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THE MARINE STEWARDSHIP COUNCIL: EXPLORING THE POTENTIAL OF A PRIVATE ENVIRONMENTAL GOVERNANCE MECHANISM

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Abstract

This thesis is concerned with private environmental governance at a global level. It tries to grasp and analyse the phenomenon of the 'Marine Stewardship Council' (MSC) from an International Relations perspective. In this understanding, the MSC provides an innovative private environmental governance mechanism whose role and functions need to be scrutinised. The underlying global governance debate suggests that new forms of problem-solving structures and processes are currently emerging, with a growth in regulatory initiative and control by private actors. However, there is rather little evidence to which degree the engagement of these actors in rule making and implementation on a global level challenges and complements established governance systems that have become ineffective. Accordingly, this thesis aims to generate a deeper understanding for the problems and opportunities of the Marine Stewardship Council in this context. For clarification it poses the question 'what is the potential of the MSC to exert environmental governance in the issue area of fishing?' Four criteria for governance potential are developed: (1) appropriateness of rules, (2) legitimacy of the governance mechanism, (3) behavioural changes of stakeholders triggered through the governance mechanism, and (4) the ability of raising concern. The analysis reveals that while the MSC's potential to exert environmental governance in the issue area of fishing remains limited at present, it is likely that it increases in the near future. With regards to the global governance debate, however, this thesis generates evidence that private governance initiatives will only be able to complement public governance systems in a restricted manner.

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1 Problem Formulation

1.1 Subject Area

While human use of local ecosystems has always had environmental impacts, the *global* dimensions of environmental change, caused by human activities, have become obvious only during the last few decades. Environmental problems have emerged that exceed the boundaries of nation-state territory. One way of distinguishing different problem sets is to cluster them into problems that are related to (a) international commons, (b) trans-boundary externalities, (c) linked issues concerning policy-integration, and (d) shared natural resources (Young 1994).[1] Generally, single nation-state actors cannot solve these problems on their own; hence, states are becoming environmentally interdependent. There is a need for co-operation and regulation beyond nation-state boundaries, and for the development of transnational or sometimes even global governance systems in order to avoid joint losses. Consequently, environmental institutions developed in order to foster collective rule making and implementation in the environmental domain and to close the governance gaps yawning in this area.

Many of these institutions, for various reasons, have not managed to meet their targets to stop environmental degradation and solve the problems that initially led to their creation. Achieving more sustainability seems to require different approaches and innovative forms of governance. As the OECD analyses in its report on governance in the 21st century,

> "First, old forms of governance in both the public and private sectors are becoming increasingly ineffective. Second, the new forms of governance that are likely to be needed over the next few decades will involve a much broader range of active players. Third, and perhaps most importantly, the primary attributes of today's governance systems – the usually fixed and permanent allocation of power that are engraved in the structures and institutions of many organisations; [...] – look set to undergo fundamental changes (OECD 2001, 5).

So far, studies in global environmental policy and international relations (IR) have in general mainly focussed on nation-states as actors. They have been seen as the crucial

intervening variable in solving transboundary environmental problems. For a long time the role and function of different non-state actors appeared in the literature to be limited to exerting influence on agenda-setting processes, to lobbying governments in a two-level game, to providing expertise, to implementing and to monitoring international agreements.

Only recently have researchers started to concentrate on the potential of business and civil-society actors to explicitly set and enforce environmental rules and standards, mostly in co-operation with, but sometimes also completely independent from, nation-state governments and international organisations. Public-Private Partnerships (like the World Commission on Dams, the UN Global Compact, or most of the Johannesburg Type-II Partnerships) centred during the last years' debates about new roles of private actors in global environmental policy and have been studied to some extent (e.g. Risse and Börzel 2003, Dingwerth 2003). In contrast, rather little is known about the potential of emerging transnational private governance mechanisms in the shape of business-NGO partnerships. Having its seed in a joint initiative of Unilever and the World Wide Fund for Nature (WWF), the Marine Stewardship Council is dealing with environmental governance on a global level. In this context, we understand governance as "the making and implementation of rules and the exercise of power" (Keohane 2002, 2) and a mechanism as a set of "recurrent processes that link specified initial conditions and a specific outcome" (Mayntz 2002, 3). Therefore, the measures of the independent, global, non-profit organisation Marine Stewardship Council (MSC) can be identified as a private governance mechanism.

The Marine Stewardship Council is setting environmental standards for fisheries and is trying to enforce their implementation by introducing the marked-based instrument of certification and eco-labelling respectively to the fishing industry. This instrument is based on the idea that the MSC sustainability-certification, along with the permission to use the MSC logo on products, brings about economic advantages for the fisheries that are so promising that these apply for certification even though they might have to change their practices according to the MSC standards. Consequently, the power of the Marine

[1] This distinction is going to be discussed in further detail in section 2.1.

Stewardship Council is not of coercive nature, but depending on the demand of labelled products in the market place.

Certification organisations generally have two key components: (1) a set of rules, principles, or guidelines (usually in the form of a code of conducts), and (2) a reporting or monitoring mechanism (Gereffi, Garcia-Johnson and Sasser 2001). Although these private codes of conduct are voluntary in nature, they can be qualified as regulative rules when some degree of actors' compliance is existent (Pattberg 2003). Thus, the MSC as a co-operation between two private actors - a global business actor and one of the world's largest green NGOs - could exercise environmental governance.

This raises the question whether it could be seen as a complement or even an alternative to public governance mechanisms, which generally have difficulties in managing the resource fish in a sustainable manner on a global level. This thesis aims to explore the potential of the private governance mechanism Marine Stewardship Council to exert environmental governance and contribute to the solution of problems related to the exploitation of the natural resource fish.

1.2 Research Question

What is the Marine Stewardship Council's potential to exert environmental governance in the area of unsustainable fishing?

1.3 Background and Pre-Understanding

With regard to the deteriorating state of many eco-systems affected by common-action problems, we believe that the established governance systems in most cases do not deliver the expected results (Vogler and Jordan 2003; Brühl and Rittberger 2003). Transnational environmental problems are often too complex to be solved through the established forms of governance. Facing the needs of a growing world population on the one hand and simultaneously a 'crisis of multilateralism' (Loske 2003) on the other (think of the

US refusal to strengthen any binding agreement on issues such as climate change; think of the WSSD in Johannesburg, terrorism and the Iraq War, the 2003 WTO-conference in Cancun etc.), undeniably gives rise to concerns about how to manage life on earth in the future in a more sustainable manner.

"When it comes to meeting the challenge of governance we should focus on practice, on implementation, on the right signals from governments, and on letting business respond in the most efficient way" (Faulkner 1997, 158). We feel ambivalent about this opinion of the Executive Director of the Business Council for Sustainable Development on the role of business in environmental governance. However, in case that the astonishing institutionalised co-operation of antagonistic private actors could provide a way out of the crisis and help overcoming the negotiation gridlock and implementation deficit in global environmental policy, we would like to find out! With our project we would like to take part in the ongoing controversy about the prospects of an emerging global environmental governance architecture (Biermann 2002; Börzel and Risse 2003; Fuchs 2002; Keohane 2002; Rosenau 1997, 1999, 2002) and generate a deeper understanding about the problems and opportunities of private environmental governance in this discourse.

1.4 Methodology

Generating a deeper understanding about transnational private environmental governance turns out to be demanding since the mechanisms are just coming into being. We are of the opinion that it is therefore advisable to concentrate on the qualitative analysis of one case study, the Marine Stewardship Council.

How to appraise the potential of the Marine Stewardship Council to exert environmental governance? What do we mean by 'potential'? Granted, it would be beyond our grasp to try to deliver a holistic analysis of the all-embracing potential of a complex social phenomenon such as the MSC. Therefore, in this section, we will develop the links between the very comprehensive category 'potential' and our selection of its pivotal dimensions that we will further explore in this project. In doing so, it will become clear that our methodical approach is mainly inspired by analytical tools developed by regime analysis.

To begin with, it is necessary to clarify our understanding of what the term 'potential' denotes in this paper. The Oxford English Dictionary stresses two main meanings of the word 'potential':

(1) *possessing potency or power; potent, powerful, mighty, strong; commanding*, and

(2) *possible as opposed to actual; existing in posse or in a latent or undeveloped state, capable of coming into being or action*.

Consequently, our research will broadly focus both (a) on the Marine Stewardship Council's power to exert environmental governance in the area of fishing at this point in time, and (b) on its theoretical future prospects to do so.

1.4.1 Criteria for the assessment of the MSC's governance potential

As mentioned above, Keohane defines governance as "the making and implementation of rules, and the exercise of power, within a given domain of activity" (Keohane 2002, 2).[2] We know that the MSC is making rules for sustainable fisheries in the shape of codes of conduct - the question is whether they are appropriate to contribute to the solution of the problem, whether they are implemented and whether it is the MSC that puts them into action? What are the effects of the Marine Stewardship Council?

In order to gain an overview of the dimensions in which the Marine Stewardship Council could possibly have effects, we will draw on an approach applied by scholars of regime theory to assess the effectiveness of international institutions. Expanding the concept of governance that we have introduced so far for a time-dimension reveals similarities between governance systems and regimes and helps to explain why we are going to operate with parts of regime analysis. "Private environmental governance emerges out of a context of interaction that is institutionalised and of a more permanent nature" (Falkner 2003, 73). The concepts of regimes and governance systems both fundamentally denote the creation of different modes of rules over time. From the perspective of regime theory, rules occur as four different types: (1) principles (beliefs of fact and causation); (2) norms (rights and obligations); (3) regulations (pre- or proscriptions for action); proce-

[2] The concept of 'governance' is going to be reviewed in further detail in section 2.1.

dures (decision-making rules) (Krasner 1983, 2). Principles and norms provide the basic characteristics of an institution, whereas regulations and procedures may change without altering the substantial content of a regime. "To capture this important difference, some scholars have argued for distinguishing between *constitutive rules* on the one hand, and *regulative rules* on the other" (Pattberg 2003, 16). Governance systems are likewise institutional arrangements that structure and direct actors' behaviour in an issue-specific area both through generating constitutive and regulative rules (Falkner 2003). In this paper we will follow Young 1994 and use the terms 'regime' and 'governance system' interchangeably.

Research over the last decade by scholars of international relations has been concerned with questions such as whether international regimes matter and how we would know? (e.g. Green 1996; Keohane and Levy 1996; Mitchell 2001; Oberthür 1997; Schreurs and Economy 1997; Victor, Raustiala, and Skolnikoff 1998; Young 1994/1999). In exploring the potential of private environmental governance in one case study, we have to ask a similar question at the beginning. Does the MSC matter and how do we find out whether it matters? Consequently, it suggests itself to have a closer look at certain tools of regime analysis for our assessment of the MSC.

The large body of research on regimes has shown that there are different possibilities of how to grasp the effects of international regimes. The decision concerning which effects are of importance seems to depend on the research interest of different authors and can be described as 'economic-political', 'juridical-political', 'process oriented-political' or even 'multidimensional-political' (Jakobeit 1998). However, as a common denominator of their contemplation, these scholars come to the result that the crucial effects of a governance system "can be evaluated along scales that measure either changes in the behaviour being regulated or changes in the environmental indicator that is the ultimate concern of the institution" (Mitchell 2001, 17). We will mainly concentrate on behavioural changes. In order to make this decision transparent, the probably the most sophisticated distinction ('multidimensional-political') of different possible effects of governance systems by Oran Young 1994 is going to be summed up in the following:

- Effects that contribute to the *solution of the problem*: this perspective on effects is certainly the most convincing one. It asks whether governance systems have effects in the sense that they operate to solve the problems that motivated parties to create them in the first place. However, there are enormous difficulties in assessing the state of the physical environment / complex ecosystems, especially when we are looking on transboundary or global systems. It is rarely, if at all, possible to draw any simple causal relation between a change in the environmental variable and the existence of a governance system. Therefore, this project is not attempting to assess the ecological effects of the MSC.

- *Behavioural Effects*: to us, the most appealing dimension of effects is to ask for any behavioural changes that a governance system causes. Does its operation alter the behaviour of one or more of its stakeholders, either by doing things they would not otherwise have done or by terminating or redirecting prior patterns of behaviour? Although behavioural effects may be correlated with problem solving, there is no basis for assuming that this will always be the case. Sometimes, the behavioural effects attributable to the establishment of an international governance system may amount to a form of displacement in the sense that they create a new problem in the process of solving an old one.

- *Evaluative Effects*: we could ask whether a governance system produces results that are *efficient*, *equitable*, *legitimate*, or *robust*. Does it provide cost-effective solutions, is it generating outcomes that are just or fair, is it democratically accountable, is it able to adapt to changing conditions etc.?

- Effects that contribute to the *attainment of goals*: Goal-oriented effects are a measure of the extent to which a governance system's (stated or unstated) goals are attained over time. Goal attainment and problem solving do not need to go together. In our research project we are not interested in this dimension since the attainment of self-set goals as a criterion does not allow one to come to any interesting conclusions about the potential of the MSC to exert environmental governance.

- *Constitutive Effects*: a governance system has effects in the constitutive sense when it gives rise to a social practice, involving the expenditure of time, energy and resources, which therefore becomes a major focus of attention for its stakeholders. Constitutive effects sometimes differ dramatically from the other conceptions. A social practice may flourish without having effects in the sense that its operation either solves the problem that stimulated the governance systems creation or attains the goals articulated by its founders. Nor does the emergence of a social practice consuming significant amounts of time and energy offer any guarantee that parties will act to implement key provisions within their domestic jurisdictions or to ensure high levels of compliance.

- *Process Effects*: this perspective is mainly applied to analyse the effects that the regulation of a governance system has on the domestic legal and political systems of nation-states. It also incorporates the extent to which those subject to a governance system's prescriptions actually comply with its requirements. However, perfect compliance is not sufficient to solve problems when key provisions of a governance system are either inadequate or inappropriate. Hence, we are going to discuss the appropriateness of key regulations (the code of conduct for sustainable fisheries) in the case of the MSC.

Following from these considerations, we argue that exploring the MSC's power to exert environmental governance mainly means to investigate its **effects on the behaviour** of the certified fisheries. According to the Food and Agriculture Organisation of the United Nations (FAO), an estimated 25 percent of the major marine fish stocks are moderately harvested, about 47 percent of them are fully exploited and another 28 percent are overexploited, standing for significantly declined and depleted stocks (FAO 2002, 23). Only if the actors that are causing this overexploitation on the ground, the fishermen, have incentives to alter their behaviour, there are prospects of using this resource in a sustainable manner. For this reason we will try to discover whether within the certified fisheries the fishermen alter their behaviour due to the existence of rules established by the MSC. Consequently, when speaking of changes in stakeholders' behaviour, we mainly concentrate on the fishermen. Nonetheless, we do not neglect the impacts on other affected ac-

tors such as processors, retailers, consumers, governmental bodies, and other interest groups. This perspective should, however, neither be misunderstood as an oversimplification of the complex societal reasons why fishermen behave the way they do, nor as an attempt to put the blame solely on this group of actors.

