issues of promotion, research, and administration. The Product Board also has to support government in the implementation of policy and regulation and is involved in policy making. It provides a platform for the sector's discussions with the government about policy plans, and it has regulative authority through which it can impose binding regulations upon companies. The Product Board thus provides a link

between the sector (mainly the fishery organisations) and the government (Van Buuren & Klijn 2006). The management of the Product Board consist of representatives from sector organisations and observers from relevant ministries and the Social-Economic Council (a major advisory body for the cabinet on social-economic policy). The organisations are regionally/locally organised and very homogenous.

However, the role of the Fish Product Board, and thus the neo-corporatist arrangement, changed under the influence of the EU. The EU stimulated private fishery organisations, and in the nineties these became more influential. The EU had given these voluntary associations of fishermen market organising authority[1] (Van Buuren & Klijn 2006). In 1993, with the installation of the co-management system, the government was also no longer obliged to present new regulation first to the Fish Product Board, leading to a further marginalisation of the Product Board. The Product Board proved not very adequate in acting upon these growing societal and governmental requests for sustainability. Hence, other governing arrangements were preferred besides and instead of the PB to manage sustainability of fisheries.

This erosion of the Fish Product Board came together with wider developments and discourses (that is: outside the fisheries sector) on governance, including a redefinition of the role of the national

[1] In order to guarantee fishermen a minimum level of income, POs may withdraw fishery products from the market if prices fall below a given level. This is called the *Community withdrawal price*, and is set by the Commission each year for each type of product marketed. When prices fall and the intervention mechanisms are triggered, members receive compensation from the PO to which they belong (http://europa.eu/legislation_summaries/maritime_affairs_and_fisheries/fisheries_sector_organisation_and_financing/l66002_en.htm/February, 2011)

government in many major sectors (e.g. agriculture, environment, spatial planning). In fisheries, this process already started in 1993 with the installation of the co-management system, but it further strengthened in the new Millennium. By 2005, the government had defined a new role for itself in fisheries governance. For a long time (influenced by World War II), the government had seen itself as an important exponent of the so-called Green Front, where expansion of the agricultural and fisheries sector for the purpose of food security was the main goal and objective.

However, as the negative consequences for the environment, landscape and animal welfare became visible and strongly articulated in society and politics, the government felt an urge to change. This change implied a stronger link with a broader set of interests in society than only the producers (Ministerie van Landbouw 2005). Central elements in the new discourse as described by the government: "We want to facilitate processes instead of making sure things are happening"; "We want to decentralise when possible, and centralise when necessary"; "We will focus on debate and dialogue"; and "We will find a balance between people, planet and profit" (Ministerie van Landbouw 2005 pp.1.)

Influenced by this new discourse in fisheries governance, a Task Force Sustainable North Sea Fisheries was established in 2005 by Minister Veerman. Its task was to develop an economic and ecological perspective on a sustainable cutter fleet, in close cooperation with all stakeholders. The advice of the Task Force was written in a report

entitled: 'Vissen met tegenwind" (Fishing with opposition) (Taskforce 2006). The Task Force was succeeded by the Fisheries Innovation Platform (Visserij Innovatie Platform, VIP hereafter), which aimed to set up a favourable climate in which innovation is able to flourish. The VIP supported for four years innovation projects under the conditions that various stakeholders (fishermen, scientists, NGOs and companies) should collaborate in each project, that projects should lead to sustainability, and have an innovative character (VisserijInnovatieplatform 2010). The requirement to ensure cooperation between the various stakeholders was a central point and reflected the approach in fisheries governance.

1993: The Dutch government introduced a co-management system in the Netherlands
1996: Market and NGOs introduced the Marine Stewardship Council (MSC)
2002: The World Summit on Sustainable development was held, commitment for Maximum Sustainable Yield (MSY)
2004: NGOs introduced the Good Fish Guide in the Netherlands
2004: An intention statement was signed by government and industry where they promised to work together on sustainability
2005: The Ministry set up a Task Force Sustainable North Sea Fishery with the aim to develop a vision for a sustainable cutter fleet
2006: The Dutch Ministry established a Fisheries Innovation Platform, which provided subsidies for innovative and collaborative projects
2006: The North Sea herring fishery by the Pelagic Freezer Trawler Association is the first Dutch fishery that is MSC certified
2007: Scientists and fishermen started cooperating more closely on stock assessments
2007: Supermarkets in the Netherlands agree to have a complete MSC fish assortment by 2011
2008: The Dutch Ministry set up National Study Groups for fishermen for a period of six years
2008: A social covenant was signed by both NGOs, industry, and government, in which cooperation between industry, NGOs and government was agreed upon (regarding certification, communication, education, MPAs, and fisheries management

Box 1.1: Initiatives taken by both public and private actors related to sustainability and innovations

Apart from these new public-private arrangements, many others were created both by public and private actors (see Box 1.1). For example, the government stimulated knowledge exchange between fishermen and scientists by calling for closer cooperation and the legitimisation of science after a period of heavy debate regarding quota advises. As a result, in 2007, for the first time four fishermen were allowed as observers on board of the two research vessels that are responsible for the yearly Beam Trawl Survey (BTS). In 2007, supermarkets committed themselves to selling only MSC certified fish by the end of 2011; and in 2008, the government introduced national Study Groups for fishermen in order to stimulate cooperation among fishermen. In the same year a covenant was signed by NGOs, government and industry with the aim to reach a sustainable North sea fisheries that is rated positively by the public (Anonymous 2008c).

These new policy arrangements reflect a new mode in fisheries governance in the Netherlands. We are witnessing a transformation from hierarchical governing by nationally organised political institutions (i.e. government) to modes of governing in which a multitude of public and private actors at different policy levels govern fisheries through networks and voluntary action (Hysing 2010, Sørensen 2006). These different steering mechanisms at different levels, and the interactions between a diversity of actors, indicate that relationships between stakeholders are changing as well, stimulated by new dependencies. New interactions and negotiations among stakeholders that previously did not interact and even distrusted one another, are now emerging,

resulting in new trust relationships. It is not only the trust in government that needs to be restored, as is often emphasised in literature (Akkerman *et al.* 2001, Beck 1999, Beck *et al.* 1994, Giddens 1990, Giddens 1994), but new interactions and modes of governance also require trust among private actors (e.g. among environmental NGOs, fisheries industry, and scientists). In the next section I will discuss a variety of theoretical approaches to analyse trust, and the approach I am taking in this thesis in order to examine changing trust relationships in Dutch fisheries governance.

1.5 New modes of trust in fisheries governance

1.5.1. The concept of trust

In academics, the concept of trust has been investigated in a variety of disciplines. Scholars in philosophy, economics, psychology, sociology, political science, and religious studies have all been involved in conceptualising trust (Misztal 1996). A large part of the current research revolves around the functional properties of the concept (Möllering 2001). As such it is seen as the basis for risk-taking behaviour (Coleman 1990), co-operation (Gambetta 1988), reduced social complexity (Luhmann 1979), order (Misztal 1996), and social capital (Coleman 1988, Putnam 1995). Furthermore, Luhmann, states that a complete absence of trust would prevent (one) even (from) getting up in the morning (Luhmann). Elster posits that trust is the cement of society,

the grease that keeps the societal engine running (Elster 1989). Putnam argues that high levels of trust result in a co-operative society with efficient public and private institutions (Breeman 2006, Putnam 2000). From a more economic viewpoint high-trust societies are said to perform better economically (Fukuyama 1995), and trust enables relationships, in economics and business, and to reduce transaction costs by reducing relational risk (Nooteboom 2002). Notwithstanding this large variety of trust research it is possible to outline some of the common ideas used in most trust studies.

Trust can be defined as a set of expectations, shared by those in exchange (Zucker 1986, pp.61). It concerns favourable expectations, which are often culturally given. These expectations are influenced by beliefs, knowledge, memory and interpretation of past experiences; in sociology this is referred to as reflexiveness (Sztompka 1999). Trust always involves elements of risk and uncertainty, resulting from our inability to monitor other's behaviour, from our inability to have a complete knowledge about other people's motivations and, generally, from the contingency of social reality. People always try to control, instead of predict, other people's conduct in order to reduce risks.

However, in situations of full control we cannot speak of trust as "an actor's trust in other actors presupposes the freedom of action of others" (Barbalet 1996). The element of risk distinguishes trust from confidence, as trust presupposes awareness of circumstances of risk, whereas confidence does not (Giddens 1990).

The notion of trust is increasingly being applied by social researchers in an attempt to explain the empirical differences in achieved levels of cooperation in various social and political environments. With trust people can accomplish more than without trust, and it specifically plays an important role in periods of (policy) change that are characterised by high levels of uncertainty. It is said that when uncertainty constrains economic exchange and institutional trust is missing, then informal social institutions such as culture, shared cognitive schemes, conventions, and reputation are required in order to gain certainty for transactions (Akerlof 1970, Glückler & Armbrüster 2003: Glückler, 2003 #1534, North 1990).

However, the question is how more personal forms of trust play a role in facilitating these informal social institutions. The need for trust seems particularly high in difficult times when cooperative behaviour is essential. I will elaborate on this by analysing new governance arrangements in fisheries in which, through shared experiences and interactions, the boundaries of tolerance (Selnes & Aalders 2005) of each actor are being explored.

1.5.2. The role of trust in fisheries governance

The literature on trust in fisheries governance has a strong focus on the economic function of trust. As such it is claimed that trust plays a major role in reducing the costs of fisheries management. If fishermen trust each other, (but also the government) to comply with local and

regulatory rules to protect the fishery, and this trust is justified, the costs of monitoring actions of individual fishermen is reduced (Grafton 2005).

Thus, trust is considered valuable because it enables fishermen to harvest a given catch with lower costs, while also increasing the likelihood that the resource will be sustained in the future. Trust is also seen as valuable in promoting the sharing of knowledge and information about the resource (Pomeroy & Berkes 1997). Such knowledge exchange can in turn reduce regulatory costs and improve management outcomes (Grafton 2005). Finally, the relationship between fishermen and scientists is often mentioned in relation to sustainable fisheries governance. A good relationship and cooperation between them can make research on stocks more cost effective and also improve the knowledge regarding fish stocks (Conway 2006, Hartley & Robertson 2006).

The relationship between trust and governance is also dealt with in fisheries governance literature, but from a broader social capital point of view. It is said that community cohesion founded on norms, trust, communication, capacity building, and connectedness in networks and groups is an important attribute leading to successful fisheries co-management. This robust social capital serves as a buffer against changes in institutional arrangements, economic crises and resource overexploitation, and fosters sustainable co-management systems (Gutierrez *et al.* 2010, Jentoft 2005, Jentoft *et al.* 1998). Furthermore, proponents of co-management argue that increased stakeholder input can lead to better management. They posit that a process that engages

fishermen in management leads to greater procedural legitimacy and enhances the quality of regulations due to better information about the resource and distributional consequences of regulations (Beem 2007).

However, with the recently posed statement by the European Commission that trust should increasingly play an important role in fisheries governance, it is relevant that more insight into the role of trust in fisheries governance is obtained. More specifically, it should not only focus on the importance of trust, which is quite clear; instead it should focus on how trust works, which different dimensions of trust exist, and how it is constructed and maintained. Yet these different dimensions of trust are "not recognised by legal-economic theory where trust is basically a functional element facilitating transactions that would otherwise be more complicated and less efficient" (Anheier & Kendall 2002). Moreover, trust should not only be addressed focussing on relationships between regulators, fishermen and scientists, but in light of the increasing influence of other stakeholders, such as market parties and civil society, also include these actors and their trust relationships.

Therefore, in this thesis I will deal with trust from a sociological point of view, in which different dimensions of trust are distinguished, and different stakeholders are included. In order to analyse trust in fisheries governance research, I apply three pairs of trust (dichotomies), each pair referring to a different dimension of trust. The pairs are: 1) personal/institutional trust, 2) thick/thin trust, and 3) passive/active trust. These pairs are mentioned by different authors that place them in the context of a shift from pre modern to complex modern/reflexive

societies in which, because of shifting social relations, new dimensions of trust have become more important. Similar changes are taking place in fisheries, which makes the different dimensions of trust useful when analysing these changes. I will now explain these different dimensions of trust, their origin, and their main characteristics in more detail.

1. Personal/institutional trust

Giddens, among others, makes a distinction between pre modern societies, which are based on personal trust, and modern complex societies that rest on trust in abstract (especially expert) systems and organising interactions across time and space (Misztal 1996). Trust in pre modern times is secured by the kinship system, religious cosmology, the local community (place based), and tradition (e.g. rituals) (Giddens 1990). Personal trust involves the expectation of reciprocity. Conditions of personal trust are familiarity, repeated encounters, interdependencies and shared beliefs (Hardin 2000). In many fishing communities, which are often rather closed communities, personal trust still plays an important role.

In modern, complex democracies, trust can still be personal (although now based on friendship or sexual intimacy instead of on locality or kinship), however trust no longer exclusively depends on personal trust. Instead, having trust in institutions (Zucker 1986 and Luhmann, 1979 #1333) or systems (Giddens 1990), has enabled the expansion of economic and political relations beyond homogenous communities. System trust can be defined as "trust in the functioning of

bureaucratic sanctions and safeguards, especially the legal system", it is a generalised trust that all others like myself will continue to trust in the system-what Luhmann calls "trust in trust." (Luhmann 1979, pp.22). We trust in the system (political, monetary, etc.) because we trust that others trust in it as well, especially incumbents in highly symbolic roles (Lewis & Weigert 1985).

Trusting an institution amounts to knowing that its constitutive rules, values, and norms are shared by participants and that they regard them as binding. It differs from the trust two people can have in each other, because the possibilities for trust in an institution are not analogous to those for trust in a person. It is for example difficult to claim to have knowledge with respect to most government officials or with respect to government generally (Hardin 1998). However, within abstract systems encounters take place with the representatives of abstract systems, and as such these encounters can have an essential influence on the perceived reliability of the system (Giddens 1990). Other factors that play an important role in institutional trust are order and predictability, as well as openness and transparency.

According to Giddens (Giddens), two types of mechanisms provide guarantees of expectations, and they depend on trust across distanciated time and space: symbolic tokens (such as media, money, and labels), and expert systems (professional expertise. An example in fisheries is the MSC certification scheme. Consumers and companies trust the MSC to treat each case similarly thereby following standard procedures, which are in some cases, backed by sanctions. Trust is then

institutionalised, and does not depend on personal relations. This modern trust relationship is however highly fragile, because it is left without the external support of kinship ties, local community, tradition or the authority of religion (Misztal, 1996 #1425). Moreover, expectations are more varied and levels of heterogeneity in societies have increased significantly (Anheier & Kendall 2002). As a result, and combined with weaker sanction mechanisms, modern society may have lower levels of predictability (Beck 1992).

This fragility is also visible in fisheries where trust in experts (scientists) has diminished after some episodes where, due to high levels of uncertainties, miscalculations were made regarding fish stocks and thus quota advice. At present fishermen want to be involved in stock surveys, and cooperate more closely with the experts. These encounters with representatives of abstract systems can possibly restore trust of fishermen in scientists. Recently, we also see discussions arousing around the fairness of MSC certification. Some experts have publicly doubted the reliability of MSC, and consumers are not massively buying MSC certificated fish. Whether institutional trust is a control or a form of trust support also remains a fundamental issue in debates (Shapiro 1987: Rousseau, 1998 #1532)

2. *Thick/thin trust*

Zucker (Zucker) sees a general shift from particularistic (= thick) trust based on individual characteristics to trust based on process and experience, and then to more generalised, thin trust (Anheier & Kendall

2002). Similarly, Beck (Beck), and Giddens (Giddens) suggest that the reflexive 'thinner' trust in modern societies is different from the 'thicker' but essentially fatalistic trust in earlier times. Pre modern societies were mainly based on thick trust. Thick trust is trust in people whom we know intimately (often through family and local community ties), and it is embedded in personal relations that are strong, frequent and nested in wider networks (Anheier & Kendall 2002, Putnam 2000). In a small, closed community, or close circle of friends and relatives, each can have on-going relationships with every other one. Such overlapping relationships typically generate a lot of knowledge relevant to trusting any particular person. Because of these dependent and direct relationships, those with whom we deal with have not only the incentive of loss of our relationship, but also that of loss of reputation (Misztal 1996) when they fail to meet the obligations inherent to the trust relationship. This makes them more willing to reciprocate. However, small communities are not the only place where trust can be generated. It is just one possible source of knowledge for the truster about the trustworthiness of another, and one possible source of incentives of the trusted to be trustworthy (Hardin 2000).

Modern society is increasingly based on thin trust, which tends to be associated with the organic solidarity or *gesellschaft* of looser, more amorphous relationships (Newton 1997). Thin trust applies to new acquaintances and is generalised; it is evident in our willingness to extend the benefit of the doubt to others. Thin trust, unlike thick trust, fosters a willingness to trust people outside of our immediate circle or

group (Putnam 2000). Thin trust is based on everyday contacts, professional and acquaintance networks, and involves a much greater number of ties that form less dense relations (Anheier & Kendall 2002). It is closely related to bridging ties. Bridging ties facilitate access to resources and opportunities that exist in one network to a member of another network (Granovetter 1973). A diverse set of bridging ties within a group increases a group's agency, and diverse group membership is an important element of successful adaptation capacities of a community to new situations, and problems related to sustainability. Thin trust is however also very fragile, because it lacks the dependency of the relationships in closed communities which brings a greater incentive to reciprocate.

3. Passive/active trust

Trust develops in both active and passive forms. "In traditional and early modern societies the commitment (that is related to trust) would be characterised more by the habitual/passive acceptance of circumstances than by the active leap of faith" (Giddens 1990, pp. 90, Möllering 2001). Passive trust can be envisioned as a passive state of mind that regulates much of people's ways of acting and relating to each other. Trust is produced and reproduced when individuals take part in everyday actions and situations and perform their roles as expected (Julsrud 2008). Passive trust can be facilitated through taboos and rituals, but also by means of institutions. An important difference between passive and active trust is that passive trust gives relationships

a stabilising force, while active trust develops forces in favour of variety (Batt & Purchase 2004).

In the post traditional society, new forms of social solidarity have to be dynamically and energetically sustained amid increasing pressures from processes of individualisation. These new forms of community and association ask for new relations of active trust, which are predicated on an opening out of the self to the other (Banks *et al.* 2000). Giddens (Giddens , Giddens) has proposed the term 'active trust' to denote how many individuals in modern society need to work on trust relationships through active interaction and communication. Active trust implies a reflexive process, which requires that it be constantly reproduced in order to result in a stable or at least continuous relationship (Julsrud 2008). Active trust is not called for, which implies more deliberate leaps of faith (unconditional, it is not blind faith in other people, but it is a contingent and negotiated feature of professional or social engagement with others (Giddens 1990 #1256). Active trust demands increased visibility of social relations and also acts to increase such visibility (Sachs 2000).

In order to be able to cope with the fragile aspect of trust in contemporary society, which is characterised by negotiation and cooperation with multi actors, governments increasingly depend on active trust and cooperation between actors involved. Trust is then based on particular forms of shared engagement in practice. However, if employed clumsily, interactive policy making may result in a reduced trust in government. Yet, the practices should contribute to a

strengthened trust (Akkerman *et al.* 2001). This form of active trust requires equality, discursiveness, reciprocity and substantiation (Beck *et al.* 1994).

In sum, it is evident that trust has many different dimensions, and that these play a role in different contexts depending on the steering mode. The question is however what the role is of these different dimensions of trust in contemporary fisheries governance. Fisheries governance is currently characterised by two important developments, namely sustainability and shifts in governance. The question is how trust is being maintained as a result of these new developments. Furthermore, do we see different dimensions or forms of trust becoming more important and/or relevant? The shifts in dimensions of trust were mentioned by several authors, of which many are mentioned in the previous section, however what is lacking is empirical research on what kind of shifts take place, what were the key turning points for these shifts, and how why and to what extent these shifts are there to stay. This research will fill in this gap by studying trust from a more sociological-historical point of view by analysing trust relationships throughout time, namely before and after the introduction of new governance arrangements in fisheries.

1.6 Research questions and research methodology

Fisheries governance in the Netherlands is, like in many other countries, influenced by national and international fisheries policies that aim to reach sustainable fisheries sectors and sustainable fish stocks. The Dutch fishing industry has been facing severe sustainability challenges the last decades. The once flourishing beam trawl fleet suffers financial problems (negative net results), social problems (lack of good crew, and heavy criticism from society), and ecological problems (decreasing stocks, and negative ecosystem impacts).

In order to cope with these problems new governance arrangements are being created in which sustainability and innovation play a crucial role. These new governance arrangements influence social relations, and subsequently trust relationships between the actors involved in fisheries governance. New forms of cooperation and knowledge transfer between various actors most likely require trust, but a different kind of trust than in the conventional neo-corporatist setting.

This thesis sets out to analyse how fisheries governance has changed throughout the years, which actors increasingly play a role, and how their level of interaction has changed. The key objective is to analyse how shifts in governance have changed (social) trust relationships between the main actors, and which dimensions of trust especially play a crucial role. These questions are studied within the context of the Dutch (mainly flatfish) fishing industry.

The aim of this thesis is to study how trust relationships between the main actors in the fisheries industry are changing under conditions of new modes of governance enhancing demands for sustainability. The main question to be answered in this thesis is:

How have relationships of trust and dimensions of trust between the central actors in the Dutch (flatfish) fisheries changed with the creation of new governance arrangements, and how do new forms of trust contribute to the transition towards a sustainable fisheries.

The main research question is divided into three sub questions:

- What kind of new governance arrangements have developed in Dutch fisheries to deal with the sustainability challenges the industry is currently facing?
- How have these new governance arrangements influenced trust relationships?
- What does this new governance-trust complex contribute to the transition towards sustainable fisheries?

In this thesis trust is analysed along four perspectives that represent different trust relationships: 1) trust relationships among fishermen, 2) trust relationships between fishermen and government, 3) trust relationships between fishermen and NGOs, and 4) trust relationships between fishermen and other companies/actor within the value chain. In each perspective trust plays a different role. A fifth

perspective is the trust relation between fishermen and scientists. However, as the relationship between fishermen and scientists has already been analysed in detail recently by other scientists (Van Hoof, 2010, and Verweij 2010), it will not be addressed in this thesis. In each of the four perspectives trust relationships are analysed by studying several case studies of new fisheries governance arrangements that have been introduced in the Dutch fisheries industry during the last decades.

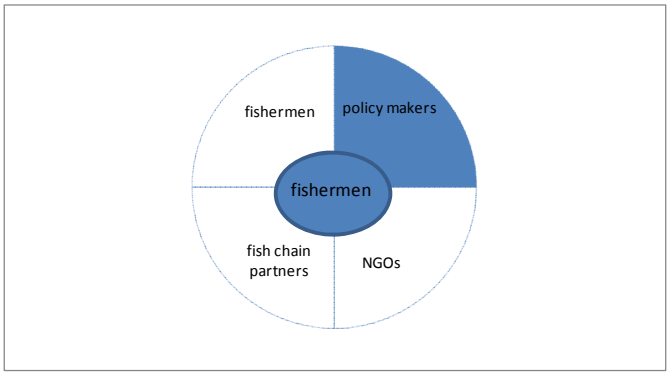
In general case studies are the preferred strategy when 'how' or 'why' questions are being posed, when the investigator has little control over events, and when the focus is on a contemporary phenomenon within a real life context. The case study method allows retaining the holistic and meaningful characteristics of real life events – such as small group behaviour, and organisational and managerial processes. The goal is to expand and generalise theories (analytic generalisation) and not to enumerate frequencies (statistical generalisation) (Yin 2009). The data for each case study were obtained through extensive observations and interviews with the central actors during a period of eight years. By making observations one can study interactions among people, which are important processes for studying trust. In order to ensure validity I have used multiple sources of evidence: observations, conducting interviews, analysing reports, and documents and literature review. Moreover, key informants were invited to review interview reports and paper drafts.

Hereafter I will provide a short description of each perspective, the innovative arrangements that are being analysed within each

perspective, and the dimensions of trust that play a role in them. Each of these perspectives relates to one chapter in this thesis.

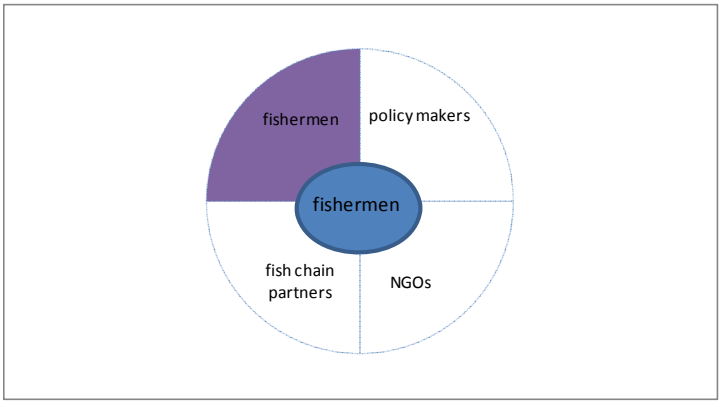
1. The co-management system

The co-management system was setup in 1993 in order to regain the legitimacy of the fisheries policy and to seek a balance between economic and ecological interests by giving responsibility to the Dutch fisheries sector through self-management and new forms of cooperation. It also had to restore trust relationships between fishermen and government that had been disturbed due to the entrance of a new actor, a new discourse and new rules (a quota system). In this chapter I will analyse the trust relationships between fishermen and government prior to the installation of the co-management system, and why and how the co-management system changed these relationships.



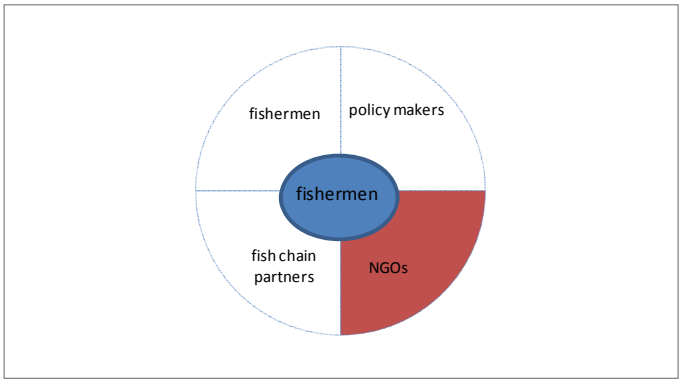
2. The National Study Groups

In 2008, the government stimulated, and subsidised the creation of National Study Groups of fishermen with the aim to enhance cooperation and exchange of knowledge between fishermen from different regions. The ultimate goal was to stimulate innovation and sustainability. Fourteen Study Groups were setup by the fishermen, and producer organisations with the help of scientists. These new arrangements form the perfect place to study changing trust relationships among fishermen themselves: How were these relationships prior to the Study Groups, and what is the influence of the Study Groups on trust relationships?



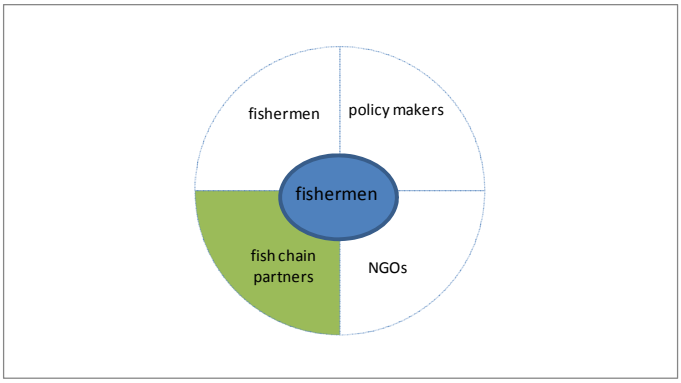
3. The *Viswijzer* (Good Fish Guide)

Based on the Monterey Bay Aquarium (Seafood Watch), Audubon Society (currently: Blue Ocean Institute), the Marine Conservation Society (The Good Fish Guide), the Marine Stewardship Council and the FAO Code of Conduct for Responsible Fisheries, the *Viswijzer* was introduced in 2004 by a Dutch NGO, the North Sea Foundation (NSF), as a market-based communicative tool for assessing fisheries through sustainability criteria and categorising them in a traffic light system. The *Viswijzer* triggered interaction between NGOs and fishermen, whose relationship was previously characterised by a lack of trust. In order to analyse the changing trust relationships between fishermen and NGOs I analyse the *Viswijzer*, the social covenant and by the *Viswijzer* induced improvement paths for fishermen.



4. New initiatives in the value chain

Actors in fisheries industries worldwide are facing challenges, such as: a lack of sustainability in economic, social and economic terms, globalisation (increasing competition), changing consumer demands, NGO led demands regarding sustainability of fish, and international regulations regarding food safety, and work conditions. These challenges lead to changes in the way the fish value chain is governed, described in literature as the change from a supply to a demand driven chain. In this chapter I analyse thirteen new arrangements in the fresh fish value chain and the way these arrangements change relationships between actors operating in the fish value chain (fishermen, auctions, processing/trading companies, retail and consumers).



1.7 Thesis outline

After having discussed the research background, objectives, research questions and methods in this introductory chapter, the

following four chapters present the results of our case-studies. Chapter 2 analyses the changing trust relationship between fishermen and government by looking at the introduction and evolvement of the co-management system. Chapter 3 studies the changing trust relationships among fishermen themselves by focusing on the national Study Groups. Chapter 4 discusses the changing trust relationships between fishermen and NGOs by analysing the introduction of four Good Fish Guides, and chapter 5 studies changing trust relationships within the fresh fish value chain by focusing on several new initiatives that are currently taken by chain actors. The last chapter reflects on these case study chapters, draws several conclusions and formulates recommendations for future governance research.

2
Trust relationships between fishermen and government: New challenges for the co-management arrangements in the Dutch flatfish industry[2]

Abstract

Until the 1990s fisheries were largely managed by the state. Since then, Dutch government and the sector increasingly recognised that a fishing industry cannot be managed effectively without the cooperation and participation of fishermen to formulate policy and to implement and enforce laws and regulations. As a result, in the nineties, the existing neo-corporatist arrangement was replaced by a co-management system in the Dutch flatfish fishery. Co-management is often seen as leading to greater procedural legitimacy and subsequently compliance. However,

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constructing an effective co-management arrangement is not only a matter of building institutions but also a matter of building trust relations between the government and industry. Institutional arrangements such as co-management can contribute to these trust building processes; however, a too strong reliance on institutional arrangements can lead to distrust.

2.1 Introduction

Whereas previously, fisheries were largely managed by the state, since the 1990s, governments and the fishing industry have increasingly recognised that the sector cannot be managed effectively without the cooperation and participation of fishermen in different stages of policy making (policy formulation, implementation, and enforcement). Also, the development of fisheries industries and policies in Western states have been confronted with and influenced by a general shift from government to governance. Changes have taken place in the forms and mechanisms of governance, the location of governance, governing capacities, and styles of governance (Arts & Van Tatenhove 2006) (Kersbergen & Waarden 2004).

Traditionally, governance was associated with government, i.e. the formal institutions of the state and its monopoly of legitimate coercive power (Stoker 1998). Horizontal and vertical processes have resulted in an erosion of the traditional bases of power of the nation

states. The former refers to the blurring of the distinctions between state, market, and civil society at the national levels, the latter to a relocation of politics below and beyond the nation state. The shifting locus (multiple actors and levels) and the shifting focus (new rules of the game and steering mechanisms) of governance (Van Leeuwen & Van Tatenhove 2010) have resulted in, for example, decentralised, flexible, and consensual styles of governance (Arts *et al.* 2006) (Mol 2006a), the development of public–private partnerships (Berkes 2009, Kooiman 2003, Pierre & Peters 2000), and a growing role of international and supra-national institutions (Mol 2006a, Van Tatenhove *et al.* 2000).

As a result, various policy arrangements have emerged as an expression of the changing relationships between state, market, and civil society (Arts *et al.* 2006). For example, in fisheries policy, co-management systems have been developed as a partnership arrangement using the capacities and interests of the local fishermen and communities, complemented by the ability of the government to provide enabling legislation, enforcement and conflict resolution, and other assistance (Pomeroy & Berkes 1997). Proponents of co-management argue that increased stakeholder input can lead to better management. They posit that a process that engages fishermen leads to greater procedural legitimacy and enhances the quality of regulations due to better information about the resource and distributional consequences of regulations (Beem 2007, Jentoft 1989, Pinkerton 1989). In turn, fishermen choose to comply with regulations if they perceive the rules or the decision-making process as legitimate (Eggert & Ellegard 2003).

However, many researchers have warned that co-management is not a panacea for problems of legitimacy and regulatory capture (Beem 2007). Constructing an effective co-management arrangement is not only a matter of building institutions but also a matter of building trust between the parties and social capital in general. Trust appears to be a determinant of success in many cases of co-management, as a prelude to building a working relationship (Berkes 2009). It is, however, rarely addressed and elaborated in the literature on fisheries governance.

Trust is an important building block in democracy where absolute control of governments is impossible. When trust relations exist and when policy is perceived as legitimate, the rules are more likely to be complied with. It is further believed that in the case where people trust others to comply they are more likely to comply themselves. Governments may play an important role in this matter. Hardin (Hardin 1998) states the following: ''A good government enables its citizens to trust among themselves''. Trust is particularly important in fisheries, as they are characterised by major scientific uncertainties regarding the level of the fish stocks.

Furthermore, fishermen and scientists use different parameters as a measure for stock size (Verweij *et al.* 2009). This often leads to different perceptions regarding the level of fish stocks and related regulations and compliance: ''The gap between the research/statistical-based knowledge and experiential-based knowledge has the potential to undermine the legitimacy of the management system'' (Loucks 2009, Raakjaer & Vedsmand 1999). A deceptively simple way out of the

structural scarcity of trust noticeable in many fishery industries is the reliance on institutional arrangements such as co-management. Institutional rules are being relied upon, in this perspective, as self-reproductive, self-enforcing, path dependent, and self-perpetuating, and no one is expected to distort them or interfere with their expected operation (Offe 1999, Warren 1999). However, as Offe (Offe 1999) states, this is a rather naive point of view, as institutional arrangements are incomplete, ambiguous, and contested.

The aim of this paper is therefore to show, by using the case of co-management in the Netherlands, how trust is built both among fishermen, and between fishermen and the government, but also how trust can disappear again. The co-management arrangement is a suitable framework for analysing trust relationships between fishermen and the government, as in these participatory arrangements public and private interests meet and interact and jointly define problems and formulate solutions. By describing and analysing the institutionalisation and the shifts from one institutional arrangement to another, it is possible to analyse the role of trust in these different institutional arrangements. It is especially important and valid to study trust in a changing context, as these periods of change are often characterised by high levels of uncertainty. Uncertain situations require trust, and it is in these situations that it becomes apparent whether or not it exists.

For this research, qualitative research methods were applied in a historical case study design. In general case studies are the preferred strategy when 'how' or 'why' questions are being posed, when the

investigator has little control over events, and/or when the focus is on contemporary phenomena within a real life context (Yin 2009). The historical perspective applied to the development of the various institutional arrangements that characterised the Dutch flatfish industry from 1975 to 2010 serves to make an analysis of the shift of trust in the course of time and to better understand the processes that contribute to changing trust relationships.

The empirical data were collected during the period 2002–2009. Over thirty interviews (semi-structured) were conducted with flatfish fishermen from different regional areas in the Netherlands. In addition, ten interviews were held with fisher representatives of the two national fishery organisations and with governmental officials. Also researchers of the Agricultural and Economics Research Institute (LEI) were interviewed (informally) and secondary material was used (interview reports, scientific literature, and policy documents). The material content was analysed focussing on the presence of trust. The presence of trust in a relationship cannot be asked directly, but needs to be observed and explored in different ways. As Nooteboom (Nooteboom 2002) states: 'a pledge of trustworthiness in mere words is cheap and unreliable'. Nonetheless, a whole pattern of actions, expressions, and relational signalling can give important clues. Such clues include whether actors have positive expectations of one another, if they share sensitive information, are willing to take risks, or demonstrate reciprocity (de Vos & Bush, 2011).

The next section starts with an introduction and discussion of the conceptual framework of policy arrangements and trust, followed in Section 3 by an empirical analysis of the shift in arrangements in the Dutch fishing industry and the role of trust in each of them. The final section draws conclusions about the role of trust and legitimacy in fisheries governance and how it is related to specific arrangements.

2.2 New policy arrangements and the role of trust

2.2.1. The policy arrangement approach

To analyse the relation between trust and governance in fisheries management the policy arrangement approach can be applied. This approach was developed to understand and to analyse change and stability in policy processes. A policy arrangement refers to ''the temporary stabilisation of the content and the organisation of a particular policy domain'' (Arts *et al.* 2006, Liefferink 2006, Van Tatenhove *et al.* 2000). The structure of a policy arrangement can be analysed along four dimensions, the first three referring to the organisational, and the last to substantial aspects of policy (Arts *et al.* 2006, Liefferink 2006):

1. The actors and their coalitions involved in the policy domain;
2. 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;

3. 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
4. The current policy discourses, where discourses entail the views and narratives of the actors involved (norms, values, definitions of problems, and approaches to solutions).

Change in one dimension may induce change in other dimensions, thus changing the arrangement as a whole (Liefferink 2006, Van Tatenhove & Leroy 2003). When a new actor (for example the North East Atlantic Fisheries Commission, NEAFC) mobilises a new discourse (we have to be careful that fish stocks are not being overexploited) in existing policy arrangements, this may result in a new rule (the introduction of a quota system). It is difficult to determine exact causal relationships, as dimensions are closely interconnected. In her discussion of the policy arrangement approach Buizer (Buizer 2008) believes that social-relational factors, such as perseverance, empathy, and trust deserve special attention.

The aim in this paper is to understand and to analyse how the dynamics of policy arrangements over time, i.e. the changes of the dimensions, and the friction between existing policy arrangements affects relations of trust and vice versa. Hence, attention is explicitly

paid to the role of trust in the policy arrangement approach. A change in one or all of the dimensions also has an impact on trust, while on the other hand, trust or the lack of it influences the institutionalisation of policy arrangements.

2.2.2. *The shift from passive to active forms of trust*

In literature, trust is defined as ''the belief that others, through their action or inaction, will contribute to my/our wellbeing and refrain from inflicting damage upon me/us'' (Sztompka 1999). Trust is a highly effective device to overcome principal-agent problems. A society that fosters robust relationships of trust is probably also a society that can afford fewer regulations and greater freedoms (Warren 1999). Trust substitutes resources of social control and helps to economise on transaction costs. For example, ''I do not need to monitor those whom I can trust, nor do I have to buy what I trust they will offer me voluntarily (such as the occasional use of a car), nor do I have to force them to do what I expect them to do or to call in third parties (such as courts) to enforce my claims'' (Offe 1999). A decade ago, compliance studies focussed primarily on the coercive aspect of government. Whether the government was supposed to be trustworthy or not, appeared to have little to do with compliance. With the emergence of new governance arrangements, a much richer view of compliance has been developed based upon the mutual interactions between citizens, market parties, and governments (Scholz 1999).