Regrettably, it is not easy to generate causalities between a governance mechanism's existence and behavioural changes of the stakeholders that go beyond simple correlation. As shown, a governance mechanism can contribute to multidimensional and complex changes in actors' behaviour. However, it is not the only variable that causes changes. Actors are embedded in other constantly varying economical, political, technological, and social environments that also might have effects on their behaviour. Hence, one has to ask how the effects of the MSC can be measured exactly and how to isolate these effects from those that are caused by other variables? In this respect, regime analysis suggests the concept of *counterfactual reasoning*:
We will follow the hypothetical question "How would the certified fisheries' behaviour have looked like without the existence of the Marine Stewardship Council?" Since we cannot observe the true counterfactual situation in a laboratory experiment, we are trying to examine the observable behaviour of the fisheries prior to their certification and try to investigate the contribution of the MSC to possible changes.[3]

As mentioned above, behavioural effects may be correlated with problem solving, but this is not necessarily the case. Therefore, it is also important to discuss the **quality and appropriateness of the created rules**. This enables us to build up a qualified argument about the MSC's potential to exert environmental governance in the problem area of unsustainable fishing.

Furthermore, we will touch upon the dimension of the MSC's evaluative effects such as its **legitimacy and accountability** since we consider these issues to ultimately determine its potential in the long run; e.g. should innovative forms of governance turn out not to be legitimate, they cannot be seen as complements or alternatives to forms of public govern-

[3] It is noticed that, in order to strengthen the argumentation, a more sophisticated form of counterfactual reasoning would also include investigations on the behaviour of other comparable fleets after the genesis of the MSC that have not been certified. Regrettably, the time frame of this project was too limited to do so.

ance. Due to time restrictions, the investigation of evaluative effects will, however, remain superficial to some extent and leave enough room for other research projects to follow.

Haas, Keohane and Levy developed an understanding of the effects of governance institutions that became generally known as the '3 Cs'. In order to round off our analysis, we incorporate one more perspective on the possible effects of the MSC. "Any effective action of international institutions with respect to the global environment is likely to follow a path that increases Concern, or Capacity, or improves the Contractual environment" (Haas, Keohane and Levy 1993, 21). If one accepts this framework, then an effective governance system should be designed so that its rules address whichever of these three factors appears to be lacking. In the case of the Marine Stewardship Council, it raises for us the question whether the organisation manages to **increase concern?** The MSC's effects rest on a market-based instrument, which means that ultimately the consumers' choice determines whether fisheries apply for certification at all.[4] Therefore, another important impact determining the MSC's potential is its PR-work and awareness-raising campaign. In this respect the potential of the MSC rises with the extent to which it is able to promote and communicate its work.

In sum, we are going to assess the potential of the Marine Stewardship Council to exert environmental governance against four criteria: (1) the appropriateness of the MSC Code of Conduct for Sustainable Fisheries, (2) the behavioural effects of this code on the fisheries, (3) legitimacy and accountability, and (4) the ability to increase concern. We would like to point out that we attach unequal importance to these four criteria. Even though others are revealing that problems related to accountability and the democratic legitimacy of governance mechanisms are at least as important as those related to the regulatory dimension mainly discussed here (Knill and Lehmkuhl 2002), the top priority of our analysis lies on the investigation of behavioural effects caused through Marine Stewardship Council rules.

[4] For an explanation of the market-based instrument of eco-labelling see section 3.3.

1.4.2 Working Questions

Analysing the potential of this NGO-business co-operation means to investigate different dimensions, following these working questions:

- Are the established rules environmentally sound, do they really contribute to the solution of the problem?
- Do the rules established by the Marine Stewardship Council change the behaviour of the fishers on the ground?
- What does the design, development and changes of the MSC indicate for its future potential; is this governance mechanism democratically accountable, is it legitimate?
- Does the MSC raise stakeholders' concern for problems related to fishing?

1.4.3 Methods

To answer our research question we will use a mixture of methods. Firstly, the more theoretical part about global environmental governance is based on a thorough literature review. Secondly, we initially intended to analyse the Marine Stewardship Council's effects through studying all of the seven MSC certified fisheries.[5] We tried to get in contact with representatives of these fisheries in order to find an answer to the question whether they altered their behaviour due to their involvement with the MSC. Since we managed to interview only four stakeholders (one through a telephone interview and a questionnaire, two through telephone interviews only, and one through a questionnaire only) this method did not deliver sufficient information for our analysis. However, we are using the conducted interviews to support our argumentation with valuable information of stakeholders on the ground and their ideas about the Marine Stewardship Council. The telephone interviews have been conducted as semi-structured exploratory interviews to allow for openness, while maintaining focus on the key issue of possible behavioural changes caused by the MSC. The interviews have been recorded. Exploratory interviews

[5] The number of seven certified fisheries was exhaustive at the time we started our investigation. However, during the last weeks of our research three new fisheries achieved certification that could not be included any more.

are supposed to be open and have little structure. They introduce an issue and follow up on the interviewees' answers and seek new information about and new angles on the topic (Kvale 1996). Whereas the two questionnaires have been structured and have investigated the interviewees' opinion on the effects of the MSC on the fishery. The interviewees were chosen due to their function in the fisheries of co-ordinating the intended collaboration with the Marine Stewardship Council and should therefore be highly familiar with the process of certification and its implications.[6]

In order to be in the position of analysing possible effects on all the fisheries, thirdly, we decided to mainly base our analysis on reviewing assessment reports on the fisheries that have been carried out by independent certifiers.[7] These reports assess the fisheries in detail in terms of their sustainability and document fishing and management methods of the fisheries before the certification. Most importantly, in some cases they point out requests to the fisheries to correct certain practices in accordance to the MSC standard. Since follow up surveys are available we can also study whether these requests have been implemented by the fisheries and thereby answer the question whether the MSC caused any behavioural changes.

Taken together, the methods used should (a) enable us to make some close guesses about what the behaviour of the fisheries would have looked like without the existence of the MSC as well as (b) provide sufficient information to discuss aspects of the MSC's legitimacy and accountability and indicate its concern-raising effects.

1.4.4 Limitations

As the MSC is less than a decade old, the ink has only just dried on some important protocols and declarations. The discipline of international relations has shown that international governance system are dynamic and can change dramatically over time, e.g. through different feedback effects (Oberthür 1997), or windows of opportunity that allow

[6] A contact list of our interviewees is to be found in the appendix, 9.2.

for a sudden tightening of measures. A 'cascade of norms' (Finnamore and Sikkink 1998) in the area of fishery governance might take time to develop and at the time of our analysis the Marine Stewardship Council is definitely in an early stage. Within the months of April and May, three new fisheries have gained certification, while another eleven are in the pipeline[8], indicating that this organisation is gaining momentum. Thus, in some respect an analysis of its potential might be a balancing act and perhaps even premature in terms of tracing its impacts. Furthermore, we are analysing only one case study; thus we do not expect to come to a general, solid 'take-away' message that is rating the implications of private environmental governance. Moreover, such a message is not easy to find when one attempts to dive deeply into a complex issue.

1.5 Outline and importance of each section

The **second chapter** of the project deals with developing the conceptual framework of private environmental governance. It is providing the theoretical background of how IR has explained the development and performance of transnational governance systems in general, showing that global environmental policy has come a long way that could be interpreted as a "transformation from environmental government to governance" (Vogler and Jordan 2003).

Accordingly, we will introduce global governance as a perspective that broadens our scope on global environmental policy ('*What* is global governance?' section 2.1.1). Section 2.1.2 is explaining *why* there is a need to govern environmental problems at a transnational level at all. Subsequently, the question *how* these problems have been approached is going to be addressed and section 2.2 is giving a restricted literature review on different explanations for the changing role of private actors in global policy-making.

[7] In important point within the structure of the MSC is that independent third party certifiers carry out certification and monitoring. For details see section 4.1.4. A contact list of the certifiers is to be found in the appendix 9.1.3.

[8] Fisheries that are currently undergoing assessment are: Alaska Pollock, Australian Mackerel Icefish, British Columbia Salmon, California Chinook Salmon, Chilean Hake, Hastings Fishing Fleet Dover Sole Fishery, Hastings Fishing Fleet Pelagic Fishery, North Sea Herring, Pacific Halibut (Alaska, Washington & Oregon), Pacific Halibut (British Columbia, Canada), Sablefish (Alaska).

Taken together, these steps make clear the 'crazy-quilt' nature of environmental governance institutions, going beyond the traditional state-centric perspective and making innovative forms of co-operations in the environmental area apparent.

A consideration of the environmental problem of unsustainable fishing is undertaken in **chapter 3**. Different approaches of management and regulation of this problem are outlined; in particular, economics and market-based incentives are explored.

The project's **fourth chapter** is devoted to our case study on the Marine Stewardship Council. Its organisational structure is scrutinised (4.1) and seven MSC certified fisheries are investigated (4.2).
"Over the past three decades, most relationships between the private sector and civil society have been founded upon conflict" (Murphy & Bendall 2002). The sudden co-operation between Unilever and the WWF raises our curiosity about its impacts.

The different chapters require different scientific skills, ranging environmental science to economics and political science, and are therefore interdisciplinary. Following the guiding working questions will prepare the ground for a critical analysis of the potential of one private transnational governance mechanism in the in **chapter 5**. Finally, we draw conclusions in **chapter 6** and give an outlook on intriguing issues within the area of global environmental governance (**chapter 7**).

2 Global Environmental Governance

The discipline of international relations originally covered only the relations between nation-states. Governance, however, does not seem to be merely an affair of states any longer. "Modern societies have in recent decades seen a destabilisation of the traditional governing mechanisms and the advancement of new arrangements of governance" (van Kersbergen and van Waarden 2004, 143).

Throughout this paper we follow the proposal of Simmons and de Jonge Oudraat 2001 and distinguish among five broad categories of actors:

(1) We will refer to *states* including associations of them (such as G-8, EU) also as *public actors*.

(2) *International Organisations (IOs)* including intergovernmental bodies (such as UN organisations, Bretton Woods institutions, treaty secretariats, development banks, and regional organisations).

(3) We use *business-actors* and *private sector* interchangeably to describe for-profit entities and non-profit associations promoting business interests (such as the International Chamber of Commerce).

(4) We use *NGOs* and *civil society* to include the diverse universe of interest groups, advocacy groups and citizens' associations.
However, when summarising business-actors and NGOs in one group, we will simply speak of *private actors*. Therefore our definition of *private* governance includes both civil-society and business-actors.

(5) We use *experts* to refer to government and non-government individuals with specialised technical, regulatory or scientific knowledge who advise or make decisions in global rule-making and regulation; and we use *epistemic communities* to refer to transnational groups of experts who conduct common discourse based on shared knowledge.

(6) We use the term *non-state actors* to sum up the private sector, civil society, and epistemic communities and thereby oppose them to states.

These groupings are admittedly somewhat artificial given the diverse cast of characters

and networks they are forming – but they provide a useful categorisation (Simmons and de Jonge Oudraat 2001).

After clarifying our understanding of 'governance' in further detail, this chapter is trying to answer the fundamental questions why there is a need for transnational or sometimes even global governance in the environmental area, how this environmental governance has been exerted so far and by whom? We are arguing that global governance is the appropriate lens to analyse current basic trends in global environmental policy and therefore the pivotal concept to understand the challenges and opportunities that an organisation such as the Marine Stewardship Council brings about.

Furthermore, this chapter provides a literature review of explanations for changes in the forms and mechanisms and the location of governance and introduces the concept of business-NGO partnerships in section 2.2.2.

2.1 Global Environmental Governance – unravelling a crazy quilt

2.1.1 What is 'global governance'?

At first glance it seems that governance is a buzzword. The Online Contents catalogue of journals, for instance, returned 24 hits on the term 'governance' in 1990. This number increased to 510 in 1999 and 603 in 2000. Today, one can find 'governance' in such a wide range of scientific discourses that this inspired some authors to explore the concept's suitability for serving as a bridge between the different disciplines (van Kersbergen and van Waarden 2004). German Chancellor Gerhard Schröder recently gave the opening address at the first Annual Symposium of the newly founded *Hertie School of Governance* in Berlin. Strangely enough, the word 'governance' does not even exist in some languages, such as German. So, is this focus much ado about nothing or more an expression of fundamental societal changes?

The New English Dictionary defines governance as "the manner of governing, control-

ling, directing or regulating influence". In order to fathom the meaning of governance, Rosenau and Czempiel emphasise the distinction between governance and government. While both words refer to purposive behaviour and to goal-oriented activities, government suggests activities that were backed up by formal authority, whereas governance refers to activities backed up by shared goals.

> "Governance in other words is a more encompassing phenomenon than government. It embraces governmental institutions, but it also subsumes informal, non-governmental mechanisms whereby those persons and organisations within its purview move ahead, satisfy their needs and fulfil their wants" (Rosenau and Czempiel 1992, 4).

These informal mechanisms of governance are, in comparison to governmental ones, based upon non-hierarchical forms of steering. Hierarchical modes of steering are usually reserved for states and public actors who can allocate values authoritatively and enforce rules. To put it differently: "We enter the realm of governance, the more we include non-hierarchical forms of steering and non-state actors" (Börzel and Risse 2002, 2).

Table 1: The Realm of Governance. (Source: Risse and Börzel 2002, 3)

Actors involved ***Steering modes***	**Public Actors only**	**Public and Private Actors**	**Private Actors only**
Hierarchical: Top-Down; (Threat of) sanctions	- Traditional nation-state - Supranational Institutions		
Non-Hierarchical I: Positive incentives; bargaining	- Intergovernmental bargaining	- Delegation of public functions to private actors - Corporatism - Public-private networks - Bench-marking	- Private regimes - Private-private partnerships (NGOs-companies)
Non-Hierarchical II: Non-manipulative persuasion (learning, arguing etc.)	- Institutional problem-solving		

Rosenau further notes that with few exceptions "governance tends to be employed when it is modified by the adjective 'global'. Otherwise, for any scale short of the global, 'government' is usually treated as the entity through which order is sought" (Rosenau 2002, 71). Discussions on the concept of global governance are highly controversial and participants in these debates disagree about the nature, extent, and implications, if not its mere existence. On a very general level, there are some similarities in the different concepts of global governance: it is conceptualised as a move toward multi-actor, multi-level decision-making in world politics. New forms of problem-solving structures and processes are pointed out, with a growth in regulatory initiative and control by sub-state, supra-state, and non-state actors.

> "Thus, scholars describe a change of the international system from a state-centric to a multi-centric one with multiple sources of power and loci of authority. The core of the global governance argument concerns the acquisition of authoritative decision-making capacity by non-state and supra-state actors " (Fuchs 2002, 11).

In this respect, our project operates at the very heart of this ongoing debate. Global governance optimists claim that private actors have successfully established themselves as political agents, having both a significant direct and indirect impact on international policy. On the contrary, a substantial number of scholars are highly sceptical regarding the potential extent of global governance. They highlight a persistent enforcement gap and have doubts about the capacity of the 'new actors' (Fuchs 2002). Through our project, we hope to generate evidence and thereby define our own position in this debate.

The concept of global governance denotes fundamental societal changes and departs from more traditional ones in IR in four distinct ways. As an analytical tool the concept includes: "(1) non-state actors, (2) analyses multiple spatial and functional levels of politics, (3) is concerned with new mechanisms of producing and maintaining global public goods, and (4) highlights the establishment of new spheres of authority beyond the nation state" (Pattberg 2003, 6).

At the most general level, global governance is the sum of all existing "channels through which 'commands' flow in the form of goals framed, directives issued, and policies pur-

sued, the sum of myriad – literally millions – of control mechanisms driven by different histories, goals, structures, and processes" (Rosenau 1997, 27). Global *environmental* governance is emphasising that the scope on global politics lies in the environmental issue-area. From a global environmental governance perspective it will become possible to achieve a better overview of the mechanisms that regulate behaviour in this area by widening the traditional state-centric perspective.

2.1.2 Why to govern environmental problems on a transnational level?

At the beginning of the seventies, scholars of international relations realised that economic exchange in the international system was growing constantly, causing a specific relationship between nation states that was described as *complex interdependence*. This term, introduced by Robert Keohane and Joseph Nye, refers to the various, complex transnational connections, interdependencies, between states and societies (Keohane and Nye 1977). Reflecting on the relaxing situation between the conflict parties in the late seventies period of the Cold War, they argued that with the decline of military force as a policy-tool and with the increase in economic and ecological forms of interdependence the probability of co-operation among states increases as well. Almost thirty years later Keohane emphasises that "people's lives can be fundamentally changed, or ended, as a result of decisions made only days or moments earlier, thousands of miles away. In other words, interdependence is high" (Keohane 2002, 1).

With regard to global environmental governance, ecological interdependence is becoming a central category in explaining the rise of environmental co-operation in the international system.

> "Interdependence gives rise to collective-action problems in the sense that actors left to their own devices in an interdependent world frequently suffer joint losses as a result of conflict or are unable to reap joint gains because of an inability to co-operate" (Young 1994, 15).

Moreover, the increasing probability for co-operation among different actors in the international system can be illustrated by taking a closer look at the specific structures of

transnational environmental problems. Following Young, different problem sets can be classified: *International Commons*, *Shared Natural Resources*, *Transboundary Externalities*, and *Linked Issues*. In other words, "clusters of interactive situations" (Young 1994, 19), in which groups of interdependent actors are likely to suffer mutual losses in the absence of effective governance systems.

- In 1968, the biologist Garrit Hardin introduced the term '*Tragedy of the Commons*' for a situation, where actors with free access to common goods tend to overuse the given resource and thereby destroy it in the long run (he was working on the example of common farmland, but the most prominent one nowadays certainly are atmosphere/stratosphere and oceans and their limited waste-storage capacity).[9] Commons are "physical or biological systems that lie wholly or largely outside the jurisdiction of any of the individual members of a society but that are valued resources for many segments of society" (Young 1994, 20).

- Non-renewable resources are defined as "physical or biological systems that extend into or across the jurisdictions of two or more members of international society" (Young 1994, 22). Although it appears to be obvious that the establishment of joint institutions could solve these kinds of problems, the management of shared resources is not a simple matter. This projects' case study is dealing with a problem set of shared resources (fish stocks) and will provide further evidence for these difficulties.

- "*Transboundary externalities* arise when activities that occur wholly within the jurisdiction of individual states produce results that affect the welfare of those residing in other jurisdictions" (Young 1994, 20). Cases such as acid rain in Europe or the nuclear power plant accident of Chernobyl showed that negative externalities do not know any political border and have to be managed on a supranational level.

- Finally, *linked issues* arise when social institutions that are supposed to deal with environmental problems have impacts on other regimes and vice versa. This can be illustrated by the fact that environmental concerns sometimes lead to the formulation

of import restrictions for products from states with low environmental standards. These can interfere with norms and rules of the General Agreement on Tariffs and Trade, for example the US import restrictions for Shrimps and Tuna. 'Policy integration' is therefore going to be one of the major issues on the future environmental policy agenda.

Accordingly, these transnational environmental problems cannot be solved by the action of only one or a few individual actors in the international system. They have to be seen as common action problems - global change requires global action. Game theory[10] is often applied in order to understand in which problem sets co-operation among stakeholders is most likely to occur. Games such as Prisoners' Dilemma, Co-ordination Game, or Battle of the Sexes explain that rationale actors generally tend to co-operate in the long run in order to avoid mutual losses and sub-optimal outcomes.

2.1.3 How to govern environmental problems on a transnational level?

There are different ideas of how to tackle these problem sets. Some argue for a World Organisation for Environment and Development and for a major change of the international systems' structure (e.g. Biermann and Simonis 1998, 2000). In such a conception, political power would be redistributed and a sort of 'eco-world-government' could limit the principle of state sovereignty by interfering into former nation state affairs. A few others are of the opinion that the total privatisation of common goods could solve the problems (see Dryzek 1996, Chapter 6).

However, these proposals remain ideas and the world is far away from a global constitution. The established way of managing environmental collective-action problems on a transnational level is (a) the development of governance systems or institutions in the

[9] However, Harding admitted that the English philosopher David Hume already had come 200 years previously to similar conclusions.

[10] Game theory is a mathematical model used to study problems in economics, and, to a lesser but still significant extent, political science and psychology as well. It is used to study interactions with formalised incentive structures ("games"). The predicted and actual behaviour of individuals in these games are studied, as well as optimal strategies. Seemingly different types of interactions can be characterised as having similar incentive structures, thus all being examples of one particular game.

shape of *international regimes* and (b) the creation of governance mechanisms in the mould of *international organisations*.

Following Krasner's standard definition, "regimes can be defined as sets of implicit or explicit principles, norms, rules and decision-making procedures around which actors' expectations converge in a given area of international relations" (Krasner 1983, 2). In contrast to international organisations (IOs), regimes are not material entities; they have no budgets, employees or offices. Generally based on international treaties, they are not actors but a social construction consisting of agreements and expectations that regulate the behaviours of actors in one issue area.

Although some regional environmental regimes already arose around the Stockholm Conference in 1972, fifteen years later the Brundtland Commission underlined that "the integrated and interdependent nature of the new challenges and issues contrasts sharply with the nature of institutions that exist today" (WCED 1987, 310). Consequently, it was seen as crucial by most of the states participating in the following process of the Rio Summit of 1992 (United Nations Conference on Environment and Development, UNCED) to foster the further institutionalisation of international co-operation. In order to do so, several international conventions could be agreed upon. "By comparison with the normally glacial progress of international institution building, the 1990s represented a period of unprecedented institutional innovation" (Vogler and Jordan 2003, 140). Framework conventions on climate (1992) and biodiversity (1992) were negotiated, a steady strengthening of the ozone depletion regime followed the 1987 Montreal Protocol, and Agenda 21 provided a vast blueprint for implementing sustainable development. At the same time, international conventions on the transport of hazardous wastes (1989) and desertification (1994) were developed, along with a network of regional environmental agreements.

Realist and Institutionalist scholars of international relations, and in particular of regime theory, see the nation-state as the pivotal actor in the international system. They draw,

however, different conclusions on the probability and relevance of transnational governance institutions, becoming entangled in one of IRs ongoing major debates: [11]

> "The realist research programme denies any significant independent role for intergovernmental institutions and organisations, or for non-state actors. Institutionalists have argued that inter-governmental co-operation is both theoretically possible and empirically undeniable" (Biermann 2002, 1).

As indicated in section 1.2, assessing the effects of regimes is rather difficult. The relevant literature lacks a consensual definition of how to evaluate the overall-effects of governance systems. What do we mean when we ask whether a regime matters? By talking about complex eco-systems whose processes and interconnections are by far scientifically not fully understood, it is not possible to draw any causal relationship between the measured changes in an eco-system and the existence of a regime. In fact, changes in these systems often take long time periods. Hence, the impact of a regime on the environment sometimes could become obvious only in 50, 100 or maybe a 1000 years time. On a very general level,

> "Any claim that an institution was effective, whether in terms of behaviour or environmental quality and in terms of the goal or some prior baseline, implies that, absent the institution, outcomes would have been different" (Mitchell 2002, 18).

There are certainly different dimensions of effectiveness, however, in terms of counterfactual reasoning on changes of the environmental indicator ('how much did the institution contribute to improve the state of the environment?'), further or increased environmental degradation in areas like biodiversity, desertification etc. shows that the overall success of existing environmental regimes is rather limited. Vogler and Jordan summarise that "the one overwhelming conclusion from much of this work [regime-analysis] was that, there were significant, and on occasion apparently insurmountable problems in translating international agreements into sustainable solutions on the ground." (Vogler and Jordan 2003, 141.)

[11] For an introduction into this debate see Richard Little 1997.

In their investigations on the transformation from international to global governance Brühl and Rittberger likewise argue that the present international governance systems are ineffective. They see two dimensions in which these systems turn out to fail.

> ”First, today’s international governance systems have not been able adequately to meet the demands on their policy-making capabilities. This is especially true for ’trans-sovereign problems’, i.e. problems extending across state borders in an almost uncontrollable way. Second, new actors have entered the world stage. [...] A critical assessment of international governance systems clearly demonstrates that they fail to deal with the new actors’ aspirations. The attainment of governance goals by international governance systems, in which states play a paramount role, seems to be extremely difficult, if not impossible” (Brühl and Rittberger 2002, 19-20).

While international regimes were generally seen as the basis of international order in an anarchic world of sovereign states - Joseph Nye once invented the picture *of islands of order in the ocean of anarchy* - “scant regard was initially paid to the accumulating evidence of significant involvement in international institutions by a range of non-state actors” (Vogler and Jordan 2003, 148). Consequently, scholar started to focus on the rise of non-state actors and the growing influence of private authority. The rationale of government-private sector interaction has thereby been studied in some detail under the headline of public-private partnerships. These partnerships are already involving non-state actors in the process of rule making. They represent, however, only one type of private governance on a continuum ranging from more traditional inter-state negotiations, to fully private co-operations (Pattberg 2003).

Table 2: Examples of global governance mechanisms according to actor constellation and purpose. (Source: Pattberg 2003)

Actor Constellation ***Purpose***	**Public**	**Hybrid**	**Private**
Service Provision	UNEP	Global Reporting Initiative (GRI)	Privatisation of water services (e.g. Thames Water)
Implementation	Global Environment Facility (GEF)	Global Network on Energy (GNESD)	Cement Sustainability Initiative
Rule-making	Johannesburg Summit	World Commission on Dams (WCD)	Marine Stewardship Council

This distinction notices the different actors that are involved in the process of generating formal and informal norms, principles, rules, and decision-making procedures. Consequently, one could distinguish between public, hybrid and private governance. Table 2 is showing examples of different environmental governance mechanisms according to the actors involved and their purpose.

2.2 Private actors and global governance

So far, we have argued that there is a need for innovative forms of transnational governance systems that facilitate co-operation in order to solve certain environmental problems. We will now turn to the changing perception of the role of private actors in transnational environmental policy and give a restricted literature review on how different authors explain why rule making increasingly tends to include private actors (section 2.2.1). The idea of this review is to point out that the emergence of a private governance mechanism such as the MSC is not just an oddity but likely to reflect a general trend that private governance is an increasing element of the modern world and that the problems and opportunities it presents need to be explored in more detail. Moreover, the background of business-NGO co-operations is going to be discussed in section 2.2.2.

2.2.1 The changing role of private actors in global politics

While there are less than 200 governments in the global system, there are approximately

- 60,000 major transnational companies (TNCs), such as Shell, Microsoft, Unilever, or Daimler-Crysler;[12]
- 10,000 single-country non-governmental organisations (NGOs), such as Freedom House (USA) or Population Concern (UK) who have significant international activities; and

[12] TNC: "in the most general sense any company based in one country that has dealings with the society or government in another country. However, the term TNC is normally reserved for a company that has affiliates in a foreign country. The affiliates may be branches of the parent company, separately incorporated subsidiaries or associates, with large minority shareholdings." (Willets 2001, 362)

- 5,800 international non-governmental organisations (INGOs), such as Amnesty International, the International Red Cross, the World Wildlife Fund, plus a similar number of less well established networks of NGOs. (see Willets 2001, 366.)

This group of private actors in global policy making is very heterogeneous and it sometimes causes confusion to put actors into a single category that have very different structures, different resources, and different ways of influencing policy making.

At the Rio Summit in 1992, private actors were officially integrated into the political process for the first time. It became apparent that environmental governance was no longer exclusively achieved by governments negotiating with governments:

> "Whereas for most of the 20th century, private actors only tried to influence agenda-setting processes by lobbying states and international institutions, today, they are involved in all stages and phases of world politics: they are active partners in agenda setting, norm and rule formulation, and implementation" (Brühl 2002, 371).

What are the reasons for this 'privatisation' of global environmental governance? Increasing involvement of private actors in politics is generally not new, but an essential element of the genesis of the liberal societies. Their involvement remained, however, for a long time restricted to individual national contexts. As Pattberg points out, the term non-state actors enfolds its conceptual usefulness only within the Westphalian system of sovereign states. It falls short of explaining questions of relative power and influence under the conditions of feudalism or tribalism, because these social institutions are not organised around centralised authority, but rather a whole network of interlocking ties and responsibilities.[13] To stress the importance of non-state actors in a historic perspective, it is to acknowledge that the usefulness of this concept very much depends on the appropriate timeframe (Pattberg 2003). We operate in the timeframe of the system of modern nation-states and like to develop an understanding for Rosenau assessment of the new role of private actors on the transnational level as "so thoroughgoing as to bring

[13] Many political developments in fact originated from the action of individuals or collectives different from those formally in power. For example, the conquest of the Americas was supported and later utilised by authoritative actors such as the Spanish Crown, but its driving force was the imagination and motivation of individuals and economic actors, such as Columbus and the Fugger Bank.

about the first turbulence in world politics since the Treaty of Westphalia in 1648" (Rosenau 1997, 37).

Critics of neo-liberal globalisation often see the deregulation and economic liberalisation as the reasons for the rise of private actors in the global arena. A closer look at this phenomenon makes unequivocally clear that there is no single explanation. Instead, the driving forces turn out to be so complex and located on different levels from the local to the transnational that their exploration in this paper will not be exhaustive.

Brühl introduces three factors that contribute to the growing significance of private actors: (1) the economic liberalisation increases the number of TNCs as well as it strengthens their position in world politics, while at the same time it provokes the formation of an opposing network (consisting of NGOs), "which might be interpreted as a rudimentary form of an evolving world community". Furthermore, (2) the development of new information technologies would foster the formation and emancipation of civil society, and (3) the end of the Cold War would speed up privatisation tendencies (Brühl 2002, 371).

The information revolution is also crucial for Ann M. Florini. She is the opinion that the most important driver for change in the nature of groups that are able to carry out governance flows from the information revolution. New types of technologies substantially increased the number of collective action problems to be solved. At the same time they also altered the relative capabilities of different types of actors to solve them, in particular increasing the capacity of non-state actors relative to states and creating a much larger number of players in the international system (Florini 2000).

Rosenau in comparison, analyses transformations of the political context in three different parameters:

> "Where the macro parameter has for centuries involved dominance by the anarchic system of nation states, lately the overall structure of world politics has undergone a bifurcation in which a multicentric system of diverse types of actors has emerged to rival the state-centric system. The transformation of the macro-micro parameter has involved movement of authority structures from being in place to being in crises. As for the micro parameter, it is conceived to have undergone changes wherein the analytic skills of citizens have expanded substantially (Rosenau 1997, 37)

He observes the evolution of a new form of anarchy in the modern world, which is not only characterised by the absence of a highest authority, but also by the disaggregation of nation-state authority. Facing the inability to solve the environmental problems, governmental output legitimacy is declining. As a result, authority is simultaneously moving up towards supranational groups and down to sub-national actors.