In general, in line with the shift from government to governance, a development from passive trust to active trust can be witnessed. Passive trust presupposes a 'thick support' of civil society for a 'strong capacity' of the state (Akkerman *et al.* 2001, Bang & Sorensen 1999). However, in contemporary society, governments increasingly depend on active trust and cooperation between actors involved. The notion of active trust is rooted in the work of Giddens and Beck (Akkerman *et al.* 2001), and aimed at enhancing confidence (gaining trust) by active participation in practices of governance. As Giddens (Giddens 1994) claims, in the post-traditional society, when trustworthiness cannot be taken for granted, and winning trust is constantly necessary, it may be prudent to apply the strategy of ''active trust'': ''opening out'' to the other, emotional disclosure – even if risky – in order to produce obligation of trustworthiness. As both public and private actors are involved, governing requires more than ever to actively develop shared frameworks of interpretation and actively gaining trust in order to enable sustainable cooperation (Edelenbos 2002, Hajer 2000, Hajer & Wagenaar 2003). Active trust requires equality, discursiveness, reciprocity, and substantiation (Beck 1999, Beck *et al.* 1994).

Institutional arrangements, such as co-management are a way to deal with uncertainties and as such, they can contribute to trust building processes. They can diminish fear and insecurities about other people's behaviour. Trust in institutional arrangements is related to order (Eshuis 2006). Order is crucial for the predictability and as such for trust (Luhmann 1979, Misztal 1996). In order to ensure trust in institutional

arrangements, procedures need to generate an impeccable record in terms of truth-telling, promise-keeping, fairness, and solidarity—with this the reasons for suspicion and cynicism are virtually nullified (Offe 1999). When an institutional arrangement is perceived as legitimate it sets new standards and norms for evaluating behaviour; it becomes a tool that people use to predict the behaviour of others and so guide their own (Jentoft *et al.* 1998). Institutional arrangements embody and create order through stable structures and processes. For example, bureaucratic organisations make repetition possible; individuals within these organisations can trust that each case is treated similarly. Openness and transparency play a role in trust in institutional arrangements. Through openness and transparency, understanding and predictability are able to grow (Eshuis 2006).

The next section will outline how distrust and an illegitimate policy in the nineties resulted in the installation of a co-management arrangement in the Netherlands. The co-management arrangement provided clear role descriptions for each party, as well as clear rules and in that way decreased uncertainty. However, with the entrance of new actors (from 2002 onwards) that introduced the new discourse on sustainability, uncertainties arise again. This poses new challenges to the co-management arrangement. And as institutional arrangements are quite stable and cannot change overnight, a more important role for active trust is then required.

2.3 The change from one policy arrangement to another. The main triggers for change and the role of trust in these changes (1975–2010)

2.3.1. The neo-corporatist fisheries arrangement (1975–1983)

Before 1975, the relationship between state and market in the Netherlands was structured by neo-corporatism. Neo-corporatism describes a well-defined exchange relation between the state and some acknowledged intermediate 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 neo-corporatist arrangements, functional interest organisations possess a representational monopoly, co-operating between each other and with the state based on a political-economic consensus at the top. ''The participating organisations are granted privileged influence on public policy-making in exchange for disciplining their constituency and restraining their demands'' (Frouws 1993, Frouws 1997, Frouws & Tatenhove 1993). Consultation with the Dutch fishing industry was institutionalised in a public corporation: the Dutch Fish Product Board (FPB) (Van Buuren & Klijn 2006). The FPB provided a link between the industry (mainly the fishery organisations) and the government and had the authority to raise taxes and decree regulations (Van der Schans 2001). The Fisheries Directorate was obliged

to present new policies to the FPB (Van Buuren & Klijn 2006), which increased the legitimacy of policy.

Until 1983, relationships between the fishing industry and the Ministry of Agriculture and Fisheries were controlled by corporatist rules that were known beforehand by the negotiating partners. This resulted in a high degree of predictability, as expectations were clear and the actors shared similar interests and needs (focusing on an economically healthy sector). Fishermen believed that the politicians, civil servants, and their representatives acted in their favour. As it was not necessary to reproduce this trust relationship repeatedly it can be characterised as (institutionalised) passive trust. For other actors (e.g. civil society), gaining access was very difficult. This became clear when the North East Atlantic Fisheries Commission (NEAFC) introduced in 1975 Total Allowable Catches (TACs), on the basis of the observation that a number of species (plaice, sole, herring, mackerel, cod, whiting, and haddock) were being threatened by extinction (De Vries 1990).

This policy, imposed on the Dutch industry, was completely against the dominant way of working in the neo-corporatist arrangement in this period where policies were formulated and implemented jointly, based on a commonly agreed substantive discourse. As was stated in the Report of the Parliamentary Research Commission: ''The interests of fishermen and the fishing industry were identified with the national interest, and as a consequence of this it was accepted that community obligations sometimes were not complied with'' (De Vries 1990).

However, the actors had to respond to the new regulation. Key actors therefore tried to integrate the new policy into the neo corporatist discourse. The Ministry delegated the enforcement of the TACs to the FPB. ''But the Board faced too many difficulties to enforce this regulation and returned this quota-management task back to the Ministry in 1976'' (Davidse 2000). This was followed by an effort from the Ministry to meet the industry's wishes. This meant that the quota system was transferred into an Individual Quota (IQ) system in 1976 hereby handing more responsibility to the fishermen. The Ministry at the same time revised the procedure for the allocation of the IQs meaning that from now on also newly bought vessels were able to obtain quota (Davidse 1998).

Despite the Ministerial efforts, the support for the TAC system did not increase. The General Inspection Service (*Algemene Inspectie Dienst AID*) was not able to enforce the rules, and the (National Consultation Fish Auctions (*Nationaal Overleg Visafslagen*) did not want to take responsibility for inspections. At a meeting, held in 'Hotel Friesland' in Wieringerwerf, it was concluded that a black market was inevitable and the government saw no other option than to agree to turn a blind eye to what was going on as long as the bookkeeping was correct. It was referred to as a 'gentlemen's agreement' between officials from the Department and representatives of the fish auctions. As a result false information was sent to Brussels (De Vries 1990). The neo-corporatist arrangement continued to exist until 1983, when the European Commission introduced the Common Fisheries Policy (CFP)

based upon the evolution of common measures introduced in 1970 (Council Regulation 2141/70) and subsequent negotiations following the accession of the UK, Ireland, and Denmark in 1973 (Churcill & Owen 2010, Holden 1994). From then on, the Dutch neo-corporatist fisheries arrangement started to erode.

2.3.2. The fragmentation of the neo-corporatist arrangement (1983–1992)

In 1983, the Dutch neo-corporatist fisheries arrangement changed with the introduction of the Common Fisheries Policy (CFP).With the institutionalisation of the CFP a new 'actor', the European Commission (EC), got involved in the Dutch fisheries arrangements. Not only did the EC confront the Dutch Ministry with its low compliance rates, the Commission also introduced new rules and discourses. The EC had adopted the NEAFC quota policy, and developed an extensive package of auxiliary policies, such as, technical measures and days at sea regulations, in order to reduce the effort (Van Buuren & Klijn 2006). Due to a more intensive and strict enforcement policy, the Dutch national government was forced to implement the new policies, but at the same time they were facing the lack of support from the industry and its representatives. ''The EU overrules the national government and does not reckon with the Dutch consensual approach. Its top-down approach and the power to enforce compliance, gave the EU a powerful position within the Dutch network'' (Van Buuren & Klijn 2006).

The neo-corporatist consultation role had lost a large part of its purpose because of lack of trust and in the absence of trust actors must

rely on formal monitoring and enforcement (Offe 1999). Hence, in 1988, a team of 120 governmental inspectors (with a police background) started to monitor fish landings closely (Van Ginkel 2005). Because of the harsh enforcement policy, the relationship between fishermen and the Ministry and among fishermen themselves was subjected to great pressures. This worsened when the TAC for sole was reduced in the second half of the 1980s. From that moment on, illicit landings increased, which further damaged relationships between fishermen. Fishermen had different opinions regarding compliance with the law and many blamed their peers (especially those who were members of the other organisation) for violating and evading the law (Van Ginkel 2005). Many fishermen felt compelled to overfish because they feared that overfishing by others would mean that national quotas would be fulfilled, resulting in a closure of the fishery long before the end of the year (Langstraat 1999).

Trust was clearly lacking, nobody knew what was going on, and what other actors were doing. Fishermen did not believe their peers were acting responsibly and in their favour. Institutional arrangements that could have restored the disappearance of trust did not exist. This resulted in free rider behaviour, which in turn had a negative impact on the price level. Many actors increasingly felt dissatisfied with the situation and decided that things needed to change. A retired AID-official reported the incorrect bookkeeping of the AID with respect to quota busting and many employers, who had been responsible for the inspections, supported him, resentful at being ridiculed by the

fishermen while doing their job (De Vries 1990). Subsequently, a hearing took place and finally in 1990, the Minister resigned (De Vries 1990). This marked a new era. The Dutch government was looking to rid itself of the increasingly heavy burden of implementing the rules and regulations pertaining to the fishing industry (Davidse 1998). ''We have reached the end of our possibilities'', the new Minister admitted (Van Ginkel 2005). The industry had to assume greater responsibility: mutual confidence had to be restored: and the legitimacy of fisheries policy regained. The idea for a co-management system was born.

2.3.3. Installation of the co-management system (1992–2002)

The erosion of the neo-corporatist arrangement and the inability of the national government to implement new regulations had forced the main actors to reflect on their roles and tasks. In June 1992, the Steering Committee Biesheuvel (named after the chair Barend Biesheuvel, the former Prime Minister of the Netherlands from 1971 till 1973) published its report *Beheerst Vissen*, in which several ideas were presented to make fisheries policy more acceptable to the fishing industry. In the preface, Biesheuvel wrote: ''At the start of the task of the Steering Committee, the visible lack of trust between the government and the fishermen and their representatives struck me'' (Biesheuvel 1992 pp.2). According to the Biesheuvel Committee discursive shifts were needed to stimulate cooperation between fishermen in co-management

groups and to distribute responsibilities between government and fishing industry.

A co-management system was seen as the appropriate institutional arrangement to restore the relationship between fishermen and government. Co-management (also referred to as the Biesheuvel system) is less elitist compared to the neo-corporatist arrangement. The neo-corporatist rule that prescribed the obligation of the Ministry to consult the FPB about upcoming policy changes was removed, and policy making was not any longer an exclusive responsibility of the elites. Fishermen formed homogeneous occupational groups with responsibilities that had to take into account the wider society (Hoefnagel 2002). Fishermen were granted more responsibility regarding quota management and enforcement (i.e. social control). The AID became responsible for the inspection of the total catch at group level in order to prevent busting of the national quota (Hoefnagel 2002). With the introduction of the co-management system tasks were defined more clearly for the FPB, the AID, the fishermen, and the Ministry. This created order, stabilisation, security, and predictability, all important conditions for the restoration of trust.

Although the Ministry considered the joining of responsibilities as taking a risk (according to the Ministry, the industry had failed to handle greater responsibilities in the past), it saw no other option than to try it. The fishermen having more responsibility meant more control. Moreover, fishermen were increasingly required to act as entrepreneurs and managers, thoroughly plan their fishing year and cooperate in co-

management groups and Producer Organisations (POs). This also resulted in more transparency and openness about quota uptake (Hoefnagel 2002), which reduced free-riding strategies and distrust towards their peers. Another new rule contributed to that transparency: a mandatory auction agreement. This private rule, a gentlemen's agreement between fishermen and traders, stated that fishermen from then on were 'obliged' to sell all their fish through an auction. This agreement led to higher prices, since price undermining illegal landings belonged to the past (Van der Schans 2001).

The co-management system also changed the relationship among fishermen, as they increasingly had to cooperate with their peers. This required that active trust among fishermen had to be established. Groups of fishermen were formed, composed according to their type of vessel/gear/species, region, and fishery organisation. All group members had to be a member of the same Producer Organisations (POs). The Netherlands has had two competing fishery organisations since 1979, when the *Federatie van Visserijverenigingen* split itself from the *Nederlandse Vissersbond*, due to a conflict about norms and values with respect to fishermen's behaviour. The *Federatie* mainly represented larger vessels with more engine power as opposed to the *Nederlandse Vissersbond*, which mainly represented the smaller vessels. Three co management groups operated under the *Nederlandse Vissersbond* and five operated under the *Federatie van Visserijverenigingen*. The groups were rather homogeneous and localised – fishermen lived in the same local community (Hoefnagel 2002) –which meant that trust was very localised

and based on personal and family relations, i.e. 'thick' trust (Putnam 2000). However, this personal and thick trust within the own organisation hampered the institutional trust in the Biesheuvel system as a whole.

As the Ministry perceived the installation of the co-management system to be a risky strategy, due to the lack of trust, they wanted to build in securities. In order to be able to predict and control the behaviour of fishermen, both rewards and punishments were used. An important rewarding measure was a large increase in the sole TAC in 1990. This decreased the discontent fishermen had with the European and national fishery measures and led to greater compliance with quota regulations (Van Ginkel 2005). Other important rewards were an increase of 10% in days at sea, and the possibility of renting and hiring quota throughout the year. The extra days at sea, as well as the extension of the rent market, resulted in more flexibility for fishermen, which led to better economic net results and a better uptake of quota (Hoefnagel 2002).

An important sanction concerned the threat of a capacity reduction if the fishermen would fail to implement the Biesheuvel-proposals within 3 years (Hoefnagel 2007). Finally, the Parliament threatened to take coercive structural measures (a general horsepower reduction) should the participation level of fishermen in co-management groups remain below s75% (Van Ginkel 2005). This came to be known as ''de stok van Mok'' (Mok's stick, named after the 1992 advice of the

commission chaired by Mr. M.R. Mok looking into forced capacity reorganisation) (Van Hoof & Van Tatenhove 2009).

The co-management system was a 'success'; 97% of all beam trawl fishermen joined a co-management group, even though the fishermen were initially reluctant to cooperate. Because of the clearer role division and increased clarity with respect to rights and duties, behaviour was structured and became more predictable. Both national and European governments, Dutch scientists and industry representatives communicated extremely positively on the co-management system and thus reconfirmed its success.

2.4 New challenges (2002–2010)

From 2002 onwards the new discourses of innovation (in particular self-governance and self-regulation) and sustainability further changed fisheries policy and affected the other dimensions of the co-management arrangement. In 2002, the European Union made commitments at the World Summit on Sustainable Development in Johannesburg, which included the objective to 'maintain or restore stocks to levels that can produce the maximum sustainable yield'. One of the four pillars of the Common Fisheries Policy became a long-term sustainable management approach. With the introduction of the 'sustainability' discourse, new pressures were put on the co-management arrangement, resulting in new coalitions, rules, and

resources. For example, the industry was forced to become more open towards 'outsiders' as new actors entered the fisheries arena, such as environmental NGOs (ENGOs), which were looking for new environmental policy instruments, such as sustainability certification. Moreover, because of the increasing European integration, other European countries and their fishermen increasingly played a role in the Dutch fisheries arena. For their part, Dutch fishermen increasingly kept a keen eye on how other European governments were coping with regulations and this influenced their perceptions on the legitimacy of policy, the fairness of regulations and the willingness of fishermen to comply with regulations, as the following quotes show:

''In other countries like Belgium, one feels like the Department supports their fishermen, while here it seems like they want to get rid of us'' (personal communication with a fishermen, 2007).

''There are no inspections in other European countries such as France, England, Ireland, and Scotland. Because these counties do not take compliance seriously, there is no level playing field'' (Hoefnagel & Van Mil 2010).

Fisheries policy is no longer a national affair, as the involvement of new actors meant increasing outside interference with fisheries policy. An important focus within the co-management arrangement has always been 'fishing within quota limits'. The co-management groups had focused largely on this issue, stimulated by the EC. However, the

challenges of today go much further: fishing within quota limits is not enough to ensure a viable future. In the new discourse, the focus was laid on ecosystem impacts, and criticism about large engine capacity and the high amount of discards was being laid against the fishing industry. For the Ministry, excessive engine power and discarding levels had been major problems for a long time, due to difficulties with inspections and enforcement. For fishermen, this had been a thorn in their side, because it had led to unfair competition. One way to solve these problems was to involve the co-management groups in a new arrangement with the aim of increasing compliance regarding engine power in the demersal fleet [59].

This new arrangement focused on control and enforcement and was the outcome of several informal meetings between the Minister and representatives of the industry. An informal agreement was made with the Minister, which mainly contained the option to allow an exceeding of the engine power limit by up to 12.5% per vessel (personal communication with a former employee of the FPB, 2009). Although this meant that once again the European rules were being evaded, the fishermen felt relieved and it brought more calmness into the industry according to the FPB. The fishermen argued that many other European countries were not tackling the issue at all. Fishermen participated in this extension of the co-management system to cover engine power for several reasons. Participation meant that initial costs would lie with the government; a contribution to fair competitive positions for all fishermen in the Netherlands; fear of additional inspections, personal

reasons (tranquillity of mind and religion); and the feeling of being forced to participate (threats of less days at sea) (Hoefnagel & Van Mil 2010).

The fishery representatives nonetheless still partly resisted the extension of the co-management system to engine power and enforcement. According to them the differences in control and enforcement between EU countries were too large, making it difficult to incorporate these measures in the co-management approach (Ens *et al.* 2007), as this would undermine the level playing field (Van Hoof *et al.* 2005). Opinions of fishermen and their representatives regarding the new arrangement reflected new feelings of illegitimacy and distrust regarding the co-management arrangement and the government. Costs have increased for the industry and expectations were not fulfilled. This led to rising feelings of distrust as the following quotes show:

''The Ministry just gives us (as representatives) more tasks to carry out. New regulations need to be implemented and we have to make a lot of effort convincing fishermen to abide by the rules. This is extremely time and cost consuming. We never really wanted the engine power arrangement, but we agreed to it when the Ministry promised to accomplish a level playing field within Europe. However, they did not fulfil their promise'' (personal communication with a representative, 2008).

''The Ministry has always ignored the engine power subject. They have repeatedly mentioned that they lacked the ability and the capacity to monitor

and control compliance. The government is thus not able to handle the rules'' (Hoefnagel & Van Mil 2010).
''The majority of the policy makers at the Ministry with whom I had built up a relationship have left. So, it is not possible to confront them with previously made agreements'' (Hoefnagel & Van Mil 2010).

The increasing lack of transparency (regarding number of inspections, quota uptake, etc.) also resulted in a lack of legitimacy and trust:

''In our group people receive a warning after the first infringement and a fine after the second one. I am in favour of sanctioning the offenders; otherwise there is unfair treatment between offenders and those who abide by the rules. Quota busting still exists, however this is not clear as there are no exact numbers, and co-management groups, AID and Ministry present different numbers. So, we do not know what the groups of the other fishery organisation do, but we do not really trust it'' (personal communication with a representative, 2008).

The co-management system seems to have turned into an implementation body instead of a collaborative body where fishermen or their representatives have an influence on the policy making process. Therefore the legitimacy of the co-management system is diminishing. Moreover, the limits of self-control have become apparent. The initial idea was that the co-management groups were responsible for the inspection and the administration of fines. However, fishermen and

group managers are reluctant to report illegal activities of their peers, because of personal relationships and because they fear to lose their members to another group (operating under the other national organisation):

''When one confronts the offender, it is all over the harbour, the manager is criticized and one runs the risk of losing the member to the other (competing) fishery organisation''(personal communication with a representative, 2008).

Some groups have outsourced the monitoring activities in order to overcome their scruples, but it still remains a difficult task. Another option to overcome this burden is to report illegal activities anonymously to the AID:

''Social control works as follows: Fishermen inform the manager about an infringement and the manager contacts the AID'' (personal communication with a representative, 2008).

However, it is difficult for the AID to respond to these reports:

''I receive reports from individuals about infringements; however it is difficult to follow this, because the vessel will be gone when we arrive there'' (personal communication with an AID-inspector, 2008).

The difficulties with a system of social control were also confirmed by a critical report made by the National Audit Office in 2008. The report stated that: ''In practice the groups do not perform inspections among their members and the only inspections are done by the AID''. The Minister however disagreed with that statement and indicated that vessels that had not signed a private agreement received extra inspections by the AID (Rekenkamer 2008). The Ministry has other options to 'punish' non-participating groups: they are reluctant to grant them innovation subsidies (personal communication with a policy officer, 2007).

2.5 Conclusions

This paper has explored how trust relationships among fishermen and between fishermen and regulators in Dutch fisheries have changed and what the main triggers were for these changes. By adding the role of trust to the policy arrangement approach, it was possible to gain more understanding of the dynamics and legitimacy of co-management in Dutch flatfish fisheries (Liefferink 2006). A change in one of the dimensions (rules, discourses, actors, and resources) of the neo-corporatist arrangement resulted in the development of a co-management arrangement, which in turn affected trust relationships.

Where previously Dutch fisheries policy was organised on a national level (the Ministry and the industry), new actors increasingly

got involved in the arrangements. This has had an effect on trust and legitimacy. Because of the change of arrangements in Dutch fisheries management there is a shift from institutionalised, personal and passive trust towards negotiated and active forms of trust. Until the 1980s Dutch fisheries policy was organised as a neo-corporatist arrangement. The access to neo-corporatist arrangements is limited to representatives of the state and fisheries organisations, and policies are made and implemented jointly based on a commonly agreed substantive discourse. Not only rules for participation are clearly defined but also a neo-corporatist arrangement provides clear rules for negotiation and the search for consensus (Frouws 1997, Van Hoof & Van Tatenhove 2009).

In this neo-corporatist arrangement high levels of personal trust between civil servants and fishermen became visible. Civil servants worked closely together with the fishermen, there was plenty of interaction between them, and fishermen knew the officials by name. In general, trust was passive and institutionalised: fishermen and civil servants shared the same interest and expectations were met. The actors were known beforehand (the Ministry, fishermen, and their representatives), as well as the rules (each policy was consulted with the industry) and the discourse (policy had to add to the economy of fishermen). The result was a highly legitimate fisheries policy.

The image of a corporatist policy sector was severely challenged in the 1980s and this changed relationships of trust between fishermen and government. The NEAFC as a new actor introduced a new rule: the quota system. Although fishermen considered this system as

illegitimate, it had to be implemented by Dutch government. However, continuation of neo-corporatist exchange relations was supposed to be more important than the introduction of a quota system. Because of this the quota system was not enforced in Dutch fisheries management. The result was that outsiders were successfully banned from the neo-corporatist arrangement, and that trust remained passive and institutionalised.

In 1983, the European Commission introduced the Common Fisheries Policy (CFP) and became an important new actor. The Ministry had lost its trustworthiness within Europe, because false information was sent to Brussels regarding the implementation of policy, and enforced the rules very strictly. With the introduction of the co-management system, the Ministry handed responsibilities over to the industry. The neo-corporatist rule to consult the industry about every policy change disappeared. In the co-management arrangement, fishermen were given more control, and increasingly worked together with their peers.

An important conclusion is that the introduction of the co-management system in the Netherlands resulted in forms of active trust among fishermen, because fishermen worked together in co-management groups and had the responsibility not to exceed the group quota limits. It also restored the passive and institutionalised trust relation between fishermen and government, because co-management provided transparency, predictability and more control and flexibility for fishermen.

However, given the institutional setting of fisheries policy risks are faced for the continuation of the co-management system in its current shape as well as for the legitimacy of policy. Although co-management restored trust among fishermen and between fishermen and government, relationships are very fragile. Fishermen have come to regard the co-management arrangement as a way for the government to put more tasks on their shoulders without giving something in return.

Another reason for the scarcity of trust between fishermen and government is the fact that the opportunities for direct observation of elite actors by the general public over extended periods of time are extremely limited, partly due to the democratic mechanism of the ''coming and going'' of elite personnel (Offe 1999). This mechanism was observed while conducting interviews with fishermen in 2003. According to them a sustainable trust relationship with civil servants at the Ministry was not considered possible due to the 'carrousel effect' at the Fisheries Directorate (which had become an official policy). This led to the failure to meet mutual agreements.

Also transparency regarding quota uptake has diminished. It is not published frequently on the internet anymore, as a result of which old sentiments between the two competing fishery organisations have re-emerged. For many times during history fishermen have asked for a better enforcement and control system. An important reason for this is that trust among fishermen themselves was and is still lacking, mainly between the fishermen that are represented by the 'other' national fishery organisation. In this fragmented setting of regional Producer

Organisations and two national fishery organisations institutional trust seems to work only as far as their own organisation. This hampers the development of the institutional trust in the co-management system as a whole, because the co-management groups belong to either one of the national organisations, and representatives are played off against one another ('if you fine me, I will join the other organisation'). A level playing field and the confidence that organisations apply the same rules are particularly important in this case. Having actualised information on the internet regarding the quota uptake of each group can increase that institutional trust.

In sum, the development of a co-management arrangement was an inevitable and necessary step, because of the entrance of new actors, the need to implement new discourses and rules, and the lack of trust between government and industry. But recently it has become clear that the co-management arrangement does not necessarily generate trust anymore, as changes regarding discourses (sustainability and innovation), actors (NGOs), and rules (MSY) are on its way again, putting pressure on the co-management arrangement. In this period of change, when uncertainties arise, active trust between fishermen and government and among fishermen themselves becomes more important.

3

Changing trust relations within the Dutch fishing industry: the case of National Study Groups[3]

Abstract

This paper focuses on changing trust relationships among fishermen following new governance arrangements. The previous 'thick' trust relationships that characterised the Dutch fisheries industry under a neo-corporatist arrangement had resulted in an isolation of local fishermen groups vis-à-vis outsiders. However, under new governance arrangements, in particular the so-called Study Groups, these trust relationships are changing. The establishment of Study Groups, where fishermen from different localities have to cooperate on sustainability innovations in order to receive subsidies, lead to more diversity within the industry, more collaborations across localities and new forms of 'thin' trust. As such, these Study Groups can be understood as

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successful experiments in further opening up of the fisheries community.

3. 1 Introduction

Today many fisheries in the world face a number of problems that endanger the sustainability of their business: low profits, a decline in stocks, inadequate management, ecosystem damages and related public concerns. In facing such problems, the Dutch fishing sector is a typical representative of fishing sectors in many parts of the developed world. Besides economic and social problems, Dutch fishermen increasingly face environmental sustainability criticism from relative outsiders, such as consumers and Environmental Non-Governmental Organisations (ENGOs). In seeking solutions for these sustainability problems the fishing sector increasingly opens up the initially closed fishing industry through further collaboration, both internally (between fishermen from different localities within the Netherlands) as well as with other actors.

This development of opening up and collaboration started already in the nineties when a co-management system was installed (De Vos & Van Tatenhove 2011, Hoefnagel 2002, Van Ginkel 2005, Van Hoof *et al.* 2005). Following this co-management system, experimentation with other new governance arrangements started, all with enlarged collaboration between public and private actors. One of these new

governance arrangements was the introduction of Fishermen Study Groups in 2008. Study Groups consists of a maximum of sixteen fishermen from the same fleet segment but from different regions in the Netherlands, which work together and exchange knowledge. Each group is facilitated by two scientists. The main goals of these Study Groups are to overcome the lack of cooperation among fishermen from different regional areas, and at the same time stimulate and empower fishermen to innovate towards more sustainable fisheries.

However, in order to cooperate and open up to outsiders, trust is required. For long the Dutch fisheries industry has been characterised as a closed community, where trust relationships among fishermen were mainly based on family and locality. Fishermen have always been organised in local, place-based homogenous groups (Hoefnagel 2002), stereotyped by fishermen from other places and regions (and countries). Interactions between place-based groups of other regions, let along with ENGOs, governments and scientists have always been scarce, difficult, conflict-ridden and full of distrust. Fishermen often feel threatened by intrusion and criticism from outsiders. Hence, local groups become fortresses, protecting group members from the outside and continuously confirming who belong to the group and who do not (Meurs 2008). For a long time, this did not cause major problems. However in the current situation, with the increasing demands for cooperation to solve sustainability problems, closed-group behaviour does not function anymore. Study Groups are a key example for this.

This paper focuses on the increasing cooperation between fishermen from different localities and the role that trust plays in this cooperation. The establishment of Study Groups must be seen as part of a broader development that is taking place within the Dutch fishing industry; a change from neo-corporatism and a place-based orientation, towards network governance and national cooperation. In analysing this change, the paper concentrates on the role of trust in this process. Cooperation based on place and family requires a different type of trust than trust necessary in multi-actor networks that stretch across wider geographies. This is far from a one-stop change and various actors still have difficulties with their new roles and trust relations. In the current transitional period old and new elements and forms of trust coexist.

For this research, qualitative methods were applied in a case study research design. In general case studies are the preferred strategy when 'how' or 'why' questions are being posed, when the investigator has little control over events, and when the focus is on contemporary phenomena within a real life context (Yin 2009). The presence of trust in a relationship cannot be asked for directly, but needs to be observed and explored in different ways. As Nooteboom (Nooteboom 2002) states: a pledge of trustworthiness in mere words is cheap and unreliable. Yet, a whole pattern of actions and expressions, and relational signalling can give us important clues (Nooteboom 2002). Hence, by performing observations, formal and informal interviews and a content analysis of various written sources, trust relations were explored.

Empirical data have been collected from 2007 till 2009. In 2007, the preparations for the Study Groups started. Ten meetings were held with government officials, scientists and fishery representatives. These meetings were all observed by the authors. In 2008, the Study Groups were set up and started to function. In 2008 and 2009 (informal) interviews were conducted with ten supervisors of the Study Groups, two government officials and four fishermen representatives. Furthermore, fifteen Study Group-meetings were observed, thereby focussing on interactions (related to trust) among fishermen and between fishermen and scientists. Finally, 120 documents (formulated plans, minutes of meetings, and presentations) were subjected to content analysis.

Theories on trust and social capital form the theoretical basis of our analysis, as presented in the next section. Section three reports and interprets the empirical findings, with a closer analysis of some Study Groups to understand how trust is constructed, maintained and changing within these groups. The paper is finalised with conclusions.

3. 2 From neo-corporatism to governance arrangements

3.2.1. Neo-corporatism in the Netherlands

As in many developed countries, also in the Netherlands agriculture and fisheries have been regarded for a long time as the prime examples of a neo-corporatist system (Kickert 1997). Neo-corporatism describes a well-

defined exchange relation between the state and some acknowledged intermediate interest organisations of stakeholders (Frouws & Tatenhove 1993). In the fisheries neo-corporatists system fishermen interests were represented by (regional/local) Producer Organisations (POs) and the Fish Product Board. And these interest representation organisations exchanged influence in state policies against some degree of control of fishermen in the implementation of state policies and measures.

These organisations were regionally/locally organised and very homogenous, even after the installation of the co-management system in 1993. The POs and co-management groups were/are composed according to the type of vessel/gear/species, region and membership of one of the two national fishermen organisations (Hoefnagel 1999). In this neo-corporatist arrangement fishermen exchanged knowledge locally. They mainly worked together with fishermen from the same village, sport club, family and local PO. Even at sea fishermen from the same community used a particular radio frequency ('scramblers') to communicate privately about where to find the best fishing spots.

Besides the strong regional/local focus in the Dutch fisheries, kinship is at the core of the majority of the fishing firms. Family members know and trust each other, and in an accident-prone occupation this is deemed an important asset (Van Ginkel 2007). Although in some fleets (where the target species are not constrained by quota) also newcomers have entered the profession, one still sees mainly brothers and cousins working together as crew members on board of the

same vessel. The women, retired fishermen and highly educated family members work for the firm ashore. They do the administration, apply for subsidies and visit meetings with producer organisations, while their brothers and husbands go fishing. There is a strong relation between the fishing community at sea and the (fishing) community ashore.

Finally, Dutch fishermen share a number of socio-cultural characteristics that can also be found among fishermen all over the world. Around the world fishermen have to cope with natural environments and face corresponding problems, for instance with respect to markets and prices, and relations with traders and competitors. So, in strikingly different settings, one may encounter remarkably similar ideas among fishermen concerning for instance work ethos, an egalitarian ideology, rhetorics and concepts of independence and freedom (Van Ginkel 2007). This homogeneity formed a strong basis for cooperation and 'community' in times of crises and external pressure. Fishermen groups were mostly composed of fishermen living in the same local community, following economic, cultural and social ties. Consequently, these groups were functional and territorial communities (Hoefnagel 1999).

However, ever since the nineties, the neo-corporatist system is in the process of change and erosion (De Vos & Van Tatenhove 2011). The economic crisis in fisheries, also following overexploitation of fisheries and underutilisation of capital, and the growing political and societal calls for sustainability, opened the closed neo-corporatist system. New governance arrangements started to dominate fisheries policies and

management, where new stakeholders and national and international relations complemented the conventional local fishermen communities (see Figure 3.1). But this process of change is slow and has not been completed, as will become clear in this paper.

3.2.2. Trust in a changing fisheries management system

Trust can be defined as "the expectation that arises within a community of regular, honest and cooperative behaviour, based on commonly shared norms, on the part of other members of that community. Those norms can be about deep 'value' questions like the nature of God or justice, but they also encompass secular norms like professional standards and codes of behaviour" (Fukuyama 1995). Trust is key in any social system; but it is not of a similar nature.

To identify trust relations in the neo-corporatist setting of the pre-1990s, and the changing trust relations when moving to new governance arrangements, the distinction of Putnam (Putnam) in `thick' trust and `thin' trust is useful. Thick trust is based on strong and frequent personal relations, partly of a face-to-face nature. Thin trust applies to new acquaintances and is generalised; it is evident in our willingness to extend the benefit of the doubt to others. Thin trust, unlike thick trust, fosters a willingness to trust people outside of our immediate circle or group (Putnam 2000). Traditionally, trust between fishermen has been largely based on local community, egalitarianism among fishermen, family ties and similar fishing techniques or targeting

similar species, hence 'thick' trust. When neo-corporatism starts to erode and new stakeholders and fishermen from different localities become important in fisheries management, thick trust alone is no longer sufficient, and has to be complemented with thin trust

This distinction between thick trust and thin trust is related to the difference between ''bonding'' and ''bridging'' ties (Putnam 2000). Bonding ties refer to relations among family members, close friends and neighbours in closed networks, such as fishermen from the same region. However, these networks often lack diversity. Bonding ties create dense network clusters and strong but localised thick trust. Meanwhile, bridging ties facilitate access to resources and opportunities that exist in one network to a member of another network (Granovetter 1973). A diverse set of bridging ties within a group increases a group's agency, and diverse group membership is an important element of successful adaptation capacities of a community to new situations. A more diverse group will have the resources needed to address the complex nature of ecological and social problems without exhausting itself (Newman & Dale 2006). The capacity (or social capital) to form bridging ties is assumed to rely on generalised or "thin" trust, whereas bonding ties are associated with more particularised or "thick" trust (see Figure 3.1).

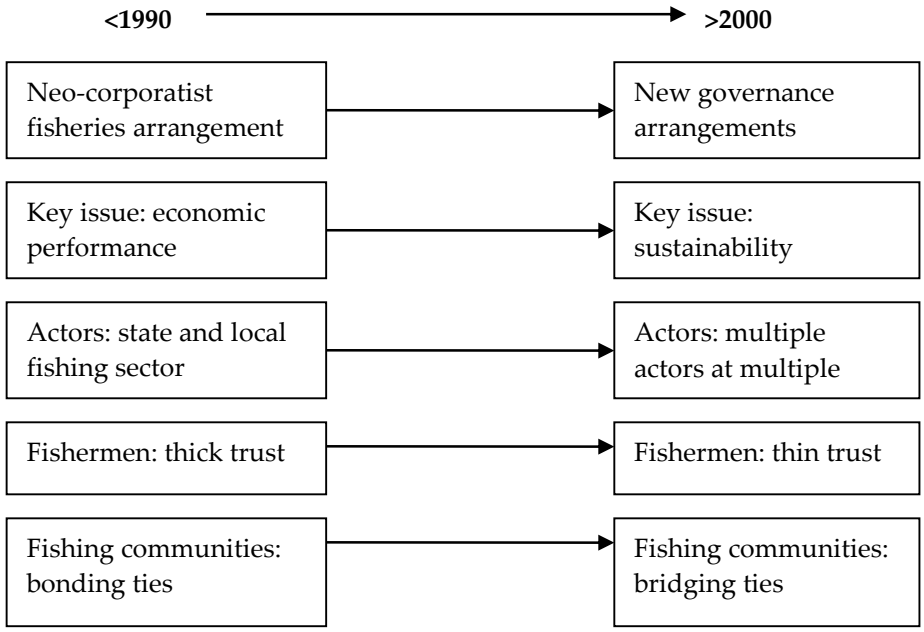

Figure 3.1: From neo-corporatism to new governance arrangements

3.2.3. Building 'thin' trust within Study Groups

Following demands and requirements for sustainability and fishing innovations, government officials, scientists and fishermen leaders widely believe that fishermen from different regions should work together and exchange their knowledge in order to stimulate and disseminate innovations. These new collaborations require thin trust. The Study Groups in the Dutch fisheries industry aim to facilitate and build this 'thin' trust. Such Study Groups do not fit into a neo-corporatist setting of exchange relations between the government and fishermen organisations, as innovations and change are usually made bottom up among hands-on fisherman. Hence, these Study Groups are

part of and fit into a wider development away from a fixed neo-corporatist framework, towards new flexible governance arrangements.

Trust arises on the basis of shared norms, values and practices which people develop in the course of time and that make everyday life predictable. Yet, for newcomers in existing groups or in new situations or new groups, such shared practices and (implicit) codes are unknown or not yet crystallised (Meurs 2008). Study Groups can be seen as more or less protected spaces where the sharing of norms, values and practices is being developed, nourished by mutual concerns and interests of the participants and by the idea that they probably need each other's resources.

In Study Groups, fishermen are forced to collaborate with other fishermen outside their direct circle of thick trust. In regularly meetings and joint practices, shared norms, values and routines are built and a social structure of (bridging) ties is established (Termeer 2006). In that way, thin trust is developed, and ideally a situation emerges where parties are willing to share resources (such as information, knowledge, access, authority) without worrying that the other party will take advantage. In such trust building processes three stages can be distinguished (Nooteboom 2002):

1. Stage of control in the absence of trust. Safeguards are made by contracts, supervision, dependence, or hostages
2. Stage of assessing trustworthiness and developing trust. In this stage, one obtains more knowledge and experience of others, as a basis for broadening limits of trustworthiness.

3. Stage of widening trust, on the basis of mutual identification and the development of shared cognitive frames. Thereby, one may develop empathy for the partner's objectives, actions and weaknesses, and feel affinity.