Table 3: Transformation of three global parameters. (Source: Rosenau 1997, 37)

	From	**To**
Micro parameter	Individuals less analytically skilful and emotionally competent	Individuals more analytically skilful and emotionally competent
Macro-micro parameter	Authority structures in place as people rely on traditional and/or constitutional sources of legitimacy to comply with directives emanating from appropriate macro institutions	Authority structures in crisis as people evolve performance criteria for legitimacy and compliance with the directives issued by macro-officials
Macro parameter	Anarchic system of nation- states	Bifurcation of anarchic system into state- and multi-centric subsystems

In accordance with Rosenau, Beck also sees the appearance of powerful non-state actors on the global level. To him, new (environmental) risks are the central category for the explanation of this phenomenon and the redistribution of authority:

> "The legal order no longer guarantees social peace, because it generalises and legitimises the threats to life. Consequently, there is a reversal of what is politics and what is not politics. The political is becoming non-political, and the non-political political. The hour of *subpolitics* is sounding" (Beck 1996, 15).
> "The concept of 'subpolitics' refers to politics outside and beyond representative institutions of the political system of nation-states. It focuses attention on signs of an (ultimately global) self-organisation of politics, which tends to set all arenas of society in motion. Subpolitics means 'direct' politics – that is ad hoc individual participation in political decisions, bypassing the institutions of representative opinion-formation (political parties, parliaments) and often even lacking the protection of the law. In other words, subpolitics means the shaping of society from below" (Beck 1996, 19).

The incompetence of governments to solve the complex environmental problems is also evident for Dryzek. In his discourse analysis he comes to the conclusion that the administrative state's performance has been called into question.

> "This questioning can often be put under the heading of 'implementation deficit' – a substantial gap between what legislation and high-level executive decisions declare will be achieved and what is actually achieved at street level in terms of attainment of environmental standards. More generally, the administrative state may be running out of steam in the environmental arena, or experiencing diminishing returns to effort" (Drysek 1996, 79).

In his opinion, government administrations could not be effective in solving complex problems, because of their inherent Weberian organisation structure. Relevant knowledge could not be centralised in administrative hierarchy. Instead, it would be compartmentalised which majorly obstructed the development of successful policies and solutions. He claims "the democratisation of environmental administration has been a felt need to secure legitimacy for decisions by involving a broader public" (Dryzek 1996, 86).

Finally, Risse and Börzel are summing up how these changes have been reflected in the IR research programme. They are stating that for the last few decades, research on international institutions has concentrated on inter-state regimes solving collective action problems.

> "To the extent that non-state actors were taken into consideration at all, they appeared either as actors shaping state interest through domestic politics (cf. the literature on "two level games") or as transnational actors lobbying international negotiations and/or International Organizations (IOs). Only recently did they emerge in the IR literature as direct partners of national governments and IOs in structures of international governance" (Börzel and Risse 2003, 41).

In sum, this review shows that there are many different explanations for the ongoing changes. However, they point into the same direction of an existing governance gap in the capacities of nation-states. It is furthermore indicating that new forms of governance are needed to respond to the scale and complexity of problems and to the changing context within which they have to be tackled. Even critics of the concept of a drastically changing role of state and private actors in transnational environmental politics, like

Martin Jänicke ('No withering away from the nation state'), admit the existence of this governance gap. "In general we are not very successful in the field of environmental protection. The global economic development increases at the same time the level of environmental pressure and the capacity to react to environmental problems. The race between both tendencies may not be won by environmental policy" (Jänicke 2001, 137).

The potential of private actors - NGOs, TNCs and epistemic communities, in different functions and constellations - to fill these adumbrated gaps in international environmental policy is highly controversial. As mentioned above, one constellation in which private actors are getting involved in global governance is *partnerships*. Since the Marine Stewardship Council emerged out of a partnership between Unilever and the WWF it is of interest to clarify the concept of business-NGO partnerships in the environmental area.

2.2.2 The concept of business-NGO partnerships

"*Partnership* is not the first word that usually comes to mind when one thinks about business and NGOs" (Murphy and Coleman 2000, 207). The term 'partnership' has generally been used to describe a profit-oriented relationship between individuals, but in recent years gained prominence as a more general idea of relations between various actors. It covers greatly differing concepts and practices and is used to describe a wide variety of types of relationship. Underlying the trend of business to engage in partnerships with NGOs is a change in attitude and strategy in the corporate sector over the last twenty years. As Falkner reflects on this change:

> "In the 1970s and early 1980s, corporate responses to the environmental agenda were largely hostile and consisted of little more than reluctant adaptation. While many companies continue to react in similar fashion, the 1980s saw the emergence of new responses based on proactive and systemic integration of environmental goals into corporate strategy. (...) Corporate leaders embraced the notion that corporate environmentalism can promote 'win-win' solutions that further business and environmental interests" (Falkner 2003, 81).

Besides this trend there are, however, two concrete events that are generally believed to have triggered the strategy of business actors to engage in partnerships with NGOs,

namely the public debate about Shell's involvement in the Ogoni case in southern Nigeria and the intended disposal of the Brent Spar off-shore oil rig in the open sea (Pattberg 2003). After widespread public protest and consumer boycott, Shell's Chief Executive Officer Herkstroter highlighted the positive aspects of the Greenpeace campaign, and a partnership approach in general: "We took decisions, which in retrospect were mistakes. We now realise that alone we could never have hoped to reach the right approach. (...) In essence, we were somewhat slow in understanding that environmental groups and so on were tending to acquire authority" (Heap 2000, 3). Protests against brand-name retailers are only about 10 years old, but as a Greenpeace activist once expressed, "it was like discovering gunpowder for environmentalists". Subsequently, after the consumer boycott against Shell, it became clear that, under certain circumstances, the 'naming and shaming' of environmental harmful businesses in public campaigns can provide a powerful tool for NGOs to impose pressure on business actors. The co-operation of NGOs and businesses in partnerships could therefore be seen as an attempt to avoid these situations and develop 'win-win' solutions. The MSC has been kick-started by a partnership between Unilever and the WWF and became an independent, global, non-profit organisation in 1999.

In sum, there are four important aspects of partnerships in the context of global environmental governance that have to be highlighted: (1) partnerships have shared goals that are beyond profit making, thus excluding purely marked co-ordinated relations or other private interactions to maximise profit; (2) partnerships can involve actors from different sectors of society; (3) they have institutionalised relationships; (4) partnerships engage in rule-making and/or implementation, facilitating outcomes that would not be possible in absence of the specific partnership (Pattberg 2003).

3 The Environmental Problem

Over time, parts of the ocean have become a *commons* – an area where owners agree to rules of use. The twelve nautical mile limit from shore is an example of this, where international law recognises that countries have authority over activities, such as fishing, that take place in their territorial seas. Most countries extended their jurisdiction to 200 nautical miles between the 1960's and 1980's, which under the United Nations Law of the Sea Convention is recognised as a 200-mile Exclusive Economic Zone (EEZ). Countries may regulate activity within this area; however, they are not allowed to exclude the vessels of other countries. Areas outside the 200-mile zones of coastal states, the high seas, are regarded as a global commons where all nations have legal access. Natural resources within a commons have become known as *common pool resources*. These resource areas have multiple users who are legally defined and difficult to exclude. The fishermen all live on the premise of the resource that once it is taken it is not available to others (Buck 1998).

This chapter highlights the precarious state of fisheries in the world and how humans are the agents of unsustainable fishing. A consideration of fisheries management theory is given, emphasising some of the various tools employed and how fisheries governance has generally failed to deal with the problems encapsulated with this natural resource.

Through looking at three regulatory approaches within the practice of fisheries management - *hierarchical, market* and *participatory* - this chapter argues that a balance of all three approaches is needed. Economics does have a part to play in fisheries management and eco-labelling is one such tool in its box. An analysis of eco-labelling and how it works, introduces the Marine Stewardship Council and its market based approach to sustainable fishing. The basis for this approach is the MSC's Principles and Criteria by which fisheries must adhere to. Finally, the chapter asks whether the Marine Stewardship Council and its market approach can achieve what it has set out to do?

3.1 A Natural Resource in Danger

It was once thought that the oceans were an inexhaustible mine full of fish stocks that could be harvested without too much thought. Alfred Marshall summed up the scepticism as to the nature of fish stocks in 1920:

> "As to the sea…its volume is vast and fish are very prolific; and some think that a practically unlimited supply can be drawn from the sea by man without appreciably affecting the numbers that remain there; or in other words, that the law of diminishing returns scarcely applies at all to sea-fisheries: while others think that experience shows a falling off in the productiveness of those fisheries that have been vigorously worked" (Marshall, 1920, Book IV, Ch.III, para 7, quoted in Kooiman et al. 1999).

The developments of humanity in the twentieth century soon put pay to this notion as fishery after fishery experienced a decline in stocks. In some cases traditional fisheries, most spectacularly the Atlantic cod fishery on the Grand Banks of Newfoundland, have completely collapsed (Kaye 2001). The insight that fish were prone to overfishing occurred to man back in the Middle Ages, yet in the case of offshore fisheries, regulation did not come into place until a few decades ago.

The exploitation of fish has many ecological consequences, the results of which are not only in the direct removal of the target animals. Disturbance can also be caused to the composition, abundance, and population structure of the target species and other species as well in the consideration of the overall structure and function of the ecosystem. As most fisheries consist of mixed stocks this is particularly important. Mixed groups are groups of species that are caught together but may not have the same abundance, growth rates, or life histories. Fishery biologists are now urging the use of the ecosystem approach[14] rather than viewing the fish as single species units in isolation (Ludicello, Weber, & Wieland 1999).

[14] The ecosystem approach acknowledges that the fishers are an integral part of the ecosystem and that both ecosystem and human well-being must be achieved. Thus, sustainable use of the world's living aquatic resources can only be achieved if both the impacts on the ecosystem are identified and, as far as possible, understood. Within fisheries management the single species approach is widely used which is consider inadequate (FAO 2000).

In this regard bycatch is an inherent problem in fisheries. Bycatch describes living creatures that are caught unintentionally by fishing gear. Unlike those species specifically targeted, bycatch is usually unwanted and unused and is usually thrown back into the water; however, handling and exposure can sometimes cause injury to the bycatch leading to possible death after being discarded. Although this discard may serve as food for other species when it is thrown back, it is not recruited into, and does not become a part of, the reproducing population. As a result, discard not only affects the current population, but also influences the species' opportunity to replenish itself. "For decades, bycatches were mostly ignored by scientists working on stock assessment, by fisheries managers, and by environmentalists…the emphasis on single species management models and schemes did not leave much room for consideration" (Hall, Alverson & Metuzals 2000).

It is also a problem in terms of what species is actually caught. Some species have a protection status either under the Endangered Species Act or that of the Marine Mammal Protection Act relating specifically to bycatch. Environmental groups often contend the catches of some fisheries, if they contravene these acts, especially when sea mammals, turtles and birds are the species being caught. This has helped highlight the consequences of fishing and ultimately bycatch (Alverson 1992). What is required are reliable statistics that take into account bycatch and inherently leads to something being done about it, for endangered species and the waste of fish are not the only problems. In those areas where fisheries overlap, conflicts can often arise due to the problem of bycatch especially when one fishery discards fish that is important to another. According to Murawski (1992)

> "Bycatch interactions have been and remain almost the most frustrating, difficult, and time-consuming problems faced in fisheries management areas throughout the world. Although bycatch has always been an integral part of fishing with non-discriminative gear, efforts to manage bycatch effectively have intensified" *(Alverson, D.L.; Freeberg, M.H.; Pope, J.G.; Murawski, S.A., 1992).*

The highly controversial problem of bycatch has been tackled from the perspective of producing selective techniques for catching certain species and not others. This will help to alleviate the problem in some way, however extensive research is needed in this area and better available information about the actual impacts. Altogether, it requires coop-

eration from all sectors of the fishing industry, and it is definitely a point that the MSC could help the fishing industry tackle as will be shown in the case studies.

Another impact of fishing relates to the physical destruction and disturbance to aquatic ecosystems. Some fishing methods, particularly those that are in contact with the surface of the seabed such as bottom trawlers can cause adverse destruction and disturbance. This has to be minimised for it is not keeping with the ecosystem approach to capture fisheries management.

Overall, the impacts of fishing upon the ecosystem are not widely known to any considerable degree and more research is needed in this area. The ecosystem approach is reflected in the FAO Code of Conduct for Responsible Fisheries and is beginning to be adopted by fisheries management. The MSC through their Principles and Criteria can further influence the use of the ecosystem approach in fisheries management and therefore hopefully contribute to sustainable fisheries.

3.1.1 Fish Stocks and our Appetite

The cultural ecology of most fisheries revolves around their ability to sustain constant harvesting. In those fisheries where industrial methods are not used, there is rarely sufficient impact upon the populations to prevent them from reproducing and growing to adult size. The advent of industrial technology (steam powered trawler and net winch in the late 19th century and after World War II, nylon nets and electronic aids to the location of shoals of fish) had a dramatic effect on this balance (Cushing 1988). Consequently, there is urgent need for fisheries research because of the diminishing availability of fish as some species become commercially extinct (Finlayson 1994). There are various other reasons for urgency – provision of the world's population, profitability, employment, community survival, and institutional credibility (King et al 2000).

The seas in the twentieth century sustained humankind as never before. With new technologies and cheaper energy, bountiful catches were possible. These catches involved routine over-fishing, which no management regime could stop. Nation states and inter-

national bodies to try alleviating the pressure on fish stocks, so that sustainable harvesting is possible, have employed numerous policies with differing tools. Although they have had marginal success in some areas, fisheries remain in crisis worldwide (Garcia and Newton 1997; Ludicello, Weber and Wieland 1999).

Currently, two thirds of the total food fish supply is obtained from fishing in marine and inland waters, with the remainder derived from aquaculture.[15] The total amount of fish consumed and the species composition of the food supply vary according to region and country, reflecting the different levels of natural availability of aquatic resources in adjacent waters, as well as diverse food traditions, tastes, demand and income levels (FAO 2002). Global production is currently however, the highest on record and remains very significant for global food security. Fish, crustaceans and molluscs provided 15.8 percent of total animal protein intake in 1999. In 2000, an estimated 89 million tonnes of fish was produced in the world, excluding China[16], of which 71 percent (63 million tonnes) was used for human consumption. The remainder (29 percent) was utilised for various non-food products, mostly for reduction to meat and oil (FAO 2002). It is definitely true to say that marine fish populations are never accurately accounted for, because fish are so hard to count. Landings can be counted, but whether these fluctuations correspond to changes in fish stocks, and whether changes in fish stocks are the consequences of fishing, is often hard to say. This information conundrum exacerbates the management conundrum of an open access resource.

3.1.2 The Need for reliable statistics

There is consensus among fishery experts that the management of capture fisheries involve synthesising information, analysing, and decision- making (FAO 2002, 59). The

[15] Aquaculture refers to the management and use of water environments for the raising and harvesting of plant and animal food, in which fish and shellfish are reared in enclosed ponds, tanks and cages, or on protected beds. It is almost exclusively confined to inland waters and estuarine or other near-shore coastal waters. The raising of freshwater or marine fish for commercial purposes is often separately classed as fish farming. With some crustacea, for example shrimps, and in salmon fish farming it is necessary to catch wild stock to raise to commercial standards in pens (Collins Dictionary of Environmental Science, 1990).