Thin trust is precarious, much more than thick trust, because the actors are not that familiar with each other and a social structure of strong bonding ties has not been established (yet). In such insecure and complex arrangements, trust needs to be won and actively sustained over and over again. This type of trust is referred to as active trust (Van Tatenhove 2006).

3.3 Study Groups as new governance arrangement

3.3.1. The origin of National Study Groups

Before the official start of the Study Group project in 2008, one group already more or less functioned as a Study Group *avant la lettre*, the *Pulse* (an electric fishing method that is designed to catch sole with less seabed disturbance and forty per cent less fuel consumption than the original beam trawl) Group. For several years an informal group of fishermen interested in pulse fishing had been receiving a subsidy from the Ministry of Agriculture, Nature Conservation and Food Quality for the stimulation of their sustainability innovation and for further cooperation. However, up till 2007 only one fisherman had taken

advantage of the subsidies. The Ministry felt this was both a risk and an inefficient use of subsidies, as preferably the knowledge gathered by that fisherman should be passed on to other fishermen. This had not happened so far. The fisherman had gained a lot of attention from ENGOs and journalists, but not from other fishermen. Lack of trust and jealousy played a role in not disseminating the experiences to other fishermen. So, participating in a group became a necessary precondition in the subsequent rounds of ministerial innovation subsidies.

The *Pulse* Study Group became an important learning experience for the Ministry. The Ministry felt it had spent too much money on a single technique and a single fisherman. More variety and better diffusion was welcome. This became even more obvious when the pioneer sold his vessel after years of subsidising and experimenting. Hence, from 2008 onwards, in total twelve fishery and two aquaculture/fisheries Study Groups were installed and subsidised (see Table 3.1). The Study Groups were set up for a period of seven years, and funded both by the European Commission and the Dutch Ministry for Agriculture, Nature Conservation and Food Quality. The aim was to enhance the innovation, cooperation and exchange of knowledge among fishermen from different localities. The Ministry promoted self-regulation and empowerment (*"It has to be their own instrument"*) for better policy outcomes of the environmental and economic sustainability of the sector.

The Study Group participants were considered by both the representatives of fishermen and the Ministry as frontrunners. Their task

was to develop best practices that could disseminate and diffuse to the wider network of fishermen. In order to facilitate this process, each Study Group had to be 'supervised' by two scientists with different disciplinary backgrounds (one economist/social scientist and one biologist). The supervisors had to provide knowledge, and to facilitate the meetings and the process of knowledge exchange among fishermen and between fishermen and others. They had to intervene when necessary, stimulate reflexivity and openness (create a trusting environment), answer (in interaction with fishermen) research questions and provide the participants with adequate, truthful and timely information that would help the Group achieving its goal.

For setting up a Study Group and receiving governmental and EU subsidy strict regulations had to be followed. These regulations aimed at transparency and goal achievement, which would gain legitimacy and trust of both participants and outsiders (politicians, ENGOs, non-participating fishermen). In order to be eligible for subsidy a Study Group had to submit a project plan in which the participants had to specify the aim of the group, related to three criteria (cost reduction, yield increase and reduction of ecological impact). Scientific supervision and cooperation between regions were necessary preconditions. And subsidies were publicly announced in advance.

Fishermen from all fleets operating in the Netherlands were stimulated to set up a Study Group. The Ministry aimed to have Study Groups for each fleet segment, and in that way not to favour anyone in particular. In practice, the Study Groups were gathered around a

specific theme (e.g. entrepreneurship), new fishing techniques that could replace the traditional and controversial beam trawlers (pulse, outrig, twinrig, flyshoot, and sumwing), passive fishing techniques (grey mullets and sea bass and sole), aquaculture (mussel seed collection and oysters) or fishing area (inland fisheries and lake fisheries). Each Study Group consisted of six to sixteen fishermen and two facilitators. Later on other stakeholders were invited as well (e.g. banks, fishery organisations, ENGOs, supply chain partners, politicians, directors of shipyards and gear design companies, thread suppliers and chefs). However, this only happened when trust was present between the fishermen. Hence, the groups were very diverse and represented the increasing focus on diversity in the Dutch fishing industry. For some segments (e.g. gill net fishing on mullet and sea bass), who had always felt neglected, this diversity policy was a welcome initiative and opportunity.

After the official launch of the Study Groups project by the Ministry, in which fishermen were invited to submit a plan, mainly 'traditional' actors, such as representatives of the two national fishery organisations, took the initiative to submit plans. They expected fishermen not to be very proactive (*'If we do not take action, nothing will happen'),* and also wanted to stay in charge. This was followed by initiatives from scientists, consultants, fish auctions, and accountants. These actors arranged meetings for fishermen where the idea of Study Groups was introduced and where fishermen were encouraged to participate. Usually, a small, homogeneous network (e.g. a combination

of fishermen and representatives or fish auctions which knew and trusted each other) took the initiative and invited fishermen from other localities to join, as they were obliged to.

3.3.2. Thin trust and bridging activities through Study Groups

In order to understand the importance and complications of building thin trust in Study Groups, in this section the formation process of five Study Groups is analysed in more detail. Together these five Study Groups are representative for the 14 Study Groups that have been established in the Netherlands since 2008.

The Pulse Study Group

The Pulse Study Group is formed by five fishermen from three different regions (Texel, Stellendam/ Goedereede and Urk). The establishment of this group was stimulated by the designer/producer of the pulse technique. He wanted to continue with the production of gears. The five fishermen got recruited by the foreman of the *Federatie van Visserijverenigingen* (the largest one of the two national fishery organisations). These fishermen also had shown interest at several meetings on pulse techniques. The foreman became the chair of the Study Group and his son was one of the fishermen who received a pulse subsidy.

An important goal of the pulse fishermen is to apply for a sustainability label. However, this is a sensitive issue for them. On the

one hand they would like to continue their company and they are aware of the fact that they have to change fishing routines in order to accomplish that. But they are reluctant to damage the (Pearl Harbor Natural Resource Trustees) relationship with and the position of fishermen (relatives and friends) that are still using the beam trawl. This is considered a true dilemma. They do not want to communicate explicitly that the pulse fisheries is better than the beam trawl, also because the beam trawl is what made the flatfish sector big.

	Study Group	Origin	Main actors	Issues of trust and bridging
Alternatives for the beam trawl				
1	Pulse (electric fishing gear) on sole and sumwing	First Study Group. Network already existed, subsidy from Ministry. Establishing a group was compulsory. Gear designer took initiative	5 fishermen (Texel and Urk)	Fishermen from different localities work together. They share enthusiasm in this. Previously only one fisherman experimented with the technique (with subsidy). He was focused on bridging with NGOs, but due to the Study Groups he is working with other fishermen again. The group was chaired by a national representative, and a gear designer also participated. However, later it was decided by the fishermen that both had to leave the group, because of hidden agendas. Also a new gear designer was not welcome as a member of the group, although he stimulated the group again with new ideas. A common trip to France was good for the trust building process. Information regarding nets was exchanged. Role of pioneer is substantial in creating trust between fishermen
2	Flyshoot (beat technology) on goatfish, gurnard and squid	Initiated by auction and three fishermen from Stellendam (South)	6 fishermen from two regions (Stellendam and Urk. Independent chair (known by auction)	Cooperation between small scale experienced fishermen (Brander & Burke) and large scale newcomers (Stellendam). Initiated by auction and fishermen from Stellendam. The latter needed fishermen from Urk (more experienced) and invited them. In order to build trust other actors were excluded: fishermen fishing under foreign flags, large companies and representatives of fishermen organisations. Rules regarding privacy were signed by the participants. A common study trip to Iceland stimulated trust building process as well as did the independent chairman. The fishermen do not feel represented by the organisations and wanted more awareness by chain partners and customers regarding their technique and products. They make information bulletins. A foundation was established.
3	Respon sible entrepre	Follow up of existing Urker	10 fishermen from one locality: Urk,	A group of Urker fishermen (from different Producer Organisations) work together and exchange more knowledge than previously.

	neur ship	network	and accountants (chair)	A 'new' actor – an accountant – stimulated cooperation within the locality by focusing on finances. Initially, a beam trawl Study Group was set up by a national representative, but this did not work. The assistance of the accountant made it easier to communicate and compare differences between the companies, especially regarding fuel consumption. They made a brochure for other fishermen with fuel saving instructions. A privacy statement was signed among the participants to build initial trust. Spin-off to fishermen at other localities so far only in words.
4	Outrig fishing on plaice (and sole)	Two outrig fishermen from two localities applied and received an innovation subsidy. The Ministry recommende d to form a Study Group.	8 Dutch fishermen from Texel and Urk + 3 Belgium fishermen	Two fishermen from different localities received a subsidy. They shared similar interests on outrig fishing and had met each other at sea. Their representative was not interested in helping these two. Scientists both in the Netherlands and in Belgium stimulated cooperation with other fishermen. The group exchanged information on very practical and technical issues. Meetings took place in different localities, which stimulated the cooperation across localities.
5	Transi tions in the Southern part of the North Sea – sumwing	Initiated by the Director of United Fish Auctions, a bank employee and director of ship yard.	10 fishermen from one region: South	This group work together at present more than before, but not yet across regions. Many stereotypes exist regarding this southern region. Experimenting, discussion and knowledge exchange mainly on fishing techniques led to more trust within the region. In the south they use different types of fishing grounds and target different species, leading to different knowledge interests regarding for example fishing gears. However, cooperation with the Responsible Entrepreneurship Study Group is at hand by late 2009, as both mainly use the beam trawl and information exchange is important. Cooperation with the pulse group is also at hand as fishermen and designers want to combine both techniques.
6	Twinrig	A working	12 fishermen	A market research (abroad) for plaice was

	fishing on plaice	group on twinrig already existed in 2008. Mainly representatives	from three different localities and some representatives (PO, fish processors and North Sea Fish Centre, Urk	executed by scientists. Results were not very positive for plaice. Group is diverse; some have more experience than others. Some vessels joined the Ekofish Group that was MSC certified in 2009. Image building on twinrig is an important goal for this Study Group. They want to prevent comparisons with the controversial beam trawl.
7	Twinrig fishing on nephrops	A working group on nephrops already existed. Mainly representatives	PO and auction. Innovation subsidy was approved.	Fishermen are not yet involved and a Study Group still needs to be established. Neo-corporatist frame still dominates in this Study Group. Surprising that innovation subsidy was approved without the participation of fishermen
Passive fishing techniques				
8	Gill net fishing on sole	Initiated by the Secretary of the *Vissersbond*. Also stimulated by *Kotteroverleg* (a group of different local industry representatives)	6 small scale fishermen from different western localities. Secretary of one of the National Organisations chairs.	Small scale fishermen from different localities worked together in this Study Group. They share similar ideas regarding the way to reduce effort and they were already in the process of attaining the MSC label (with other fishermen outside this group). Large scale fishermen, however, do not participate in this group and there is a split between them as they went for another label: Friend of the Sea. They have different perceptions on how to reduce effort.
9	Coastal fisheries on grey mullet and seabass (small scale)	Initiated by a fisherwoman ('Good Fishermen' network), local sustainability label.	Fisherwoman (chair, North) 5 fishermen (West and South) One large meeting to transfer knowledge to remaining fishermen	The fisherwoman already had a network that continued to exist. Fishermen from other regions were invited and joined. They share ideas on small scale fishing (small group in the Netherlands). The group has a common enemy; the anglers. Relationships with professional anglers are difficult. Because knowledge regarding fish stock and market is not available, they blame each other for changes in stocks and prices. Cooperation with scientific tagging research projects stimulates cooperation between the

				fishermen. They are not represented by organisations and the Ministry does not stimulate research and information gathering on this fisheries. Therefore, the fishermen are eager to exchange knowledge with fishermen across localities and regions (regarding prices, stocks, market etc.)
Fresh water fisheries				
10	Inland fisheries	Initiated by local representatives	Fish Commodity Board, Combination of Professional Inland Fishermen, PO, Stock Management Committee Later some fishermen	Fishermen had to reduce eel catches, and made a voluntary plan at the request of Ministry. The plan was rejected and fishery closed down for two months. Fishermen lost trust in Ministry and relationship was completely disturbed. Distrust also regarding one scientist from scientific institute. High involvement of local representatives. The goal of the Study Group is not yet clear.
11	Lake fisheries	Establishment was prevented by secretary of national organisation	Not yet defined	The Secretary advised the scientists not to start a Study Group, because of the problems in the eel industry. The fishermen are according to him distrustful, negative and defensive.
Aquaculture/fisheries				
12	Mussel Seed Collectors	Pioneer collectors (PD) working together with biologists.	6 collectors	An intention statement was signed. The group consists of pioneers that are pro-active towards policy. They do not feel represented by Producer Organisations and the Study Group became new interest group. However, the Ministry is not in favour of this development. It is not clear what is the status is of the Group according to the Ministry and the Fish product Board. There is distrust towards them, because the policy advises of the Study Group were not incorporated in the new Ministerial policy. There is also tension between small (cultivators) and large scale (trade) companies
13	Oyster culture	Initiated by the board of the Dutch	Oyster cultivators Invited:	Issues that were important to the cultivators and sector as a whole were particularly addressed. Shared concerns for the

		Oyster Association. After a presentation at a general assembly, applications followed.	Ministry of Transportation, WWF, local high school	impairment of the industry lead to synergy. Mix of large and small companies with an overlap of interest leads to increased knowledge exchange. There was difficulty with information exchange among many small scale oyster cultivator in the beginning. Then, one of the large scale cultivators got involved in the Study Group and brought new energy, because it made the small scale companies feel more represented and powerful. Distrust exists towards government and policy making. The Study Group wants more influence, which is part of their motivation.
Remaining fisheries				
14	Shrimp fisheries	Follow up of previous project – '3x5', subsidised by VIP. Representatives took the initiative	11 fishermen Local representative as chair	Despite local/regional differences, they cooperate. Some fishermen worked in different localities and can dismantle stereotypes. A privacy statement was signed among the participants. Distrust exists towards trading companies, because of prices and mixing of tropical and north sea shrimp. The Study Group is interested in MSC labelling; they have to solve issues regarding disturbance of the seabed and discards. They are working on that at present (2009), however they have different perceptions on how to do that. The cooperation between northern and southern localities remains difficult; some fishermen have left the group, others have joined.

Table 3.1: Fourteen Study Groups and their origins, main actors and issues of trust

The development of the Pulse fishing has been a difficult process. The European law is still not clear whether or not electric fishing is going to be approved. Although the voltage is minimal, some insecurity remains regarding effects on other species. Every year dispensation is provided by the European Commission, resulting in insecurities for both the fishermen and the producer of gear. Moreover, for quite some time the fishermen felt that the producer failed to innovate and only when another gear designer/producer stepped in with new plans, some fishermen became motivated again. However, different interests and opinions between the designers/producers split the group in two. In order to rescue the Study Group the fishermen asked the designers/producer to leave the group. Also the foreman was asked to leave due to double interests (being accused of favouring his son). Only recently, the fishermen seem to be able to cooperate and build trust between them.

The Flyshoot Study Group

The Flyshoot Study Group consists of sixteen fishermen that originated from two different localities (Stellendam and Urk). The Study Group was initiated by the United Fish Auction (UFA) and three fishermen from Stellendam (the auction is also situated at Stellendam). A consultant, hired by the UFA, chaired the meetings. Because of the national-coverage rule, they invited Flyshoot-fishermen from Urk, who were more experienced with this technique.

The Flyshoot technology is a beat technique, a potential sustainable alternative for the beam trawl, although targeting non-quota species. The technology is still experimental and in need of improvement and optimisation, especially for less experienced fishermen. Besides technological improvement, the Study Group aimed to get greater publicity and thus increased market value for the fish caught with this particular method, especially among ENGOs, trading companies, suppliers, retailers and consumers. The increasing diversity of fishing technologies (and related ecological consequences) within the fisheries sector is not yet commonly known by these actors.

Cooperation between the Flyshoot fishermen from different regions proved to be far from easy. The first meeting of the group was initiated by the auction and fishermen from Stellendam. They had brought with them local representatives of fishery organisations and teachers of fishery schools. This caused distrust amongst the Urker fishermen, especially with respect to the representatives of the fishery organisations who they addressed as 'background figures'. The Urker fishermen feared that remarks made during the meetings would later on be used against them by these representatives. The next meeting, the Urker fishermen brought an equal amount of representatives with them to the meeting. Subsequently, it was decided that representatives were not entitled to participate in the meetings, but were provided information after the meetings. On common ground they also excluded boat owners that were fishing under foreign flag, as well as large

shipping companies, as they wanted to promote Dutch, small family firms.

The participants were initially reluctant to share information, especially with respect to their own fishing spots. The Urker fishermen are more experienced and feared losing their competitive advantage over the fishermen of Stellendam. A common trip to Iceland (to institutes where similar technologies were used, to foreign auctions, customers and fishermen, and to places where gears could be tested at full scale) proved key in building 'thin' trust and sharing information between the two groups of fishermen. From then onwards, mutual experiences were better shared and best practices were developed, and cooperation became easier. It helped that the fishermen from this Study Group did not feel represented by their Producer Organisations, but rather saw themselves as representatives of a new fleet segment. They were experimenting with new technologies and had felt underrepresented in the national fishery organisations and producer organisations, which were still largely dominated by (the interest of) beam trawl fishermen.

The Shrimp Fisheries Study Group

The Shrimp Fisheries Study Group consists of eleven fishermen from three different localities. Fishermen from one locality, though, appeared to be dominant (Wieringen). The chairman of the Group is a local representative of this village. Part of the eleven fishermen were previously involved in a subsidised innovation project (named '3x5'),

where they had been working towards Marine Stewardship Council (MSC) certification. Economic aspects such as calculating the cost price, play an important role in this group, besides more technical innovations directed at sustainability.

In this Study Group, collaboration between fishermen from the three localities proved difficult. Fishermen from Lauwersoog (north-west) distrusted fishermen from Wieringen (north-east) and from Stellendam (south). The northern and southern fishermen differ in many things. The southern fishermen have bigger vessels and therefore use more horsepower than the northern fishermen. A northern fishermen typically claimed: ”Behind the dyke they cannot be trusted anymore.” The fishing seasons also do not run parallel, which further complicated the relationship. They blamed each other for being unsustainable, for disrupting the market, and for using too much horse power. At one point a fishermen from Lauwersoog phoned the Inspection Service claiming that fishermen from Stellendam were violating the law by exceeding the maximum amount of horsepower allowed (which is 300). The Inspection Service checked one of the fishermen (also a member of the Study Group) and he was clean. But it caused major distrust and the relationships were heavily disturbed.

However, also positive things happened in this group. It was actually the first time fishermen from these three localities cooperated in one group. The southern fishermen attended every meeting, even though they had to travel three hours. Moreover, when a couple of fishermen from Lauwersoog were discussing the irresponsible

behaviour of the Wieringer fishermen, one of the Lauwersoog fishermen was able to correct this stereotype, as he had been fishing under a Wieringer captain. This proved an essential turn in the construction of 'thin' trust among fishermen of the three localities. Their shared task and interest to make shrimp fisheries more sustainable further added to growing trust. But differences in opinion remain, mainly with respect to the southern fishermen.

Gillnet fishing on sole

This Study Group was initialised by the secretary of the *Vissersbond* (the most centralised of the two national fishery organisations). The *Vissersbond* also took the initiative for two other Study Groups; Entrepreneurship and Shrimp Fisheries. In the *Kotteroverleg* (a consultation group where both national organisations are present) it was decided that gillnet fisheries was one of the main topics in need for innovation. Gillnet fishing was severely criticised the last years due to porpoises being killed and found cut into pieces ashore. It was however not clear which fishermen were responsible for this (fishermen from the Netherlands or abroad; and what type of fishery). Following negative publicity, the interests of gillnet fishermen were further promoted in the Regional Advisory Committees (RACs) and consultations with the Ministry of Agriculture, Nature Conservation and Food Quality and ENGOs improved. Subsequently, the image of the gillnet fisheries improved and a management plan was written. One of the aspirations of this Study Group became obtaining the MSC label.

The Gillnet Study Group on sole consisted of five fishermen, two ENGO-representatives, two fishery representatives (representing the two national organisations) and a representative of the national federation for anglers. These stakeholders were already involved in the MSC process and continued this in the Study Group. Later on the constituency of the Study Group changed, as the Study Group principally aimed for cooperation between fishermen. One of the representatives became the chairman of the Group and took up a more independent role. The other representative left the group as he was representing several interests at the same time. . The ENGOs and the angler representative also left the group, and were only present at meetings where stakeholder consultation for the MSC assessment was required.

The fishermen originated from different localities, but one important place was underrepresented: Urk. This was due to a difference in opinion regarding the maximum amount of nets that could be used in a sustainable fishery and the installation of a license system in order to limit the entrance of new fishermen. The small scale fishermen from the Study Group agreed that 300 nets was the maximum, which was equal to the ENGO advice. It became a condition in the MSC assessment. The large scale fishermen from Urk (and from IJmuiden) refused to limit themselves voluntarily, because of negative experiences in the past: in their view voluntary limitations always lead to regulations. A split became apparent and the Urker fishermen applied for (and obtained) another label: Friends of the Sea. The ENGOs did not

support this label and considered these fishermen to be unsustainable. Regarding the license system, a warning letter was sent to the Ministry. When new regulations on the amount of nets were introduced by the Ministry, the Study Group got blamed for by the large fishermen.

Although the small scale fishermen excluded the large fishermen, they remained indecisive on their own course and still preferred collaboration with the group of twenty-four large fishermen. While they had different opinions, the small fishermen would need collaboration of the large ones for other activities. And although ENGOs tried to push the Study Group forward and even rewarded them with a green label in their Good Fish Consumer Guide, the fishermen stated:"We are still fishermen, and we are not better than they are." The egalitarian ethos remained important.

Mussel Seed Collectors (MZIs)

The rationale behind the establishment of a Study Group for mussel seed collectors (*Mosselzaadinvang installaties:* MZIs) was the need to optimise this technology in order to cope with the increasing difficulty to sustainably fish mussel seed. Fishing mussel seed causes damage to the seabed and in 2006 the Council of State (the highest court in the Netherlands) restrained the mussel seed fishing, which was inconsistent with what was promised earlier by the Minister. By 2007, the Netherlands had seventeen MZI-users. The goal of the Study Group was to increase the volume and amount of mussel cultivators using MZIs, partly by using existing plots more efficiently (double use).

Experience with the grow-out system and different type of locations should be acquired, and the double use of plots should reduce ecological disturbance and at the same time provide newcomers space.

Several of the larger mussel cultivation companies had already been experimenting with MZIs since 2001. In 2006 they received subsidies from, among others, the Fisheries Innovation Platform (a platform consisting of ENGOs, government and scientists that subsidised innovation projects) in order to setup a pilot (labelled IMOZA) in cooperation with biologists. Together with a biologist one of the participants of this pilot project subsequently initiated the Study Group. In their perception they had already been working as a Study Group since 2001 and perceived themselves as the pioneers. An invitation was sent to all cultivators, and six showed interest to participate (three of them participated also in IMOZA). An important aim of the Study Group was to provide the Ministry with policy advice.

By the end of 2008 the government was still working on a policy with respect to mussel seed collection, although a new policy was supposed to be in place already in 2007[4]. Licenses for the collection of mussel seed expired in the end of 2008 and collectors were afraid everyone had to start again from scratch in obtaining a license. The Study Groups perceived the current policy making process as illegitimate. In their opinion, they had made investments and shared

[4] The process is delayed due to extreme carefulness from the part of the Ministry with respect to the licenses, as the Ministry does not want to be summoned to court again. They want to avoid any idea of arbitrariness.

knowledge and now they wanted something in return. As the ‘pioneers’ of the MZI, these cultivators claimed to have the oldest rights when it comes to the designation of plots for hatcheries (to be done in the near future).

These cultivators distrusted other potential and recently started mussel seed collectors, because they perceive them as passive competitors (waiting for the government to make policy instead of being proactive) and making use of their knowledge without paying for it. However, the Study Group participants were obliged to disseminate the knowledge they were developing within the Group. Therefore, a meeting was organised for the remaining mussel seed collectors and other interested parties. The program was made beforehand with the participants, however, the Study Group members were reluctant to speak, because their bosses (directors of the companies) were present in the room as well. As a consequence, the facilitator had to answer all questions posed by the audience.

Participants in the Study Group perceived the Study Group as a way to influence policy making and to express their opinion without being represented by the 'wrong people'. These participants do not trust representatives of Producer Organisations (POs) and the Fish Commodity Board to represent their interests, mainly because the common interest of POs has always been mussel seed fishing instead of the collection of mussel seed. Mussel seed fishing already exists since the nineteen century and the majority of PO members is doing that. Collecting seed is a new activity, an innovation. So, the Study Group

members perceived themselves as the representatives of a new activity. However, Study Groups are not supposed to create and represent new interest groups. The Ministry does not want to discuss issues with individual members or informal groups, but prefers the sector to present a single vision. So, when the political and policy process of MZI designation was finalised early 2009 without paying attention to the advice of the Study Group, the facilitators had a hard time motivating the Study Group participants to continue.

3.4 Conclusions

In the Dutch fishing industry a shift is taking place from neo-corporatism to new governance arrangements. This paper focussed on how this shift changed cooperation among fishermen. Study Groups, where fishermen work together across different localities to obtain state subsidies for advancing sustainable fisheries, proved to be part of the new institutional arrangements that facilitated fishermen towards national – instead of just local – collaboration.

In order for local fishermen to work together with relatively 'outsiders', a certain amount of trust is required. But the required thin trust is of a different type than the thick trust dominant in neo-corporatist arrangements. This thin trust was facilitated and created in Study Groups. Study Groups developed various mechanisms to create a trusting environment. Some Study Groups excluded fishermen with

(too) different values and thus created new homogeneous groups, although now not along lines of locality and family. New homogeneity and possibly new (future) 'thick' trust were visible in attitudes towards policy-making, ideas on representation, small scale against large scale fishermen, Dutch small family firms against larger shipping companies fishing under foreign flags, etc. Other groups created trust by agreeing on secrecy regarding fishing spots or financial data, by formulating a common goal and interest (MSC labelling or policy changes), or by identifying a common enemy (angler fishermen). In the Study Groups facilitators and independent chairmen contributed to the creation of trust between fishermen, by actively denying stereotypes. This was also done (more effectively) by fishermen themselves, as illustrated in the Shrimp Fisheries Study Group.

Building thin trust needs to be accompanied with active trust. When trust is thin, it is vulnerable and has a higher risk of fading away, and it must be actively confirmed over and over again, especially in the beginning. Study Groups did exactly that. With the obligation to meet at least five times per year, Study Groups facilitated and enhanced face to face contacts and direct communication (instead of via representatives) between fishermen from different localities. Joint study trips abroad led to mutual experiences, which enhanced trust relationships. Study Groups enabled fishermen to exchange knowledge regarding the issues they had prioritized. Previously, representatives, scientists and policy makers imposed their ideas upon fishermen, too often resulting in

unrealistic – and thus unfulfilled – expectations and hence feeding into distrust.

Although Study Groups, as a new governance arrangement, have stimulated bridging ties and cooperation among fishermen from different localities, old elements of the neo-corporatist system continue to exist next to these new elements. Many Study Groups were initiated by representatives, and sometimes these representatives hampered innovation (e.g. the Gill Net group). In the Entrepreneurship Study Group, the issues suggested by the representative who started the Study Group did not really match the demands of the fishermen and the group collapsed. In other groups fishermen found it difficult to step out of their local bonding ties. And it remains to be seen to what extent and how quick the successful Study Groups of progressive frontrunners will manage to reach the more conventional fishermen.

Still, it makes sense to conclude that the Dutch fishing industry is changing from a set of rather closed communities with local and egalitarian characteristics, towards a national network of more diverse fishermen, organised along very different lines and opening up to relative outsiders with different values and opinions. Study Groups can then be understood as experimental gardens, where more national cooperation, thin trust and diversity of networks are created. This is most likely to be a favourable environment for extending cooperation to other actors, such as ENGOs and supply chain partners, which forms a next step in constituting a modern governance system for a sustainable fishery industry.

4
Far more than market-based: Rethinking the impact of the Dutch *Viswijzer* (Good Fish Guide) on fisheries governance[5]

Abstract

The sustainable seafood movement has given greater credence to NGO involvement in fisheries governance through a series of 'market-based' tools and strategies, including consumer awareness campaigns and seafood certification schemes. Despite their proliferation in recent years, we argue that the market-based translation of consumer demand directly steering fisher's towards more sustainable practices limits our understanding of wider patterns of interaction that these tools can engender. Using the case of the Dutch Good Fish Guide or *Viswijzer*, we contend that market-based tools can be effective in creating both horizontal and vertical 'spaces of interaction' between key actors in the Dutch fishery sector. We conclude that while market-based impacts may

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be negligible, the *Viswijzer* presents a powerful communicative instrument which has succeeded in fostering more face-to-face interaction and deliberation between otherwise disparate actors. Constructive collaboration between NGOs and industry can therefore create a requisite level of trust in the transition towards a sustainable fishery.

4. 1 Introduction

It is increasingly accepted that that many of the world's commercial fisheries are in a state of crisis, with an estimated 80% of fisheries are fully or over exploited (FAO 2009, Gray 2005). In response to this crisis the fishing industry and the state have drawn into the NGO-led global 'sustainable seafood movement' (Illes 2007, Jacquet & Pauly 2007). Representative of a wider process of political modernisation in environmental governance (Arts 2002), the sustainable seafood movement has mobilised new patterns of civil society participation and market influence at all levels of policy-making. NGOs are increasingly involved in governance through what they refer to as market based tools, including consumer awareness campaigns, boycotts, certification schemes and seafood guides see (Illes 2004, Roheim & Sutinen 2006). In doing so they have become central actors in a wider shift to defining 'new' quality grades and standards (Busch & Bain 2004) which set a new sustainability yard stick for the world's fisheries.

In the United States, but also in Europe, an emerging alliance of environmental groups has driven a series of sustainable seafood campaigns aimed at consumers as a new environmental protection strategy. Representative of a wider consumerist turn in environmental governance (Spaargaren & Mol 2008), and reminiscent of debates around sustainability in wider agro-food networks (Konefal *et al.* 2005, Marsden *et al.* 2010), these campaigns aim to manipulate market demand for sustainable seafood by turning shoppers into politically engaged citizens. To formalise this consumerist turn, more than 60 such market-based tools have emerged for sustainable seafood, each with their own set of grades, criteria and standards (Jacquet *et al.* 2009, Roheim & Sutinen 2006).

In theory, these 'market-based' governance tools by-pass the traditional political problems of strengthening fishery regulation (Illes 2004), by democratising concern, raising consumer awareness, changing market demand, and ultimately reducing fishing pressure on overexploited or sensitive species. However, as Jacquet and Pauly (Jacquet & Pauly 2007) argue, while market-based approaches have demonstrated a large degree of 'horizontal agitation' between NGOs, industry and the state, there is very little evidence that this leads to vertical pressure through the market to change fishing practices.

The abandonment of political process in favour of the market is largely critiqued as leading to few (if any) changes in fishing practices because of too much mislabelling of fish by retailers, too much misleading information, and too many inconsistencies between

competing criteria and standards (Gulbrandsen 2009, Jacquet *et al.* 2009, Jacquet & Pauly 2007). Given these challenges, should market-based tools be abandoned? Or from a more nuanced standpoint, does the close attention on the direct impacts of these tools to veiling their potential as communicative instruments? By changing this focus it may not be so much a matter of whether horizontal agitation will *give way* to vertical downward pressure on fisheries (see Jacquet & Pauly 2007), but rather how they can engender new interactions within a wider set of embedded governance relationships. As such we examine the impact of these tools in creating cooperation and trust between NGOs and fishermen, two actors that have historically operated at a large social distance.

Our analysis focuses on the NGO-led Dutch Good Fish Guide (*Viswijzer*), as an example of a market-based tool applied in global 'aqua'-food industries. We analyse the role of the *Viswijzer* as a communicative instrument in the sustainable seafood movement, and more specifically its role in creating what Bush (Bush 2010) refers to as new spaces of social interaction between key actors in the Dutch fishery sector – including NGOs, the industry and government. As such, we examine the ways in which the *Viswijzer* has been able to forge new 'horizontal' spaces of interaction between fishermen and NGO actors, and the extent to which deliberation and agitation within these spaces of interaction has influenced the degree of trust in decision making around sustainable fishing. The importance of agitation in more 'vertical' spaces of interaction between fishermen, the state, wholesalers, retailers and

auction houses are dealt with in other research (De Vos & Mol 2010, De Vos & Van Tatenhove 2011).

For this research, we adopted an historical perspective to the development of the *Viswijzer* from 2004 to 2009 by tracing out the key changes to the information presented on the wallet cards (a printed guide summarising the sustainability classification), and also the type of interactions and level of trust between key industry, state and NGO actors. The presence of trust in a relationship cannot be asked directly, but needs to be observed and explored in different ways. As Nooteboom (Nooteboom 2002) states: 'a pledge of trustworthiness in mere words is cheap and unreliable'(Nooteboom 2002). Yet, a whole pattern of actions and expressions, and relational signalling can give us important clues. Such clues include whether actors have positive expectations of one another, if they share sensitive information, are willing to take risks, or demonstrate reciprocity. Following this design, information for the study was collected through ten semi-structured interviews with fishermen, three NGOs, the Dutch Fish Product Board and the Ministry of Agriculture, Nature and Food Quality. This data was complemented with a content analysis on over fifty newspaper articles and documents of the Dutch parliament related to the four *Viswijzers*.

The next section starts with an introduction and discussion of the conceptual framework of spaces of interaction, interactive governance and trust, followed by two sections presenting the empirical cases of the four *Viswijzers* and three related events which we will analyse in more

detail. We end with a discussion whereupon we draw our main conclusions.

4.2 Theoretical framework

4.2.1. Spaces of interaction and interactive governance

Similar to developments that have occurred in other sectors, the fisheries industry is facing a process of political modernisation. This refers to structural processes of changing interrelations between state, market and civil society, and to new conceptions and practices of governance (Arts *et al.* 2006). As a result, numerous non-governmental organisations (NGOs) have emerged on the local, national, and global level, often by-passing the state in their attempts to influence policy making and implementation (Van Leeuwen 2010). As variously noted in wider agro-food network research (Bingen & Busch 2007), NGOs play an increasingly important role in creating and regulating private quality conventions around product quality, including sustainability. The same is increasingly so in fisheries through the third party certification, like the Marine Stewardship Council, and recommendations lists such as the *Viswijzer*.

The various actors that constitute market and civil society epistemic communities do not operate in isolation in this process of political modernisation. Instead, as outlined in Kooiman's (Kooiman 2003) interactive governance theory, they are embedded in governance

networks that are both constituted by and instrumental in facilitating social interaction. In particular Kooiman's ideas elaborate the interrelationship between broadly defined groups of market, civil society and state actors and their collective response to diverse, dynamic, and complex societal issues such as sustainable fisheries (Kooiman & Bavinck 2005). The strength of his approach is that he draws attention to understanding the diversity and type of governance interactions, and in doing so transcends a purely sectoral approach to governance to illustrate networks comprised of novel inter-sectoral, public-private partnerships and arrangements.

As illustrated by Mol (Mol 2006b), the conventional powers of (state) authority in environmental protection are partly replaced by informational resources, flows, and processes in new governance arrangements and networks. Kooiman argues that these networks are fostered through governing instrumentation, including 'images' and 'instruments'. Images are a frame of reference on a particular issue, built up from personal experiences, values and scientific fact. They can also be translated into a tool of governance to forge common understanding, but can also be strategic in nature; made up of hidden values, false knowledge and presumptions. Central to the formation of images is communication and deliberation over 'acceptable' states or practices of, for example, sustainable fishing. Instruments are described as 'devices in a context, as crafts applied to jobs at hand within the context of craft cultures and craft institutions' (p.45). Examples of these instruments are informational and communicative instruments. These instruments

transfer knowledge for the purpose of informing, persuading, convincing or tempting, and they can also be combined with and support other types of instruments. They often create social support and increase awareness. Examples are information and promotional material, labels and benchmarks (Egmond *et al.* 2005). New 'mixed' instruments emerge through private-public partnerships involving state, NGO and private actors creating shared images and using networks such as markets to communicate to society.

Instruments and images provide a basis to understand the material and discursive elements of governance interactions, but they are less useful in identifying the moments, events or sites within which interactions occur. For this, Bush (Bush 2010) introduced the relational concept of 'spaces of interaction', made up of moments, events or sites where constellations of networked (often spatially non-contiguous) actors forge new relationships that allow meaningful deliberation over consumption and production practices in fish chains. These spaces of interaction may be temporally intermittent or persistent. They may also exist between spatially contiguous actors within a locality, or alternatively between non-contiguous actors within regionally or globally linked 'space of flows' (Castells 1998).

In this paper we use the concept of spaces of interaction to emphasise the role of the *Viswijzer* in creating sites of deliberation between actors *related* to but not *dependent* on the fish chain. As such, we view the *Viswijzer* as a communicative instrument that has the power to include and exclude certain fisheries in that way triggers interaction and

deliberation on sustainable fishing. In doing so we build on a wider literature that has drawn attention to the role of market-based tools and images in linking consumption and production practices. For example, Roheim (Roheim 2009) argue that market-based instruments that reward sustainable production practices, such as eco-labelling or purchasing practices, are better strategies for the environmental community because they bring positive economic incentives instead of confusing consumers. Similarly, Oosterveer and Spaargaren (Oosterveer & Spaargaren 2011) argue that while the MSC and wallet cards offer strong examples of market-based tools they are both limited in actively involving and committing citizen-consumers - which they perceive as a necessary precursor for the greening of globally agri-food networks. Various other critiques have also emerged: mislabelling of seafood is noted as a serious barrier to effective consumer-led change (Jacquet & Pauly 2008); the inflation of issues in private definitions of seafood quality is thought to overwhelm consumers (Gulbrandsen 2006), and; single species instruments such as wallet cards are not perceived to be effective in addressing sector wide reforms (Auld 2007).

We argue that many of these understandings are very literal in the sense that they focus on the impact consumption practices have over production choices. As this impact is questionable, we refocus our attention away from the more literal impact assessment within the vertical 'consumption-production nexus' (Spaargaren & Mol 2008) and towards the practices and modes of deliberation that may result in novel horizontal interactions between actors that are otherwise divided by

interests, values or knowledge - i.e. fishermen and NGOs (see figure 4.1).