[16] China remains by far the largest producer, however, there remain doubts concerning the production statistics for capture and aquaculture. Therefore because of its importance and uncertainty it is usually discussed separately from the rest of the world.

essential ingredient is reliable information so that founded decisions can be made, a more realistic status of a fishery can be determined and consequently, the effects of a particularly management strategy evaluated fairly.

In order for effective fisheries management it is imperative to know what is actually being fished from the wild population. This is because it affects the stock's ability to survive, and most importantly reproduce and repopulate. Thus, catch and effort statistics together with other data regarding the fish caught are the essential basis. Specifically, the statistics taken concern how much fish may be taken, by whom, by what means, when and where, ensuring that fishers are constrained within the set limits.

> "Thus, total allowable catch[17] and licence or quota allocation, fishing gear and operational controls, as well as seasonal and area closures, all require monitoring, much of which can only be achieved by the regular and systematic collection or reliable statistics on the catch and amount of fishing effort" (FAO 2003, 60).

Another reason why reliable statistics are a necessity is because good fisheries management in the sense of sustainability[18] not only protects the ecological aspect of the fish stock but also takes care of the dependent communities. These communities depend on the fisheries for food security and economic well-being. Benefits from the surplus production of wild stocks should be brought into economies in ways that are appropriate to the political, social and development environments in which they occur. This allows communities to achieve and ensure a fair and appropriate distribution of benefits, while policy makers need such statistics in order to properly represent the fishing industry when policies are being developed.

[17] The general definition for Total Allowable Catch (TAC) is the quantity of fish that can be taken from each stock each year. In the European Union for example, the figure is agreed by the Fisheries Council of Ministers each December for the following year. EU Member States are then allocated a fixed proportion of the total allowable catch as their national quota (EEA, 2004).

[18] Sustainable, productive fisheries are achieved when appropriate management ensures a high probability of stocks being able to replenish themselves over a long period of time within a sound ecosystem, while offering stable economic and social conditions for all those involved in the fishing activity. This definition is based around that set out in the MSC Standard and what is generally agreed to be the basic fundamentals.

Within fishery statistics there is a prevalent problem of unreliability, which comes from a variety of sources. A key problem cited by most fishery managers is deliberate misreporting or non-reporting by legal and illegal fishers and other participants (processors, traders) particularly in developing countries and international fisheries. Within small-scale fisheries and developing country fisheries a common problem is the lack of law requiring fishery data, and/or very little infrastructure for the collection of such data. Furthermore, the data that is collected may be based on inadequate sampling or inappropriate sampling methods (FAO 2002). The MSC could help to alleviate these problems in the future by encouraging fisheries to utilise the more sustainable methods and helping to produce more open, reliable statistics by providing the resources to do so.

Other problems include bias and deliberately distorting the numbers to come into line with a particular outcome, delays in the preparation of statistics rendering their usefulness, as well as the appropriate confidentiality of fishery data. Combined with the fact that some of the data collected are of little relevance in terms of fisheries management, culminates to produce a management headache. A greater uncertainty into the stock assessment process undoubtedly leads to a reduction in confidence of the accuracy of fisheries management advice. Consequently this often leads to conflict among fisheries managers being overcautious, fishers who think they know better and anxious environmental campaigners (Harnesson 1996).

3.1.3 Fish stocks and their precarious status

Despite questioning the reliability of data there is a persistent pattern concealed by the mean totals for each year that highlights the delicate nature of this resource. Numerous important fisheries collapsed in the twentieth century, generally the most valuable ones, due to the power of demand in their markets, or planned production quotas, and technologies. Examples of those that crashed are the cod fisheries of Newfoundland's Grand Banks. By July 1992 it was reported that the northern cod populations had declined to the point that they were on the verge of commercial extinction. This was the basis for the moratorium on the entire northern cod fishery. Some 35,000 fishers and fish-plant workers were affected by this closure, not to mention the other businesses, families, and

community organizations dependent on the work of fishermen and plant workers (McCay and Finlayson 1995). The North Atlantic cod moratorium remains in effect to this day. There is little evidence that cod populations, or other depleted populations in the North Atlantic, will be able to sustain a resumption of fishing anytime soon. Other examples include the redfish, and haddock fish stocks, which have all but collapsed in some areas of the North Atlantic. This prompted the World Conservation Union in 1996 to add several commercial fish species - including Atlantic cod, haddock, and bluefin tuna - to its influential "red list" of species whose survival is in some degree endangered (Hudson & Mace 1996).

Wherever modern fishing methods were applied, sooner or later high fishing pressure, combined with a natural downturn in fish stocks, led to a crash (FAO 1997). The catches of the 1980's and 1990's show a greater proportion of previously uneconomic fish ("trash fish") sought out because cod, herring, haddock and tuna, among others, became harder to find (King & Durrenberger 2000).

The collapses in these decades were not new. Regulation to prevent fishing can be traced back as far as the thirteenth century and in 1869 the first treaty was signed between Britain and France in order to curtail over-fishing. This paved the way for a series of bilateral and multilateral agreements to come into force (a selection of which are in List 3.1). The list highlights that varying management techniques were used for the conservation of fish stocks and therefore suggesting the complexity of fisheries and that there is no one easy way to manage them (see Table 3.1). These techniques included closed seasons and area (reserves) restrictions on the type of gear allowed, and quotas. For example, the Rhine convention (1885) set out minimum mesh size, gear restrictions and closed seasons. Free-rider ship was ruled out, for if one party denounced the terms the others would follow suit (Wolf 1997, 61).

Table 4: List of selected International Fisheries Agreements. (Source: Wolf 1997)

1.	1867	Convention between France and Great Britain Relative to Fisheries
2.	1885	Convention between Baden, Bavaria, Hessen, Netherlands, Oldenburg, Prussia, Switzerland, and Wuertenberg for the Uniform Regulation of Fishing in the Rhine.
3.	1930 1985	Convention between the USA and Canada for the Protection, Preservation, and Extension of the Sockeye Salmon Fisheries of the Fraser River System Treaty Concerning Pacific Salmon
4.	1937	Convention for the Regulation of the Meshes of fishing, Nets and the Size Limits of Fish
5.	1958	Convention on Fishing and Conservation of the Living Resources of the High Seas
6.	1981	Agreement on Fisheries between the European Economic Community and Canada.
7.	1982	United Nations Convention on the Law of the Sea, Part 5
8.	1994	Agreement on Fisheries between The EEC and Denmark/ Greenland
9.	1995	Agreement Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks

In 1897 the first use of a direct quota was witnessed between Russia and Sweden/Norway. The Convention was based upon allocated shares in order to regulate the Salmon Fishery in the Tornea. Each party had half the fishery and fishing was carried out by cooperatives. Equality of fish stocks was maintained by transferring fish. Although in this case there was no limit in place to regulate the total harvest, it is believed that the cooperatives operation may have had an indirect bearing on the total harvests collected (Wolf 1997, 61).

Table 5: Management Techniques of the selected International Fisheries Agreements. (Source Wolf 1997)

Treaty number	Year	Research or information	Season or area limits	Gear Restrictions	Effort Limits	Fish Size Limits	Quotas	Other
1	1867		x	x				Fishing proximity limits
2	1885		x	x		x		Conditional quota
3	1930 1985						x	
4	1937					x		Mesh size limits
5	1958	x	x	x	x			
6	1981	x	x					Trade exchange
7	1982						x	Broad provisions
8	1984						x	Compensation for catch possibilities
9	1995							

In the 1960's and 1970's most countries expanded their fisheries zones from 12 to 200 nautical miles[19]. Many of the bilateral and multilateral agreements needed updating to accommodate the expansion of the fisheries zones. A number of international fishery agreements with established management commissions also needed reforming. Many of these treaties share a number of similarities due to many of the nations involved in the same agreements, and also in part because the United Nations Food and Agriculture Organisation facilitated the negotiation in many cases. Yet despite the actions of these commissions since their establishment, and that of the command and control policies adopted by nation states, almost all of the most valuable fisheries are today seriously overstressed from a biological standpoint. Not only this but also many fishing communities are suffering economically (Wolf 1997, 68).

3.2 The Need for Effective Fisheries Governance

Marine fisheries governance and the prospect of improved fisheries management are gathering pace as fisheries in a growing number of ocean areas come under the scope of regional fisheries management organisations, and as the international community is holding these to greater accountability by paying more attention to the problems associated with fishing.

International Law continues to play an important part within fisheries. The United Nations Convention on the Law of the Sea (1982) had dramatic effects on the action of the state within fisheries. Within the framework of this law the exclusive economic zone (EEZ) was adopted, which placed 90 per cent of the world's fisheries under national jurisdiction. The consequences were huge for patterns of fishery exploitation and the ownership of fishing vessels (Kaye 2001). Kaye goes on to note that "while the Law of Sea Convention reflects the dominant paradigm in contemporary marine living resource management, it is not the only area of international law that has a role to play. The emergence of the precautionary principle in the 1980's, and its subsequent adoption at the United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro

[19] One nautical mile equals 1.15 stature (land) miles.

1992, and its acceptance within the Highly Migratory and Straddling Stocks Agreement presents a distinct alternative to the management of fisheries" (Kaye 2001, 2).

The nation states are those that signed the declaration of these laws and considerable power is with them to manage fisheries in a responsible manner. Nonetheless, the international community places particular importance and responsibility into the hands of sub-regional and regional fisheries cooperation. The reason for this is because many fish stocks are transboundary in nature and cannot be managed by single state actors (FAO 2000, 48). The FAO concludes that the issue for Regional Fishery Management Organisations is their capacity and willingness to accommodate new entrants in a fair and consistent manner. "RFMOs are needed to facilitate and reinforce regional cooperation. Over the next decade, RFMOs face the challenge of implementing parts of Agenda 21, the 1995 UN Fish Stocks Agreement and the 1995 FAO Code of Conduct for Responsible fisheries. However, unless RFMO members cooperate more closely and are prepared to take difficult decisions, which could have adverse short term social and economic costs on their way to achieving longer-term sustainability gains, even large amounts of scientific research, funding and enforcement will not improve the effectiveness of these organisations" (FAO 2000, 49).

Therefore, what is needed for better fisheries regulation? This section shows that fisheries are part of a diverse, dynamic and complex social and economic sector. As a resource, fish is in great danger and therefore the livelihoods and way of life of those fishers, families and communities that depend on fish. Traditional fisheries regulation has failed to turn the tide of unsustainable fisheries. According to Kooiman, van Vliet and Jentoft a new perspective on regulation is needed, on the basis of which new opportunities can be sought. Their basic assumption and normative belief is

> "that in modern societies there is a growing need for 'co' tasks and responsibilities, in addition to the specific relevance and the need for separate public and private tasks and responsibilities. In societal sectors such as fisheries, there is a growing need to look upon problem solving or opportunity-creation in terms of a 'mix' of self-governing, co-governing and hierarchical governing. Every problem and every opportunity needs a specific mix of these three governing types." (Kooiman et al. 1999, 6).

Consequently, this requires a multi-faceted approach and/or interdisciplinary co-operation, whereby *interaction* takes centre stage. Fisheries are marked by a diversity of involved interests: there are small and large-scale fishermen; community versus corporate interests; fishing and ecological issues. Thus, fisheries are complex in which the density of the linkages and interactions between actors and entities within fisheries is ever increasing. The outcome of these characteristics is a sector where:

- Problems occur as the result of an interplay of various factors, some of which are clearly known, but others are easily overlooked;
- Knowledge about causes and solutions is dispersed over many actors;
- Uncertainty is the rule, not the exception (Kooiman et al. 1999, 14).

Therefore, in which ways can fisheries management find solutions to these governance problems? There is a need to develop new techniques, new instruments and new institutional arrangements. The Marine Stewardship Council is adequately poised to help rectify some of the problems just mentioned by complementing already existing fisheries regulation and being a fresh approach to the management of fisheries.

There are three perspectives of regulation that dominate the theory and practice of fisheries management. These are hierarchical governance; market governance; and participatory governance.

3.2.1 Hierarchical governance

This is most regularly applied and is where government is held responsible for an adequate management of the fishery. Through applying legal and administrative powers, government can enforce rules and regulations in order to manage the sector. A prime example is the use of legal and administrative measures that decide when, how and where fishing is allowed to take place (Kooiman et al. 1999).

The hierarchical system has come under severe criticisms and some argue that it is deemed to be outdated and inadequate. The powers of government to regulate society are

constrained by the obligation to legitimise its actions. Factors that are believed to be responsible for the failures of public policy are:

- Lack of knowledge, time and financial resources within the public service, especially on the part of enforcers.
- The power of social groups, especially business, to influence public decision-making or to resist government pressure.
- The complexity of the issue at stake, which encumbers or even prevents the design of adequate regulatory devices (Kooiman et al. 1999).

It is the implementation of fisheries rules that results in incomplete enforcement because of mutual dependence and limited resources due to the multi-actor interactive process, strategic behaviour with bargaining among key actors and the interaction of interest motivated actors under constraints (Downing & Hanf 1983).

3.2.2 Market governance

This is one alternative to hierarchical governance in which the government is persuaded to make use of the market mechanism through creating markets or market conditions. The individual transferable quota (ITQ) system is a prime example within fisheries. The total allowable catch is divided into private property rights, which can be freely traded. The profit orientation and cost-consciousness of individual fishermen will result in the most efficient way of harvesting the fish for the society as a whole (Squires et al. 1995).

According to advocates of market governance, the government should try to change the incentive structure to reconcile private and public interest, and restore the workings of a perfect market. ITQs could solve the biological, economic and administrative tasks of the fisheries, especially if they are evolved towards real property rights, as this will allow individuals to act as private owners of a resource (who are supposed to have an interest in the conservation of the stock) (Kooiman et al, 1999).

3.2.3 Participatory governance

This is the second alternative and it advocates that government should not try to regulate fisheries alone, as one institution cannot have enough knowledge, legitimacy and power to regulate fisheries in an adequate way. Some responsibility for collective action problem solving should be transferred to user-groups and /or other stakeholders, so that dispersed knowledge and governing capacities can be united (Kooiman et al. 1999).

The idea that meso and micro levels of society should participate more in governing on a significant level is central to this perspective. It involves rearranging the organisational structure of governance and a changing of attitude among the participants. Advantages of this perspective over hierarchical governance are centred on its adaptability. By involving the meso and micro levels it is believed to be more flexible to the complexity of governance in modern society. Moreover it is less legalistic and it can be assumed that participation will boost the legitimacy of government (Ostrom 1990).

In consideration of these three governance procedures the Marine Stewardship Council is very much a market regulation as will be outlined in the next section. Furthermore it has participatory incentives embedded within the programme. In sum it is a mixture of the alternatives to hierarchical regulation, which is there to compliment governmental regulation.

3.3 Economics and Fishing

Economics is the study of the allocation of scarce resources.[20] If the amount of a good that one-person uses does not affect what is left for everyone else, it is regarded as *free* (as opposed to scarce). In many cases, there is unrestricted access to a resource and no one is charged a fee or is otherwise limited in taking it. Economists refer to such resources as *open access resources* (Ludicello, Weber and Weiland 1999). As no one owns

[20] By *resources* we mean things that people use. In economics, a resource described as *limited* or *scarce* is scarce in relation to wants. Fish are sometimes scarce and sometimes not. Farm-raised fish are scarce, however, marine fish have not historically been treated as a scarce resource.

the oceans it has traditionally been open access to all comers. Open access refers to the fact that anyone can fish in the area designated. It is an attempt to be fair and to share the opportunity of fishing, however, it is too often the case that an open access fishery will attract too many boats and people, too much fishing power, resulting in an over fished fishery. In economic terms a fisherman will strive to maximise profits by combining his effort[21] where there is the greatest excess of revenues over cost. As long as the return from the catch exceeds the cost of the inputs the fisherman will continue to apply the effort. The problem in an open access fishery is that no one places any limit on how much fishing effort is applied. The result is that fishing effort increases until there is no more profit to be made. It is at this point that too much effort is being expended in chasing too few fish.

Pure open access, as alluded to at the beginning of this chapter, has been modified over time. From the 1960's the onset of national fisheries jurisdiction and the evolution of fishery management has created a present situation that has been described by Wilen and Homans (1997) as *regulated open access* in which controls or regulations are combined with limits on access to the fishery (Ludicello et al. 1999). Sissenwine and Rosenberg in their 1993 paper 'Marine fisheries at a critical junction' clarified the situation in their views that restrictions can only protect the stock for a while. If access remains open, catch limits and rules alone will not be enough to discourage new entrants from seeking rents in the fishery. They concluded that management which ignores the economic incentives and the importance of rights to fish tends to exacerbate the problem instead of averting it (Sissenwine and Rosenberg 1993). The following section delves into some examples of economic incentives and property right in fisheries.

As explained, fishermen in an open access fishery continue applying effort until the return on a unit of effort exceeds its cost. What if the fishery belonged to a single owner where ownership prevented others from fishing in the fishery? This exclusion would leave the fisherman not needing to worry about leaving fish for others to catch and would

[21] Fishing effort is often expressed as "number of days fished" or as size of vessel, such as gross tonnage. Due to the constantly changing state of fishing technology these measures represent an imperfect estimate of changes in fishery capacity. In this example effort refers to the vessel, gear, labour, fuel, and time on the fishing grounds.

have an incentive to not use more fuel, gear, and labour than necessary. Furthermore, the fisherman would then be concerned about the number of fish caught today as well as in the future.

This simplified scenario illustrates that by changing the fundamental assumption of having one fisherman instead of many self-interested fishermen, the catch outcome can change. It states simply the best case for an economically efficient fishery – the profit maximising outcome. However, in the real world this situation does not exist anymore than does a completely unregulated open access regime. Today's fisheries operate under a combination of regulated open access, or controlled access in combination with regulations (Ludicello et al. 1999).

3.3.1 Examples of Economic Instruments

Over the past several decades governments have played conflicting roles in marine fisheries. Firstly they have sought to secure food supplies, to increase employment, and to promote economic development through increasing the capacity of their fishing fleets and processing units. Yet on the other side their role has been to try and protect society's interests by controlling fishing fleets from depleting public fishery resources (Ludicello et al. 1999) Economic instruments and regulations have played an important part in these outcomes.

Governments have promoted social objectives through economic assistance and in fisheries this has been mainly through the use of subsidies. According to Roodman (1996) a subsidy can be defined as a government policy that alters market risks, rewards, and costs in ways that favour certain activities or groups (Roodman 1996). This definition interprets subsidies to not only include tax breaks or grants but also government policies that might involve research and development or marketing. In general, there is agreement that fisheries subsidies do great harm by exacerbating the problems arising from the 'common pool' aspects of capture fisheries (Cox 2001). However, many economists believe that, if the 'common pool' aspects of a fishery could be removed by, for example, establishing a full-fledged property rights system, the negative impact of fisheries subsidies would

prove to be trivial (Munro & Sumaila 2002).

Other economic instruments rely more on the market than regulatory intervention to regulate fishing capacity. The individual transferable quota (ITQ) is the most commonly used market-based mechanism and represents a form of rights-based management. In theory, a properly designed rights-based management program will create economic incentives for vessel owners to decrease their labour and capital investments in a fishery, resulting in a reduction in fishing capacity (Squires, Kirkley and Tisdell 1995).

ITQ programs have generated substantial concerns. Most notably there is an abiding fear among some fishermen that the character of the commercial fishing industry and small fishing communities will be sacrificed or lost, particularly if ITQs result in large corporations or other absentee owners controlling the industry with focused interest in market share rather than on the resource and the people (Squires et al. 1995).

Some of the criticisms levelled at ITQ programs are common to all fishery management, and care should be taken to judge ITQ programs by appropriate measures, such as differences from the fishery under open access. Commercial fishing is very complex. ITQs must not be seen as providing the final or sole solution to fishery management concerns, but are only one tool to be used in conjunction with more traditional fishery management options. ITQs alone can address only some of the present concerns (e.g., ITQs alone will not bring about restoration of any fishery, because ITQs do not address habitat quality and other environmental issues).

3.3.2 Ecolabelling: a new tool in Fisheries

The previous section highlighted just a few of the economic tools used within fisheries management, which have worked in order to try and manage fishing capacity. Moreover, the section highlighted just how economics can play a role in the management of fisheries. Since 1997 the Marine Stewardship Council has been working to create more sustainable fisheries through the use of another market-based incentive – that of a certifica-

tion program and ecolabelling[22]. This section explores how this market based incentive works and what role it can play within the area of fishing for a sustainable future.

"Between 1950 and 2000 world catch of wild fish for human consumption increased from 20 to 95 million tonnes. As demand for seafood has risen there has been a race to increasingly exploit known fish stocks and to find and develop new stocks" (Mcllgorm 1999). Poor management around the world of fisheries is leading to a decrease in fish stocks. The concern over the status of fish stocks, combined with well-known limitations of command and control management mechanism (Hannesson 1996) has led to initiatives to provide consumers with more information regarding the production process of seafood products. One such initiative of providing consumers with such information on the production process of seafood is to use certification and eco-labelling programs.

One definition of ecolabelling is that of the OECD in which they are described as "voluntary granting of labels by a private or public body in order to inform consumers and thereby promote consumer products which are determined to be environmentally more friendly than other functionally and competitively similar products" (FAO, 2000). Ecolabelling as a market-based incentive seeks to persuade customer's behaviour so that they take into consideration purchasing attributes such as social environmental and ecological aspects and not just price. The label is present to notify customers of these attributes, without requiring the customer to delve too deeply into the complications of that underlie the certification criteria and the certification itself (FAO, 2000).

Neoclassical economic theory assumes that perfect information is required for efficient operation of economic markets. Therefore, consumers must have access to all the relevant information in order to make economically rational decisions. This, however, is not

[22] Certification conveys acceptance into an ecolabelling program of a product, which is in compliance with relevant criteria, and other requirements of the program. If the criteria are met and an agreement between the product supplier and the ecolabelling program is entered into, the product supplier's complying product may be represented as certified; Ecolabel refers to an ecolabelling program's graphic emblem or seal, which is used on or in association with a product to acknowledge that product's compliance with relevant certification criteria (Wessels et al. 2001).

the case in reality as there are several types of imperfections related to the information that individual consumers receive. The most significant of these are the following: -

- That individuals may not have sufficient information with which to base their decisions on;
- That individuals may not know the limitations of the information they receive;
- Or, that they do not have the knowledge needed to evaluate the information.

Environmental certification programs offer one market-orientated approach to addressing each of the three types of information deficits noted above. In theory, such labelling programs affect consumer behaviour as follows:

1) An independent third party first develops criteria for environmentally preferable products by category, and then evaluates products to determine their absolute and relative (to other products within the same product category) environmental burdens during manufacture, use, and disposal.
2) This complex information is presented in simplified form on a product label.
3) Consumers can then incorporate the environmental attributes as present on the label with conventional attributes, such as price, quality, and convenience, to evaluate the products. To the extent that consumer demand for products with fewer environmental burdens exists, the market share of these products will increase, all else being equal.
4) In response, companies manufacturing competing, but less environmentally preferable, products may reformulate their products as a competitive strategy. Manufacturers may also, for reasons unrelated to consumer demand (such as employee or stockholder relations) seek out an environmental label to distinguish themselves within the marketplace. (EPA 1994)

The success of labelling programs depends on several factors that are not directly related to the format, content, or procedures of product labelling. Consumers' behaviour to environmental messages and information is directly related to how much they understand about environmental issues. Furthermore, labelling initiatives include a significant educational and promotional effort. Such an effort can include nationwide publicity cam-

paigns and the creation of environmental curricula for use in schools, supplementary material upon request and available material at the point of purchase.

Within these certification (eco-label) programmes the underlying economic theory can be found within Stigler's work on the economics of information.

> *"*A consumer searches for information until the marginal benefit of additional information is equal to the marginal cost of obtaining the additional information. As a result, there is a willingness to pay for information (or demand curve), and there is a marginal cost of information (or supply curve)" (Stigler 1961, 213-225).

This work was contended by Nelson (1970, 1974) who stated that determining quality levels in the market is an even greater problem than that of determining price levels, because it is harder usually to obtain information about quality compared to information on prices. Nelson distinguished between search goods and experience goods. The quality of search goods might be defined as price, size of package, or colour, whereas the quality of experience goods may be determined by experience of taste, durability, or maintenance needs. In 1973, Darby and Karni expanded this by including credence goods. These are goods that you cannot determine the quality of by going either through search or experience, such as the production process of a good. It is for these goods that one must rely on a third party to provide truthful information to the consumer whether the product is of high quality or not (Wessels 2001). Government regulations or a third party certification process may carry this out.

The success of the products depends very much on how the producer advertises them and the acceptance of the producers' claims to the consumers'. For search and experience goods, the producers may advertise information about the lowest prices and highest quality. For credence goods the situation is more complex for the consumers cannot determine the product's quality even after they buy and consume it (Darby et al. 1973). Therefore, an imperfect market exists because to start with there is unevenness in possession of knowledge between the producer and consumer, and furthermore, because it is not practical for consumers' to assess the quality of the product. For example, the environmental friendliness of a good is an attribute of credence goods since it is in general infeasible for the consumer to observe the production process. "According to Caswell

(1998), labelling can transform credence attributes to search attributes that allow the consumer to judge quality of the good before they purchase it" (Roheim 2002).

In the case of seafood products the most important certification scheme is that of the Marine Stewardship Council (MSC). It was in early 1996, that the World Wide Fund for Nature (WWF) and the multinational giant, Unilever, announced their joint commitment to establish the MSC to design and implement market-driven incentives for sustainable fishing. The world's largest private, non-profit conservation organisation seeks a new approach to ensure more effective management of marine fisheries. Unilever, who are on the other hand a major buyer of frozen fish and manufacturer of the world's best-known frozen fish products, are interested in long-term fish stock sustainability to ensure a future for its successful fish business. The MSC's market based approach is designed to complement regulation. By bridging the gap between business and environment, which is done by working through a multi-stakeholder approach that focuses on integration and support from the fishing industry, wholesalers, processors, retailers, conservationists, scientists, environmental organisations and consumers (MSC, June 2003).

The MSC works toward sustainable marine fisheries by promoting responsible, environmentally appropriate, socially beneficial and economically viable fisheries practices, while maintaining the biodiversity, productivity and ecological processes of the marine environment, through three principles:

1) A fishery must be conducted in a manner that does not lead to over-fishing or depletion of the exploited population and, for those populations that are depleted; the fishery must be conducted in a manner that demonstrably leads to their recovery.
2) Fishing operations should allow for the maintenance of the structure, productivity, function and diversity of the ecosystem (including habitat and associated dependant and ecologically related species) on which the fishery depends.
3) The fishery is subject to an effective management system that respects local, national and international laws and standards and incorporates institutional and operational frameworks that require use of the resource to be responsible and sustainable (MSC 2003).

Consumer access to the product is key to the effectiveness of the eco-label. Currently, there are more than 200 MSC labelled products on sale in 17 countries – a 30% increase from last year (MSC 2004). Consumer access is particularly significant in the U.S and Western Europe where several large retail chains are selling MSC labelled products. For example, Migros, the first supermarket chain in continental Europe to sell MSC products, reports that they currently have 27 MSC labelled items in their assortment of products, with about 6% of the value of all fish sales in 2001. This is approximately a 20% increase above 2000, increased partly due to several aggressive product promotions of the MSC product to their consumers, building consumer's recognition of the logo and the logo's meaning (Roheim 2002).

Although only one example has been given of the market impact, there is a healthy growth in consumer access to MSC-certified products. Many seafood buyers for grocery corporations have indicated that they look forward to when there is a wider choice of MSC certified products available so that they can increase the range of offerings to their customers. Presently, one of the primary difficulties that retailers are face in supporting the MSC program is the limited availability of MSC labelled products. Many of the fisheries that have so far been certified are seasonal in nature; therefore high quality product is not available during all parts of the year. Thus certification of additional fisheries is necessary in order to increase availability of product for the market and to help ensure the effectiveness of the MSC certification program (Roheim 2002).

The implications of increasing the number of certified fisheries could be twofold. More products and product promotions will increase consumer awareness about the problems that wild fisheries are facing and what as consumers they can do to help prevent these problems. Secondly as more fisheries are certified there is hopefully the intended effect of improving the ocean environment.

At the heart of these certification programs is the consumer. As market based incentives they are dependent on consumers buying the products. Eco-labelling therefore assumes that the consumers are informed enough about environmental issues and care enough to

want to buy environmentally friendly products. The push has to come from all sides in order to educate the consumers. These include the MSC, the seafood processors, buyers and distributors and the media. The MSC is there to compliment already existing policies, not to replace them. A start has been made in the area of fisheries to give consumers the choice. Ultimately these certification schemes are effective only inasmuch as the issues they represent are important to society. Furthermore, and most importantly they must reflect broader societal issues.

4 Case Study - The Marine Stewardship Council

4.1 Introduction to the structure and function of the MSC

The Marine Stewardship Council (MSC) is an example of a private governance mechanism. This kind of governance mechanism results from enhanced co-operation between former adversaries, namely TNCs and NGOs (Pattberg 2003, 11). In the case of the MSC the close partnership that formed was between the WWF and the Unilever Group, who in 1996 set about shaping an institution based on the model and experiences of the Forest Stewardship Council (FSC) in the issue area of fisheries. As a governance mechanism the MSC is amongst other things involved in standard setting, accrediting certifiers, and granting labels for products and production chains.

The MSC aims at exerting governance in the area of fishing by working through a multi-stakeholder approach. It focuses on integration and support from the fishing industry, wholesalers, processors, retailers, conservationists, scientists, environmental organisations and consumers (MSC 2003).

The previous chapter provided information about how ecolabels and certification work in general. This chapter provides specific insight into the Marine Stewardship Council concerning how it was created? What the MSC is trying to do? And how it goes about doing this?

4.1.1 The Emergence - Motives of the initial Actors (Unilever + WWF)

Based upon the WWF's experience with the FSC, the NGO was asked to set up a similar model of stewardship combining exert standard setting with third part certification. After lengthy discussions with many of the stakeholders involved in the FSC, one partner was singled out. According to Fowler and Heap, who wrote the book 'Terms for Endearment' concerning the task of achieving a better understanding of where the power lies and what drives NGOs, businesses and the political process, Unilever were identified as an appropriate partner because they were beginning to question the sustainability of their actions

and possessed substantial organisational commitment (Fowler and Heap 2000, 137). These authors went on to postulate that it was the WWF who instigated the idea and they alone who decided to cut short the stakeholder involvement short and set up a two party process. As the MSC's official literature notes, Unilever and the WWF were brought together by "different motivations, but a shared objective: to ensure the long-term viability of global fish populations and the health of the marine ecosystems on which they depend" (MSC 1996, 1).