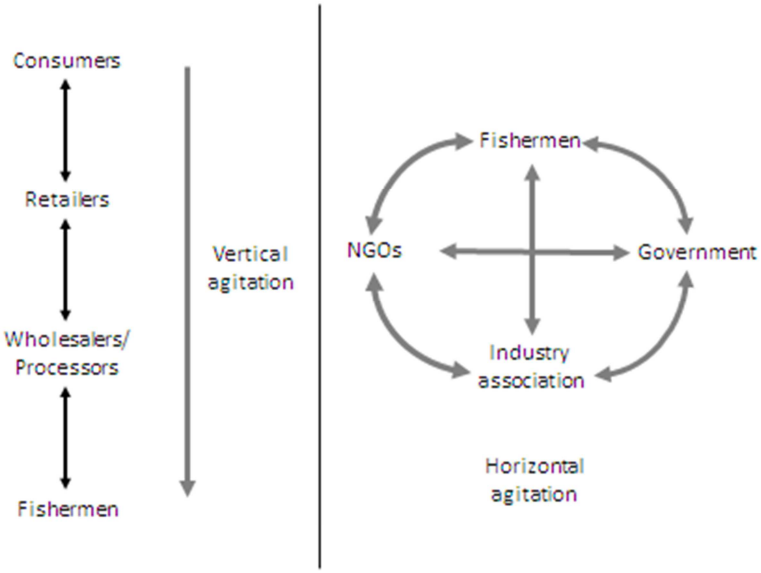

Figure 4.1: Vertical and horizontal agitation

From an interactive governance perspective, market-based tools then offer the potential to understand how new spaces are created within which the diversity, complexity and dynamics of social-environmental realities can be understood and deliberated over. In particular, we extend interactive governance theory by focusing on the role of trust in social–political interactions – a point identified but not taken up directly in Kooiman's work.

4.2.2. Interactions and trust between NGOs and fishermen

These novel spaces of interaction, which engender horizontal deliberation and agitation between NGOs and fishermen, induced by market-based tools such as the *Viswijzer*, influence (Pearl Harbor Natural Resource Trustees) relationships between them. This has raised the position of NGOs in wider policy debates around fisheries. With the increasing influence of NGOs in the political process, and the higher demand for the greening of production that characterise current governance practices, the interdependencies between industry and NGOs are growing as well. This is a good starting point for trust and cooperation given an important condition for trust is the need of it in the first place (Nooteboom 2002). We therefore extend interactive governance theory by focusing on the role of trust in social–political interactions – a point identified but not taken up directly in Kooiman's work.

Collaborative partnerships, so-called green alliances, between environmental NGOs and businesses that pursue mutually beneficial ecological goals cooperation have been growing since the late 1980s and early 1990s (Stafford *et al.* 2000). The impetus for such alliances has been varied. For business, green alliances provide new economic opportunities in addition to improving (environmental) performance and enhancing their reputation in the marketplace. NGOs were drawn to these alliances because cooperation with businesses provided more opportunities for environmental gains than cooperation with government (Glasbergen & Groenenberg 2001). But as Arts (Arts 2002)

argues, perhaps the most consistent driver of these alliances has been the shared disappointment of NGOs and business in governmental policy.

Scholars following these green alliances agree that interaction and constructive cooperation between public and private actors (or between private actors) requires a certain amount of trust. When trust exists, people are more willing to give useful knowledge and are also more willing to listen to and absorb others' knowledge (Levin & Cross 2004). We follow Möllering's (Möllering 2001)) definition of trust as "a state of favourable expectation regarding other people's actions and intentions" (p.404). Seen as such, trust plays a significant role in any exchange where there is uncertainty about other people's motivations as relations can be calculative only to a certain extent (Nooteboom 2002), and/or where there is a time lapse between the reciprocal exchange of goods or services. Social relations and the obligations inherent in these expectations and exchanges are therefore requisite components for building trust. Conversely, not meeting somebody's expectations offends our sense of what is appropriate in a given circumstance.

Reflecting on Bush's spaces of interaction, trust can be used to assess the form and function of deliberation and agitation between related actors. To unpack this further we adopt Anheier and Kendall's (Anheier & Kendall 2002) notion of 'thin' and 'thick' trust to understand how social (or institutional) distance influences deliberative governance processes. Trust between actors that operate at a large social distance, such as fishermen and NGOs, provides a particularly complicated case

given that the starting point for the interactive relationship is a series of conflicting interests around production and conservation. This requires a different dimension of trust than the type of 'thick' trust that was dominant in pre-modern societies where family and friendship ties had an important function in small, closed communities (Anheier & Kendall 2002). Modern societies are increasingly based on thin trust, which fosters a willingness to trust people outside of our immediate circle or group (Putnam 2000). This type of trust requires visibility of the other through multiple, personal interactions in networks where experience and reputation can be developed.

In the rest of the paper we turn to the *Viswijzer* and examine how it has been central in realigning practices of trust between industry and NGOs. This feeds into a growing number of examples in the Netherlands where close and constructive involvement between NGOs and industry is being realigned around common opposition to state policy (personal communications with both NGOs and Fish product Board, 2009), through new shared learning initiatives (De Vos & Mol 2010), and in the development of market-based standards and tools such as the Marine Stewardship Council (MSC). In doing so, we focus on how the role of the *Viswijzer*, contrary to its nominally market-based objectives, has fostered trust between industry, NGOs and the state by opening up new spaces of interaction within which deliberation and agitation has led to new partnerships aimed at sustainability.

4.3 Case Study: *The Viswijzer*

4.3.1. Origin

Based on similar models from the Monterey Bay Aquarium, Audubon Society, and the Marine Conservation Society, the *Viswijzer* was introduced in 2004 by the Dutch-based North Sea Foundation (NSF). The concept of wallet cards such as the *Viswijzer* as a consumer tool is predicated on the market-based logic of communicating a clear and explicit image reflecting the knowledge, facts, and interpretation of the North Sea Foundation on European and international aquaculture and fisheries. Each species is assessed through sustainability criteria and categorised in traffic light system: red for 'preferably not', orange for 'second choice' and green for 'excellent choice' (for detail see www.goedevis.nl*)*. The success of the *Viswijzer* is claimed by virtue of the fact that a quarter of all Dutch consumers reportedly use the card (Hofs 2009). However, in addition to its nominal role in promoting consumer-driven 'vertical agitation' over the fishing industry, the following traces its evolution (see table 4.1) as a contested governing mechanism which has led to politically engaged 'horizontal agitation'. In particular, we focus on the changing alliances within and between NGOs and industry actors that had previously not interacted, as they have negotiated criteria, information, communication and impact level.

Viswij-Zer	Actors/coalition	Methodology	Information/layout	Modes of governance
1 2004	NSF 5000 copies	NSF methodology MSC assessed according to NSF methodology	Distinction between wild, farmed, MSC fish and origin. Book and website with information on criteria. Assessments are available for the general public.	Steering by NGOs, hierarchical and goal-setting. Self governance, informal character
2 2006	NSF 2.7 million copies	NSF methodology MSC assessed according to NSF methodology	Distinction between wild, farmed, MSC fish and origin. Website provides information on criteria Assessments are available after request.	Steering by NGOs, hierarchical and goal-setting. Self governance, informal character
3 2007	NSF WWF 2.8 million copies	Joint international NGO methodology MSC labelled fish in separate column	Distinction between wild, farmed, MSC fish and origin. Less information on website regarding criteria. Assessments are available after request.	Steering by NGOs, rules, and goal-setting
4 2009	NSF WWF (Fish Product Board) 1.8 million copies	Joint international NGO methodology Sector consultation MSC labelled fish in separate column	Distinction between wild, farmed, MSC fish, origin and fishing techniques. Less species are listed, but more extended. Website has five colours instead of three Assessments are available after request.	Mix of formal and informal elements (industry consultation, less hierarchical)

Table 4.1: Comparison of four Viswijzers

The first 'Viswijzer'

The first *Viswijzer* was published as a 132 page book in 2004 written by Wouter Klootwijk, a culinary journalist and reviewer, in cooperation with the NSF, and funded by the Ministry of Housing, Spatial Planning and the Environment. In addition to the book, NSF distributed a wallet card which listed the most popular species. Initially, the wallet card was a by-product of the book, however when its impact became clear, the *Viswijzer* became a focal point of NSF's advocacy strategies.

The *Viswijzer* started as an instrument designed to intervene in the Dutch fishing industry, through communication and information. It continued to be considered a novel form of intervention because, as the designer of the *Viswijzer* described in 2004, "There is no organisation in the Netherlands that provides independent information in supermarkets regarding the stock levels of consumed fish" (Anonymous 2004). Reflecting this concern the NSF decided to initially assess fisheries that had attained MSC certification, indicating that at the time they were not convinced about the quality of the MSC criteria. NSF was inspired by the experiences of the sustainable seafood movement in the US to make an overview of approximately 90 species that were available in Dutch supermarkets. From this list 32 species were printed on the wallet card. As the designer described shortly after its launch, "The colour differentiations make it easy for consumers to see which species are close to extinction and which species cause little damage to the environment" (Anonymous 2004).

The launch of the *Viswijzer* during the 2004 'Week of the Sea', was part of a wider Good Fish campaign with which NSF wanted to stimulate consumers to make a choice for environmentally friendly fish consumption. The *Viswijzer* book attracted considerable media attention, but with only 5000 cards consumer and fisher influence proved limited. Industry media largely disregarded the launch, however the Fish Product Board responded by organising a meeting, between industry, NGOs, scientists and government where consumption and sustainability issues were addressed. In addition, the Dutch Fish Bureau, part of the Fish Product Board, launched a calendar for the catering industry outlining the availability of species per season. The *Viswijzer* also triggered several counter campaigns with some fishmongers and traders launching their own sustainable seafood guides, e.g. fresh fish trader Jan van As launches the *Vis en Seizoen* (Fish in Season) books with recipes for chefs. Despite the relatively limited consumer impact, the first *Viswijzer*, within the wider sustainable seafood strategy of NSF, represented a new approach to NGO intervention in a relatively closed industry sector in the Netherlands.

The second 'Viswijzer'

The launch of the second *Viswijzer* in May 2006 continued to foster further interaction between NSF and the industry. However, in addition to the direct responses in the food services sector, the 'naming and shaming' of fisheries also led to a series of negotiations between environmental NGOs. Most notably, a new partnership was developed

between NSF, Greenpeace and WWF who previously competed instead of cooperating. Recognising the potential impact to the *Viswijzer* the three NGOs decided to join forces and better coordinate their advocacy strategies in order to more efficiently stimulate sustainable fish consumption in the Netherlands. WWF's decision to support the wallet card was parallel to their support for the MSC certification of Alaskan Pollock, which was and remains to be the species used in the high volume production of 'fish fingers'. Ensuring more sustainable certified products for the Dutch market was a key interest of WWF given the only MSC product in the Netherlands at the time was Alaskan salmon and Dutch herring, while shrimp and lobster in the Oosterschelde had entered the pre-assessment (Drijver 2006). The Seafood Choices Alliance, following on from their success in the US sustainable seafood movement (Illes 2007), facilitated a collaboration between these NGOs to develop a joint methodology for the *Viswijzer* (personal communication with NSF, 2009).

Despite the initial enthusiasm, the collaboration came to an end within months when Greenpeace withdrew after rejecting the 'weak' attitude of the other two NGOs regarding bottom trawl fisheries which in their opinion did not match the urgency of the 'fisheries crisis'. In response Greenpeace developed their own 'fish card' (*vis-a-card*) and, following the UK led *Recipe for Disaster* campaign followed up by publishing an online list of Dutch supermarkets ranked on their fish purchasing policy and a red list of unsustainable species (www.maakschoonschap.nl). The Greenpeace red list was (and remains)

longer than on the *Viswijzer*, because according to their methodology a fail on one of the three criteria immediately leads to a red score. They were therefore critical of the comparative assessment methodology created for the *Viswijzer* by NSF which means a fail on one criteria can be compensated by higher scores on the other two criteria (personal communication with Greenpeace, 2010).

Industry engagement continued in the third *Viswijzer* but appeared to be secondary to the alliance between the environmental NGOs. The collaboration clearly demonstrates a process of building legitimacy within both the *Viswijzer* as a tool as well as the wider image of sustainable seafood to consumers and industry alike. The withdrawal of Greenpeace in this light is not seen as a defection but rather a strategic separation of interests and approaches: the direct agitation of Greenpeace versus continual improvement of NSF and WWF. According to the Fish Product Board the failure of the collaboration did not weaken the position of the green lobby, but instead, by focusing on technical issues set an agenda that directly addressed already sensitive issues such as the impact of fishing techniques such as beam trawling, a technique that is still commonly used in the Netherlands.

The *Viswijzer* gained momentum when prominent Dutch chefs removed red listed North Sea cod from the menu, and when two large supermarket chains in the Netherlands announced in 2007 that they were considering to remove the main target species of Dutch fishermen (North Sea plaice and sole) from the shelves because of its unsustainable character (Anonymous 2007a). Concerned that this was a 'negative'

impact of the *Viswijzer* on the consumption of North Sea fish the Fish Product Board responded with a series of media statements. They were primarily concerned that the categorisation of sole and plaice in red did not reflect the effort made by the industry to work towards sustainability. They argued that despite changes to fishing techniques made in the two fisheries the categorisation did not change. Furthermore, they argued that the categorising fishermen that abide by existing European and Dutch quota limits set an unfair agenda for private definition of responsible fishing.

The third 'Viswijzer'

In July 2007, WWF and the NSF decided to increase their cooperation and launched the third *Viswijzer* together. The new partnership significantly raised consumer awareness about the *Viswijzer* with funding support for the distribution of 2.7 million copies. However, MSC certified products were still scarce within the Dutch supply chain making the impact of sustainable consumerism limited. The decision to support the *Viswijzer* was therefore seen as a key strategy to raise awareness of sustainable seafood and prepare consumers for changing their purchasing practices. Although the partnership between WWF and NSF continued, WWF regards the *Viswijzer* a temporary tool until 2012, when MSC products will be mainstreamed in Dutch supermarkets.

Due to the increasing impact of the *Viswijzer*, it became more controversial in listing sole and plaice, important target species for the Dutch fishery, in red – or a 'bad choice' for consumers. Fishermen of

these two species saw this as a clear statement against their fishing practices. Tempers were further tested by the relative positioning of Vietnamese Striped Catfish (pangasius) in orange. The species were publicised together in one card, hereby bringing together both local and global interests, triggering protectionist sentiments by fishermen, politicians and researchers (Bush & Duijf 2011). In particular, it reflected the wider political economy of sustainability in the Dutch fishing industry: disputes over fishing practices and competition with cheap aquaculture imports. Industry magazines began reporting on the *Viswijzer* and many fishermen responded negatively to what they perceived as misguided categorisation of their practices. A beam trawl fisherman was quoted as saying at the time:

"It is unfair that all North Sea fish is placed on the red list. We are perceived as killers and destroyers of the ecosystem. Everything we catch is suddenly put on a red list and farmed fish is green while they are full with antibiotics" (Anonymous 2007e).

In further developing a counter narrative against the *Viswijzer*, another fisherman made an alternative 'Wiser Fishermen' (a Dutch-English play on words inferring 'wiser fishermen') and displayed it on his vessel during '*Vlaggetjesdag*' - a large national fishing event held to celebrate the start of the herring season. His interpretation of 'green' fishery included 'crew', 'freshness', 'vessel', 'mentality', 'innovation' and 'quality', while 'oil price', 'regulation', 'fish prices', 'politics', 'imported

fish' and the '*Viswijzer*' were considered as key criteria for a 'red' fishery (Anonymous 2008b).

Three interrelated themes return here: the misperception of fishing practices, the transparency of categorisation, and the unfair bias towards imported and/or farmed fish. Even politicians and scholars intervened in the discussion which fish is more sustainable with the Director the Dutch Marine Research Institute (IMARES) stating, "Plaice is listed as red because it is caught using unsustainable fishing methods. However this is too general, they should have made a distinction between different fishing techniques", and "I know one thing for sure; the cheap pangasius that is flooding our markets is not sustainable" (Anonymous 2008a). The Fish Product Board, that represents both fishermen and traders, stated in an interview that such arguments put them in a difficult position; "Pressure was put on us from different sides: fishermen who wanted pangasius on the red list and traders who wanted pangasius to be categorised as green" (Personal communication, 2009).

Domestic protectionist sentiments were also put forward with one politician criticising the lack of transparency of the assessment criteria, arguing:

"The 'Zeeuwse' [province in the Netherlands] mussels moved from green to orange for totally inexplicable reasons. Albeit, maybe it can be explained and is it just a lobby to remove mussel fisheries from the Wadden sea" (Anonymous 2007d).

Seeming contradictions between information on the wallet card and the website of the *Viswijzer* did not allay such concerns. On the last wallet card plaice is still in red, but on the website it is placed in both orange and light red. Such confusion has led to further mistrust when, in addition to feeling they had been portrayed as 'killers and destroyers of the ecosystem', plaice fishermen also experienced a dramatic drop in market prices in 2008. Although unlikely, given the price for plaice is fixed in the international market for white fish, fishermen directly blamed the *Viswijzer* for their loss in profits.

Concerns that the *Viswijzer* was creating unfair bias against Dutch fish also led to debate within the Lower House of Parliament. Concerns were raised about the objectiveness of the *Viswijzer* given it was unilaterally formulated by WWF and NSF. As a Christian Union representative stated, "At present consumers distrust - weather or not this is justifiable – fish guides originating from specific interest groups" (Anonymous 2007c). A representative from the Christian Democrats (CDA) reiterated this sentiment stating "My position is that a *Viswijzer* that is partial, i.e. formulated by NGOs only, cannot be seen as an independent *Viswijzer*" (Anonymous 2007c). The general consensus was that the government should ensure there is an independent source of information to assist the purchase of fish such as MSC certification. The Minister replied that the *Viswijzer* offers a good initiative to promote but sought greater oversight between industry and NGOs to facilitate sustainable production.

Shortly thereafter, the Minister came with a press release indicating she would like to do her best to reach an agreement between government, NGOs and industry regarding the *Viswijzer* (Anonymous 2007b). This idea was acted upon in 2008 when a social covenant was signed between NGOs, industry and government, creating a novel space of interaction within which a broad set of actors deliberated over fisheries sustainability with oversight by the state. In 2006, in a report called 'Fishing with head wind', it had been already recommended to both NGO and industry representatives to join forces in order to green the industry. However this did not happen until after the launch of the third *Viswijzer*.

The covenant was finalised and signed in June 2008 by the three parties who agreed that: 1) the website is the focal point and the *Viswijzer* is a temporary communicative tool to be used in campaigns, 2) the government will subsidise an independent audit on the *Viswijzer* assessments, 3) sustainability improvements made by lead fishermen will be communicated on the website and where possible on the wallet card, 4) they will develop a joint formation centre that distributes reliable information regarding sustainable fish, 5) actors will inform one another and exchange information, and finally that the industry will be consulted prior to the launch of each *Viswijzer* (Anonymous 2008c). These points, although not ground-breaking in terms of content, did create a basis for trust and cooperation between industry and NGOs. As such, we argue the *Viswijzer* played an important role in creating a series

of spaces of interaction through which constructive deliberation around more substantive issues could continue.

The fourth 'Viswijzer'

The fourth *Viswijzer*, launched in May 2009, carried some changes as a result of the agreements made in the covenant. On the website the categories red, orange and green were extended with two colours; light orange and light red, and a distinction was made between fishing techniques. Because of this, a differentiation could be made between for example North Sea plaice caught with the beam trawler (red) and North Sea plaice caught with a twinrig (orange although MSC certified). The new information is evidence of a new rationale of creating an incentive for improvements in fishing practices. It also reciprocated the wishes of the industry. However, the five colour system appeared on the website and not on the wallet card, which created suspicion regarding motivations for reciprocity between the organisations. In an interview the Fish Product Board (2009) stated they "were pleasantly surprised about the new five colour system, however when it only appeared on the website and not on the wallet card we were disappointed, why were they not transparent about this beforehand?"

The industry consultation process was designed to create a more negotiated process through which criticism could be incorporated into the new *Viswijzer*. This, it was believed, would in turn improve the reliability and support for the *Viswijzer*. A draft of any changes to species categorisation had to be presented to a 'feedback group' of

industry representatives as was agreed upon in the covenant. This led, under the formal agreement of the covenant and with formal oversight by the Ministry, to changes in deliberation and trust. The NGOs used the meeting to their advantage, stating after the launch of the final version "We have used the sector's input" (Noordzij 2009). However, the Fish Product Board felt the consultation process disregarded important information that had been presented from the feedback group.

Concern was also directed at the scientific value of the assessments and, therefore, the validity of the final categorisation. The NGOs had offered the industry an independent scientific review of the *Viswijzer*. However, this was rejected by the Fish Product Board who argued that "although procedures can be scientifically valid, the final decision where to categorise the fish remains a political choice". The statement reflects the difficult position of the Fish Product Board. On the hand they, as a key industry advocate they were willing to engage with the NGOs in order to gain their trust and influence the *Viswijzer*. On the other hand they wanted to keep some distance from the *Viswijzer*, because they were concerned they would lose the trust of their members within the industry.

A final point of criticism concerned the timing of the launch of the final *Viswijzer.* Agreeing to work more closely together the NGOs and the Fish Product Board decided to organise a joint symposium on 'A sustainable future for the fishmongers' during the 2009 'Week of the Sea' – with the theme 'good/sustainable fish'. During preparations for the symposium the Fish Product Board found out that NSF and WWF had

planned to launch the new *Viswijzer* in the same week. The Fish Product Board felt betrayed because they had not been informed about the launch of the new *Viswijzer* and suspicion was aroused once again. The Fish Product Board subsequently decided that it was not in their interest to organise this event in the same week when the new *Viswijzer* was launched and the symposium was postponed. However, the Fish Product Board did distribute a pamphlet entitled '*Vis Wijzer*' (fish wiser) on the same day the new *Viswijzer2009/2010* was launched containing information on new and sustainable fishing techniques, co-management, and improvements through a decrease in energy use as well as in the number of discards. The covenant was also mentioned as a good step forward. The NGOs called the simultaneous launch 'pathetic' (personal communication, 2009), however things did not escalate, most likely because to the existence of the covenant, and deliberations regarding the covenant continued. Despite their differences, both NGOs and industry apparently saw the need to continue their relationship.

4.4 New Spaces of Interaction

The process of developing the various editions of the *Viswijzer*, in particular negotiating the changes made to the ranking of fish species, has led to considerable 'horizontal agitation' between industry and NGOs, but also nascent spaces of vertical interaction and agitation. In the rest of the paper we argue that these horizontal and vertical spaces of interaction have been central in creating new patterns of deliberation

and understanding between actors in the Dutch fishing sector that did not previously exist. We first explore how each of the four versions of the wallet card has renegotiated trust between NGOs, industry and the government, and second between NGOs and fishermen.

When the first *Viswijzer* was introduced in the Netherlands, NGOs, fishery representatives and fishermen operated independently from one another. The Dutch fishery industry was a rather closed community due to its neo-corporatist character and the relatively monopolistic right of fishermen regarding the exploitation of the sea. Until 1983, relations between the fishing industry and the Ministry of Agriculture and Fisheries were controlled by corporatist rules that were known beforehand by the negotiating partners. The interests of both government and industry were also in line with each other with a strong focus on on-going economic viability (De Vries 1990) and new policies were consulted with the industry before implementation. For other actors, such as NGOs, gaining access to the industry and policy negotiations, was very difficult (De Vos & Van Tatenhove 2011). The industry only started to open up slowly when a co-management system was introduced in 1993 and after the first signs of unsustainable exploitation had become apparent.

The North Sea Foundation was been established already in 1978 with the goal to integrate knowledge and expertise on marine issues including, fishery, oil and gas production and shipping, while at the same time stimulating a dialogue between with NGOs and users of the North Sea (www.natuurinformatie.nl). However, interactions with the

fishing industry were lagging behind. When in 2004 a statement of intention for 'Sustainable North Sea Fisheries' was signed between government and industry, the NGOs were not invited.

The situation was different in 2008 when a social covenant was signed between NGOs and industry representatives. New governance tools such as MSC and the *Viswijzer* created an arena that legitimised a role for NGOs in the transition to a sustainable fishery. Where previously fishermen were able to keep NGOs at a distance, they have become increasingly interdependent as governmental subsidies that stimulated sustainability and innovation projects, including MSC certification, are only approved under the condition that NGOs are involved.

Although less direct, the *Viswijzer* has also triggered interactions, such as the covenant for implementing *verbetertrajecten* (improvement paths for fishermen), and the organisation of common events, such as a symposium. Importantly these new spaces of interaction stimulate face-to-face contact which in turn has formed the basis for the further creation of thin trust – a considerable step from the more confrontational days of the '*groene leugens*' (green lies) around 2005. A particularly important role of these spaces of interaction is the opportunity for fishermen and NGOs to exchange information on a more equal basis, which is also an important condition for trust. However, although some interests overlap, others do not. For fishermen the continuation of their companies is of vital importance and NGOs continue to try and change consumer patterns, which maintain a degree of antagonism.

Ever since the third *Viswijzer*, discussions have intensified between NGOs, industry and scientists led largely by, amongst other issues: lower fish prices, high fuel prices, and the higher impact of the *Viswijzer*. The inclusion of the *Viswijzer* in parliamentary debate illustrates how these new governance instruments are developed at the borderline between public and private call for discussion about the role and status of both public and private actors (Kooiman 2003). The *Viswijzer*, albeit a private initiative, was able to indirectly criticise government policy to the extent that the Ministry became a stakeholder. Illustrating the on-going need for government oversight, the 'enforced' covenant between industry and NGOs was also overseen by government, at the request of the signatories, to facilitate the meetings. The *Viswijzer* therefore not only created face-to-face spaces of interaction and deliberation between NGOs and industry representatives, but also drew in formal government involvement in which began as a nominally market-based exercise to change consumer purchasing behaviour.

So far we have mainly discussed the role of the *Viswijzer* in creating new spaces of interaction on an institutional level between NGOs, industry representatives and the government. However, what can we say about the spaces of interaction on a more informal level between fishermen and NGOs? The *Viswijzer* triggered *Verbetertrajecten* for fishermen to improve their fishing practices. This 'step-wise-improvement' discourse is employed by the NGOs as a means of positively engaging 'lead' fishermen who have taken a proactive role in upgrading their practices. Many of the fishermen interviewed see the

contact as increasingly necessary given the power of the NGOs to classify their fisheries. The fishermen depend on what they largely perceive as the 'goodwill' of NGOs to support their attempts in MSC certification or when they want their fisheries put into the green category. In addition, fishermen can also activate the relationship by maintaining a good relationship and instigating more deliberation around 'sustainability'.

This more open relationship between these lead fishermen and NGOs is a considerable change in the industry and one that many see as emerging from the *Viswijzer*. As one fisherman noted during an interview, "The *Viswijzer* has brought us closer together, although not on a voluntary basis". Nonetheless, new patterns of interaction have emerged. Fishermen have increasingly sought contact either by phone or in person with representatives of the NGOs directly requesting information on how to upgrade to a 'orange' categorisation. In doing so, they also inform the NGOs about their new fishing techniques. For the NGOs the new contacts with the industry has given them a greater sense of legitimacy. As NSF stated, where they only once met fishermen in formal settings they are able to now 'ring them up for a beer'.

The continual improvement agenda set out by the NGOs is therefore in itself a new space of interaction within which more constructive rather than oppositional deliberation can take place. In other words, it is a discourse of engagement that creates multiple and on-going interaction. As such, the *Viswijzer* does more than facilitate a unidirectional transfer of information; it has engendered longer term

engagement between actors that once did not interact, or at least not in a positive way. Not all fishermen see the NGOs in a positive light however. The more radical activities of Greenpeace, including dumping large boulders in the path of beam trawlers in the Wadden Sea, has fostered continuing distrust. In a less radical way the *Viswijzer* continues to discipline rather than engage fishermen. This means that despite the success of creating more face-to-face interactions, the equality of the relationship between fishermen and NGOs maintains a continued degree of mistrust.

4.5 Conclusions

This paper deals with three important changes in fisheries governance. Firstly, new governance tools such as the *Viswijzer* reflect the increasing influence of NGOs in the political arena and the policy process. Whereas previously government and industry set the standards for sustainable fishing, NGOs are now one of the leading standard setters for sustainable fisheries worldwide. Secondly, what are currently characterised as market based tools may be better understood as a communicative instruments which facilitate interaction between policy actors that previously operated at a large social distance. Thirdly, the *Viswijzer* has contributed to a much more complex interaction pattern than just simple information exchange. What started as an abstract communication tool operating through the market, has led to novel face-

to-face (e.g. improvement paths, and symposium) as well as institutional interactions (e.g. the covenant) between these actors. The new spaces of interaction the *Viswijzer* has created between these actors are fundamental in creating a requisite level of trust between them.

Not only was thin trust stimulated through more self-governing modes of voluntary face-to-face interplay, trust was also institutionalised through the formalisation of interactions within the state sponsored social covenant. A covenant is a way to increase institutional trust, especially in its initial phase, as mutual expectations are made clear, and predictability is enhanced. The *Viswijzer* stimulated the signing of a covenant between NGOs, industry representatives and government in which agreements were made that went beyond the original scope of the market-based tool. This was an important basis for a more long term commitment, and shows the important relation between spaces of interaction and trust. These spaces of interaction require trust in order to have meaningful deliberation over consumption and practices that eventually result in changes in operation through improvement paths. Through these improvement paths fishermen increasingly seek contact with NGOs and exchange information regarding new fishing techniques and the ways to improve their status on the wallet card. This is a two way exchange; fishermen and other chain partners are also now more likely to inform the NGOs on the latest developments.

However, our results also show that trust building processes between fishermen and NGOs is a difficult process. The decision of the

Fish Product Board to reconsider the agreement on the peer review and the communication of sustainable initiatives that take place in the industry through the website and not through the wallet card are clear examples. Nevertheless, the arguments that have taken place appear to be outweighed by stabilisation and deliberation the covenant has brought to the industry. The actors increasingly value the continuation of the relationship, which shows a certain level of trust between them. In addition, industry and NGOs are often, as was stated by both, in agreement and find themselves opposed to the government, which enhances their trust relationship.

Although Fish Guides are often characterised as market based tools, our results indicate they also play an imperative role as a communicative instrument that can stimulate interaction and even trust between industry and NGOs. This study reflects the increasingly recognised point of view that communicative processes should not focus solely on consumers, but equally at the various actors in the overall value chain. Consumers may continue to recognise and even use the guides, but we suggest the recognition given by the consumers is more important in legitimising the role of NGOs like NSF in a wider governance debate on fisheries policy. The consumer oriented potential *Viswijzer* as a market-based tool may therefore be less important than its role in creating deliberation and trust between once conflicting sets of actors. As we have demonstrated, the new spaces of interaction within which this deliberation and trust is built occurs not between NGOs, the state and industry representatives – but also between NGOs and

fishermen. We therefore suggest that Jacquet's notion of 'horizontal agitation' can also lead to engagement and changes in fishing practices.

Finally, the success of the *Viswijzer* in developing deliberation and trust within the Netherlands is contradicted by the fact that both national and international species are listed. Covenants, symposia and continual improvement discourses are all accessible to actors within the Dutch national context. But international producers are only indirectly represented through the Fish Board, which is compromised by its key advocacy role for both fishermen, wholesalers and retailers. The position of international species on the *Viswijzer* has therefore been little more than strategic source of agitation, creating strong reaction and debate by Dutch fishermen. This has specific implications for market based tools in general given the evolution of horizontal to agitation to vertical pressure on fishermen may well be limited to a national or at most regional scale. Further research is needed to determine whether and how the *Viswijzer*, and other recommendation lists like it around the world, can bridge deliberation and trust on an international scale.

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5
Changing trust relationships in the Dutch fresh fish value chain: A new role for the auction[6]

Abstract

The fisheries sector worldwide is facing challenges, such as, a lack of sustainability in economic, social and economic terms, growing competition in a globalised world, changing consumer demands, and tighter international regulations regarding food safety, and work conditions. These challenges affect the way the fish value chain is governed. As a response to the new challenges that are being posed on food value chains, we see a shift from arm's length market relationships to different types of value chain governance. This has consequences for trust relationships within these value chains. In the Dutch fresh fish value chain trust between suppliers and buyers was previously institutionalised through the auction. Nowadays trust is increasingly institutionalised through new parameters, standards and practices which are being developed, both external to the value chain (e.g.

[6] In the process of being submitted for publication to Environment and Planning C

sustainability certification, and food safety standards), as well as within the value chain (e.g. quality standards). However, caused by fast changing consumer preferences, and a growing diversity, standards have not been developed yet in every aspect. Owing to this, a high level of coordination temporarily takes place within the value chain, which is characterised by other governance mechanisms such as personal and active trust instead of the previously more important institutionalised trust. These new forms of trust are mainly essential in the relationship between supplier, processor and buyer.

5.1 Introduction

The fisheries sector worldwide is facing challenges, such as, a lack of sustainability in economic, social and economic terms, growing competition in a globalised world, changing consumer demands, and tighter international regulations regarding food safety, and work conditions. These challenges affect the way the fish value chain is governed. In chain literature these changes are described as a shift from a supply to a demand driven chain (Wiskerke 2009), or as 'chain reversal', which entails "changing relationships in the context of production-consumption-cycles between providers and citizen-consumers of goods and services" (Spaargaren 2003, *translated*). Traditionally, these relationships were mainly organised and studied from the providers-perspective, recently the citizen-consumer perspective as end-user has appeared to be more dominant (Spaargaren

2003). In the agribusiness and food industries this chain reversal resulted in major changes in the structure, culture and behaviour of the firms. It meant greater accuracy, speed and flexibility in responding to the market, an improved response to consumer demands and environmental demands, the development of new technology and products as well as more cooperation to maximise profits at chain level.

Supermarkets, looking for more competitive strategies, play a key role in these changes (Gereffi *et al.* 2005). Concomitantly, a shift in power has occurred within the food value chain from primary production to the retail sector, which has become the main outlet for processed as well as well as fresh food products (Wiskerke 2009). For supermarkets fresh products are strategic because it is one of the few product lines that can persuade consumers to shift from one supermarket chain to another. In order to attract customers, supermarkets introduce new items and emphasise quality.

At the same time, supermarkets were forced to respond to an increasingly complex regulatory environment related to food safety as well as environmental and labour standards. Supermarkets pursue these strategic goals by increasing explicit coordination in the value chain. Instead of purchasing through wholesale markets, they develop closer relationships with importers and exporters, and move to renewable annual contracts with suppliers whose capabilities and systems are subject to regular monitoring and audit (Gereffi *et al.* 2005).

Other authors emphasise the high levels of risks, the related uncertainty, and the lack of trust that characterise modern value chains,

as being the main causes for the changes in these value chains (Hoyt & Huq 2000). Also Wiskerke (2009) outlines and illustrates the emergence of an alternative paradigm as a response to problems associated with the agro-industrial logic. These problems entail the disconnection of food from its socio-cultural and physical territorial context which has led to consumer mistrust, health issues, pressure on farm family incomes, environmental pollution and ecological degradation (Wiskerke 2009).

In sum, as a response to the new challenges that are being posed on food value chains, we see a shift from arm's length market relationships to different types of value chain governance (Hoyt & Huq 2000), (Thorpe & Bennet 2004), (Gereffi *et al.* 2005). Whereas previously little coordination between companies occurred, nowadays they coordinate activities and exchange information directly. This has consequences for trust relationships within these value chains. It is said that trust increasingly plays an important role in these new chain arrangements, which are more dependent on collaboration and information sharing (Hoyt & Huq 2000). However, this paper will show that it is not so much the case that trust plays a more important role; instead different dimensions of trust are becoming more important. Therefore, this paper will deal with changing trust relationships within the Dutch fresh fish value chain, and their implications for value chain governance. We focus on the fresh fish value chain that is currently facing developments similar to developments that have occurred in the agri-food business. Moreover, trust specifically plays a role in chains

that trade fresh products that are highly perishable and thus represents a risk, both for human health as well as in economic terms.

The above can be summarised into the following central questions:

- How have local actors within Dutch fresh fish value chain (fishermen, auction, and buyers) repositioned themselves as a reaction to current market and sustainability challenges?
- What kind of initiatives are the result of this process of repositioning, and how did these affect trust relationships between traditional and new actors within the chain?
- What does this mean for the role of the Dutch fish auction, traditionally an important generator of trust?

For this research, qualitative research methods were applied in a case study design. The research is based on an in-depth investigation of thirteen new arrangements that took place in the Dutch fish value chain in a period of six years (from 2004 to 2010). These case studies are used to explore causation in order to find underlying principles (Yin 2009). The uses of multiple sources, (19 semi-structured interviews, secondary data (newspaper articles, and written documents on the initiatives if available), and direct observations in one of the initiatives) further enhance reliability and validity (Miles & Huberman 1994).

We continue the paper with an introduction and discussion of the conceptual framework, consisting of theories on value chain governance and trust. In section 3, we give a general characteristic of the Dutch fish value chain, thereby focussing on the important role of the

auction in the traditional fish value chain. In section 4, we analyse six new initiatives of value chain governance in the Dutch demersal fleet, and their impact on trust relationships. This is followed by section 5, in which we draw our main conclusions.

5.2 Value chain governance: changing relations of trust and quality

5.2.1. Value chain governance

A value chain consist of a set of interdependent suppliers, agents, processors, distributors and wholesalers/retailers/food services, who work together to supply a product to the consumer (Thorpe & Bennet 2004). In general, chain governance refers to the coordination of activities within a value chain, given the specific inter-firm relationships and institutional mechanisms of that chain (Humphrey & Schmitz 2008). This is different from traditional arm's length relationships where the parameters are defined solely by each firm at its point in the chain. These "arm's length" relationships are characterised by little or no investment in assets with minimal information exchange (Hoyt & Huq 2000). Standard products can be traded through arms'-length market relationships, because designs and product specifications are well established (Humphrey & Schmitz 2008). They can be bought at spot markets (e.g. fish auctions), where commodities are traded for cash payment and delivered almost immediately.

Product and process parameters can be set by agents within the chain (e.g. quality standards) or by external agents (e.g. food safety standards set by the government or certification or sustainability criteria set by NGOs). Generally speaking, external parameters reduce costs for the buyer, because the costs of certification and enforcement are borne by the supplier. A downside is that the lead firm has less control on the selection and definition of these parameters. A well-known parameter for sustainable fish, set by both internal and external agents (WWF and Unilever), is the Marine Stewardship Council (MSC). In 2007, the Dutch retail business jointly decided to sell only MSC certified fish by 2011. However, MSC does not set parameters regarding other essential quality aspects that can persuade consumers, such as freshness. These parameters are therefore often set by chain companies themselves.

Characteristic for the present value chain governance is the increasing role of buyers. In traditional arm's length chains, buyers used to have little influence on the type of products, or how they were made (Humphrey & Schmitz 2008). This pattern has been changing due to the success of the labelling strategies of retailers, challenging the position of large processors (Marques Vieira & Traill 2008). Big retailers are leading the food chain to become more buyers-driven (Dolan & Humphrey 2000). There are two reasons why buyers nowadays seek to govern their chains more strictly. Firstly, there is a change from standard products to product differentiation. Products may be differentiated according to a range of factors, including the production process, their constituent components etc. (Humphrey & Schmitz 2008), and secondly, buyers are

facing risks of suppliers failure regarding quality, response time, reliability of delivery, and safety (Schmitz 2004) that they seek to minimise.