Unilever is an Anglo-Dutch company, created in 1930, which has a foods division and a home and personal care division. Unilever today has operations in around 100 countries and products on sale in 150 with a turnover at the end of 2002 of nearly 50,000 million euros (Unilever 2003). There are various reasons why Unilever was recognised as a potential partner by the WWF. Primarily it was at the time of consideration one of the leading fish processors and bought 25 per cent of the world's white fish[23] market. Furthermore, Unilever reacted to the emergence of conclusive evidence at the beginning of the 1990's that over-fishing had put global stocks of fish for human consumption at serious risk, by committing to buy all fish from sustainable sources by 2005; a goal that it already had to postpone due to unforeseen delays in the MSC certification process. As one of the world's largest buyer of seafood its supplies to the frozen fish business were threatened. It started engaging with its fish suppliers to adopt sustainable fishing practices, and in 1996 asked its suppliers to confirm that their fish were legally caught in specified United Nations Food and Agriculture Organisation catch areas. In addition they wanted to know whether they were involved in species threatened with extinction, and for those suppliers who could not offer confirmation they stopped doing business (Unilever 2003, 6). It is important to think about whether corporations such as Unilever really do have the sustainability of fisheries at the heart of their thinking. As Steinberg questions, "are private producers truly serious about foregoing short-term profit and incurring the costs associated with internalization of externalities in order to ensure long-term sustainability?" (Steinberg 2000) This has led some authors to brand certification programmes, such as the MSC, as 'corporate greenwash' (Kaliner 1997). Although the mo-

[23] White fish is a fisheries term referring to several species of deep water ocean fish, such as cod, whiting and haddock.

tivations of the initial actors are an interesting issue to study, it is not one we are intentionally trying to investigate.

The World Wide Fund for Nature (formerly the World Wildlife Fund) was very much the leader in the FSC, upon which the MSC is modelled. One of the reasons why they chose to form a partner with only one other actor could possibly be accounted for by the experience of the setting up of the FSC. In this example a number of conflicts emerged concerning the amount of power given to corporate interests in defining the certification criteria, which eventually led to Greenpeace and Friends of the Earth leaving the council (Humphreys, 1996). By choosing carefully a partner that had enough market power and also the right intentions was surely at the forefront of the WWF thinking. In Unilever they found the largest market player who was already pledging itself to buying all of its fish from sustainable sources by the year 2005 (Unilever 2003, 1).

In setting up the MSC the two partners each brought a wide range of skills, knowledge and networks to the formation. In 1999 the MSC became a fully independent non-profit organisation. The MSC now functions independently from the founding partners, but they continue to support the initiative through funding and promotional work. The decision to distance themselves from the MSC was their own decision, according to Roger Cooke (a partner at Coopers and Lybrand[24]), and an opportunity for others to work with them and take the initiative forward. Cooke went on to argue that the Forest Stewardship Council's image had born the consequences of becoming more associated with the environmental groups than with producers, and that the WWF and Unilever did not want the MSC initiative to be seen as theirs (McHale 1998).

[24] Coopers and Lybrand are an internationally renowned accounting and consulting firm that was contracted to develop an organisational blueprint for the MSC and advised the WWF/Unilever team on how to implement the programme (McHale 1998).

4.1.2 The Organisation Chart of the MSC

The Main Board

The MSC is not structured as a formal membership organisation like the FSC, but is instead governed by a Board of 14 individuals. The Board members are automatically trustees of the charity and are nominated in a personal capacity for a three-year term, representing the MSC in public whenever appropriate. The members come from every continent and they bring with them expertise from a wide range of sectors including scientific, industry, government and conservation (MSC 2003, June). It is important to note that the appointed board, which has no direct accountability to a body of constituent member organisations, primarily oversees the decision-making procedures of the MSC (Steinberg 2000).

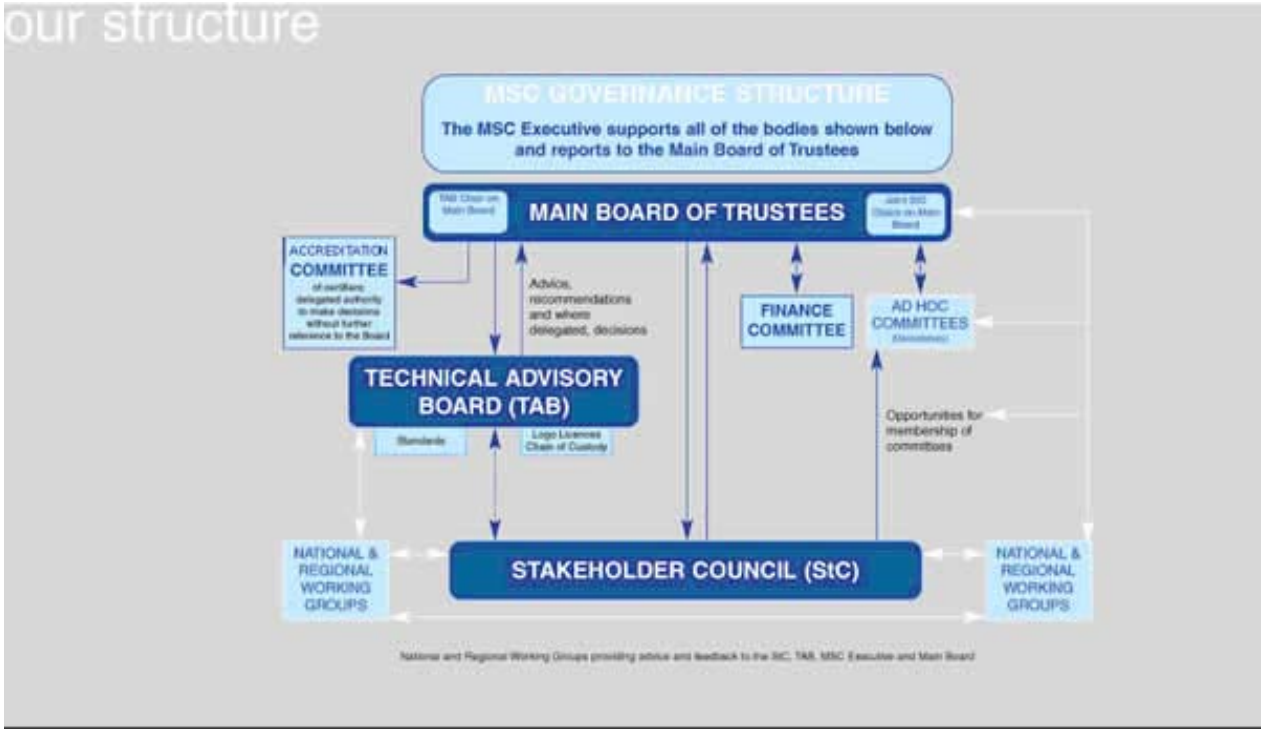
In 2001, a ten-month review was finalised into the governance structure of the MSC responding to stakeholders concerns. The review included extensive consultation across a broad range of issues with several hundred interested parties. The external panel and two co-chairmen formulated a series of recommendations which were accepted by the MSC board at its meeting in June. The following changes were made to the set up:

- MSC Board of Trustees - increased representation to incorporate a diverse balance of interests and skills especially the conservation area and developing world.
- The MSC Technical Advisory Board - its role includes advising the Board on matters relating to the MSC Standard, replaces the existing Standards Council.
- The MSC Stakeholder Council - this will replace the Advisory Board and Senior Advisors Group. A group of about 30 members will act as a point of reference for the MSC Board, and meet annually. The Stakeholder Council will appoint two joint chairmen with seats on the MSC board.
- MSC National & Regional Working Groups - these will have further defined roles.
- MSC Committees - these will be convened on an ad hoc basis (MSC 2001).

This new hierarchy structure, as highlighted in flowchart 1, is intended to create an im-

portant balance between efficiency and openness, with governance that is hoped to provide a platform for growth and progress.

Flowchart 1: The MSC Governance Structure of the MSC (Source: MSC 2003)



The Technical Advisory Board

The Technical Advisory Board (TAB) has 11 members who are a mixture of fisheries scientists, those from processing and marketing, a person from the seafood industry and a representative of small scale, community based fisheries. Its function is to advise the Main Board on all relevant matters including the setting and review of the MSC Standard. The TAB is equipped to form sub committees and/or call in ad hoc skills in order to focus specific expertise on specific functions or topics. Before a final decision about proposed recommendations is made, the TAB will, where appropriate, gather and consider the views from the Stakeholder Council's members and other interest groups. Then the TAB submits a final recommendation accordingly. The Main Board is strongly guided by the TAB's advice and it will set out its reasons when reaching a different conclusion to the TAB. It is the Main Board that is responsible for appointing the TAB, whilst the TAB

is responsible for its own chair (MSC 2003).

The Stakeholder Council

The Stakeholder Council (StC) has a balanced stakeholder body of 30-50 members fulfilling specific roles and acting as a point of reference, participation, liaison and representation. The annual StC meetings include an open convention event for all interested parties at which reports from, in person, the Chairman of the Main Board and the MSC Chief Executive will be presented and discussed. Their reports focus respectively on MSC strategy and executive activities. The StC has two joint chairs that have seats on the MSC Main Board and thereby are involved, on behalf of StC members, in all Board matters, decisions and appointments.

The StC represents a balance of MSC stakeholder constituencies through a defined structure and procedures. The Board in consultation with the MSC Executive has appointed half the members. The current members have appointed the remaining half. Each StC constituency is responsible for its own nominations and appointments. The ability for the Main Board to nominate and appoint constituency members will remain available and be exercised when circumstances require (for example when a constituency is unable to find or agree upon suitable members).

Accreditation Committee

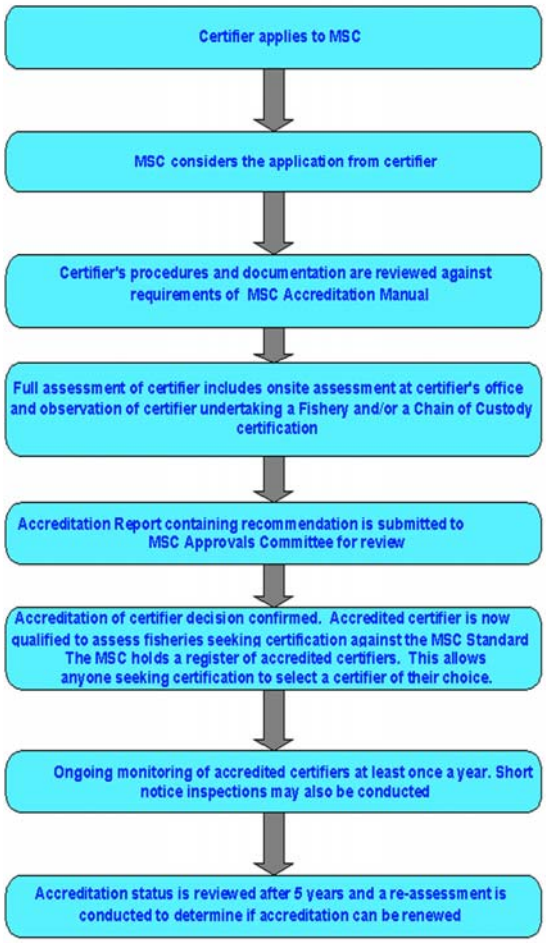
The Accreditation Committee, which was formerly known as the Approvals Committee, functions as the body that ratifies accreditation decisions made by the MSC. Therefore, they are the body that makes the decisions concerning whether a certification body becomes an accredited MSC certifier, according to the specified requirements as stated in the MSC Accreditation Manual.

4.1.3 The Certification Procedure

Certification Methodology

The certification methodology has been written for use by the MSC when accrediting certification bodies. The aim of the certification methodology is to set out how these third parties should undertake assessments of organisations against the MSC Principles and Criteria. Flowchart 2 reveals the process for accrediting a Certifier whilst the following points explicitly express the methodology:

Flowchart 2: Accreditation procedure for certifiers. (Source MSC)



- To establish a consistent certification methodology to enable all MSC accredited certification bodies to operate in a consistent and controlled manner.
- Provide the transparency that is required of an international accreditation body for it to be credible with potential stakeholders, including governments, fishery managers, certification bodies, suppliers of fish and fish products, non-governmental organisations and the general public.
- To provide documentation designed to assure long-term continuity and consistency of the delivery of MSC certification.
- To specify a system that ensures the MSC Logo on fish or fish products is a credible assurance that the fish is derived from a well-managed and sustainable fishery, as defined by the MSC Principles and Criteria and ultimately the MSC claim (MSC 2002).

At the last TAB meeting in Seattle, November 2003, progress was made on the development of a new Fisheries Certification Methodology, which is currently being reviewed by the Main Board of Trustees and will be available soon (MSC 2003, 3). By reviewing this upcoming methodology we hope to evaluate what were the motives behind this development and whether or not progress is being made in the procedure?
For the basic procedure of the accreditation of the certifiers look at flowchart 1. What is evident from this is, that a fishery suitable for certification is able to choose the Independent Certifier them self.

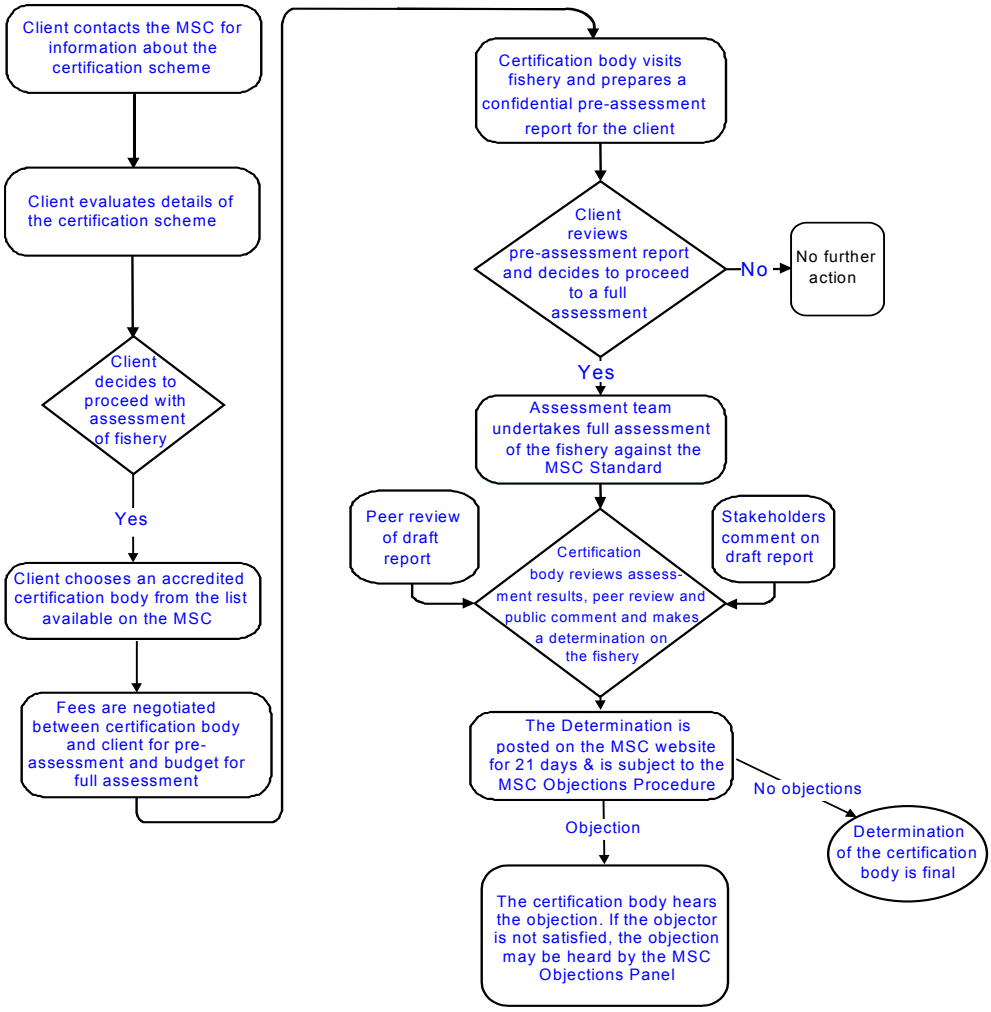
The Chain of Custody
The Chain of Custody Standard is the MSC's traceability measure. The guiding principle in the development of this Certification Methodology has been the need to specify a system that ensures the MSC logo on fish or fish products is a credible assurance that the fish is derived from a well managed and sustainable fishery, as defined by the MSC fisheries certification Standard and ultimately, the MSC claim. Thereby, minimising the risk of public confusion between those fish and fish products that have been certified and those that have not.