As a result, value chains increasingly depend on collaboration and information sharing, for which different dimensions of trust are required. In the next section we will elaborate on the changing role of trust in fish value chain governance.

5.2.2. The importance of trust within value chains

Trust among partners is seen as an essential requirement for successful value chain management (Kwon & Suh 2004). Trust and commitment are important because value chain relationships often involve a high degree of interdependency between competitors (La Londe 2002). Morgan and Hunt argue that both commitment and trust are vital as they produce outcomes that promote efficiency, productivity, and effectiveness (Morgan & Hunt 1994). When trust does not exist, companies will spend most of their time analysing their trading partner's credibility, reliability, and trustworthiness, rather than optimising their operations (Kwon & Suh 2004).

Trust can be defined as "a state of favourable expectation regarding other people's actions and intentions" (Möllering 2001) pp.404). It plays a significant role in any exchange where there is uncertainty about other people's motivations as relations can be calculative only to a certain extent (Nooteboom 2002), and/or where

there is a time lapse between the reciprocal exchange of goods or services (De Vos & Bush, 2011). Trust is the key in any social system; but it is not of a similar nature (De Vos & Mol 2010). Trust works differently depending on the way the value chain is governed. Therefore, it is useful to make a distinction between different dimensions of trust. In this paper we apply two dichotomies of trust, being: personal/institutional trust, and passive/active trust. We will now introduce these dimensions and their origin briefly.

Giddens, among others, makes a distinction between pre modern societies, which are based on personal trust, and modern complex societies that rest on trust in abstract (especially expert) systems and organising interactions across time and space (Misztal 1996). Personal trust is trust in other people, and it is based on familiarity, repeated encounters, interdependencies and shared beliefs (Hardin 2000). Trusting an institution means that its constitutive rules, values, and norms are shared by participants and that they regard them as binding (Hardin 2000). We do not need to know all the people involved in the system in order to trust it. We trust in the system (political, monetary, certification etc.) because we trust that others trust in it as well (Lewis & Weigert 1985).

Another dimension of trust that has become more important in modern times is active trust, as opposed to the passive form of trust that played an important role in more traditional societies. In contemporary societies, characterised by complexity, dynamics, and negotiation with multi actors, trust implies a more reflexive process, and needs

continuous reproduction through face to face contact, in order to result in a stable or at least continuous relationship (Julsrud 2008). This is called active trust as opposed to passive trust, which entails the habitual/passive acceptance of circumstances (Giddens 1990). In the next section we will elaborate on what these trust dimensions mean for value chain governance.

5.2.3. Changing relations of trust and quality within value chains

Traditionally, in the Dutch fish value chain, goods were mainly traded at spot markets, i.e. fish auctions. A time-lapse between the delivery and payment did not exist, as goods were traded for money almost immediately. This meant that the buyer had to accept the product as it was bought; as there was no option for returning the good or delaying payment with the aim to pressure the producer to deliver a better quality. However, when the buyer was not satisfied, for his future purchases he could easily switch to another fisherman. Products were bought on the basis of passive trust (based on acceptance), and on institutional trust (based on reputation; buyers possessed knowledge regarding the vessels that delivered good quality products, and the ones that did not). Face to face contact between producers and buyers was largely absent. Both buyers and suppliers trusted the auction to measure and check the quality, set a fair price, and to arrange all financial transactions. Goods were standard, and interaction between buyers and suppliers was therefore not required. Relationships were volatile, and

commitment between buyers and suppliers did not exist, as both could easily switch to another (temporary) partner. Hence, trust was passive and institutionalised through the auction, and through vessel numbers.

Nowadays, active, and personal trust are likely to become more important in demand driven value chains as relationships are becoming more complex and transaction costs increase when inter-firm relationships require greater coordination. Buyers and suppliers depend on one another for specific competences. For example, non-standard inputs and integrated product design architectures involve more complex transfers of design information and therefore intense interactions across enterprise boundaries (Gereffi *et al.* 2005). The level of commitment is higher and so are the risks. Therefore, value chains more and more depend on collaborative relationships which require active interaction and communication, and a commitment for long-term cooperation along with a willingness to share risks (Sahay & Maini 2002). Active and personal trust has the ability to diminish these risks and uncertainty, which are especially important in value chains that trade fresh, highly perishable products like fish.

Another way to diminish risks is for one lead firm to exercise a high degree of control in the value chain. One firm then specifies the product characteristics, and therefore close cooperation between the other actors within the chain is necessary. In this case trust relationships still need to be optimised, otherwise high monitoring costs need to be paid. This can be achieved through personal contact, contracts, and a

diverse network of business partners. Due to the high asset specificity, suppliers face a risk when buyers fail to buy from them.

Finally, a lack of trust and high risk can also be diminished by means of an increasing level of formalisation in relationships through detailed production regulations and quality control systems (Wiskerke 2009). This is for example done through certification. Trust is then re-institutionalised. It is not as before institutionalised through the auction, but instead through quality and control systems. In the next section we will describe and analyse new governance arrangements that are being created in the Dutch fresh fish value chain, as well as the changing trust relationships. But first we provide a description of the general characteristics of the Dutch fishing industry.

5.3 Value chain governance in the Dutch fishing industry

5.3.1. The supply and demand side

The Dutch sea fishing fleet consists of several segments specialised in certain types of fisheries. The largest segment in terms of number of vessels, capacity and turnover is the cutter fleet. Target species are sole, plaice, shrimp and other flatfish, which are mainly caught in the North Sea and landed fresh (European Commission 2009c). This research is limited to the Dutch cutter fleet being the main commercial fleet in the Netherlands. More importantly, this fleet currently faces many challenges, related to a growing import, decreasing

prices, and sustainability problems. Therefore a large number of initiatives are undertaken by actors operating within these value chains. These initiatives have a strong focus on fresh fish. With fresh, high quality fish both buyers and suppliers expect to make a difference in terms of higher margins.

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 (Van Hoof 2010).

When we look closer to the stages of the Dutch fisheries value chain we can identify the following main stages (see figure 5.1): (1) the diversity of fishermen; (2) the auction and (3) a diversity of buyers, which are mainly processing companies/fish traders, and intermediaries. With the new initiatives, the chain distribution is changing, as will be shown in section 4.

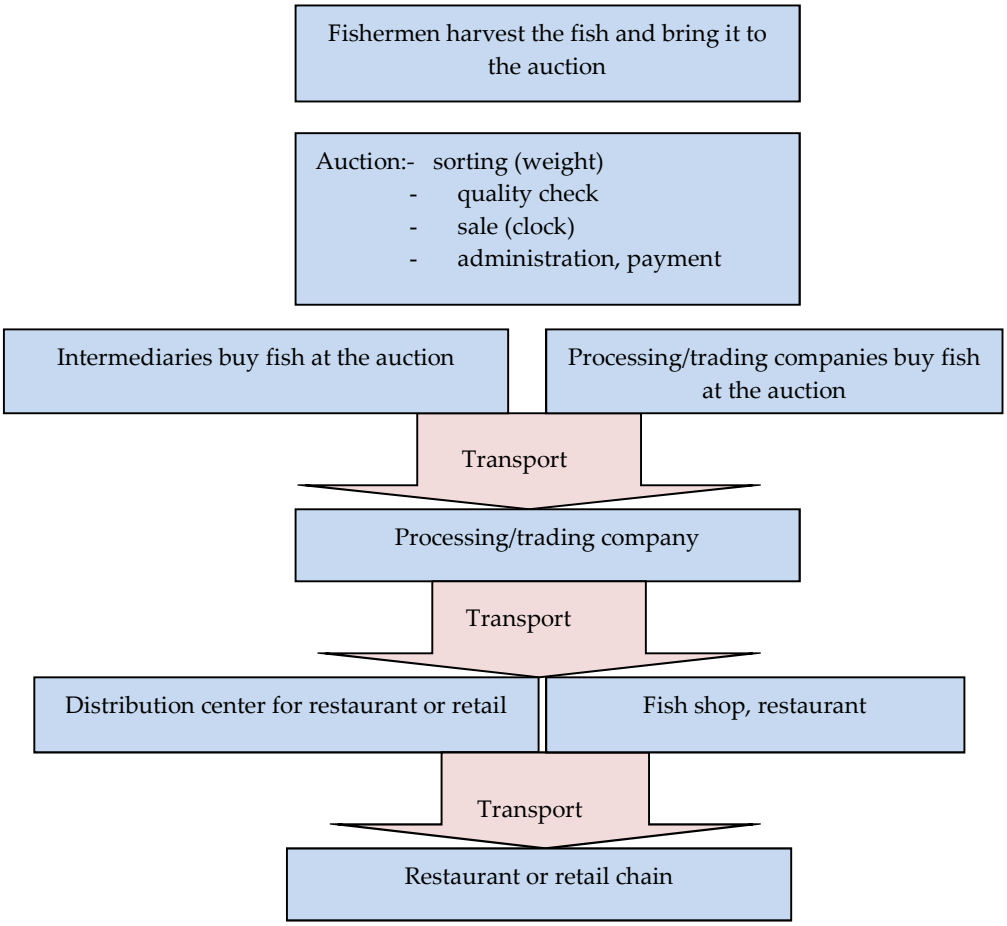

Figure 5.1: Stages in the Dutch fish value chain

5.3.2. The important role of the auction

In the Netherlands, fish is sold by auction. The Netherlands counts eleven auctions, of which the majority has been privatised since the nineties. At present these auctions are owned by fishermen cooperatives, sometimes in combination with traders, producer

organisations or municipalities. Since 2000, several auctions have chosen to work more closely together in order to increase efficiency.

At the auction, the capture of each vessel is graded according to specie and size and put into boxes. Then the fish is weighed, qualified, and stored in ice awaiting the Dutch auction (*afslag)*, which usually takes place on Fridays. The auctioneer begins at a very high price and descends until the first winning bid. This differs from the English auction where buyers actively bid in ascending order or price (Peterson & Georgianna 1988). Buyers at the Dutch auction are required to have a bank guarantee and registration number. Fish is mainly bought by processing companies, trading companies or restaurants. Most of them buy their fish directly at the auction, others work with brokers. These intermediaries have knowledge regarding the quality of the fish, and often also arrange transport from the auction to the processing company or restaurant.

The auction practice already exists for more than hundred years. However only since 1993, when the Dutch co-management system was installed (De Vos & Van Tatenhove 2011), it was decided by the Producer Organisations (POs), in close cooperation with the government and trading companies, to prescribe the sale of fish through the auction. It is often referred to as the gentlemen's agreement. From then on, all quota restricted fish (mainly flatfish) is sold at the auction. This was agreed on and controlled by the government's inspection department.

The private auction arrangement as part of the co-management system contributed to transparency regarding quota uptake and led to

higher prices, since price-undermining illegal landings belonged to the past (Van der Schans 2001) (De Vos & Van Tatenhove 2011). The auctions therefore played an important role in the regained legitimacy regarding the quota system and governmental policy. The private auction agreement is still common practice and is often even extended to the species that are not restricted by quota, for example shrimps, tub gurnard, red mullet, and sea bass. Fishermen who want to sell fish directly to customers need permission from their PO, and this is not given to them easily. POs believe selling through the auction is the best option for fishermen in terms of prices. Many fishermen accept the auction as their only option, and do not even know that other ways of selling exist.

To conclude, the traditional relationships in the Dutch fish value chain can be characterised as arms' length market relations, with a central role for the auction. Within the chain there is not much contact between the different links; each link has its specific task. Quality standards are set by the auction and intermediaries, and the commodities have similar characteristics. Although, buyers can easily switch between suppliers, they have a preference for vessels with a good reputation. Because fishermen form a homogeneous group and differences between them are not openly stressed, good reputation is based on experience. Trust relationships between buyers and sellers are passive, and mediated through the auction and producer organisations.

5.4 New initiatives in the Dutch cutter fleet

At present, a shift is taking place from traditional relationships to other types of value chain governance and trust within the Dutch value chain. This is reflected in fourteen initiatives which have been developed in the Dutch value chain focusing on shrimps, and flatfish (see table 5.1). These initiatives differ from the traditional value chain in several aspects. Firstly, the contact between suppliers and buyers is more direct. Secondly, the role of the auction has changed, and thirdly the initiatives show different dimensions of trust. In this section we describe and analyse six of these new initiatives in depth, which have been created by different links within the value chain (see figure 5.1), i.e. fishermen, auction, wholesale companies, and the retail business. As such these six initiatives represent the diversity in initiatives. The initiatives are: *The Ekofish Group* and *Han Ypma* (initiated by fishermen), *Wieringer vismarkt* (a municipality/auction initiative), *Jacoba's dagvangst* (a wholesale/auction initiative), *Jan van As* (a wholesale initiative), and *Vis van dichtbij* (a retail initiative).

Fishermen initiatives

The Ekofish Group

The Ekofish group is initiated by a large fishing family from Urk. In 2005, after a tour through Europe, they decided to redefine their business strategy, and convert the traditional beam trawl into the more sustainable twinrig fishing technique in combination with flyshoot

(Icelandic seining). Initially, the bank was reluctant to invest, however when the entire family showed their willingness to invest, this also persuaded the bank. Knowledge about the new techniques was provided to the fishermen by their Danish colleagues.

The fishermen expected to receive a higher price at the auction for their sustainable and high quality fish. However, when this did not occur the fishermen decided to take control over the value chain, by defining the parameters in close cooperation with their customers (mainly retail and restaurants). Attaining the MSC label was an important issue for the retail they found out after a visit to a large retail company in Switzerland. Shortly thereafter the fishermen contacted WWF to discuss the MSC process, and they were willing to support the fishermen. The result was that the fishermen, after two years of assessments, received the certificate in 2009. This was the right time to launch a campaign for their MSC fish, which pushed the demand considerably.

In order to meet the demand, and at the same time increase market power, the family decided to extend the group beyond the family. Three fishermen, with similar business views, responded to their announcement in *Visserijnieuws* (Fishing News), and a group of five vessels was formed, named the Ekofish Group. These five vessels are all vessels fishing under foreign (British) flag, and by signing they agreed to deliver their complete catch to the group. The auction has a different role in this initiative; instead of selling the fish at the auction, the auction weighs and registers the fish, as is required for all quota restricted fish.

After this the fish is stored separately, and the Ekofish group buys the fish from the fishermen for a fixed price. This payment is performed by the auction, whose role is minimised to administration and payment.

Instead of selling the fish to intermediaries or processing companies, the Ekofish group mainly sells the fish to end buyers with whom they conclude long term contracts. The Ekofish groups contacts the end customer about requirements regarding the form and delivery of the product, and then they select a processing company, or perform minor processing tasks themselves. This differs from the traditional situation in which the end customer decides with which processing they work. In this way, the Ekofish Group is keeping control of quality and price.

Besides a new role for the auction, this initiative has also changed buyer-supplier relationships. The contact is direct and personal, and the business relationship is formalised through long term contracts. One of the participants explains this as follows:

"At present the fisherman needs to work on its customer relations and provide service, which is a whole new ball game for us. Positive is that the customer stops being anonymous, and vice versa."

Because of this new relationship, feedback is given regarding complaints and demands. The fishermen feel proud when they visit shops where their fish is displayed:

"We now know where our fish is going to and we go to the shops and see our fish displayed in the shelves. That is a nice experience."

It also changed the relationship between fishermen and the bank. Because of the long term commitments with buyers, they are able to plan their whole production process, and calculate their expected income beforehand. This has improved their trust relationship with the bank:

"The price at the auction fluctuates too much and the long term contracts allow us to plan the whole year. This is highly appreciated by the bank. We have improved our credibility."

Finally, it also changed relationships among fishermen themselves. The initiative is characterised by a close horizontal cooperation. It started with trust based on family values, but is now expanded to other colleagues who share similar business values. At first only within the Netherlands, but at present even abroad, as in 2010 eight Danish MSC certified vessels joined the Ekofish Group in order to control the market for MSC plaice (Anonymous 2010). Face to face contact is very important, and encounters take place on a weekly basis. The family keeps a close watch on the behaviour of the remaining fishermen, and makes sure the rules are complied with. In order to ascertain deliveries, the five vessels work according to strict schedules.

MSC plays an important role in this initiative, however next to this institutionalised trust, fishermen also changed their operation, as a

result of close interaction with their customers, and improved the quality of the fish by sorting on board, and land the fish more frequently. Thirty per cent of the fish is sold fresh, however when demand and price drop, fish is frozen anticipating market improvement. When part of the fish is sold through the auction, then MSC labels are not used. This for fear of low prices at the auction leading to lower contract prices (personal communication with LEI researcher, 2010).

Direct selling by a Wieringer fisherman – WR244

In this initiative a fisherman, who owns a small beam trawl vessel, also aims for more control in the value chain by taking over several stages in the value chain. Initially, the fisherman was asked to participate in the Wieringer fish market (see further this paper), however he disagreed with the set parameters as well as with the price he received. The fisherman was reluctant only selling his final catch, as he considers his entire catch to be fresh as the fish is never older than two days. Furthermore, he sets his own parameters, and treats the fish with care in order to ensure the best quality. This was confirmed by a third party when he received more than once a local prize for having the best quality fish. In addition, he had a trust good relationship with a local processing company, which he did not want to jeopardise by telling that the best quality had already been sold to someone else.

However, prices at the auction were low, and the fisherman decided to start a new initiative about three years ago, which implied

selling fish directly to local customers. This was motivated by him as follows:

"Fishermen do not get a fair share of the profit, in my opinion. Good quality fish should receive a higher price than lower quality fish. When after one night of fishing I only received 49 cents for my extremely fresh fish, and it was later on sold for 3,25 per kilo at the auction, I decided that a higher margin for fishermen should be possible." (www.wieringermeerplaza.com)

Then he decided to keep part of his catch separately to sell it to local customers who had been asking for it. He received a higher price than at the auction. However, this is not according to the registration rule, and he was caught, and fined by the government's inspection service (AID). Thereafter he decided to make use of the old system in a new way. He obtained a bank guarantee, a registration number, and became a buyer at the auction. After fishing, he brings the fish to the auction, takes place in one of the buyer seats, and waits until his catch is displayed. When the price drops below a certain minimum he presses the button and purchases his fish, after which he loads the fish unto his vessel again, and sells the fish in the harbour directly to consumers. Consumer trust lies in the direct contact they have with the fishermen, the place of the sale (real fishing boat), the stories he tells them about fishing and biology of the fish, the high quality, and the low consumer price (personal communication with fisherman, 2010) (www.wieringermeerplaza.com).

Initially, he mainly bought fish that is not regularly consumed in the Netherlands, and for which a low price is paid at the auction, which are: plaice, dab, lemon sole, whiting, flounder, and gurnard. However when customers kept asking for sole, this was added to the assortment. He only sells his own catch, and this appreciated by his customers (personal communication with fisherman, 2010). By buying his fish at the auction he stimulates other buyers to pay a higher price, but at the same time he does not exclude anyone. By doing this he tries to keep relationships good in such a small industry. He sells the fish below the average market price, even below the prices at the fresh fish market, which is located at a close distance from his vessel (100m). This leads to distrust and frustration from the side of traders and fresh fish market organisers (personal communication with sellers at the market, 2010).

An auction/municipality initiative

Verse vismarkt (fresh fishmarket) Wieringen

The fresh fish market in Wieringen was organised for the first time in 2004. Fresh sea fish and shellfish, caught by local boats are sold at the market, which takes place on Saturdays from June to December in the auction *Hollands Noorden* (www.versevis.nl September 15th 2011). The fish is bought directly from fishing boats, and brought to the auction where it is sold to end consumers. In this way the value chain is shortened, as processing, and trading companies are not involved. The market is run by volunteers who sell and clean the fresh fish, which cannot be older than 48 hours.

The initiative came from the municipality of Wieringen in close cooperation with the auction, and aimed to stimulate both local, sustainable fisheries, and the local auction. The latter was coping with low turnover rates caused by a reduction of the local fleet (personal communication, 2007). A subsidy was granted by the province and the Ministry of Economic affairs with which among others a market study was performed by research institute LEI (De Vos *et al.* 2007). At the market fish, organic vegetables and cheese are sold, combined with demonstrations on how to peel and cook shrimps, and how to repair fishing gear. If fish remains unsold, it goes for a reasonable price to a trader (Beek 2008). The small profit goes to the auction.

The fresh fish market is located in the auction hall, but employs its own buyers (personal communication, 2007). These buyers perform the first quality check on board. The auction has set the quality parameters, hereby taking a new role in which they try to cope with new developments, work more demand oriented, and subsequently aim to increase their profits. Fishermen are required to upgrade their fishing process by: fishing for shorter periods of time, staying close to the harbour, handling the fish with care, using more ice, gutting the fish on board, and by keeping fish caught in the last 48 hours separately from the rest.

Trust with the end consumer is based on stories about local fishermen, as well as face to face contact. Consumers value the local concept, the freshness, the combination with local vegetables, the freedom to decide which fish they want to buy, but also the prices,

which are lower than in average stores (personal communication with eight visitors, 2010). For many consumers, the market forms part of a day tour that includes the harbour and a local restaurant. The sustainability concept is mainly defined as economic and social sustainability an important role left for cultural history (peeling shrimps and repairing nets) and livelihoods. The supply is limited, implying freshness. The fish, displayed in one piece is cleaned right on the spot, and the quality can be checked by the customers themselves:

"It is difficult to judge how old the fish is when it is put behind glass. It is even more difficult when it concerns a fillet. The neon-light in the hall further ads up to the reliability. This market very much differs from the shops where the light can even make a brick look shiny."(Beek 2008).

Now, six years after the start, the market shows some flaws. Without subsidies the market cannot survive. For a large part this is caused by inefficient procurement. Moreover, traders do not seem to be willing to buy leftovers, and boycott the initiative. Finally, the tourist activities, such as shrimp cooking and peeling, and net repairing have also disappeared from the market, probably leading to a decrease in number of visitors.

Wholesale initiatives

Characteristic of the *Jacoba's dagvangst* and *Jan van As* initiatives is that wholesalers define the relations within the chain and establish direct relations with specific selected fishermen.

Jacoba's dagvangst (Daily fresh fish from Jacoba)

Hanos, a wholesale company for restaurants and hotels, was confronted with fluctuations in the quality of the fish they were buying at the auction. To be ensured of a certain quality level, Hanos wanted to develop direct relationships with a few fishermen. They came into contact with Bastion Zeevis (a processing/trading company which wanted to work directly with fishermen and sell local, sustainable fish to restaurants). After a while Bastion Zeevis was sold, and the previous owner started to work for the auction *Hollands Noorden*. The established contact with Hanos continued. Four fishermen had been selected by the auction for a direct trading relationship with Hanos (facilitated by the auction), and they were required to upgrade their product and process by participating in several projects (collecting garbage at sea), storing the last catch separately and extremely cold, and by gutting, sorting and weighing the fish on board. Hanos, however, was not satisfied with the selected fishermen, as they did not live up to its quality and sustainability standards. A new partnership was brought about with a cousin of one of the Hanos employees. An informal contract was made (handshake), and the fisherman received an extra ten per cent on top of the average daily auction price.

This initiative resulted in increasing face to face contact between the fisherman and wholesaler, while Hanos also functioned as a knowledge broker between the customers (restaurants and hotels) and the fishing industry, by organising for example a master class for customers about fishing techniques and sustainable fisheries. The trust relationship between buyer and producer, induced by personal contact and commitment, plays an important role in this initiative. This commitment can lead to more sustainable fishing behaviour as the following example shows. In this case Hanos buys directly from a pike perch fisherman. His whole catch is sold to Hanos, and the fisherman was requested only catching the bigger fish. Thereafter the fisherman changed his catching pattern and targeted mainly for the bigger fish, leaving the small ones to breed. In another case a beam trawler was excluded as a supplier, but after changing his fishing technique he was allowed to supply again, which was one of the reasons that stimulated him to change.

Trust in this initiative is built through direct and personal contact, mutual information exchange (the fisherman who provides material for the master class, and the buyer that exchanges information about customers), and the parameters are set by Hanos itself. Institutionalised trust through for example MSC certification does not play an important role in this initiative, which aims at hotels, and restaurants instead of the retail:

"Labels are mainly used by companies that have no knowledge of fish. MSC herring was discarded because the quality was not good. We always bought herring from two Dutch vessels, however after
they got certified we had to pay more for the same fish." (Personal communication with Hanos employee, 2010).

Hanos is now trying to expand the initiative by broadening the assortment with other species besides flatfish. Recently, they sought contact with another fish trading company with similar values: Jan van As. This partnership is based on personal contact (the initiators are former colleagues).

Jan van As

Jan van As - a family-owned company founded 60 years ago - delivers fresh and frozen fish, shell-fish and smoked fish to the hospitality business, organisations, wholesalers and retailers. By purchasing fish directly from fishing boats, *Jan van As* aims to guarantee the best of quality. Also in this initiative trust relations are direct and personal, based on a long term commitment. For example, buyers (among which a famous Dutch chef) are invited to the vessel in order to create a mutual understanding, exchange knowledge and ultimately improve the quality. The focus is on quality (freshness) of the fish as well as on its limited (i.e. seasonal) availability.

In 2008, an employee of *Jan van As* who previously worked as a chef, contacted one of Urk's best known (in terms of high quality, and

communication skills) fisherman to sell his fish directly to *Jan van As*. He disliked the sorting practices at the auction which disturbed the cooling chain, resulted in a lower quality fish. He showed the skipper of the vessel the difference between his fish and the fish they bought from other vessels at the auction. The expiring date was increased by seven days. The fisherman thereafter upgraded his process, and stated:

"Because of our contact with *Jan van As*, my crew handles the fish differently, more consciously. Our eyes have opened, there is quality and there is quality." (www.janvanas.nl).

New arrangement	Goal	Actors	Auction involved	Target species	Subsidy
Retail initiatives					
1.Vis van dichtbij Informal agreements with fishermen (quality, local, sustainable)	Goal is to revitalise the sale of North Sea fish in the supermarket. From supply driven to demand driven value chain.	AH (retail) Marine Harvest Auction Hollands Noorden Fishermen WNF LEI ILVO	Hollands Noorden, later expanded, because of new insights in sustainability	Sole and Plaice	Yes
Whole sale initiatives					
2. Jan van As Informal contract, MSC, quality	Direct buying and contact with fishermen. Extra demands on quality (sustainability, freshness)	5 Fishermen Restaurants	Urk	Sole	No
3. Jacoba's dagvangst Informal agreement with fishermen (quality, seasonal, sustainable)	Sell local, good quality fish in hotels and restaurants. Based on seasons.	Fishermen Auction Strogoff fresh food (butcher delivering to restaurants) Hanos (restaurant wholesale)	Hollands Noorden	Sole and plaice	No
4. Contract sale Heiploeg since 2004	Direct sale from (some) shrimp fishermen. Fixed prices and amount.	Fishermen Auction Heiploeg (processing/trade)	Lauwers oog	Shrimps	No
5. Fishes MSC, quality	Tries to stimulate consumers to buy a sustainable quality product	Fishermen Fishes (trade) Retail, restaurants	All auctions	Sole	No
Fishermen initiatives					
6. Ekofish group MSC, formal contracts,	5 vessels are obliged to sell their fish to the Ekofish Group. They stay owner	5 fishermen Ekofish Group Auction (for administration)	Urk	MSC plaice, and potentially MSC	No

horizontal coordination	of the fish. They sell the fish to retail companies and restaurants. In house processing	Processing/trading companies Supermarkets (domestic and abroad)		sole	
7. WR244 (Han Ypma) Local, no auction/processing personal, direct selling, quality	A fisherman repurchases his own fish from the auction. After that he loads the fish unto his vessel again and sells the fish in the harbour directly to consumers. Story telling	Fisherman	Hollands Noorden Ijmuiden	Flatfish, shrimps, crab and shellfish	No
8. Osprey group Horizontal cooperation, MSC, contract selling, high quality, fish is landed three times per week. Tracking and tracing	4 vessels work together. Viva la fish mediates between buyers and fishermen. Buyers pass on volumes, and Viva la fish tunes the catching plan with fishermen	4 fishermen (all relatives) Auction (for administration) Viva la fish (marketing) Processing/trading companies Supermarkets	Urk	MSC plaice, marke-ting of fresh North Sea fish	No
9. TX 25 (Dirk, Albert Blom) Local, quality, direct selling	This fisherman owns a shrimp processing plant in the Netherlands. Transport to Morocco is avoided.	Fisherman		Shrimps	No
Auction initiatives (2nd and 3rd initiative are still in starting phase)					
10. Verse vismarkt Wieringen Direct selling to consumers,	The fresh fish market is a market where consumers can buy their fish directly from locals, Fish is	Fishermen Auction Market	Hollands Noorden	All locally caught fish	Yes

local, personal, fresh	bought at auction by intermediaries				
11. Development of a new auction system (internet)	Rethinking the auction: How to improve service (quality assessments? What are the wishes of the purchasers? Traceability and sustainability, contracts,	UFA, Hollands Noorden, Ijmuiden PEFA LEI	UFA Hollands Noorden IJmuiden	North Sea fresh fish	Yes
12. Scheveningen pride Branding, quality	Product innovation, e.g. soup delivered together with fish is tagged in order to show freshness to the consumer	Den Heijer Jaczon UFA Retail both home and abroad	UFA	Plaice, sole, tub gurnard	Yes
A joint initiative					
13. North Sea fish Center Regain consumer trust	Aim to improve cooperation in the supply chain and, promotion of plaice and labelling (fish is often mislabelled).	All Producer Organisations, also traders and auctions Retail, home and abroad	All auctions	Plaice (North Sea fish)	Yes

Table 5.1: New initiatives in the Dutch flatfish and shrimp industry

The buyer showed commitment by buying a fixed amount from specific fishermen (which is more or less a quarter of the total amount). The fish is sorted on board, for which the fisherman receives an extra percentage on top of the average auction price.

A retail initiative

***Vis van dichtbij* (local fish)**

Vis van dichtbij is initiated by a large Dutch retail chain (Ahold-AH, after this AH). AH promised, like the other retailers in the Netherlands, to have their complete assortment MSC certified, but at the same time was not satisfied with the MSC certified Hastings fleet they had been buying. The supply fluctuated too much, volumes were too low, and could not be delivered on time. Hence, a new business relationship had to be found (personal communication with AH employee, 2010). This became the '*Vis van dichtbij*' initiative, an initiative to put local (Dutch) fresh North Sea fish on the shelves. This initiative received subsidy from the Fisheries Innovation Platform (established by the Dutch government).

AH and their preferred supplier Marine Harvest formulated clear demands regarding product and process specificity: 1) the requested volumes needed to be available several times per week, 2) the fish needed to be fresh (i.e. not older than 48 hours, and sorted on board), 3) it needed to be caught by local, Dutch vessels, and 4) the fish needed to be sustainable (i.e. caught with sustainable fishing techniques as defined by research institute ILVO, and in the process of attaining the MSC label within three years after the start of the initiative).

Instead of trusting the quality inspections provided by the auction, Marine Harvest developed their own quality assessments. As much as possible AH tried to rely on third party certification schemes like MSC. However when these standards are not available, personal

contacts with fishermen become essential to realise the goals set by AH. In the words of an AH employee:

"As long as demands have not yet been standardised, good relationships with fishermen are extremely important. This means respect and open communication from both sides. We prefer to work with fishermen that understand and have a feeling for what the consumer wants" (personal communication with AH employee)

A partnership was established with the auction *Hollands Noorden*. The auction selected several fishermen based on their reputation and willingness to work more demand oriented. They were not yet MSC certified, but they committed themselves to become certified within three years after the start of the *Vis van dichtbij* initiative. In order to establish personal contact with the fishermen a team building event took place on board of one of the vessels, and pictures of the selected fishermen were taken and published in the magazine of AH, next to fish recipes.

The fishermen did their best to meet the demands, and a premium price was paid by Marine Harvest. A meeting was held, where AH, Marine Harvest, the auction and the fishermen were present. This meeting was an important step in the trust building process with fishermen, because AH showed commitment (travelling three hours on Saturday morning to meet the fishermen), and transparency on margins and price structure, which was essential information for fishermen in

respect to trust. Thereafter, fishermen were reported to take a different perspective on their product and were told to be proud to deliver to AH:

"We are no longer suppliers for the auction, but for AH." (personal communication with auction director, 2010).

However, after more than a year some flaws started to appear. The auction, the intermediary between buyers and suppliers, was said to fail to meet the demands regarding deliveries, and sustainability. Some fishermen who participated did not have the 'right' fishing techniques as defined by ILVO. As a result, these fishermen were excluded from the project without communicating this to them directly, leading to frictions among fishermen themselves, as well as between fishermen/auction, and the AH, as the following quote shows:

"This project does not work. AH wants the best quality without paying a lot more. The expiring date is increased by four days, but we do not gain from that advantage." (personal communication with a fisherman involved in the AH initiative)

"Supermarkets use fish to make up for the losses they make with other products, and we pay the price." (personal communication with a fisherman involved in the AH initiative)

However, two years later new steps in the trust building process were made, stimulated by the Fisheries Innovation Platform. This involved the agreement that auction *Hollands Noorden* remained the first supplier, and only in the case they were not able to meet the demand, fish could be bought at other Dutch auctions. This agreement was enforced through a monitoring instrument. This monthly monitoring system, provided by research institute LEI, showed the volumes purchased by Marine Harvest and their origin, and as such increased transparency and trust.

Two years after the start of the project, the situation remained difficult, and not all goals were met. Dutch flatfish was available in the supermarket, but a direct relationship between retail and fishermen was lacking. The fish was bought by Marine Harvest at the auction, but fishermen were not aware anymore their fish was sold to the AH. Moreover, the quality standard did not meet the requirements. This initiative showed the difficult position the auction finds itself in. On the one hand the auction was said to represent the fishermen. On the other hand direct selling could make better prices for fishermen at least in the short term, but when the majority of the fish is sold directly, this will jeopardise the existence of the auction, which can lead to lower prices in the long term.

5.5 Rethinking the role of the auction

The above discussed new initiatives of value chain governance all show the need to rethink the role of the auction in the value chain. Increasingly, the existing action system, focussing on bulk products, fails in several respects. The initiatives in the Dutch fresh fish value chain are aiming at getting higher prices, and higher quality fish beyond the existing systems. Due to globalisation, fishermen compete directly with fishermen or farmers who produce similar products on the world market, leading to lower prices for Dutch fishermen. Especially plaice is not considered to be an exclusive product, and competes with cheaper (frozen) products such as tilapia and pangasius. Sole, another important commercial fish for the Netherlands, is less sensitive for substitution, and product quality is higher. It is mainly sold as a fresh product to local restaurants at a high price. In order to deal with the current challenges, and obtain a higher price, fishermen try to upgrade their process and products (by producing fresh, sustainable, high quality fish that meets the requirements of the buyer), and they try to sell it directly to (local) buyers. By doing this, fishermen try to regain the control they have lost in the value chain.

Also buyers more and more seek to avoid the auction. They criticise sorting practices at the auction, because it either damages the fish or lowers the quality as temperature rises during the sorting process. Buyers prefer that fishermen sort, weigh, and label the fish on board to speed up the process in the auction, resulting in fresher fish

and thus less dissipation at the part of the trading and retail companies. More and more, buyers prefer to work exclusively with fishermen and have a direct say about freshness, sustainability and quality. Product differentiations are easier to accomplish through direct contact than through the auction. Furthermore, buyers want to know beforehand what they can expect on volumes and prices in order to make calculations and plan their activities. They do this through contracts that ensure deliveries and subsequently provide them with competitive advantages.

However, current debates within the fishing industry reflect insecurities regarding the effects of selling through contracts on the price levels. According to the auction theory, a higher price will be paid at the auction compared to contract sale (Mc Afee & Mc Millan 1987). The sale of fresh products is bound to a specific day, and both supply and demand fluctuate due to the weather and low price elasticity. The auction clock withdraws information from the market regarding the willingness to pay of buyers leading to higher prices. Forms of contract sale withdraw less information from the market leading to lower prices.

However, the auction theory cannot be applied in this case, because contract sale could also generate a demand that surpasses the day demand, because buyers are able to plan better (see also Bunte 2002). This happens for example with MSC products. The demand for MSC products is developed outside the auction, as a result of which MSC products that are sold within the auction receive similar prices as non-certified fish. In that way auction and contract are difficult to

compare as they represent a different demand. Furthermore, contract sale ensures the deliveries, which gives more security to buyers. This means that contract sale not necessarily leads to lower prices. However, a complicating factor can be that fishermen underbid, thereby undermining contract prices. Underbidding is not possible at the auction.

5.6 Conclusions

Market and sustainability challenges result in growing competition within the sector and an increasing importance of consumer preferences. The Dutch fresh fish value chain changed from a supply driven chain towards a more demand driven value chain. This has an impact on each link in the value chain (especially the auction), and the way the value chain is organised and governed. Where value chain relationships were previously characterised by minimal information exchange, and passive and institutionalised trust, nowadays a high level of coordination and horizontal and vertical active trust relations are needed to be able to cope with a variety of products. Standardisation is currently running behind. Therefore relationships between producers and buyers are at present (temporarily) based on personal and active trust, until new standards have been developed, and trust can be re-institutionalised again. This can either be done through a new auction system that copes with diversity or through certification schemes (intern

or extern) that include not only sustainability, but also other aspects such as quality, and locality.

Traditionally the auction created institutional and passive trust both between chain partners and between EU, government, industry and consumers, because it set a fair price, assessed the quality of standardised products, and it made the quota system work. At present, not only the call for active trust, but also other reasons affected the role of the auction. Firstly, transparency on quota uptake became less important, because sustainability demands go much further than just abiding by the law. In addition demands are made regarding fishing techniques, the impact on the ecosystem, energy use etc. Secondly, quality standards have improved, and the auction is less trusted to guarantee that quality. Thirdly, prices fluctuate at the auction, which makes it difficult for both fishermen and buyers to plan and make forecasts. Fourthly, both buyers and suppliers ask for or produce diverse products, instead of standard products. This requires direct communication between supplier and buyer. Finally, at the auction, non-standard products, like MSC, do not receive a higher price than non certified products.

In this paper we showed that besides supermarkets, also companies on the supply side actively respond to the challenges of sustainability and influences of the global market by developing innovative initiatives. Characteristic for the initiatives we discussed in this paper are new vertical and horizontal active trust relationships. Where previously fishermen drew a line between themselves and

buyers, trust is more and more organised along vertical lines, between suppliers, and the consecutive stage or with end- buyers. Buyers and suppliers work more closely together, and are far more dependent on one another. They actively improve trust relationships by organising symposia, common boat trips, and masterclasses. Information about fishermen is displayed at markets, and in wholesale and retail companies. Also new in chain governance is that fishermen are organised in value chain groups, such as the AH-fishermen, the Ekofish, and the Osprey group. This means that differences between fishermen are more often stressed, sometimes leading to anger and jealousy among fishermen themselves.

In general, the demand orientation and the direct contact between suppliers and buyers seem to create a positive stimulus for more sustainability. More and more fishermen are attaining the MSC label, and a new market for sustainable products is developing outside the auction, where additional parameters, such as locality and freshness are required. The direct contact between fishermen and customers also led to a change in fishing operations (Jacoba's initiative) and a change in behaviour in order to comply and be able to participate ('Vis van dichtbij' and 'Jacoba's dagvangst').

6

Conclusions

6.1 Introduction

It is a commonplace today that many of the world's commercial fisheries are in a state of crisis. The most visible sign of crisis in capture fisheries is the levelling off of the total world catch since the 1990s (Bavinck *et al.* 2005, FAO 2009). A number of causes are said to have contributed to this crisis, among others: the problem of overcapacity; imprecise policy objectives; a decision making system that encourages short term focus; a framework that does not give sufficient responsibility to the industry; and poor compliance by the industry (Commission 2009b). Hence, much of the blame for this crisis is levelled at the way in which fisheries are managed (Gray 2005).

The difficulties with fisheries management are strongly linked to the increasing complexity of policy making. Fisheries systems are highly complex, largely uncontrollable, and unpredictable man-in-nature systems (Mahon *et al.* 2008). In general, policy making has become more and more complex, and the centralised role of the government has failed to address the complexity, resulting in a legitimacy crisis in Dutch politics in the 1990s (Akkerman *et al.* 2001). As a response to the state of

fisheries management, a large array of governance innovations has been deployed over the past two decades (Van Hoof 2010), in which state, market, and/or civil society actors participate. These innovations concern among others: the introduction of an ITQ system, co-management, the Marine Stewardship Council (MSC), the Good Fish Guide, Regional Advisory Councils (RACs), and Fishermen Study Groups.

Trust plays an important role in these new governance arrangements, as it is an important condition and facilitator for democratic governance. Because of the limits of coercive power, authorities must depend on voluntary deference by most of the population. "This is closely related to legitimacy, which is the judgment that legal authorities are competent and honest and that their professional roles entitles them to make decisions which ought to be deferred to and obeyed" (Tylor 1998, pp. 273). As such, good trust relationships are increasingly being seen as an important condition for successful fisheries governance. This view is also endorsed by the European Commission as the following quote shows: "At the core of all these failings lays a lack of trust between stakeholders and regulators, which seemed to overshadow even the successes of those parts of the Common Fisheries Policy which clearly did work." (European Commission 2009a pp.6).

Although trust is often mentioned in relation to fisheries governance, it is seldom analysed in depth. Moreover, literature on trust and trustworthiness focus for a large part on the important relationship between governors, and citizens. This is relevant, but new governance

arrangements sometimes do not involve the state. Therefore the main objective of this thesis was to analyse and to understand how trust relationships between the main actors in the fisheries industry have changed under conditions of new modes of governance enhancing demands for sustainability.

The research questions of this thesis were defined as follows:

- What kind of new governance arrangements have developed in Dutch fisheries to deal with the sustainability challenges the industry is currently facing?
- How have these new governance arrangements influenced trust relationships?
- What does this new governance-trust complex contribute to the transition towards sustainable fisheries?

In this thesis I have analysed and assessed four perspectives of these changing trust relationships, which are: 1) trust relationships between fishermen and government, 2) trust relationships among fishermen themselves, 3) trust relationships between NGOs and fishermen, and 4) trust relationships between fishermen and other companies in the value chain. In the next section I recapitulate the conclusions of the four papers, and set out connections between the different papers to further identify lessons to be learned for contemporary fisheries governance.

6.2 Changing trust relationships in the Dutch fishing industry: conclusions from the case studies

6.2.1. New trust relationships between fishermen and government: the co-management arrangement

A new governance arrangement

In the Netherlands a co-management system was installed in 1993 with the aim to restore trust relationships between fishermen and the government. Trust was clearly lacking at the end of the eighties, as was shown by the strict enforcement practices. It was widely believed that the lack of participation of fishermen in management had caused a lack of trust between fishermen and the government, legitimacy problems, and subsequently very low compliance rates. This could jeopardise the sustainability of the fishing sector.

The influence on trust relationships

In the co-management arrangement, two trust relationships play an important role: trust between government and fishermen, and trust among fishermen themselves. The two are closely linked; 'if citizens doubt the state's commitments to enforce the laws and if its information guarantees are not credible, then the state's capacity to generate interpersonal trust will diminish' (Levi 1998 pp.7). And this interpersonal (or trust among fishermen themselves) has an important influence on the level of compliance with regulations. Moreover, if

fishermen and the government trust each other, and have good working relationships, this promotes the sharing of knowledge and information about the resource. Such knowledge exchange can reduce regulatory costs and improve management outcomes (Grafton 2005, Pomeroy & Berkes 1997). As such, many scientists, but also governors, see a co-management system as a way to improve relationships between fishermen and government.

Initially, the co-management arrangements did restore trust relationships between fishermen and the Dutch government. Mostly due to the fact that it resulted in higher transparency, and predictability, as well as more control, and flexibility for fishermen. As fishermen had greater influence on policy making, they had come to perceive the authority as more legitimate. Moreover, part of the enforcement was delegated to fishermen or their organisations adding to this legitimacy. Due to the small scale character if the industry, trust between fishermen and the government was largely personalised, and this made the relationship easier to maintain. In that way personal relationships influenced the institutional trust in the government.

The co-management arrangement also had an impact on trust relationships among fishermen. As the co-management arrangement increased the transparency on quota uptake, fishermen had more trust that other fishermen, whom they did not know, were abiding by the same rules. This led to institutional trust. Apart from the institutional trust, fishermen were stimulated to work together in small, local, and homogeneous groups on quota management. This strengthened the

thick trust that already existed in these close knit communities, with the difference that thick trust was expanded from the private environment to the professional environment. It also increased active trust among fishermen, because fishermen worked together in co-management groups and had the responsibility not to exceed the group quota limits.

For a long time, this situation worked perfectly, however these trust relationships are not stable, but are influenced by external developments. Higher demands regarding sustainable behaviour, the increasing influence of European institutions, and financial problems were putting pressure on the arrangement, and thus on the different trust relationships. Due to the democratic mechanism of the ''coming and going'' of elite personnel, personal relationships with fishery policy makers diminished, and promises were not always transferred from one policy maker to the next. Moreover, due to the increasing role of the European Union in fisheries policy, and the increasing exchange of information between European fishermen (through the internet and at sea), legitimacy expanded from the national to the European level. Hence, trust in the national government is not enough anymore to lead to higher compliance.

In addition, trust between fishermen and the European Commission, and trust among fishermen from different countries also influence compliance rates. In the Netherlands this already became apparent from the eighties/nineties onwards when some Dutch fishermen chose to purchase foreign vessels and use the national quota of other European countries (i.e. quota hopping). This increased the

knowledge regarding other national fishery policies considerably. Fishermen expect equal treatment from different inspectors at sea, and equal levels of enforcement. The Dutch national government promised to ensure this level playing field, however this approved difficult to accomplish.

Institutional trust among fishermen, which was facilitated through the co-management system (especially with fishermen from other regions/organisations) also diminished again in the new Millennium, because less transparency regarding quota uptake was provided. This task had been transferred from the organisations to the government, however because of administrative reasons; the information was not always up to date. Furthermore, the influence of fishermen on policy processes was less than during the neo-corporatist system when all new policy measures were presented to the organisations prior to implementation. Hence, failures to meet expectations, to expand legitimacy to a more European level, and the diminishing transparency regarding quota uptake led to a situation where fishermen and their organisations were less willing to take up management responsibility, and increasingly have the perception of co-management as a way for the government to decrease management expenses (i.e. a diminished trust in the government).

Trust and the influence on sustainability

Prior to the co-management system relationships among fishermen could be characterised as suspicious and distrustful. These

suspicions were particularly directed at fishermen outside their local community. This distrustful relationship led to a race to fish, and thus unsustainable behaviour. Fishermen had no idea how much fish other fishermen were catching and they were afraid the national quota limit was reached before they had reached their own individual quota limits. Therefore, fishermen felt an urge to fish as much as possible as soon as possible. A large part of the fish was traded illegally, without reporting it. This led to lower prices, which stimulated the fishermen to fish even more, in order to keep earnings at the same level. Together with the introduction of the co-management transparency regarding quota uptake increased, and fishermen were collaborating and trading quota that had become transferable for the first time. Subsequently trust was restored among fishermen. This led to more sustainable behaviour on the quota level (ecological sustainability), but it had also an important effect on the prices (economic sustainability).

However, this trust relationship is very fragile, and when transparency regarding fishermen behaviour decreased due to a lack of organisation or time, at the same time the industry was facing an economic crisis, distrust among fishermen rose again, leading to a short term focus and less enthusiasm from the part of the fishermen to take up more responsibility in fisheries management. This means that there is an important role reserved for governors to focus on restoring trust relationships among fishermen themselves (on a European level), instead of mainly focusing on trust relationships among fishermen and regulators as the quote of the European Commission suggests. The trust

between regulators and fishermen should also go beyond the national level, where trust national governments used to facilitate the relationship between fishermen and the European Commission, fishermen increasingly seek a direct relationship with European regulators, and fishermen from other European countries.

6.2.2. New trust relationships among fishermen: national study groups

New governance arrangements

In 2008 the Dutch government funded, partly with money from the European Fisheries Fund, Fishermen Study Groups. The facilitation was in the hands of research institutes LEI and Imares. Fourteen Study Groups were facilitated by these institutes, but the initiative came from actors from the industry. The groups consisted of a maximum of 16 fishermen from the same fleet segment but from different regions in the Netherlands, which worked together and exchanged knowledge. With this arrangement, the government expected frontrunners to share and enlarge their knowledge, and to make this knowledge available for the wider group of remaining fishermen in order to stimulate a sustainable fishery (personal communication policy officer, 2007). The government was willing to subsidise these arrangements for a period of seven years provided that the evaluation that had to take place after three years has a positive outcome. Hence, with the study groups, the government facilitated (financially) self-governing arrangements for fishermen.

The influence on trust relationships

Prior to the Study Groups, trust among fishermen had a strong local/regional focus, and kinship was at the core of many family firms. Relationships among fishermen were personal, strong, and frequent, and nested in a wider fisheries network. This 'thick' trust (Putnam 2000, pp.136) was further stimulated in 1993 when co-management groups were organised along local lines, each group consisting of fishermen who shared similar characteristics (fishing techniques, local knowledge, business type etc.). This means that knowledge regarding fishing techniques, fishing, and fish stocks remained largely within the local community. Fishermen from other regions, with whom one had not had a great deal of experience (cf. Rotter 1971), were often stereotyped as being unsustainable, and not innovative in their behaviour.

Apart from this thick trust, prior to the Study Groups, trust among fishermen was also institutionalised through producer organisations (neo-corporatism), the co-management groups, and the Fish Product Board. Local representatives exchanged knowledge with other local representatives, but fishermen were barely involved in this process. Representatives formed the link between fishermen, and the 'outside' world. They exchanged knowledge with NGOs, Ministry, Product Board, scientists, and fishermen from other regions. Because of this the fishing community operated in a rather isolated manner.

The Study Groups arrangements changed trust relationships among fishermen. Fishermen met 'the generalised other', i.e. fishermen at a greater geographical social distance, thus fishermen from other

regions. They were able to work together and exchange knowledge without representatives deciding the agenda. As these fishermen often do not originate from the same region, and are not relatives or close friends, the trust building process is a fragile process, and has to be created by a 'shared engagement in practice'. In that way the 'thin' trust is actively won. Both thick and thin trust are based on personal trust, with the difference that thin trust is 'a standing decision to give people one does not know from experience, the benefit of the doubt' (Putnam 2000 pp. 136). Through the Study Groups, this thin trust was able to grow, by meeting regularly, taking joint study trips abroad, by signing intentions statements, by writing plans and leaflets and jointly lobby with third parties. This led to fulfilment of reciprocity within shared social networks.

Trust and the influence on sustainability

For a long time, thick trust played an important role in ensuring an economically sustainable industry. The family owned companies were dependent on relatives who helped them out financially, with administration, and the company ensured a good living for many. Nowadays, companies are less dependent on family labour, and increasingly hire crew members from abroad. Moreover, fishermen are not succeeded anymore by their sons and daughters, who increasingly take jobs outside the fishing industry. In order to maintain their businesses, nowadays fishermen depend to a larger extent on relationships with relatively outsiders, i.e. through thin trust. This thin

trust is also important for the transition towards sustainability. With the rising demands regarding sustainability, more specialised knowledge is required regarding ecosystems, fishing techniques, markets, and regulations. Thin trust can help improving the knowledge exchange regarding fish stocks with for example fishermen from other regions, and ways to improve fishing operations in terms of ecological sustainability, and ecosystems by exchanging knowledge with NGOs, and scientists.

Fishermen themselves felt the need to cooperate and extend their networks beyond their local community and organisation. They wanted a more direct relationship with these outsiders. Representatives were mainly interested in providing equal opportunities for every fisherman to become more sustainable. They have less interest in stimulating specific groups of fishermen that are more sustainable than others. As a homogenous group is easier to represent, representatives are therefore less in favour of diversity. However, a larger and diverse network plays an important role in regaining the license to produce, an essential condition for a sustainable future. Institutions such the Fish Product Board and the two national organisations are losing legitimacy as they fail to adapt to the need for diversification. Fishermen fill in this gap by actively seeking contact with fishermen from other organisations, other regions, and countries, but also with banks (for investments), municipalities (for licenses), government (for legislation), and market parties (to increase market value). As explained before, in the Study

Groups there was space for diversity to grow under the condition of thin trust.

6.2.3. New trust relationships between fishermen and NGOs: the Good Fish Guide

A new governance arrangement

The position of NGOs within the political process has changed. NGOs have gained more expertise, and influence, and are increasingly involved in governance through what they refer to as market based tools, including consumer awareness campaigns, boycotts, certification schemes and seafood guides. In doing so they have become central actors in a wider shift to defining 'new' quality grades and standards, which set a new sustainability yard stick for the world's fisheries. These new steering mechanisms usually do not involve the state.

In the Netherlands, a similar new instrument was introduced in 2004 by a Dutch NGO. This instrument, *the Viswijzer,* was designed to intervene in the Dutch fishing industry, by informing the Dutch consumer. The *Viswijzer* is a market-based tool for assessing fisheries through sustainability criteria and categorising them in a traffic light system: red for 'preferably not', orange for 'second choice' and green for 'excellent choice'. The idea behind it was that it would stimulate the consumer to make a choice for environmentally friendly fish consumption, push the demand for sustainable fish, and by that

stimulate fishermen to green their businesses. As such, the *Viswijzer* is a clear example of market based governance beyond the state.

The influence on trust relationships

Prior to the *Viswijzer*, contact between NGOs and fishermen was largely absent. This slightly changed when NGOs started to increase their influence on fisheries policy, through their influence in the United Nations (the 2002 World Summit on Sustainable Development or the Johannesburg Summit, where it was decided to have all fish stocks at MSY level by 2015), through national government (e.g. the closing down of the cockle fisheries in the Wadden Sea), and through market based tools such as the Marine Stewardship Council. From then on, the industry criticised the influence of the NGOs, and perceived them negatively, contributing nothing but further pressure on their already beleaguered industry (Dunn 2005). NGOs are often criticised for lacking accountability, and thus transparency (unlike democratic governments and firms which are accountable to respectively citizens and owners or shareholders, it is less clear to whom NGOs are accountable to as they serve many diverse principals). NGO are also sometimes criticised for having a commercial interest (Jacquet *et al.* 2010). These aspects can feed into distrust. Both parties accuse the other of having a single minded focus: NGOs are said to focus solely on ecological sustainability, and fishermen are said to focus solely on economic sustainability. As a result there has been an endemic lack of mutual trust and dialogue between NGOs and fishermen (i.e. social distance).

However, when a new governance arrangement, *the Viswijzer*, was introduced in 2004, a dialogue was triggered. This was the first time a statement was made about the status of Dutch fisheries in terms of sustainability. As such the *Viswijzer*, as a communicative instrument, had an influence on the relationship between fishermen and NGOs. This influence was even more apparent than its influence on consumer behaviour as only few consumers ask for 'green' fish. Fishermen were very shocked by the 'naming and shaming' of NGOs regarding 'their' fish, and as such the *Viswijzer* triggered new patterns of interaction. Fishermen increasingly sought contact with 'the generalised other', i.e. representatives of the NGOs, and they directly requested information on how to upgrade to a 'green' or 'orange' categorisation. At the same time fishermen informed the NGOs about their efforts to become more sustainable. In that way, for the first time information was exchanged between fishermen and NGOs on a personal level. These new interaction and negotiation patterns stimulated trust between actors that previously operated at a large social distance.

In addition, the *Viswijzer* stimulated the sign of a social covenant in which cooperation between industry, NGOs and government was agreed upon. This was an attempt to institutionalise trust, by making guidelines on behaviour, and agreements on how to communicate both internally and externally. Both parties had made clear their wishes and expectations for future cooperation. The awareness of dependency stimulated reciprocity, and the option to build up a reputation, and subsequently trust. The result was a new version of the *Viswijzer* in

which comments from the industry had been taken into account. Although the process goes up and down (one producer organisation withdrew as a participant in the covenant), a basis for cooperation and trust is present. However, because of differences in priorities, and behaviour, the process requires a lot of face to face contact and thin and active trust. These trust relationships need to be built through active interaction, and communication. This implies a reflexive process, in which trust is constantly reproduced. When this results in a more stable or at least continuous relationship, trust can be institutionalised by means of a covenant in which guidelines for behaviour are led down, and as such can play an important role in institutionalising trust on a more long term basis.

Trust and the influence on sustainability

Trust induced cooperation between NGOs and the fishing industry in general can have a positive influence on sustainability. Meaningful collaborations among businesses and NGOs can serve as vehicles to deliver social services such as poverty relief and environmental protection (Teegen *et al.* 2004). The MSC is an example where NGO-industry collaboration has at least increased the awareness of the concept of ecological sustainable fish. But direct working relationships or information exchange can also lead to changes in fishing operations or use of different fishing techniques that have less unwanted by-catch of sea mammals (personal communication with WWF employee, 2008).

In order to trust, one has to believe that the other can act in their favour. For companies the advantage to seek partnerships with NGOs can be, when they successfully solicit the input and guidance of NGOs, they will diminish vulnerability for negative publicity. Also, companies can make use of NGO experience, expertise, and network. The MSC for example has, by pressuring the government, accomplished that government regulated and enforced fisheries more strictly, which in turn can be in favour of the fishing companies (equal competition). NGOs often believe that they can have a higher impact by pressuring companies through a changing consumer demand instead of investing in direct contact with the industry. Therefore NGOs often bypass the industry in their governance arrangements. This however interferes with establishing a good trust relationship with the industry. The question then remains if this is really the best strategy for NGOs. The *Viswijzer* arrangement shows that consumer impact is relatively small, while possibly a higher impact can be expected from direct cooperation.

6.2.4. New trust relationships within the fresh fish value chain: from a supply driven value chain to a demand driven value chain

New governance arrangements

During the last decade, the Dutch fresh fish value chain is changing considerably, due to developments as: increasing competition in a globalised world, a growing importance of (changing) consumer preferences (focus on quality, and sustainability), and an increasingly

complex regulatory environment related to food safety as well as environmental and labour standards. These developments affect the way value chains are governed and also lead to new arrangements in the Dutch fresh fish value chain. The new arrangements are characterised by: a stronger focus on quality and sustainability, more direct contact between producer and buyer, a decreasing role of the auction, and growing sales at supermarkets instead of at specialised fish shops.

The influence on trust relationships

Prior to the new value chain arrangements, direct contact between producers and buyers was largely absent. Products had similar characteristics, and the auction institutionalised trust between producer and buyer, by setting a standard for quality, by preparing the product for sale (weighing and sorting), by making sure the catch was registered (legal aspect), and by setting a fair and transparent price. The auction was the setting where supply and demand converged. Both producer and buyer trusted the auction. The producer trusted the auction to sell his/her fish at a fair price, the buyer in turn trusted the auction to get him/her a good quality product, on time, and also at a fair price. Both producers and buyers had exact knowledge regarding how much money competitors were making. Moreover, fishermen felt protected by the auction, where the presence of many buyers prevented them from being squeezed by buyers. Hence, the auction offered stability, legitimacy, order and transparency, and in that way created institutional, and also passive trust.

However, this institutional and passive trust in the auction is diminishing as a result of new developments in society. Buyers need to compete with many other buyers, and by doing so they have increased their demands regarding quality (with a focus on freshness and ecological sustainability), and want to be able to prepare forecasts for the whole year, instead of being dependent on what is available at the auction. Therefore, buyers increasingly bypass the auction and directly seek contact with producers in order to make agreements regarding specific product and delivery requirements. Producers on the other hand, are looking for ways to deal with diminishing profits among others caused by lower prices paid at the auctions. They also bypass the auction in their intention to make higher profits. They do this by selling directly to consumers, and in that way take the margin from the auction, processing companies and traders, or by taking charge of the whole chain process (they stay the owner of the fish until it is sold to the end buyer).

Where previously the auction enforced the rules, at present buyers are taking over this role. They want to make sure producers meet their demands. Trust plays an important role, but in a different way than before. In order to arrange processes in the value chain differently, producer and buyers increasingly are in close contact with one another. As buyers and producer did not have this kind of contact before, trust is still thin (based on personal encounters with unknown partners) and therefore fragile. It is also active, which makes visibility, and reciprocity of both partners becoming more important. Buyers organise business

meetings to increase shared practices, and build on trust. They directly negotiate with producers on prices, delivery times, and product specifications, and producers on the other hand negotiate with buyers on prices, fishing operations, delivery and demands. Trust is not self-evident, and needs to be actively won through this kind of personal contact, where they can open up to the other.

Hence, instead of the initial focus on passive and institutionalised trust, we now see personal, active, and thin trust relationships between producers and buyers in a value chain that is increasingly characterised by diversity instead of standardisation. Each buyer has its own product specifications through which they hope to secure competitive advantage. A way to diminish this time consuming process of trust building, is to have third parties arrange the standardisation in terms of sustainability, and quality. This re-institutionalisation of trust can be done through certification standards such as the MSC label. The reputation of the third party then becomes an essential condition for trust. A downside is that the Marine Stewardship Council (MSC) does not include quality aspects such as freshness, and locality, which are both essential conditions for the persuasion of consumers to buy a typical sort of fish. Therefore private branding becomes increasingly important. In these private brands, companies combine different standards.

Trust and the influence on sustainability

From the previous section we learned that the auction has always had an important role in institutionalising trust. This had a positive influence on ecological and economic sustainability: all fish was registered, and quota boosting diminished, leading to less overfishing. Another important effect was the effect on the prices. When in the eighties fish was sold at the black market, it had a price diminishing effect. In order to maintain income at the same level, this resulted in a higher fishing effort, leading to overfishing.

However, current demands regarding ecological sustainability comprise more than maintaining fish stocks at a healthy level. Effects on the entire ecosystem need to be taken into account. This can be done through certification schemes, but also through a more direct relationship between producer and buyer. A more direct and personal relationship between producer and buyer removes the anonymity from the relationship, and can make the producer proud and more willing to make an effort in terms of sustainability. In turn, the producer makes sure end buyers expand their knowledge regarding fish and fishing, which makes consumers better informed and possibly involved. By analysing the new governance arrangements in the value chain it has become clear that fishermen are willing to change their operations towards a more ecological friendly way of fishing (ecological sustainability) after direct and long term contact with a buyer, under the condition that the buyer shows long term commitment (economic

sustainability). In order to make long term commitments trust needs to be present between buyer and producer.

6.3 New trust relationships: theoretical reflections

6.3.1 Why new trust relationships?

The previous analysis of the four different dimensions of trust and their role in new fisheries governance arrangements provided clear insight into how societal changes have led to new governance arrangements in which different actors play a role, and which in turn have resulted in a shift in trust relationships. This section generalises these findings with the aim to gain more insight into their theoretical implications.

The fisheries industry is changing under the influence of changes in society. These changes are: increasing globalisation, the growing role of international supra-national institutions, and an increasing influence of ecological interests. In coping with these changes the fishing industry is increasingly forced to open up, and to earn their license to produce, which previously was always given to them without any constraints. At present, the fishing industry is coping with a lack of legitimacy, and trust from outsiders, which need to be regained in order to be able to ensure a viable future.

As a result of these societal changes, new governance arrangements are being created in the fishing industry. These new

governance arrangements are characterised by new modes of steering, which influence trust relationships between market, state, and civil society actors. Where previously mainly state and fishermen were involved in governance, at present the group of stakeholder is extended to among others NGOs, consumers, retail companies, other users of the marine environment, and state bodies with interests that go beyond the fishing industry (e.g. other sectors, and nature conservation). This extended group of stakeholders, also labelled as social carriers of ecological restructuring use market, money, monetary and economic logics in pushing for environmental goals (Mol 2006a). As a consequence this group is getting involved in fisheries governance through participation and market governance, putting pressure on an industry that used to be very homogeneous, and mainly based on thick trust relationships with relatives, close friends, and local peers.

Traditionally, trust relationships with outsiders were mainly absent, or facilitated and institutionalised through the fish product board, producer organisations, and the auctions. In that way, fishermen were protected, did not receive a lot of criticism, and did not need to be transparent and justify their behaviour to stakeholders other than the Dutch Ministry for fisheries.

However, the closeness of the fishing community led to a diminished trust in that same industry. At present (starting from the nineties) other stakeholders increasingly request fishermen to account for their behaviour. Where previously fishermen were the ones defining sustainability, at present retail companies, European institutions, NGOs,

consumers, different governmental bodies, and a diverse group of scientists pressure the fishermen to rethink their operations and change their behaviour in order to regain legitimacy, and a license to produce. They are the ones that now set the standards for fishermen. This is quite a change for fishermen, and often gives them the feeling to be lacking control. In order to maintain their businesses, fishermen need to cooperate, and open up. As a result, 'old' governance arrangements, such as the Fish Product Board, the auctions, the producer organisations, and the co-management system require to be reviewed, opened, and adjusted to the new situation.

This also implies that 'old' trust relationships that were related to 'old' centralised or neo-corporatist governance arrangements also need to be adjusted to the new modes of steering that are characterised by participation, negotiation, interaction, and adaptation. The thick trust relationships among fishermen that were so important during previous times when fishermen were dependent for their survival on relatives and the local community, are not enough to be able to survive under the current circumstances. These circumstances are more complex, and ask for innovations on fishing techniques, a different market perspective, coping with other users at sea, respond to new policies (e.g. MPAs), and operate, and communicate with a focus on sustainability. This can only be done effectively though cooperation with other stakeholders, as fishermen depend on these other stakeholders to regain legitimacy, trust, and the license to produce.

6.3.2. Which new trust relationships?

These new stakeholders are 'the generalised' other, with whom previously no interaction took place. Instead of thick trust, thin trust, which is in favour of variety, then becomes essential. With thin trust, based on personal relationships with relatively outsiders (people at a greater social distance), cooperation with other stakeholders can be made possible. In new governance arrangements, such as study groups, *Viswijzer*, value chain arrangements, and the social covenant, these stakeholders are able to work together, meet on a regular basis (preferably on a daily basis) and in that way obtain shared experiences, create reciprocity, and build up a reputation that in turn can stimulate this thin trust building process. Thin trust relationships are more risky than thick trust relationships that grow between people with similar backgrounds, who are at a close social distance. The mutual dependency of these stakeholders, and the increasing (sustainability) problems play an important role in the trust building process within newly created governance arrangements.

When after a while new governance arrangements become more stable, and trust is built among the stakeholders, trust can become thick again, as actors cease to be strangers, and have built up a shared framework (see the new situation in figure 6.1). The difference with the previous 'old' thick trust relationships is that these do not have their roots in family relationships, but in personal, frequent relationships between people that share a similar vision on for example sustainability, market, product, policy etc., and are dependent or committed to the

other person. For example, Dutch MSC certified twinrig fishermen have recently agreed on a partnership with Danish MSC certified twinrig fishermen through which they try to regain market control.

Another difference with the 'old' thick trust relationships is that, due to the fact that at present these ties are less deep, and overlapping compared to the ties in small, closed communities, the new thick relationships are less stable as the loss of reputation related to the failure to meet obligations does not have as much effect as before. Therefore, other mechanisms need to be sought that encourage reciprocity. Two other dimensions of trust can help to diminish the risk: active trust, and institutional trust. These I will now explain in more detail.

For a long time trust was passive, and fishermen behaviour was based on habits in relatively stable circumstances. The circumstances, such as the danger of the profession, and fluctuations in the stocks, were accepted, and dealt with through religion, taboos, and rituals. For example, Malinowski (Malinowski 1948) reports a definite relationship between the incidence of ritual and the risks involved in fishing. There were two types of uncertainties: the uncertainty of catch, and the risk to fishermen (Malinowski 1948) (Poggie *et al.* 1976). People performed their roles as expected.

At present, risks for the fishermen, and uncertainty about the catch has diminished considerably. However, other challenges characterise present times. Circumstances change rapidly, and cannot be taken for granted anymore. Present (sustainability) challenges in which many different stakeholders are involved ask for a more reflexive

form of trust, where negotiation constantly takes place. Trust is then an active process that requires continuous interaction in order to be sustained, especially during times of change (from one governance arrangements to the other). When a new governance arrangement is installed, and a more stable situation arrives, a new form of passive trust can then characterise relationships.

Active and thin trusts are both personal forms of trust. Modern societies cannot rely on personal trust alone. Institutional trust has enabled people to have trust in an organisation or arrangement without having met all the people involved. During times of change, from one governance arrangement to another, the rules, and the reputation where trust is derived from temporarily do not function. This means that trust temporarily relies on personal relationships until a new governance arrangement is build that is able to create new institutional trust relationships.

In Dutch fisheries, institutions such as producer organisations, product board, and the auction that previously generated institutionalised trust, have lost their legitimacy as they fail to cope with the increasing variety that characterise the industry. Therefore, fishermen increasingly seek direct contact with outsiders themselves instead of waiting for representatives or auction to do that. As a result, personal relationships temporarily increase, for example within the supply chain between producers and buyers. However, these personal, active, and reflexive forms of trust are more time consuming, and actors

strive for stability, and predictability through institutional trust through more new, legitimate, and trustworthy governance arrangements.

Hence, the fisheries industry combines both pre modern and modern characteristics. Unlike Giddens, I state that passive, and thick trusts still play an important role in contemporary societies, although in a new, more reflexive form. Although 'old' thick trust relationships have diminished, personal trust still plays an important role in governance due to the high levels of complexity, and lower levels of predictability. More specifically, thin and active trust, which are said to play a vital role in modern times (Anheier, 2002, Giddens 1990, and Zucker 1986), in my view especially play a role in periods of change (the shift from one governance arrangement to the other). However, after these periods of change, actors are looking for ways to reduce the more demanding forms of trust. This can be done through re-institutionalisation of trust, for example in covenants, new co-management arrangements, a new auction system or contract based sale, and through third party certification schemes such as the MSC label or private labels.

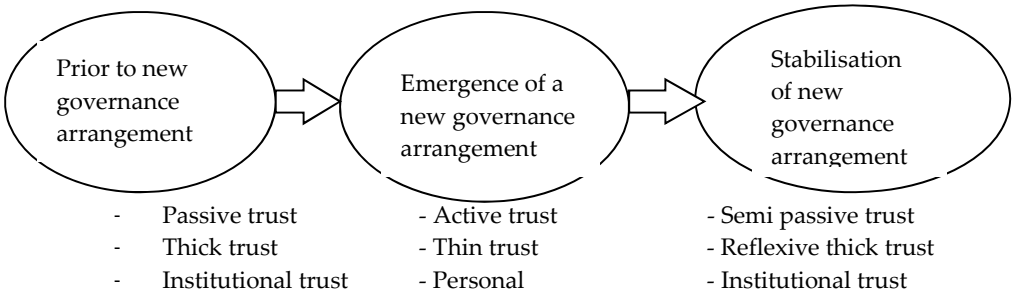

Figure 6.1: Shifts in trust dimensions in fisheries governance

6.4 The future of sustainable fisheries governance: policy recommendations and recommendations for further research

This thesis has shown that trust can play an important role in the transition towards a more sustainable fisheries industry. New governance arrangements have led to temporary new trust relationships that can stimulate interaction, and cooperation between stakeholders that previously did not interact. Remaining questions are if these changes are also taking place in other European fisheries countries that also operate under the umbrella of the CFP, and what the implications are of these new trust relationships for sustainable fisheries governance. These two points will be addressed in this final section.

Other countries within the European Union are influenced by similar (international) developments, which also force them to create new governance arrangements in response to these developments. Co-management, in various forms, is a widespread phenomenon in fisheries management and can be found in for example Denmark, Spain *(Cofradias)*, and France *(Prudhomies)*. Also fisheries management systems across Europe have had a neo-corporatist signature, and the collapse of this neo-corporatist arrangement is widespread (Van Hoof 2010, Van Hoof *et al.* 2005). It would be interesting to analyse in future research how trust relationships between government and fishermen and among fishermen themselves have changed as a result of these other co-management systems.

The new CFP aims to give responsibility to fishermen, to improve compliance rates, and to increase the focus on the long term, instead of on the short-term. Trust can be both important driver and an important obstacle behind these three goals. This thesis has shown that too often governors focus on the economic side of trust, which means that it is seen as a way to diminish management expenses. However the downside is that this can trigger feelings of distrust as fishermen and their representatives notice an increase in their management expenses without getting something in return (such as more influence on the policy process), and therefore has a reverse effect on the relationships between governors and fishermen. Dutch fishermen have the perception that governments in countries like France, and Spain act more in favour of their fishing industry than in the Netherlands (and thus have a better trust relationship with their governments). It would be interesting to investigate further whether this perception is also shared by the fishermen in these countries, and if this has a positive influence on compliance rates. This is relevant for the future of the Common Fisheries Policy, as the European Union which perceives trust as an important condition for sustainable fisheries. As with trust between fishermen and government, fishermen are said to be more willing to comply with the rules. However, this thesis has also shown that not only trust relationships between government, and fishermen are important. It is even more vital that governments play a role in enhancing trust relationships among fishermen themselves, as these relationships positively stimulate compliance behaviour of fishermen.

Another interesting question to be answered in future research is whether in other countries the role of the auction, in institutionalising trust, has also changed. In some countries, the auction has always played a minor role than in the Netherlands. In France and Italy for example, fishermen and buyers have always had more direct relationships. (fresh) Fish is sold directly from the boat to customers. Will direct contact between fishermen and consumers result in more sustainable behaviour? Or is direct contact insufficient and should an intermediate arrangement be developed?

Characteristic of the new governance arrangements in the Netherlands is the increased interaction between fishermen, governments, NGOs and chain partners, expanding networks and different trust relationships. The result is that the industry is becoming more diverse. Fishermen take actions to write policy recommendations, they negotiate with governments, NGOS and banks, and cooperate with peers from other countries. The industry is changing from a homogeneous sector to smaller, diverse groups that are organised along product categories instead of along community, and family. Where previously trust was related to the industry as a whole, we now see diverse groups of fishermen that enjoy different degrees of trust. Some groups gain more trust form outsiders than others. This is visualised in the *Viswijzer and certification schemes,* where specific fishermen are categorised as green (sustainable), while others who fish on the same target species, but with different techniques, are labelled as orange/red (unsustainable) or are denied certification. This is further implemented

in the value chain, where only selected groups of fishermen are allowed to become suppliers of for example the Albert Heijn, Hanos or Jan van As. This has consequences for the way the industry is organised and for fisheries policy in general.

Where previously national governments, producer organisations, and auctions played an important role in facilitating trust relationships among fishermen and between fishermen and other stakeholders, nowadays fishermen, in small groups, seek direct contact with other stakeholders, such as the European Union, NGOs, and other European fishermen. With the latter they collaborate on (MSC) certification, market positioning, technical innovations etc. (Policy) legitimacy is thus expanded from the national to the European level, which means that trust in the national government, or in national institutions is not enough anymore to lead to a higher compliance or a more sustainable fisheries industry.

It is therefore important that institutions such as MSC, co-management groups, the auctions, and also new arrangements such as the Study Groups create possibilities for fishermen to participate in international groups (i.e. an international co-management group, an international Study Group, and an international group of fishermen that receives a label). In these international groups, knowledge can be exchanged regarding sustainable fishing techniques, fishermen can jointly enter the market to gain more influence, increase their volumes, diminish costs, and in that way also ensure economic sustainability. At present an important obstacle for innovations and (ecological)

sustainability. With the latter a start has been already made by MSC. However, essential for institutional trust in the label is that these fishermen become certified under the same conditions. This is at present somewhat difficult as fishermen undergo an assessment in different periods of time, and with different stakeholders (and thus opinions) involved in the certification process.

References

Akerlof, G. (1970) The market for "lemons": Quality uncertainty and the market mechanism. *Quarterly Journal of Economics,* 84 pp. 488-500

Akkerman, T., M. Hajer and J. Grin (2001) Interactive policy making as deliberative democracy? Learning from new policy-making practices in amsterdam. *Convention of the American Political Science Association* (Washington DC)

Anheier, H. and J. Kendall (2002) Interpersonal trust and voluntary associations: Examining three approaches. *The British Journal of Sociology,* 53(3) pp. 343-362

Anonymous (2004) Vis eten met goed geweten ; milieuorganisatie brengt 'visvriendelijke' gids uit. *Rotterdams Dagblad*

Anonymous (2007a) Discussie over duurzaam visassortiment supers. *Visserijnieuws*

Anonymous (2007b) Lnv neemt initiatief in overleg viswijzer. *Visserijnieuws*

Anonymous (2007c) Vaststelling van de begrotingsstatuten van het ministerie van landbouw, natuur en voedselkwaliteit (xiv) voor het jaar 2008. Tweede Kamer der Staten-Generaal ed., (Den Haag: Sdu Uitgevers)

Anonymous (2007d) Visserijoverleg met minister verburg. *Visserijnieuws*

Anonymous (2007e) 'We moeten wel doorgaan', Nederlandse visser heeft steeds meer slapeloze nachten. *Haarlems Dagblad*

Anonymous (2008a) Felle kritiek directeur imares op viswijzer. *Haarlems Dagblad*

Anonymous (2008b) Go14 presenteert 'vissers wijzer'. *Visserijnieuws*

Anonymous (2008c) Maatschappelijk convenant noordzeevisserij "duurzaam vissen". Den Haag

Anonymous (2010) Verdubbeling msc-schol door nederlands-deense samenwerking. *Vis in bedrijf*

Armitage, D.R., R. Plummer, F. Berkes, R.I. Arthur, A.T. Charles, I.J. Davidson-Hunt, A.P. Diduck, N. Doubleday, D.S. Johnson, M. Marschke, P. McConney, E. Pinkerton and E. Wollenberg (2009) Adaptive co-management for social–ecological complexity. *Frontiers in Ecology and the Environment,* 6, pp. 95-102

Arts, B.J.M. (2002) 'Green alliances' of business and ngos. New styles of self-regulation or 'dead-end roads'? . *Corporate Social Responsibility and Environmental Management,* 9 pp. 26-36

Arts, B.J.M. and J.P.M. Van Tatenhove (2004) Policy and power; a conceptual framework between the 'old' and 'new' policy idioms. *Policy Sciences,* 37 pp. 339-356

Arts, B.J.M. and J.P.M. Van Tatenhove (2006) Political modernisation. Pp. 21-43 in B. Arts and P. Leroy eds., *Institutional dynamics in environmental governance* (Dordrecht, The Netherlands: Springer)

Arts, B.J.M., P. Leroy and J.P.M. Van Tatenhove (2006) Political modernisation and policy arrangements: A framework for understanding environmental policy change. *Public Organization Review: a Global Journal,* 6(2) pp. 93-106

Auld, G. (2007) The origins and growth of social and environmental certification programs in the fisheries sector. *11th annual conference of the international society for new institutional economics* (Iceland: Reykjavik)

Bang, H. and E. Sorensen (1999) The everyday maker: A new challenge to democratic governance. *COS-report no.3* (Copenhagen)

Banks, M., S. Lovatt, J. O'Connor and C. Raffo (2000) Risk and trust in the cultural industries. *Geoforum,* 31, pp. 453-464

Barbalet, J.M. (1996) Social emotions: Confidence, trust, and loyalty. *International Journal of Sociology and Social Policy,* 16(9/10) pp. 75-96

Batt, P. and S. Purchase (2004) Managing collaboration within networks and relationships. *Industrial Marketing Management,* 33(3) pp. 169-174

Bavinck, M., R. Chuenpagdee, M. Diallo, P. Van der Heijden, J. Kooiman, R. Mahon and S. Williams (2005) *Interactive fisheries governance: A guide to better practice,* (Delft: Eburon Academic Publishers)

Beck, U. (1992) *Risk society: Towards a new modernity (*Sage Publications)

Beck, U. (1999) *World risk society* (Cambridge: Polity Press)

Beck, U., A. Giddens and S. Lash (1994) *Reflexive modernization* (Cambridge: Polity Press.)

Beek, F.v.d. (2008) In de rij voor griet en heek. *Reformatorisch Dagblad* (Apeldoorn)

Beem, B. (2007) Co-management from the top? The roles of policy entrepreneurs and distributive conflict in developing co-management arrangements. *Marine Policy,* 31, pp. 540-549

Bergman, M.J.N. and J.W. Van Santbrink (1994) Direct effects of beam trawling on the macrofauna in soft bottom area in the southern north sea. in S. J. De Groot and H. J. Lindeboom eds., *Environmental impact of bottom gears on benthic fauna in relation to natural resources management and protection of the north sea.* NIOZ Report 1994-11/RIVO-DLO Report CO 26-94)

Berkes, F. (2009) Evolution of co-management: Role of knowledge generation, bridging organizations and social learning. *Journal of Environmental Management,* 90 pp. 1692-1702

Biesheuvel, S. (1992) Beheerst vissen. Voorstellen voor de planning van de visvangst, gebaseerd op samenwerking tussen aanvoerders, handelaren, verwerkers en overheid. (Den Haag)

Bingen, J. and L. Busch (2007) *Agricultural standards: The shape of the global food and fiber system,* (Dordrecht: Springer)

Brander, L. and D.L. Burke (1995) Rights-based vs. Competitive fishing of sea scallops placopecten magellanicus in nova scotia. *Aquatic Living Resources,* 8 pp. 279-288

Breeman, G. (2006) *Cultivating trust: How do public policies become trusted,* Dept. of Public Administration, Faculty of Social and Behavioural Sciences, Leiden University. Thesis)

Buizer, M. (2008) *Worlds apart. Interaction between local initiatives and established policy.* Wageningen University

Bunte, F. (2002) Contractverkoop witlof. *projectcode 64479* (Den Haag: LEI)

Busch, L. and C. Bain (2004) New! Improved? The transformation of the global agrifood system. *Rural Sociology,* 69(3) pp. 321-346

Bush, S.R. (2010) Governing 'spaces of interaction' for sustainable fisheries *Tijdschrift voor Economische en Sociale Geografie,* 101(3) pp. 305-319

Bush, S.R. and M. Duijf (2011) Searching for (un) sustainability in pangasius aquaculture. A political economy of quality in european retail *Geoforum,* 42(2) pp. 185-196

Castells, M. (1998) *The information age: Economy, society and culture: Volume 2,* (Massachusetts: Blackwell Publishers)

Churcill, R. and D. Owen (2010) The EC common fisheries policy. OUP

Coleman, J.S. (1988) Social capital in the creation of human capital. *American Journal of Sociology,* 94 (Supplement) pp. 95-120

Coleman, J.S. (1990) *Foundations of social theory,* (Cambridge MA: Harvard University Press)

Conway, F.D.L. (2006) Evaluating the human--as well as the biological--objectives of cooperative fisheries research. *Fisheries,* 31(9) p. 447

Davidse, W. (1998) Poperty rights and regulatory systems: The strategic response of dutch fishermen. in D. Symes ed., *Property rights and regulatory systems in fisheries* (Oxford and Malden: Fishing News Books)

Davidse, W. (2000) The development towards co-management in the dutch demersal North Sea fisheries. FAO

De Vos, B.I and S.R. Bush (2011) Far More than Market-Based: Rethinking the Impact of the Dutch Viswijzer (Good Fish Guide) on Fisheries' Governance. *Sociologia Ruralis 51 (3)*

De Vos, B.I and J.P.M. Van Tatenhove (2011) Trust relationships between fishers and government: New challanges fro the co-management arrangements in the dutch flatfish industry. *Marine Policy,* 35 pp. 218-225

De Vos, B.I. and A.P.J. Mol (2010) Changing trust relations within the dutch fishing industry: The case of national study groups. *Marine Policy,* 34 pp. 887-895

De Vos, B.I. and E. Hoefnagel (2006) Ondernemerschap in de platvissector; ondernemersstijlen, duurzaamheid en toekomstvisie. *Rapport 2.06.04* (Den Haag: LEI, onderdeel van Wageningen UR)

De Vos, B.I., A. Kole, C. Van der Heijden and D. Stijnen (2007) Ondernemerschap en ketensamenwerking in de vissector. Transitie naar duurzaamheid. (Den Haag: LEI)

De Vries, J. (1990) De vis bleef zwart betaald. Een politicologische analyse van een dynamisch netwerk. in J.A.M. Hufen and B. Ringeling eds., *Beleidsnetwerken. Overheids-, semi-overheids- en particuliere organisaties in wisselwerking* (Den Haag: Vugen Uitgeverij BV)

Dolan, C.S. and J. Humphrey (2000) Governance and trade in fresh vegetables: The impact of uk supermarkets on the african horticulture industry. *Journal of Development Studies,* 37(2) pp. 147-176

Drijver, C. (2006) Presentatie wnf voor 'vis op de kaart'. (Scheveningen: Visbureau)

Dubbink, W., J.W. Van der Schans and M.v. Vliet (1994) Vissen is veel meer een berekening geworden, maar nog niet al mijn collega's zijn zich hiervan bewust. (Rotterdam: Erasmus Universiteit)

Edelenbos, J. (2002) Vertrouwen in interorganisationele samenwerking. *Bestuurswetenschappen*, 4, pp. 298-322

Eggert, H. and A. Ellegard (2003) Fishery control and regulation compliance: A case for co-management in swedish commercial fisheries. *Marine Policy*, 27 pp. 525-533

Egmond, C., R. Jonkers and G. Kok (2005) One size fits all? Policy instruments should fit the segments of target groups. *Energy Policy*, 34 pp. 3464-3474

Elster, J. (1989) Social norms and economic theory. *Journal of Economic Perspectives*, 3(4) p. 99

Ens, B.J., N.M.J.A. Dankers, M.F. Leopold, H.J. Lindeboom, C.J. Smit, S.v. Breukelen and S.J.W.v. der (2007) International comparison of fisheries management with respect nature conservation. (Wageningen: Wageningen UR)

Eshuis, J. (2006) *Kostbaar vertrouwen. Een studie naar proceskosten en procesvertrouwen in beleid voor agrarisch natuurbeheer. (*Wageningen University)

European Commission (2009a) *The common fisheries policy - a user's guide,*Luxembourg: Office for Official Publications of the European Communities)

European Commission (2009b) Green paper. Reform of the common fisheries policy. (Brussel)

European Commission, J.R.C. (2009c) The 2009 annual economic report on the eu fishing fleet. J. Anderson and J. Guillen eds., (Luxembourg)

FAO (2009) The state of world fisheries and aquaclture 2008. (Rome)

FAO, fisheries and aquaculture department (2000) *The state of world fisheries and aquaculture* (Sofia)

Frouws, J. (1993) *Mest en macht: Een politiek-sociologische studie naar belangenbehartiging en beleidsvorming inzake de mestproblematiek in nederland vanaf 1970,* (Wageningen: Landbouw Universiteit Wageningen)

Frouws, J. (1997) The manure policy process in the netherlands: Coping with the aftermath of the neocorporatist arrangements in agriculture. Pp. 209-225 in E. Romstadt, J. Simonsen and A. Vatn eds., *Controlling mineral emissions in european agriculture* (Cabinternational)

Frouws, J. and J.P.M. Van Tatenhove (1993) Agriculture, environment and the state. The development of agro-environmental policy-making in the netherlands. *Sociologia Ruralis,* XXXIII(2) pp. 220-239

Fukuyama, F. (1995) *Trust: The social virtues and the creation of prosperity,* (New York: The Free Press)

Gambetta, D. (1988) *Trust: Making and breaking cooperative relations,* (Oxford: Basil Blackwell)

Gereffi, G., J. Humphrey and T. Sturgeon (2005) The governance of global value chains. *Review of International Political Economy,* 12(1) pp. 78-104

Gibbs, M.T. (2008) Network governance in fisheries. *Marine Policy,* 32 pp. 113-119

Giddens, A. (1990) *Consequences of modernity,* (Stanford: Stanford University Press)

Giddens, A. (1991) *Modernity and self-identity. Self and society in the late modern age,* (Cambridge: Polity Press)

Giddens, A. (1994) Risk, trust, reflexivity. Pp. 184-197 in U. Beck, A. Giddens and S. Lash eds., *Reflexive modernization. Politics, tradition and aesthetics in the modern social order* (Cambridge: Polity Press)

Glasbergen, P. and R. Groenenberg (2001) Environmental partnership in sustainable energy. *European Environment,* 11(1) pp. 1-13

Glückler, J. and T. Armbrüster (2003) Bridging uncertainty in management consulting: The mechanisms of trust and networked reputation *Organization Studies,* 24(2) pp. 269-297

Grafton, R.Q. (2005) Social capital and fisheries governance. *Ocean & Coastal Management,* 48 pp. 753-766

Grafton, R.Q., A. Arnason, T. Bjorndal, D. Campbell, H.F. Campbell, C.W. Clark, R. Connor, D.P. Dupont, R. Hannesson, R. Hilborn, J.E. Kirkley, T. Kompas, D.E. Lane, G.R. Munro, S. Pascoe, D. Squires, S.I. Steinshamn, B.R. Turris and Q. Weninger (2006) Incentive-based approaches to sustainable fisheries. (NRC Research Press) http://cjfas.nrc.ca

Graham, I. (1998) The emergence of linked fish markets in europe. *Summary based on book entitled: Distribution af Danske turismeproduktor i Europa. (*Research Centre of Bornholm)

Granovetter, M. (1973) The strentgh of weak ties. *American Journal of Sociology,* 78(6) pp. 1360-1380

Gray, T.S. (2005) Chapter 1: Theorising about participatory fisheries governance. in T. S. Gray ed., *Participation in fisheries governance* (Springer)

Gulbrandsen, L.H. (2006) Creating markets for eco-labelling: Are consumers insignificant? *International Journal of Consumer Studies,* 30(5) pp. 477-489

Gulbrandsen, L.H. (2009) The emergence and effectiveness of the marine stewardship council. *Marine Policy*, 33(4) pp. 654-660

Gutierrez, N., R. Hilborn and O. Defeo (2010) Leadership, social capital and incentives promote successful fisheries. Research letter *Nature*

Hajer, M. (2000) *Politiek als vormgeving,* (Amsterdam: Vossius AUP)

Hajer, M. and H. Wagenaar (2003) Introduction. Governance or the rise of a new vocabulary. in M. Hajer and H. Wagenaar eds., *Deliberative policy analysis. Understanding governance in the network society.* (Cambridge: University Press)

Hardin, R. (1998) Trust in government. in V. Braithwaite and M. Levi eds., *Trust and governance* (New York: Russell Sage Foundation)

Hardin, R. (2000) *Trust and trustworthiness,* (New York: Russell Sage Foundation)

Hartley, T.W. and R.A. Robertson (2006) Emergence of multi-stakeholder-driven cooperative research in the northwest atlantic: The case of the northeast consortium. *Marine Policy*, 30 pp. 580-592

Hoefnagel, E. (1999) Institutional change in dutch fisheries management in E. Hoefnagel ed., *Liber amicorum dedicated to Wil Smit* (Den Haag: LEI-DLO)

Hoefnagel, E. (2002) Corporatist origin of the dutch co-management system. *IIFET Conference Fisheries in the Global Economy* (Wellington)

Hoefnagel, E. (2007) Co-management en motorvermogen. Nulmeting van opvattingen van vissers. (Den Haag: LEI, Wageningen UR)

Hoefnagel, E. and E. Van Mil (2010) Motorvermogen van vissersschepen naar de wettelijke normen; eindevaluatie co-management en motorvermogen. *Rapport 2010-062* (Den Haag: LEI)

Hofs, Y. (2009) Groen zit er voor platvis niet in. *De Volkskrant*

Holden, M.J. (1994) *The common fisheries policy: Origin, evolution, and future,* (Farnham: Fishing News Books)

Hoyt, J. and F. Huq (2000) From arms-length to collabroative relationships in the supply chain: An evolutionary process. *International Journal of Physical Distribution & Logistcis Management* 30(9) pp. 750-764

Humphrey, J. and H. Schmitz (2008) Inter-firm relationships in global value chains: Trends in chain governance and their policy implications. *International Journal of Technological Learning, Innovation and Development,* 1(3) pp. 258-282

Hysing, E. (2010) *Governing towards sustainability - environmental governance and policy change in swedish forestry and transport. Orebo studies in political science 27.*, (Orebro University)

Illes, A. (2004) Making seafood sustainable: Merging consumption and citizenship in the united states. *Science and Public Policy,* 31(2) pp. 127-138

Illes, A. (2007) Making the seafood industry more sustainable: Creating production chain transparency and accountability. *Journal of Cleaner Production,* 15(6) pp. 577-589

Jacquet, J., J. Hocevar, S. Lai, P. Majluf, N. Pelletier, T. Pitcher, E. Sala, R. Sumaila and D. Pauly (2009) Conserving wild fish in a sea of market-based efforts *Fauna & Flora International,* 44(1) pp. 45-56

Jacquet, J., D. Pauly, D. Ainley, S. Holt, P. Dayton and J. Jackson (2010) Seafood stewardship in crisis. *Nature,* 467 pp. 28-29

Jacquet, J.L. and D. Pauly (2007) The rise of seafood awareness campaigns in an era of collapsing fisheries. *Marine Policy,* 31, pp. 308-313

Jacquet, J.L. and D. Pauly (2008) Trade secrets: Renaming and mislabeling of seafood. *Marine Policy,* 32, pp. 309-318

Jentoft, S. (1989) Fisheries co-management. Delegating government responsibility to fishermen's organizations. *Marine Policy,* 13, pp. 137-154

Jentoft, S. (2005) Fisheries co-management as empowerment. *Marine Policy,* 29, pp. 1-7

Jentoft, S., M. Bavinck, D.S. Johnson and K.T. Thomson (2009) Fisheries co-management and legal pluralism: How and analytical problem becomes an institutional one *Human Organization,* 68(1) pp. 27-38

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

Jentoft, S., B. McCay and D. Wilson (1998) Social theory and fisheries co-management. *Marine Policy,* 4, pp. 423-436

Julsrud, T.M. (2008) Flows, bridges and brokers: Exploring the development of trust relations in a distributed work group. *International Journal of Networking and Virtual Organisations,* 5(1) pp. 83-102

Kersbergen, K.v. and F.v. Waarden (2004) 'Governance' as a bridge between disciplines: Cross-disciplinary inspiration regarding shifts in governance and problems of governability, accountability and legitimacy. *European Journal of Political Research,* 43, pp. 143-171

Kickert, W.J.M. (1997) Public governance in the netherlands. An alternative to anglo-american 'managerialism'. *Public Administration,* 75, pp. 731-752

Konefal, J., M. Mascarenhas and M. hatanaka (2005) Governance in the global agro-food system: Backlighting the role of transnational supermarket chains. *Agriculture and Human Values,* 22(3) pp. 291-302

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

Kooiman, J. and M. Bavinck (2005) The governance perspective. Pp. 11-24 in J. Kooiman, M. Bavinck, S. Jentoff and R. S. V. Pullin eds., *Fish for life: Interactive governance for fisheries* (Amsterdam: Amsterdam University Press)

Kwon, I.G. and T. Suh (2004) Factors affecting the level of trust and commitment in supply chain relationship. *Journal of Supply Chain Management,* 40(2) pp. 4-14

La Londe, B. (2002) "Who you can trust these days?". *Supply Chain Management Review,* May-June 2002(pp. 9-10

Langstraat, D. (1999) The dutch co-management system for sea fisheries. in D. Symes ed., *Alternative management systems for fisheries.* Fishing News Books

Levi, M. (1998) A state of trust. in V. Braithwaite and M. Levi eds., *Trust and governance* (New York: Russel Sage Foundation)

Levin, D.Z. and R. Cross (2004) The strength of weak ties you can trust: The mediating role of trust in effective knowledge transfer. *Management Science,* 50(11) pp. 1477-1490

Lewis, D.J. and A.J. Weigert (1985) Social atomism, holism, and trust. *The Sociological Quarterly,* 26(4) pp. 455-471

Liefferink, D. (2006) The dynamics of policy arrangements: Turning round the tetrahedron. in B. Arts and P. Leroy eds., *Institutional dynamics in environmental governance* (Springer)

Loucks, L. (2009) An institutional economic analysis of marine protected areas: With applications to the north sea sole and plaice fishery. *Final report. Project no. 2100834500* (Wageningen: University)

Luhmann, N. (1979) *Trust and power,*John Wiley and Sons.)

Mahon, R., P. Mc Conny and R.N. Roy (2008) Governing fisheries as complex adaptive systems. *Marine Policy,* 32, pp. 104-112

Malinowski, B. (1948) *Magic, science, and religion,* (Garden City, New York: Doubleday)

Marques Vieira, L. and W.B. Traill (2008) Trust and governance of global value chains. The case of a brazilian beef processor. *British Food Journal,* 110(4/5) pp. 460-473

Marsden, T., R. Lee, A. Flynn and S. Thankappan (2010) The new regulation and governance of food: Beyond the food crisis? (London: Routledge)

Mc Afee, R.P. and J. Mc Millan (1987) 'Auctions and bidding'. *Journal of Economic Literature,* 25, pp. 699-738

Meurs, P. (2008) Sociaal vertrouwen: Een kwestie van durf. *Eerste Verwey-Jonker/SER lezing* (Verwey-Jonker instituut)

Miles, M.B. and A.M. Huberman (1994) *Qualitative data analysis,* (London: Sage Publications)

Ministerie van Landbouw, N.e.V. (2005) Andere overheid. Van zorgen voor naar zorgen dat. Samenvatting departementale takenanalyse lnv. (Den Haag)

Misztal, B.A. (1996) *Trust in modern societies: The search for a base of social order* (Cambridge: University Press)

Mol, A.P.J. (2006a) Environment and modernity in transitional china: Frontiers of ecological modernization. *Development and Change,* 37(1) pp. 29-56

Mol, A.P.J. (2006b) Environmental governance in the information age: The emergence of informational governance. *Environment and Planning C: Government and Policy*, 24 pp. 497-514

Möllering, G. (2001) The nature of trust: From georg simmel to a theory of expectation, interpretation and suspension. *Sociology*, 35 pp. 403-420

Morgan, R.M. and S.D. Hunt (1994) The commitment-trust theory of relationship marketing. *Journal of Marketing*, 58(3) pp. 20-38

Newman, L. and A. Dale (2006) Homophily and agency: Creating effective sustainable development networks. *Environment, Development and Sustainability*, 9 pp. 79-90

Newton, K. (1997) Social capital and democracy. *American Behavioral Scientist*, 40 pp. 575-586

Nielsen, M. (2005) Price formation and market integration on the european first-hand market for whitefish *Marine Resource Economics*, 20 pp. 185-202

Noordzij, W. (2009) Nog veel te bereiken op gebied van samenwerking. *Vis in Bedrijf*

Nooteboom, B. (2002) *Trust. Forms, foundations, functions, failures and figures*, (Cheltenham, UK: Edward Elgar Publishing Ltd.)

North, D.C. (1990) *Institutions, institutional change and economic performance*, (Cambridge: Cambridge University Press)

Offe, C. (1999) How can we trust our fellow citizens? In M. E. Warren ed., *Democracy and trust* (Cambridge: Cambridge University Press)

Oosterveer, P. (2008) Governing global fish provisioning: Ownership and management of marine resources. *Ocean and Coastal Management*, 51 pp. 797-805

Oosterveer, P. and G. Spaargaren (2011) Organising consumer involvement in the greening of global food flows: The role of environmental ngo's in the case of marine fish. *Environmental Politics,* 20(1) pp. 97-114

Pearl Harbor Natural Resource Trustees (1999) Restoration plan and environmental assessment for the may 14, 1996 chevron pipeline oil spill into waiau stran and pearl harbour, Oahu, Hawaii. Pp. 122 in, *prepared by* U.S. Department of Defence, U.S. Department of the Interior, National Oceanic and Atmospheric Administration, and State of Hawaii.)

Peterson, S. and D. Georgianna (1988) New bedford's fish auction: A study in auction method and market power *Human Organization,* 47(3) pp. 235-241

Pierre, J. and B.G. Peters (2000) *Governance, politics and the state,* (London: MC Millan Press ltd.)

Pinkerton, E. (1989) *Co-operative management of local fisheries: New directions for iproved management and community development.,* (Vancouver: University of British Columbia Press)

Poggie, J.T., R.B. Pollnac and C. Gersuny (1976) Risk as a basis for taboos among fishermen in southern new england. *Journal for the Scientific Study of Religion,* 15(3) pp. 257-262

Pomeroy, R.S. and F. Berkes (1997) Two to tango: The role of government in fisheries co-management. *Marine Policy,* 21(5) pp. 465-480

Projectgroep hervorming GVB, Ministerie van Landbouw, Natuur en Voedselkwaliteit (2010) Vis als duurzaam kapitaal. (Den Haag: Ministerie van Landbouw, Natuur en Voedselkwaliteit)

Putnam, R. (1995) Bowling alone: America's declining social capital. *Journal of Democracy,* 6(1) pp. 65-78

Putnam, R. (2000) *Bowling alone: The collapse and revival of american community.* (New York: Simon & Schuster)

Raakjaer, J. and T. Vedsmand (1999) User participation and institutional change in fisheries management: A viable alternative to the failures of "top-down" driven control? *Ocean & Coastal Management,* 42(1) pp. 19-37

Rekenkamer, A. (2008) Duurzame visserij. (Den Haag)

Roheim, C.A. (2009) Thalassorama. An evaluation of sustainable seafood guides: Implications for environmental groups and the seafood industry. *Marine Resource Economics,* 24 pp. 301-310

Roheim, C.A. and J.G. Sutinen (2006) Trade and market-related instruments to reinforce fisheries management measures to promote sustainable fishing practices. (Genova, Switzerland and Paris, France: International Centre for Trade and Sustainable Development, and the Organisation for Economic Cooperation and Development - High Seas Task Force)

Rotter, J.B. (1971) Generalized expectancies for interpersonal trust. *American Psychologist,* XXVI(

Sachs, J. (2000) The activist professional. *Journal of Educational Change,* 1 pp. 77-95

Sahay, B.S. and A. Maini (2002) Supply chain: A shift from transactional to collaborative partnership. *Decision,* 29(2) pp. 67-88

Salz, P. (2002) Requiem voor de visserij in vis mineur. Samenvatting. *Natuurplanbureau werkdocument 2001*

Schmitz, H. (2004) Globalized localities: Introduction. in H. Schmitz ed., *Local enterprises in the global economy. Issues of governance and upgrading* (Edward Elgar Publishing Limited)

Scholz, J. (1999) Trust, taxes and compliance. in M. E. Warren ed., *Democracy and trust* (Cambridge: Cambridge University Press)

Selnes, T. and M. Aalders (2005) Een kantelende overheid. Debat intensieve veehouderij en de transitie naar duurzame landbouw. in, LEI, Wageningen UR en Centrum voor Milieurecht, UvA)

Shapiro, S.P. (1987) The social control of impersonal trust. *American Journal of Sociology*, 93(3) pp. 623-658

Sørensen, E. (2006) Metagovernance: The changing role of politicians in processes of democratic governance. *American Review of Public Administration*, 36 pp. 98-114

Spaargaren, G. (2003) Duurzaam consumeren of ecologisch burgerschap? in H. Dagevos and L. Sterrenberg eds., *Burgers en consumenten; tussen tweedeling en twee-eenheid* (Wageningen: Academic Publishers)

Spaargaren, G. and A.P.J. Mol (2008) Greening global consumption: Redefining politics and authority *Global Environmental Change*, 18(3) pp. 350-359

Stafford, E., M. Polonsky and C. Hartman (2000) Environmental ngo-business collaboration and strategic bridging: A case analysis of the greenpeace-foron alliance. *Business strategy and the environment*, 9 pp. 122-135

Stoker, G. (1998) "Governance as theory: Five propositions."*International Social Science Journal*, 50(1) pp. 17-28

Sztompka, P. (1999) *Trust. A sociological theory*, (Cambridge: Cambridge University Press)

Taal, C., H. Bartelings, R. Beukers, A.J. Klok and W.J. Strietman (2010) Visserij in cijfers 2010. in, *Rapport 2010-057* (Den Haag: LEI, onderdeel van Wageningen UR)

Taskforce, D.N. (2006) Vissen met tegenwind. Advies taskforce duurzame noordzeevisserij. (Schiedam)

Teegen, H., J.P. Doh and S. Vachani (2004) The importance of nongovernmental organizations (ngos) in global governance and value creation: An

international business research agenda. *Journal of International Business Studies,* 35 pp. 463-483

Termeer (2006) Maatschappelijke innovatie. Rede in verkorte vorm uitgesproken op 7 december 2006. (Wageningen: Wageningen Universiteit)

Thorpe, A. and E. Bennet (2004) Market-driven international fish supply chains: The case of nile perch from africa's lake victoria. *International Food and Agribusiness Management Review,* 7(4) pp. 40-57

Treib, O., H. Bahr and G. Falkner (2007) Modes of governance: Towards conceptual clarification. *Journal of European Public Policy,* 14(1) pp. 1-20

Tylor, T.R. (1998) Chapter 11: Trust and democratic governance. in V. Braithwaite and M. Levi eds., *Trust and governance* (New York: Russel Sage Foundation)

Van Buuren, A. and E.H. Klijn (2006) Trajectories of institutional design in policy networks: European interventions in the dutch fishery networks as an example. *International Review of Administrative Sciences,* 72 pp. 395-415

Van der Schans, J.W. (2001) *Governance of marine resources. Conceptual clarifications and two case studies,* (Delft: Eburon)

Van Ginkel, R. (2005) Between top-down and bottom-up governance: Dutch beam trawl fishermen' engagement with fisheries management. Pp. 119-139 in T. S. Gray ed., *Participation in fisheries governance* (Springer)

Van Ginkel, R. (2007) *Coastal cultures,* (Het Spinhuis Publishers, the Netherlands)

Van Hoof, L. (2010) *Who rules the waves? Governance and new institutional arrangements in dutch fisheries management in the context of the european common fisheries policy.* (Wageningen University)

Van Hoof, L., E. Hoefnagel, J.W. Van der Schans, J. Raakjær, A.S. Christensen, S. Sverdrup-Jensen, A. Delaney, S. Jentoft, K. Mikalsen, G.R. Karlsen, C. Bodiguel, J. Catanzano, J.L. Suarez de Vivero, I. Martínez Alba, S. Feria Domínguez and D. Rommel (2005) Sharing responsibilities in fisheries management. in, (Den Haag: LEI, Wageningen UR)

Van Hoof, L. and J.P.M. Van Tatenhove (2009) Eu marine policy on the move: The tension between fisheries and maritime policy. *Marine Policy*, 33(4) pp. 714-719

Van Leeuwen, J. (2010) *Who greens the waves? Changing authority in the environmental governance of shipping and offshore oil and gas production,* (Wageningen: Wageningen Academic Publishers)

Van Leeuwen, J. and J.P.M. Van Tatenhove (2010) The triangle of marine governance in the environmental governance of dutch offshore platforms. *Marine Policy*, 34(3) pp. 590-597

Van Tatenhove, J.P.M. (2006) Interactief beleid; een reflexief (beleids)experiment? In J. Grin, M. A. Hajer and W. B. Versteeg eds., *Meervoudige democratie; ervaringen met vernieuwend bestuur* (Amsterdam: Aksant)

Van Tatenhove, J.P.M., B. Arts and P. Leroy (2000) *Political modernisation and the environment: The renewal of environmental policy arrangements,* (Dordrecht: Kluwer Academic Publishers)

Van Tatenhove, J.P.M. and P. Leroy (2003) Environment and participation in a context of political modernisation. *Environmental Values*, 12 pp. 155-174

Van Vliet, M. and W. Dubbink (1999) Evaluating governance: State, market and participation compared. in J. Kooiman, M. Van Vliet and S. Jentoft eds., *Creative governance: Opportunities for fisheries in europe* (Aldershot: Ashgate)

Verweij, M.C., W.L.T. Densen and A.P.J. Mol (2009) The tower of babel: Different perceptions and controversies on change and status of north sea fish stocks in multi-stakeholder settings *Marine Policy,* 34(3) pp. 522-533

VisserijInnovatieplatform (2010) *Sucesvol innoveren in de nederlandse visserij,* (Den Haag: Zwaan printmedia)

Warren, M.E. (1999) *Democracy and trust,* (Cambridge: Cambridge University Press)

Weale, A. (2009) Governance, government and the pursuit of sustainability. In W. N. Adger and A. Jordan eds., *Governing sustainability* (Cambridge: Cambridge University Press)

Wiskerke, J.S.C. (2009) On places lost and places regained: Reflections on the alternative food geography and sustainable regional development. *International Planning Studies,* 14(4) pp. 369-387

Yin, R.K. (2009) *Case study research: Design and methods,* (California: Sage Publications)

Zucker, L.G. (1986) Production of trust: Institutional sources of economic structure. in B. M. Staw and L. L. Cummings eds., *Research in organisational behavior* (Greenwich: JAI Press)

Internet sources

http://europa.eu/institutions/inst/council/index_en.htm, accessed on Feb 17, 2011

http://www.mongabay.com/images/commodities/charts/crude_oil.html accessed on 22 May 2011

http://ec.europa.eu/trade/creating-opportunities/economic-sectors/fisheries/governance/ accessed on Feb 15, 2011

http://europa.eu/institutions/inst/council/index_en.htm, accessed on Feb 17, 2011

http://www.versevis.nl accessed on September 15, 2011

Appendix: List of interviewees

Derk Jan Berends (Secretary Nederlandse Vissersbond/Dutch Fishery Association; Producers Organisation: PO)
30 May 2008

Hans Vervoort (General Inspection Service, AID)
9 June 2008

Christine Absil (Projectleader Stichting de Noordzee/North Sea Foundation)
15 September 2009

Margreet van Vilsteren (Stichting de Noordzee/North Sea Foundation)
15 September 2009

Henri Kool (Ministry of Economy, Agriculture and Innovation)
20 October 2008

Frans Veenstra (Researcher at IMARES, Wageningen UR)
22 October 2008

Marnix Poelman (Researcher at IMARES, Wageningen UR)
26 October 2009

Arie van Duijn (Researcher at LEI, Wageningen UR)
26 October 2009

Floor Quirijns (Researcher at IMARES, Wageningen UR)
26 October 2009

Carel Drijver (WWF)
5 November 2009

Marloes Kraan (Productschap vis/Fish Product Board)
24 November 2009

Kees Taal (Researcher at LEI, Wageningen UR)

Patricia de Vries (Ministry of Economy, Agriculture and Innovation)

3 February 2010

Kees 't Mannetje (Owner GO4)
5 February 2010

Femke Nagel (Campaign Leader Oceans, Greenpeace)
12 February 2010

Klaas Jelle Koffeman (Skipper FD-281 www.visdasgeil.com)
19 March 2010

Wim Zaalmink (Researcher at LEI, Wageningen UR)
13 April 2010

Peter Hamaker (Manager Mayonna BV, Kennemervisgroep)
May 2010

Pim Visser (Director Visned)
May 2010

Jos Smit (Researcher at LEI, Wageningen UR, retired)
6 May 2010

Johan van Nieuwenhuyzen (Managing Director, United Fish Auctions)
6 May 2010

Jan Marc ten Napel (Marketing/Quality Manager Ekofish Group)
15 and 25 June 2010, 24 August

Ruben Hurkens (Quality Manager Ahold-AH)
9 July 2010

George Beers (Researcher at LEI, Wageningen UR)
27 July 2010

Rob van Asch (Marine Harvest)
19 July 2010

Hans Poppe (Marine Harvest)
19 July 2010

Louwe de Boer (General Manager Ekofish Group)
24 August 2010

Wim van Belzen (Head administration at fish auction Den Helder (Hollands Noorden))
25 Augustus 2010

Pim Visser
August 2010

Loed, Rob, Rik en Erik Zijlstra (Owners, skippers and crew members of the HD36)
25 August 2010

Frank Baiko (Category Product Manager *vers & delicatessen* at Hanos)
20 August 2010

Six visitors, and two salesmen at the Wieringer fish market
25 September 2010

Han Ypma (Owner of the WR244)
25 September 2010

Marjolein de Kool (Employee fish auction Den Helder (Hollands Noorden))
28 September 2010

Barbara Rodenburg (Goede Vissers/samen de markt op)
September 2010

Richard Martens (Director Sparc Advise)
6 October 2010

Yvonne Baarssen (Viva la Fish, works for Osprey group)
16 November 2010

Johan Bontkes (Jan van As)
16 November 2010

Michiel van Galen (Researcher at LEI, Wageningen UR)

December 2010

Rik Beukers (Researcher at LEI, Wageningen UR)
18 May 2011

Abstract

It is a commonplace today that many of the world's commercial fisheries are in a state of crisis. Much of the blame for this crisis is levelled at the way in which fisheries are managed. In general, policy making has become more and more complex, and the centralised role of the government has failed to address the complexity, resulting in a legitimacy crisis related to fisheries policy, and subsequently lower compliance rates. As a response to the state of fisheries management, a large array of governance innovations has been deployed over the past two decades in many fisheries industries worldwide.

Similar developments have occurred in the Netherlands. The Dutch fishing industry has been facing severe sustainability challenges the last decades. The once flourishing beam trawl fleet suffers financial problems (negative net results), social problems (lack of good crew, and heavy criticism from society), and ecological problems (decreasing stocks, and negative ecosystem impacts). In order to cope with these problems new governance arrangements are being created in which sustainability and innovation play a crucial role. In these new governance arrangements state, market, and/or civil society actors participate while striving for a more sustainable fisheries industry.

These new governance arrangements influence social relations, and subsequently trust relationships between the actors involved in fisheries governance. Trust is often seen as an important condition for a sustainable fishery. New forms of cooperation and knowledge transfer

between various actors most likely require trust, but a different kind of trust than in the conventional neo-corporatist setting. The main objective of this thesis was therefore to analyse and to understand how trust relationships between the main actors in the Dutch fishing industry have changed under conditions of new modes of governance enhancing demands for sustainability.

In this thesis trust is analysed along four perspectives that represent different trust relationships: 1) trust relationships among fishermen, 2) trust relationships between fishermen and government, 3) trust relationships between fishermen and NGOs, and 4) trust relationships between fishermen and other companies/actor within the value chain. In each perspective trust plays a different role. In each of the four perspectives trust relationships are analysed by studying several case studies of new fisheries governance arrangements that have been introduced in the Dutch fisheries industry during the last decades.

In order to analyse trust in fisheries governance research, I apply three pairs of trust (dichotomies), each pair referring to a different dimension of trust. The pairs are: 1) personal/institutional trust, 2) thick/thin trust, and 3) passive/active trust. Personal trust is trust in persons, while institutional trust means that people trust in the functioning of bureaucratic sanctions and safeguards, and they trust that other people also trust in the system. Thick trust is trust in people whom we know intimately (often through family and local community ties), and thin trust, unlike thick trust, fosters a willingness to trust people outside of our immediate circle or group. Finally, passive trust can be

envisioned as a passive state of mind that regulates much of people's ways of acting and relating to each other, and active trust implies a reflexive process, which requires that it be constantly reproduced in order to result in a stable or at least continuous relationship.

The main question to be answered in this thesis is:

How have relationships of trust and dimensions of trust between the central actors in the Dutch (flatfish) fisheries changed with the creation of new governance arrangements, and how do new forms of trust contribute to the transition towards a sustainable fisheries.

The data for each case study were obtained through extensive observations and interviews with the central actors during a period of eight years, of which the main part took place from 2008 to 2010. By making observations one can study interactions among people, which are important processes for studying trust. In order to ensure validity I have used multiple sources of evidence: observations, conducting interviews, analysing reports, and documents and literature review. Moreover, key informants were invited to review interview reports and paper drafts.

The first arrangement I have analysed is the co-management system, which was installed in 1993. In the co-management arrangement, two trust relationships play an important role: trust between government and fishermen, and trust among fishermen themselves. These two are closely linked; when fishermen trust the

government to enforce the law, and if information is deemed reliable, then the government will have greater capacity to generate interpersonal trust among fishermen. Trust was clearly lacking at the end of the eighties, as was shown by very low compliance rates and subsequent strict enforcement practices.

Initially, the co-management arrangements restored these trust relationships between fishermen and the Dutch government, influenced by the higher transparency, and predictability, as well as increasing control, and flexibility for fishermen. The co-management arrangement also had an impact on trust relationships among fishermen. As the co-management arrangement increased the transparency on quota uptake, fishermen trusted that their peers were abiding by the same rules. This led to institutional trust. In addition fishermen were stimulated to work together in small, local, and homogeneous groups on quota management. This strengthened the thick trust that already existed in these close knit communities, with the difference that thick trust was expanded from the private environment to the professional environment. It also increased active trust among fishermen, because fishermen worked together in co-management groups and jointly had the responsibility not to exceed the group quota limits.

For a long time, this situation worked perfectly, however trust relationships are not stable, but are influenced by external developments. Higher demands regarding sustainable behaviour, the increasing influence of European institutions, and financial problems were putting pressure on the arrangement, and thus on the different

trust relationships. The government, operating in this international arena, does not always have the capacity to meet expectations of Dutch fishermen, and subsequently fishermen have come to regard the co-management arrangement as a way for the government to put more tasks on their shoulders without giving something in return. In addition, due to the increasing role of the European Union in fisheries policy, and the increasing exchange of information among European fishermen (through the internet and at sea), legitimacy expanded from the national to the European level. Hence, trust in the national government is not enough anymore to lead to higher compliance, instead European institutions as the European Commission play an increasing role in the trust building process among international groups of fishermen.

The second arrangement I analysed concerns fourteen Study Groups of fishermen. In 2008 the Dutch government co-funded the installation of Fishermen Study Groups. The groups consisted of a maximum of 16 fishermen from the same fleet segment but from different regions in the Netherlands, who worked together and exchanged knowledge under the supervision of fisheries researchers. With this arrangement, the government expected frontrunners to share and enlarge their knowledge, and to make this knowledge available for the wider group of remaining fishermen in order to stimulate a sustainable fishery. In these Study Groups, trust relationships among fishermen play an important role, although in a much different way than before.

Prior to the Study Groups, trust among fishermen had a strong local/regional focus, and kinship was at the core of many family firms. Relationships among fishermen were personal, strong, and frequent, and nested in a wider fisheries network. This 'thick' trust was further stimulated in 1993 when co-management groups were organised along local lines, each group consisting of fishermen who shared similar characteristics (fishing techniques, local knowledge, business type etc.). This means that knowledge regarding fishing techniques, fishing, and fish stocks remained largely within the local community. Fishermen from other regions, with whom one had not had a great deal of experience, were often stereotyped as being unsustainable, and not innovative in their behaviour.

Apart from this thick trust, prior to the Study Groups, trust among fishermen was also institutionalised through producer organisations (neo-corporatism), the co-management groups, and the Fish Product Board. Local representatives exchanged knowledge with other local representatives, but fishermen were barely involved in this process. Representatives formed the link between fishermen, and the 'outside' world. They exchanged knowledge with NGOs, Ministry, Product Board, scientists, and fishermen from other regions. Because of this the fishing community operated in a rather isolated manner.

The establishment of Study Groups, where fishermen from different localities have to cooperate on sustainability innovations in order to receive subsidies, lead to more diversity within the industry, more collaborations across localities and new forms of 'thin' trust.

Instead of knowledge transfer through representatives, or through local communities, fishermen extended their personal trust relationships with fishermen from other regions, and communicated directly with other stakeholders. As such, these Study Groups can be understood as successful experiments in further opening up of the fisheries community.

Thirdly, I have analysed the relationships between NGOs and fishermen by studying the introduction of the Good Fish Guide (*Goede Viswijzer),* and several other by the Viswijzer induced governance arrangements. Based on similar models from the Monterey Bay Aquarium, Audubon Society, and the Marine Conservation Society, the *Viswijzer* was introduced in 2004 by the Dutch-based North Sea Foundation (NSF). In the *Viswijzer* each species is assessed through sustainability criteria and categorised in traffic light system: red for 'preferably not', orange for 'second choice' and green for 'excellent choice'.

The *Viswijzer* started as an instrument designed to intervene in the Dutch fishing industry, through communication and information. New governance tools such as the *Viswijzer* reflect the increasing influence of NGOs in the political arena and the policy process. Whereas previously government and industry set the standards for sustainable fishing, NGOs are now one of the leading standard setters for sustainable fisheries worldwide. These new governance tools have influenced trust relationships between fishermen and NGOs, not necessarily because they are market based tools, but more because they

are communicative instruments which facilitate interaction between policy actors that previously operated at a large social distance. In that way the *Viswijzer* has contributed to a much more complex interaction pattern than just simple information exchange. What started as an abstract communication tool operating through the market, has led to novel face-to-face as well as institutional interactions between these actors. The new spaces of interaction the *Viswijzer* has created between these actors are fundamental in creating a requisite level of trust between them.

Not only was thin trust stimulated through more self-governing modes of voluntary face-to-face interplay, trust was also institutionalised through the formalisation of interactions within the state sponsored social covenant in which agreements were made that went beyond the original scope of the market-based tool. This was an important basis for a more long term commitment, and shows the important relation between spaces of interaction and trust.

As such market-based tools can be effective in creating both horizontal and vertical 'spaces of interaction' between key actors in the Dutch fishery sector. While market-based impacts may be negligible, the *Viswijzer* presents a powerful communicative instrument which has succeeded in fostering more face-to-face interaction and deliberation between otherwise disparate actors. Constructive collaboration between NGOs and industry can therefore create a requisite level of trust in the transition towards a sustainable fishery.

Fourthly, I have studied the introduction of thirteen new governance arrangements within the Dutch fresh fish value chain and their impact on trust relationships between companies that operate in the same value chain. Influenced by challenges posed on the Dutch fresh fish value chain, such as a lack of sustainability in economic, social and economic terms, growing competition in a globalised world, changing consumer demands, and tighter international regulations regarding food safety, and work conditions, the value chain is changing from a supply driven chain towards a more demand driven value chain. This has an impact on each link in the value chain (especially the auction), and the way the value chain is organised and governed, as well as on trust relationships between companies that operate in the value chain. I studied these changes by analysing thirteen initiatives which have been recently introduced in the Dutch value chain focusing on fresh shrimps, and fresh flatfish.

Traditionally, in the Dutch fish value chain, goods were mainly traded at spot markets, i.e. fish auctions. Products were bought on the basis of passive trust (based on acceptance), and on institutional trust (based on reputation institutionalised in vessel numbers). Face to face contact between producers and buyers was largely absent. Both buyers and producers trusted the auction to measure and check the quality, set a fair price, and to arrange all financial transactions. Goods were standard, and interaction between buyers and producers was therefore not required. Hence, trust was passive and institutionalised through the auction.

Where value chain relationships were previously characterised by minimal information exchange, nowadays a high level of coordination and horizontal and vertical active trust relations are needed to be able to cope with the increasing variety in demand. Characteristic for the initiatives I analysed are new vertical and horizontal active trust relationships. Where previously fishermen drew a line between themselves and buyers, trust is more and more organised along vertical lines, between producers, and the consecutive stage or with end- buyers instead of horizontally. Buyers and producers actively improve trust relationships by organising symposia, common boat trips, and masterclasses in these demand driven value chains. This means that differences between fishermen are more often stressed, creating diversity in the once homogenous community.

At present, the auction has lost its important function of trust carrier, and trust relationships are currently based on personal and active trust (directly) between buyer and supplier. This is far more time consuming and therefore most likely a temporary situation, until transactions and goods are standardised again, leading to a re-institutionalisation of trust relationships. This can either be done through a new auction system that copes with the increasing diversity or through certification schemes (either set by internal or external parties) that include not only sustainability, but also other aspects such as quality, and locality.

The previous analysis of the four different dimensions of trust and their role in new fisheries governance arrangements provided clear

insight into how societal changes have led to new governance arrangements as well as a shift in trust relationships. The new governance arrangements are characterised by new modes of steering. Where previously mainly state and fishermen were involved in governance, at present the group of stakeholders is extended to among others NGOs, consumers, retail companies, other users of the marine environment, and state bodies with interests that go beyond the fishing industry. As a consequence this group is getting involved in fisheries governance through participation and market governance, putting pressure on an industry that used to be very homogeneous, and mainly based on thick trust relationships with relatives, close friends, and local peers.

Traditionally, trust relationships with outsiders were mainly absent, or facilitated and institutionalised through the fish product board, producer organisations, and the auctions. However, the closeness of the fishing community led to a diminished trust in that same industry. At present (starting from the nineties) other stakeholders increasingly request fishermen to account for their behaviour. Now they are the ones setting the standards for fishermen. As a result, 'old' governance arrangements, such as the Fish Product Board, the auctions, the producer organisations, and the co-management system require to be reviewed, opened, and adjusted to the new situation. This also implies that 'old' trust relationships that were related to 'old' centralised or neo-corporatist governance arrangements also need to be adjusted to the new modes of steering that are characterised by participation,

negotiation, interaction, and adaptation. Several shifts in trust are therefore taking place.

Firstly, thin trust, which is in favour of variety, becomes more essential than the previously important thick trust relationships. With thin trust, based on personal relationships with relatively outsiders, cooperation with other stakeholders can be made possible. When after a while new governance arrangements become more stable, and trust is built among the stakeholders, trust can become thick again, as actors cease to be strangers, and have built up a shared framework. These new thick trust relationships are no longer rooted in family relationships, but in personal, frequent relationships between people that share a similar vision on for example sustainability, market, product, policy etc., and are dependent or committed to the other person.

Secondly, trust is increasingly an active process that requires continuous interaction in order to be sustained, especially during times of change (from one governance arrangements to the other). When a new governance arrangement is installed, and a more stable situation arrives, a new form of passive trust can then characterise relationships. Active and thin trusts are both personal forms of trust.

However, modern societies cannot rely on personal trust alone. Institutional trust has enabled people to have trust in an organisation or arrangement without having met all the people involved. During times of change, from one governance arrangement to another, the rules, and the reputation where trust is derived from temporarily do not function. This means that trust temporarily relies on personal relationships until a

new governance arrangement is build that is able to create new institutional trust relationships. Institutions such as producer organisations, product board, and the auction that previously generated institutionalised trust, have lost their legitimacy as they fail to cope with the increasing variety that characterise the industry. Therefore, fishermen increasingly seek direct contact with outsiders themselves instead of waiting for representatives or auction to do that. As a result, personal relationships temporarily increase, for example within the value chain between producers and buyers.

However, these personal, active, and reflexive forms of trust are more time consuming, and actors strive for stability, and predictability through institutional trust through more new, legitimate, and trustworthy governance arrangements, for example through certification, a new auction system or a European co-management system. Hence, the fisheries industry combines both pre modern and modern characteristics, and passive, and thick trusts still play an important role in contemporary societies, although in a new, more reflexive form.

The opening up of the industry to outsiders, made possible through new trust relationships, is an important condition for the sustainability and thus the future of the Dutch fishing industry. The increasing direct interaction with different stakeholders has led to more diversity and knowledge exchange between stakeholders that previously did not interact. The industry is changing from a homogeneous sector to smaller, diverse groups that are organised along

product categories instead of along community, and family. Where previously trust was related to the industry as a whole, we now see diverse groups of fishermen that enjoy different degrees of trust. Some groups gain more trust form outsiders than others. Mutual dependency and mutual trust are however vital conditions for successful deliberation, and ultimately a change in operations towards a more sustainable fishing industry. Without these conditions, interaction and information exchange are interpreted negatively leading to an unwillingness to change.

Samenvatting

Het is vandaag de dag gemeengoed om te zeggen dat een meerderheid van de visserijen die overal ter wereld plaatsvinden in een crisis verkeren. Vaak wordt de oorzaak hiervan toegeschreven aan de manier waarop visserij wordt beheerd. In zijn algemeenheid kunnen we zeggen dat het beleidsproces ingewikkelder is geworden en de overheid is niet altijd in staat gebleken om het hoofd te bieden aan deze complexiteit. Hierdoor is er een legitimiteitscrisis ontstaan in het visserijbeleid wat geleid heeft tot lagere nalevingscijfers. Als antwoord op deze status van het visserijbeleid zijn de laatste 20 jaar wereldwijd een aantal innovaties op het gebied van visserij 'governance' in het leven geroepen.

Deze ontwikkelingen hebben ook plaatsgevonden in Nederland. De Nederlandse visserijindustrie heeft de laatste jaren flink te kampen gehad met een aantal uitdagingen op het gebied van duurzaamheid. De eens zo bloeiende boomkorvloot kreeg te maken met problemen op financieel (negtieve resultaten), sociaal (gebrek aan goede bemanningsleden en kritiek vanuit de samenleving) en ecologisch gebied (sommige bestanden die afgenomen waren en negatieve impact op het ecosysteem). Om met deze uitdagingen om te kunnen gaan, zijn een aantal nieuwe governance arrangementen gecreeerd waarin duurzaamheid en innovatie een cruciale rol spelen. Bij deze nieuwe governance arrangementen zoeken niet alleen de staat, maar ook de markt en maatschappij naar een manier om de visserijsector te verduurzamen.

Deze nieuwe governance arrangementen hebben invloed op de sociale relaties en daarmee ook op vertrouwensrelaties tussen de actoren die betrokken zijn bij visserij governance. Vertrouwensrelaties worden vaak gezien als een belangrijke voorwaarde voor een duurzame visserij. Vertrouwen is nodig voor deze nieuwe vormen van samenwerking en kennisoverdracht tussen de verschillende actoren, maar dit vereist een ander soort vertrouwen dan die nodig was in de conventionele neo-corporatistische samenleving. Dit proefschrift beoogt daarom te analyseren en te begrijpen hoe vertrouwensrelaties tussen de voornaamste actoren in de Nederlandse visserij zijn veranderd door deze nieuwe vormen van governance waarin duurzaamheid een belangrijke rol speelt.

In dit proefschrift wordt vertrouwen geanalyseerd aan de hand van vier perspectieven die verschillende vertrouwensrelaties veregenwoordigen. Het gaat hier om: 1) vertrouwensrelaties tussen vissers onderling, 2) vertrouwensrelaties tussen vissers en overheid, 3) vertrouwensrelaties tussen vissers en NGOs en 4) vertrouwensrelaties tussen vissers en andere ketenpartijen. In elk perspectief speelt vertrouwen een andere rol. Deze verschillende vertrouwensrelaties worden geanalyseerd aan de hand van een studie naar verschillende nieuwe visserij arrangementen die zijn geintroduceerd in de Nederlandse visserij industrie gedurende de afgelopen 10 jaar.

Om vertrouwen in relatie tot visserij governance te onderzoeken maak ik gebruik van drie paren van vertrouwen (dichotomieen), waarbij elk paar verwijst naar een andere dimensie van vertrouwen. De paren

zijn: 1) persoonlijk/institutioneel vertrouwen, 2) *thick/thin* vertrouwen en 3) passief/actief vertrouwen. Persoonlijk vertrouwen gaat om vertrouwen in personen, terwijl institutioneel vertrouwen betekent dat mensen vertrouwen hebben in het functioneren van bureaucratische sancties en waarborgingen en ze erop vertrouwen dat anderen die ze niet kennen ook vertrouwen hebben in dit systeem. 'Thick' vertrouwen is vertrouwen in mensen die we erg goed kennen (vaak familie of lokale gemeenschappen). 'Thin' vertrouwen daarentegen gaat om de bereidheid om mensen buiten onze veilige groep te vertrouwen. Tot slot, kan passief vertrouwen gezien worden als een passieve gemoedstoestand die het gedrag van mensen reguleert (bijvoorbeeld via insituties of taboes) en actief vertrouwen impliceert een reflexief proces, dat continu gereproduceerd moet worden om enige mate van stabiliteit te creeren.

De voornaamste vraag die in dit proefschrift beantwoord zal worden luidt als volgt:

Hoe zijn vertrouwensrelaties en verschillende dimensies van vertrouwen tussen de centrale actoren in de Nederlandse (platvis) visserij veranderd onder de invloed van nieuwe governance arrangementen en hoe dragen deze nieuwe vormen van vertrouwen bij aan de transitie naar een duurzame visserij.

De gegevens voor elke case studie (i.e. nieuwe arrangementen) werden verkregen door middel van observaties en interviews met de centrale actoren gedurende een periode van acht jaar (toen ik voor het LEI

werkte), waarvan de voornaamste plaatsvonden van 2008 tot 2010 (de periode dat ik aan dit proefschrift werkte). Door middel van observaties kan men interacties tussen mensen observeren, iets wat bij interviews niet kan. Deze interacties zijn belangrijk voor de studie naar vertrouwen. Om de betrouwbaarheid en geldigheid te waarborgen heb ik gebruik gemaakt van een meervoud aan gegevens, verkregen met behulp van verschillende technieken, waaronder: observaties, interviews, het analyseren van rapporten, (beleids) documenten en literatuur. Bovendien konden de geinterviewden commentaar leveren op mijn interviewverslagen om zo te controleren of ik hen ideeen juist had weergegeven.

Het eerste arrangement dat ik heb geanalyseerd is het Nederlandse co-management systeem, dat in 1993 werd geinstalleerd. In het co-management arrangement spelen twee vertrouwensrelaties een rol, namelijk tussen vissers en overheid en tussen vissers onderling. Deze twee zijn nauw verwand; wanneer vissers erop vertrouwen dat de overheid de wet handhaaft en de informatie die ze geven als betrouwbaar wordt geacht, dan zal de overheid beter in staat zijn om vertrouwen tussen vissers onderling te creeren. In de jaren 80 was er een duidelijk gebrek aan vertrouwen tussen overheid en vissers en tussen vissers onderling. Dit was zichtbaar door de lage nalevingscijfers en de harde handhavingspraktijken van de overheid.

Toen het co-management arrangement werd geintroduceerd, name het vertrouwen tussen vissers en overheid en tussen vissers onderling toe. Dit kwam door de toegenomen transparantie en

voorspelbaarheid van de zijde van de overheid, maar ook door de toenemende invloed van vissers op het beheer en een grotere flexibiliteit in de praktijk voor vissers. De vertrouwensrelaties tussen vissers onderling werd positief beinvloed door de toenemende transparantie ten aanzien van de quota benutting waardoor vissers er meer vertrouwen in hadden dat hun collega vissers zich aan dezelfde regels hielden. Dit leidde tot institutioneel vertouwen.

Bovendien werden vissers door het co-management systeem gestimuleerd om samen te werken rond quota beheer in kleine, lokale en homogene groepen. Dit versterkte het ' thick' vertrouwen dat al bestond in deze hechte gemeenschap, alleen met het verschil dat ' thick' vertrouwen niet meer alleen in de prive omgeving bestond, maar nu ook op de werkvloer. Deze groepen stimuleerde ook actief' vertrouwen tussen vissers, omdat ze samenwerkten in co-management groupen en daarmee de verantwoordelijkheid deelden om niet over de quota groepslimiet heen te gaan.

Lange tijd werkte dit uitstekend, vertrouwensrelaties zijn echter niet stabiel en worden beinvloed door externe ontwikkelingen. De toenemende vraag naar duurzaamheid, the toegenomen invloed van Europese instituties en financiele problemen zetten het arrangement en daarmee de diverse vertouwensrelaties onder druk. De overheid heeft in deze internationale setting niet altijd de mogelijkheid om te voldoen aan de verwachtingen van Nederlandse vissers. Hierdoor zijn vissers en hun vertegenwoordigers het co-management arrangement gaan zien als een manier van de overheid om meer taken op de schouders van vissers te

leggen zonder hiervoor iets terug te geven. Bovendien, door de toenemende rol van de Europese Unie in het visserijbeleid en de toenemende uitwisseling van informatie tussen Europese vissers (via internet, op zee en internationale bijeenkomsten), is legitimiteit niet meer een nationale, maar ook een Europese aangelegenheid geworden. Kortom, vertrouwen hebben in de nationale overheid is niet meer genoeg om te leiden tot een hogere naleving, maar vertrouwen zal uitgebreid moeten worden naar Europese instituties zoals de Europese Commissie waarbij de betrokkenheid van internationale groupen van vissers essentieel is.

Het tweede arrangement dat ik heb geanalyseerd betreft de instelling van veertien visserij kenniskringen. In 2008 subsidieerde de Nederlandse overheid met hulp van het Europees Visserijfonds, deze kenniskringen. Een kenniskring bestaat elk uit maximaal 16 vissers die vaak dezelfde technieken gebruiken of op dezelfde doelsoorten vissen. Meestal vertegenwoordigen de vissers verschillende regio's. Deze vissers werken samen en wisselen kennis uit onder begeleiding van visserij onderzoekers. Met dit arrangement wilde de overheid zogenaamde voorlopers stimuleren om kennis te delen en hun kennis te vergroten alsmede deze kennis beschikbaar te maken aan de rest van de sector. Het doel was om zo een duurzame visserij te stimuleren. Vertrouwen speelde een belangrijke rol in de kenniskringen, op een hele andere manier dan daarvoor.

Voor de instelling van kenniskringen had vertrouwen een sterk lokale/regionale focus en vertrouwen was vooral gebaseerd op

verwantschap (de meeste bedrijven bleven in de familie). Relaties tussen vissers waren persoonlijk, sterk en frequent en ingebed in het wijdere visserijnetwerk. Dit zogenaamde 'thick' vertrouwen werd versterkt door de instelling van co-management groepen in 1993, die gebaseerd waren op lokale verbanden. Elke groep bestond uit vissers met gelijke kenmerken (visserijtechnieken, lokale kennis, bedrijfstype etc.). Dit betekende dat kennis omtrent visserijtechnieken, visserij en visbestanden vooral binnen de gemeenschap bleef. Men had weinig contact met vissers van andere regio's en daardoor was er veel stereotypering over en weer. Men beschuldigde de ander van onduurzaam en niet innovatief gedrag.

Behalve dit 'thick' vertrouwen dat bestond voor de kenniskringen, was vertrouwen tussen vissers onderling ook geinstitutionaliseerd in producentenorganisaties (neo-corporatisme), de co-management groupen en het Productschap vis. Lokale vertegenwoordigers wisselden kennis met elkaar uit, maar vissers waren nauwelijks betrokken bij dit process. Vertegenwoordigers verbonden de vissers als het waren met de buitenwereld. Zij wisselden kennis uit met NGOs, het Ministerie, Het Productschap, wetenschappers en vissers van andere regio's. Hierdoor opereerde de visserijgemeenschap lange tijd op een geïsoleerde manier.

De visserijkenniskringen, waarin individuele vissers van verschillende regio's met elkaar samenwerken op het gebied van duurzaamheid en innovaties om in aanmerking te komen voor subsidies, leidde to meer diversiteit in de sector, meer intralokale

samenwerking en nieuwe vormen van 'thin' vertrouwen. In plaats dat kennis werd uitgewisseld via vertegenwoordigers, of via lokale gemeenschappen, breidden vissers hun persoonlijke vertrouwensrelaties uit naar visser van andere regio's en communiceerden ze direct met andere stakeholders. De visserijkenniskringen kunnen dan ook begrepen worden als succesvolle experimenten om de vissergemeenschap opener te maken.

Ten derde heb ik in dit proefschrift de relaties tussen vissers en NGOs geanalyseerd. Dit heb ik gedaan aan de hand van de Goede Viswijzer en een aantal aan de Viswijzer gerelateerde governance arrangementen. De Viswijzer werd in 2004 geintroduceerd door Stichting de Noordzee en was geinspireerd op vergelijkbare initiatieven elders in de wereld, zoals de *Monterey Bay Aquarium, Audubon Society* en de *Marine Conservation Society*. In de Viswijzer worden vissoorten beoordeeld aan de hand van door de Stichting de Noordzee ontwikkelde duurzaamheidscriteria en gecategoriseerd volgens een zogenaamd stoplichtsysteem, waarbij rood staat voor liever niet, oranje voor tweede keus en groen voor de beste keuze.

De Viswijzer was in het leven geroepen als een instrument om de Nederlandse visserijsector te beinvloeden door middel van communicatie en informatie. Nieuwe governance instrumenten zoals de Viswijzer reflecteren de toenemende invloed van NGOs op de politieke arena alsmede op het beleidsproces. Waar voorheen de overheid en de industrie de wereldwijde visserij duurzaamheidsstandaarden bepaalden, zijn het tegenwoordig de NGOs die dit doen.

Deze nieuwe governance instrumenten hebben hun invloed gehad op de vertrouwensrelaties tussen vissers en NGOs. Dit niet zozeer omdat het marktinstrumenten zijn zoals vaak beweerd wordt, maar meer omdat het communicatieve instrumenten zijn die de interactie tussen, voorheen op zeer grote afstand opererende, beleidsactoren fadciliteren. Op deze manier draagt de Viswijzer bij aan een complexer interactiepatroon dan simpelweg informative uitwisseling. Wat begon als een communicatie instrument dat vooral gericht was op de markt, heft geleid tot nieuwe, persoonlijke contacten en institutionele interacties tussen vissers en NGOs. De ruimtes van interactie die door de Viswijzer zin ontstaan, waren een belangrijke stap om een zekere mate van vertrouwen tussen hen mogelijk te maken.

Niet alleen werd 'thin' vertrouwen gestimuleerd door middel van zelf besturende, vrijwillige interacties, vertrouwen werd ook geinstitutionaliseerd door de formalisering van interacties in het maatschappelijk convenant. In dit maatschappelijk covenant werden namelijk afspraken gemaakt die verder gingen dan wat Stichting de Noordzee met de Viswijzer beoogd had. Het convenant kan daarom gezien worden als een belangrijke basis voor de samenwerking op lange termijn. Tevens laat het zien hoe belangrijk de relatie is tussen ruimtes van interactie en vertrouwen.

Dit betekent dat marktinstrumenten effectief kunnen zijn in het creeren van zowel horizontale als verticale 'ruimtes van interactie' tussen belangrijke spelers in de Nederlandse visserijsector. Terwijl de impact op de markt van de Viswijzer moeilijk aantoonbaar of zelfs

verwaarloosbaar is, is de Viswijzer wel een heel krachtig communicatief instrument. De Viswijzer is erin geslaagd meer persoonlijke interactie en onderhandelingen tussen NGOs en vissers, die voorheen nauwelijks aanwezig waren. Constructieve samenwerking tussen NGOs en visserijindustrie spelen een belangrijke rol bij het creeren van vertrouwen in de transitie naar een duurzame visserij.

Tot slot heb ik dertien aan de visserijketen gerelateerde nieuwe governance arrangementen geanalyseerd. Ik heb gekeken welke impact deze arrangementen hebben op vertrouwensrelaties tussen ketenpartijen in de Nederlandse visserijsector. De keten wordt op dit moment sterk beinvloed door een toenemende vraag naar duurzaamheid op economisch, sociaal en ecologisch vlak, groeiende concurrentie onder invloed van globalisering, een veranderende consumentenvraag en strengere internationale regelgeving omtrent voedsvelveiligheid en arbeidsomstandigheden. Hierdoor is de keten aan het veranderen van een aanbodgedreven keten naar een vraaggestuurde keten. Dit heeft een impact op de manier waarop de keten is georganiseerd en bestuurd, maar ook op vertrouwensrelaties in de keten. Ik beschrijf met name de veranderende rol van de afslag. Ik heb deze veranderingen geanalyseerd aan de hand van een studie naar dertien arrangementen die onlangs geintroduceerd zijn in de Nederlandse visketen, met name gericht op verse garnalen en platvis.

Van oudsher werd vis verhandeld via de spotmarkt (visveiling). De producten werden gekocht op basis van passief vertrouwen (gebaseerd op acceptatie) en op basis van institutioneel vertrouwen

(gebaseerd op reputatie door middel van scheepsnummers). Persoonlijk en direct contact tussen koper en verkoper was grotendeels afwezig. Zowel de koper als de aanbieder vertrouwde erop dat de veiling de kwaliteit waarborgde, dat er een eerlijke prijs totstand kwam en dat alle financiele transacties werden geregeld. De verhandelde goederen waren standaard en interactie tussen koper en verkoper was daarom niet vereist. Kortom vertrouwen was passief en geinstituionaliseerd via de veiling.

Waar ketenrelaties voorheen gekenmerkt werden door een minimale uitwisseling van informatie, zijn tegenwoordig juist een hoge mate van coordinatie alsmede actieve vertrouwensrelaties zowel horizontaal als verticaal in de keten nodig om om te kunnen gaan met de grotere varieteit aan producten. Kenmerkend voor de initiatieven die ik heb geanalyseerd zijn het ontstaan van nieuwe verticale en horizontale actieve vertrouwensrelaties. Voorheen trokken vissers een grens tussen henzelf en de kopers, maar vandaag de dag loopt vertrouwen niet alleen meer langs horizontale lijnen (tussen vissers onderling), maar ook langs verticale lijnen (tussen vissers en kopers). Vissers en kopers werken aan het verbeteren van hun vertrouwensrelaties middels het organiseren van symposia, gezamenlijke boottochtjes en masterclasses. De toegenomen diversiteit aan producten betekent wel dat verschillen tussen vissers steeds meer benadrukt worden, wat diversiteit en soms onrust creeert in de eens zo homogene visserijgemeenschap.

Door deze ontwikkelingen heeft de veiling haar belangrijke functie als facilitator van vertrouwen, verloren. Vertrouwensrelaties zijn tegenwoordig vooral gebaseerd op persoonlijk en actief vertrouwen wat direct gecreeerd wordt tussen koper en aanbieder. De consequentie hiervan is dat deze vertrouwensrelaties tijdrovender zijn geworden. Daarom is dit naar alle waarschijnlijkheid een tijdelijke situatie totdat transacties en producten weer gestandaardiseerd zijn en vertrouwensrelaties geherinstitutionaliseerd. Dit zou bereikt kunnen worden door een nieuw veilsysteem dat om weet te gaan met de diversiteit aan producten of via certificeringsschema's (door ketenpartijen zelf of door externe partijen), waarbij niet alleen wordt beoordeeld op duurzaamheid, maar ook aspecten als kwaliteit en lokatiegebondenheid meeneemt.

Voorgaande analyse van de vier verschillende dimensies van vertrouwen en de rol hiervan in nieuwe visserij governance arrangementen laten duidelijk zien hoe maatschappelijke veranderingen hebben geleid tot nieuwe governance arrangementen en nieuwe vertrouwensrelaties. De nieuwe governance arrangementen worden gekenmerkt door nieuwe sturingsmechanismen. Waar het voorheen voornamelijk de overheid en de vissers waren die betrokken waren bij de sturing, hebben vandaag de dag veel meer stakeholders invloed op het beheer, zoals NGOs, consumenten, retailers, andere gebruikers van het mariene milieu en overheidsinstanties op het gebied van milieu en economie. Een gevolg hiervan is dat deze partijen ook betrokken zijn bij visserij governance door middel van participatie en markt governance.

Hiermee leggen ze druk op de eens zo homogene visserij industrie die voornamelijk gebaseerd was op 'thick' vertrouwensrelaties tussen familieleden, vrienden en collega-vissers uit dezelfde regio.

Voor deze nieuwe governance arrangementen waren vertrouwensrelaties met zogenaamde buitenstaanders grotendeels afwezig, of ze werden gefaciliteerd en geinstituionaliseerd middels het productschap, producenten organisaties en de veilingen. Echter deze geslotenheid van de sector leidde tot een verminderd vertrouwen in dezelfde industrie. Tegenwoordig (vanaf de jaren negentig) eisen stakeholders in toenemende mate dat vissers verantwoording afleggen ten aanzien van hun gedrag. Zij bepalen de standaarden voor vissers. Als gevolg hiervan dienen 'oude' governance arrangementen, zoals het Productschap vis, de veilingen, de producentenorganisaties en het co-management systeem geopend, herzien en aangepast te worden aan de nieuwe situatie. Dit betekent ook dat 'oude' vertrouwensrelaties die gerelateerd waren aan de 'oude' gecentraliseerde neo-corporatistische governance arrangementen aangepast moeten worden aan de nieuwe manieren van sturing die gekenmerkt worden door participatie, onderhandeling, interactive en aanpassing. Hiermee vinden verschuivingen in vertrouwen plaats.

Ten eerste gaat 'thin' vertrouwen, dat een belangrijke rol speelt bij varieteit een belangrijkere rol spelen in de plaats van de voorgaande 'thick' vertrouwensrelaties. Met behulp van 'thin' vertrouwen, dat is gebaseerd op persoonlijke relaties met relatieve buitenstaanders, wordt samenwerking met andere stakeholders mogelijk gemaakt. Wanneer na

verloop van tijd de nieuwe governance arrangementen weer stabiel worden en vertrouwen is bewerkstelligd tussen de verschillende stakeholders kan vertrouwen weer 'thick' worden, omdat de actoren dan ophouden vreemden van elkaar te zijn en een gezamenlijk raamwerk hebben ontwikkeld. Deze nieuwe 'thick' vertrouwensrelaties hebben hun oorsprong echter niet langer in familierelaties, maar in persoonlijke, frequente relaties tussen mensen die een gezamelijke visie hebben op het gebied van duurzaamheid, markt, product of beleid etc., waardoor ze van elkaar afhankelijk zijn of bij elkaar betrokken.

Ten tweede is vertrouwen in toenemende mate een actief proces dat continu interactie vereist om gehandhaafd te blijven, met name gedurende perioden van veranderingen (de overgang van het oude governance arrangement naar het nieuwe). Wanneer een nieuw governance arrangement is geinstalleerd en een meer stabiele situatie ontstaat, dank kunnen vertrouwensrelaties weer een passief karakter krijgen. Actief en 'thin' vertrouwen zijn beiden persoooonlijke vormen van vertrouwen.

Echter, modern samenlevingen kunnen niet alleen functioneren op persoonlijke vormen van vertrouwen. Institutioneel vertrouwen biedt mensen de mogelijkheid om vertrouwen te hebben in een organisatie of een arrangement zonder dat men alle betrokken personen persoonlijk kent. Gedurende tijden van verandering, de overgang van het ene governance arrangement naar de andere, werken de regels en de reputatie waarop vertrouwen is gebaseerd tijdelijk niet. Dit betekent dat vertrouwen tijdelijk gebaseerd is op persoonlijke relaties totdat een

nieuw governance arrangement is opgezet dat in staat is om nieuwe institutionele vertrouwensrelaties te creeren. Instituties zoals producentenorganisaties, het productschap en de veilingen die voorheen zorgde voor geinstitutionaliseerd vertrouwen hebben een groot deel van hun legitimiteit verloren omdat ze niet hebben weten in te spelen op de toegenomen varieteit in de sector. Daarom zoeken vissers zelf in toenemende mate direct contact met buitenstaanders in plaats van dit over te laten aan vertegenwoordigers of de veiling. Hierdoor nemen persoonlijke relaties tijdelijk toe, bijvoorbeeld binnen de keten tussen producenten en kopers.

Echter deze persoonlijke, actieve en meer reflexieve vormen van vertrouwen vergen meer tijd en actoren streven daarom naar stabiliteit en voorspelbaarheid door middel van istitutioneel verrtouwen door middel van nieuwe, legitieme en betrouwbare governance arrangementen, zoals bijvoorbeeld certificering, een nieuw veilsysteem of een Europees co-management systeem. Kortom, de visserij-industrie kenmerkt zich door een combinatie van zowel pre-moderne als moderne elementen waarin passieve en 'thick' vertrouwensrelaties nog steeds een belangrijle rol spelen zij het in een nieuwere, meer reflexieve vorm.

Het openen van de visserij industrie voor buitenstaanders, mogelijk gemaakt door nieuwe vertrouwensrelaties, is een belangrijke voorwaarde voor duurzaamheid en dus voor de toekomst van de Nederlandse visserijsector. De toenemende directe interactie met verschillende stakeholders heeft geleid tot meer diversiteit en kennisuitwisseling tussen stakeholders die voorheen niet met elkaar in

contact waren. De industrie is aan het veranderen van een homogene sector naar kleinere, diverse groepen die georganiseerd zijn langs productcategorieen in plaats van langs gemeenschap en familie. Waar vertrouwensrelaties voorheen gerelateerd waren aan de sector als geheel, zien we nu diverse groepen vissers die verschillende mate van vertrouwen genieten. Sommige groepen genieten meer vertrouwen van buitenstaanders dan anderen. Wederzijdse afhankelijkheid en werderzijds vertrouwen zijn echter essentiele voorwaarden voor succesvol overleg en uiteindelijk een verandering van werkzaamheden naar een meer duurzame visserij-industrie. Zonder deze voorwaarden worden interacties en informative uitwisseling negatief geinterpreteerd wat leidt tot een een weigering om te veranderen.

Annex to statement
Name Birgit de Vos
PhD candidate,
Wageningen School of Social Sciences (WASS)
Completed Training and Supervision Plan

Wageningen School of Social Sciences

Name of the course	Department/ Institute	Year	ECTS (=28 hrs)
I. General part			
Three courses: Cambridge First Certificate, Cambridge Advanced English and Cambridge Proficiency in English.	The British School in the Netherlands (Den Haag)	2008/2009/ 2010	5
Treasurer and member of the Board of the EAFE (European Association of Fisheries Economists)	European Association for Fisheries Economists	2007-2010	4
Subtotal part I			**9**
II. Mansholt-specific part			
Mansholt research proposal	ENP/LEI	2008	6
Mansholt Introduction course	Mansholt Graduate School	2008	1,5
PhD day	Mansholt Graduate School	2010	1
Presentation at EAFE conference: Conference on fishery governance and cost of enforcement	Alghero, Italy	2008	2
Two Presentations at SP7 IPOP 'Kust en Zee programma'	Wageningen, The Netherlands	2008	1
Presentation at MARE conference: People and the Sea V. *Living with uncertainty and adapting to change.*	Mare, Amsterdam	2009	1
Subtotal part II			**12.5**
III. Discipline-specific part			
Postacademische cursus transitiemanagement	DRIFT, Erasmus University Rotterdam	2007	4, 5
Social Theory and the Environment: An Introduction Into Ecological Modernization Theory;	ENP	2008	6
Subtotal part III			**10,5**
IV. Teaching and supervising activities (optional)			
MSc Student	M. Rasenberg	2009/2010	1
Subtotal part IV			**1**
		TOTAL (min. 30 ECTS)	**33,0**

About the author

Birgit de Vos was born in Zwolle in 1976. She finished her secondary education at the Thomas a Kempis College in 1996. Thereafter she moved to Nijmegen to study Cultural Anthropology at the Catholic University (nowadays Radboud University). She wrote her master thesis on management of irrigation systems in the rural areas of Spain (Malaga), and graduated in 2001.

In the beginning of 2002 Birgit started to work for the Centre of Maritime Research (MARE) in Amsterdam where she got acquainted with fisheries. In October 2002 Birgit was hired by her current employer LEI, part of Wageningen UR. There she built op experience in fisheries, governance and sustainability. From 2008 to 2011 Birgit was the treasurer of the European Association of Fisheries Economists (EAFE).

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