The purposes of this document are:

1. To establish a consistent certification methodology for Chain of Custody certification to enable all MSC certification bodies to operate in a consistent and controlled manner.
2. To provide the transparency that is required of an international accreditation body for it to have credibility with potential stakeholders, including governments, international governmental bodies (e.g. EU, fishery managers, certification bodies, suppliers of fish and fish products, non-governmental organisations and consumers).
3. To provide documentation designed to assure long-term continuity and consistency of the delivery of chain of custody certification.
4. To serve as a training document for certification bodies (MSC 2002).

For a basic picture as to what steps a fishery can fully go through in order to gain certification see flowchart 3. Following a favourable certification, the fishery earns the claim of being a well-managed and sustainable fishery.

Flowchart 3: Main steps in fishery assessment process (Source MSC homepage)



4.1.4 What is the MSC doing?

> "The aim of the MSC, when fully operational, is to provide a governance scheme in which private certification agencies are empowered to certify local fleets as following a sustainable fisheries code of conduct. Processors and distributors who pledge to buy fish only from certified fleets will be allowed to place the MSC logo on their products, and retailers and individual consumers will be urged to disassociate themselves from fish products that lack the MSC logo. The MSC as an institution facilitates the process by developing the code of conduct and by certifying the monitoring firms who certify local fleets; that is, the MSC sets" (Steinberg 2000, 2).

When the WWF and Unilever launched the MSC in 1997 both parties decided not to include other stakeholders in the negotiations of standards and principles. To say they were completely excluded would be false for the MSC Principles and Criteria were agreed after extensive engagement with fisheries experts, scientists, environmental organisations and those with a strong interest in preserving fish stocks for the future. These Principles and Criteria are based on the United Nations Food and Agricultural Organisations Code of Conduct for Responsible Fisheries, however they were added upon after its founders began to debate the exact content of its 'Principles and Criteria for Sustainable Fishing'. The burning question was whether 'sustainability' should solely refer to the sustainability of ecological communities or to the sustainability of economic and social communities as well, in which case the MSC would take on the burden of attempting to minimise social disruption along with minimising environmental degradation (MSC 1997) For a discussion of the MSC's Principles and Criteria and how they relate to the FAO's Code go to section 5.1.

Summary: How it basically all works?

One of the main aims of the MSC is to promote equal access to its certification programme and thus the size, scale, type of location or intensity of the fishery has no relevance. As will be shown in the following chapter the fisheries so far certified are very different from each other in accordance with these aims. Furthermore, in accordance with the third principle of the MSC, recognition for the need to observe and respect the interests of those people dependent on fishing for food and livelihood is stated. Under its voluntary scheme, fisheries around the world can apply to be independently assessed against the MSC standard. They are independently assessed for the process is not carried out by

the MSC, but by Independent Certification Bodies who have been approved or accredited by the MSC. It is their task to rigorously assess a fishery that wishes to achieve certification to the MSC standard. If a fishery meets the standard it is then certified. Once certified, companies wishing to use the MSC products undergo a Chain of Custody certification that guarantees traceability of MSC-labelled seafood. This is to ensure that it has been separated from non-certified products at every stage of the production. Processors and distributors who pledge to buy fish only from certified fleets will be allowed to place the MSC logo on their products.

The MSC certification process is based on a 'continuous improvement' model allowing for knowledge, scientific analysis and changing circumstances to influence the procedures. This is achieved through involving as many stakeholders in such a way that creates openness for all whilst working towards the same goal. The next section underlines the fisheries that have been certified and what has been happening within them. At the same time the section highlights the learning curve that the MSC has experienced.

4.2 The certified fisheries

The four criteria that are regarded as being decisive for the governance potential of the MSC are at the bottom of the following investigation. Seven fisheries are discussed in chronological order of their certification. In the end game of our project the independent certification bodies recently awarded certification to three more fisheries that could, much to our regret, not be accounted for analysis any more.[25]

4.2.1 Thames Blackwater Herring Driftnet Fishery

The fishery in context: The Thames Blackwater Herring (Clupea harengus) is a small-scale driftnet (a small floating gill net) fishery located in the Greater Thames Estuary within the six-mile limit in the United Kingdom. The Thames Blackwater herring itself is a unique stock, which is separate from the North Sea herring. Both drift nets and mid-water trawls fish the stock, however, trawl fishing is prohibited from a designated area within which only gill netting for herring is allowed. The former UK Ministry of Agriculture, Fishery and Food[26] established this 'Drift-net Regulatory Area' after it investigated the negative effects of trawling on the herring spawning grounds.

While the fishery has been going on since the forties, it was the decline of the main North Sea herring stock that resulted in an increased fishing effort being expended on the Thames Blackwater herring with catches peaking in 1972/73 a record 606 t. As a result of this increasing pressure, a Herring Management Committee was established in 1976 primary to ensure the long-term conservation of the stock. The committee was supposed to enable local involvement in management through providing a forum for stakeholders

[25] The *South Georgian Patagonian Toothfish Longline Fishery* was awarded certification in March 2004, the certification procedure ended successfully for the *South African Hake Trawl Fishery* in April 2004 and the *Mexican Baja California Red Rock Lobster* becoming with its certification in April 2004 the first community-based, developing world fishery to be certified under the international programme.

[26] The functions of the ministry have been taken over by the Department for Environment, Food and Rural Affairs (DEFRA) in June 2001.

and also as a means for implementing a voluntary quota at a time when fish stocks were obviously under pressure. However, the Thames Blackwater driftnet fishery had to be closed in 1976 due to a substantial decline in spawning stock biomass and the committee stopped meeting due to lack of support three years later.

After an apparent rapid recovery, the fishery was re-opened in 1981. It has since been maintained through a strict management system of quotas, which are set annually and monitored by the Department for Environment Food and Rural Affairs (DEFRA). The Total Allowable Catch (TAC)[27] for the fishery is determined on the basis of a stock assessment that is carried out twice a year through a contracted governmental research agency. The access to the Thames Blackwater herring fishery is managed through a license-system which is issued under the Sea Fish Act of 1967. Any applicant owning a registered vessel under 17 meters length overall can obtain a license from DEFRA and enter the fishery. The fishery is therefore highly accessible. However, less than ten vessels are usually active in the fishery although the total number of licenses issued each year is around 50. These boats are generally less than ten meters length overall. This situation reflects the low herring price and the small demand for herring of the size landed (Miller 1999). Furthermore, a local management body, the Kent and Essex Sea Fisheries Committee, has legal management responsibilities within the six-mile inshore zone and is charged with formulating and enforcing by-laws. Issues covered by the by-laws include the net size, minimum allowable landing sizes, dates when fishing is permitted etc.

To put the Thames Blackwater fishery in perspective, DEFRA set its Total Allowable Catch at 121 t in the year 2000. The fishery does not reach that quota and produces only an average of approximately 40 to 70 t per year. In comparison, the TAC for the North Sea stock was 270,000 t in 1999.[28] As Ronan Roche from the Essex Estuaries Initiative explains: “It is very hard for the fishermen to catch enough Herring now and the reason for that is the intense fishing pressure that was put on the stock in the past” (Roche

[27] Definition
[28] The North Sea Herring is going through an independent certifier’s assessment at the moment.

2004)[29]. The independent certifiers surveillance report number 5 from January 2004, however, states, "these low catch rates are thought to be due to location and density of shoals, rather than low biomass. There are currently only two boats operating in the drift net fishery, so although each vessel is setting more nets than usual, there is overall less sampling meaning that they may find it more difficult to find concentrations of fish" (Hilbrands 2004). It is expected that catch rates in the drift net fishery will increase as spawning takes place.

Observable behavioural changes:

> "Overall, the changes that the Marine Stewardship Council has brought about have been quite small because the Blackwater Herring was fundamentally a sustainable fishery before its certification and it was felt that it would quite easily get the MSC certification. In fact, it was sort of a test case for the MSC because it was the first fishery in the world, neck in neck with the Australian Rock Lobster, to be certified" (Roche 2004).

Overall, the fisheries officer Ronan Roche's impression might be right and the MSC did not cause any major changes. The assessment process began in March 1999 and certification was awarded twelve months later. Studying the certifier's public summary report from 2000, however, highlights that some minor corrective action requests to the Thames Blackwater fishery were raised such as that the fishery should develop a management plan or adequate management framework and provide a recording of discard and by-catch. Behavioural change occurred in so far as that the fishermen started to report where they fish, how much they take and the amount of discard and by-catch. Furthermore, a management plan was put down on paper. "This is something that would not have been required except for the fact that it is required for the MSC. But there is not really a by-catch anyway. It has brought about changes in the fishery but these are more details rather than fundamental ways of fishing. The way the fish is caught has not changed" (Roche 2004). Backing up this statement, the independent certifier comes to the conclusion that "the fishing method seems highly selective in this area. The small by-catch and smaller discards makes management of this fishery relatively straightforward" (Miller

[29] For the analysis of the Thames Blackwater Herring Fishery we spoke with Ronan Roche and will refer to this interview as Roche 2004. Contact: Essex Estuaries Initiative, Colchester Borough Council, PO Box 885, Colchester, Essex, CO1 1ZE, +44 1206 282480. Telephone-Interview conducted and recorded on April 19 2004.

1999, 17). Furthermore, the Herring Management Committee that collapsed in 1979 has been resurrected by the stakeholders mainly due to their desire to achieve MSC certification.

Market impacts of certification: Initially, the Thames Blackwater Herring Fishery contacted the MSC to achieve certification in order to gain a competitive advantage against the North Sea Herring. Consequently, it was for economical reasons that the fishery applied for certification. "The idea was that it would increase the market price of the herring. A big problem now is that it has not necessarily done that" (Roche 2004). For various reasons, in the case of the Blackwater Herring, the market did not respond to the MSC certification yet. Thames Herring is sold locally and also goes through the major supermarkets in England. Although herring fish might be an essential part of the food culture in other European countries it is not a particularly attractive fish in England. "Having the MSC certification is not going to make people eat herring who do not fundamentally like the fish, and in England that is the majority of the people" (Roche 2004). Furthermore, the Blackwater Herring Fishery consists only of a few boats and the amount of fish that is caught is very low, hence, the supply is inconsistent. From a market point of view and from the point of view of larger retailers, one of the key criteria for introducing and contracting new products is consistency of supply. Therefore, the fishery has not got the possibility to sell herring for any further processing that could make it become more attractive to the consumers in England and improve its marked price. Since the Thames Blackwater fishery is economically not successful and so small that the fishery itself is not able to afford MSC certification it gives rise to concern about the MSC's future prospects in this case.

> "Here, everything has to be done through grants from British governmental organisations. The fishery is always going to be dependent on getting grant money from somewhere and the benefit to the fishery, to the fishermen, in terms of an increased price, has not been realised. It is a lot of work for a relatively small return. It may be that the returns are just going to be a long time in coming, it may be that we just need to be more patient" (Roche 2004).

Although Thames Blackwater intends to keep the certification, it might be that it has to withdraw from the programme, depending on its success in raising funds. It is for that reason that Roche points out his opinion that the MSC certification only works for large

profitable fisheries. However, the fisheries that are large and profitable also tend to be the ones that are quite unsustainable.

Summary: The Thames Blackwater Herring Driftnet fishery is with its 40-70 t per year a very small fishery and one should not forget its scale when analysing the potential of a *global* governance mechanism. This fishery with only two boats operating at the moment is certainly not causing an overexploitation of the stock. It is not a promising example of a certified fishery, especially since the market does not seem to respond to the MSC label. In terms of counterfactual reasoning on the effects of the MSC on this fishery it is to say that the stakeholders would not exactly, but to a very large extent, behave in the same way without the influence of the MSC rules. To put the effects of the MSC on the Thames Blackwater Fishery in a nutshell it is to say that "the way it fishes has not changed. What the MSC has improved is that people involved are now better keeping records of herring and people pay quite a lot of attention on this fishery, it is getting quite a lot of publicity through the MSC" (Roche 2004).

4.2.2 Western Australian Rock Lobster

The Fishery in Context: The Western Australia Rock Lobster (WARL) fishery is regarded as one of the first managed fisheries in Western Australia. In an effort to maintain the fisheries future, commercial fishers, processors and government joined forces in 1963 and began carrying out responsible management. This involved the introduction of minimum size requirements, seasonal fishing and a ban on catching breeding females. They also started to collect data regarding the fishery at this time, which allows for the catches to be predicted accurately by fisheries scientists therefore enabling managers to implement the correct controls in order to maintain sustainable levels and a consistent catch size (Department of Fisheries 2000). The catch is usually between 10,000-12,000 tonnes as the fishery is managed primarily through licensing under the Fish Resources Management Act 1994 (SCS 2000). Techniques used to manage the fishery include:

- Annual research to monitor settling juveniles to predict population size in later years
- Fishing season is limited from November to June each year
- Minimum size requirement for collected lobster
- Protection for the breeding females
- Fishing licences are limited to 640 commercial operators
- Each license is limited to a maximum number of pots
- A ban on the use of pointed implements for taking lobster (either recreational or commercially)
- Bag limits for recreational fishers

In March 2000, the Marine Stewardship Council certified the West Coast Rock Lobster Fishery. It was the rock lobster industry that initiated interest in the MSC certification, however, the Western Australian Fishing Industry Council (WAFIC), the Western Rock Lobster Development Association and the Department of Fisheries gave their support (DOF 2003). In fact, "the government of Western Australia and the rock lobster industry shared the cost of certification for the Western Australia rock lobster" (Wessells 2000). The evaluations conducted for this fishery occurred primarily between July 1999 and October 1999. Due to the management nature of the fishery and its creditability the WARL was perfectly placed to be the guinea pig fishery for the MSC certification process. The evaluation of the fishery was preceded by a preliminary analysis (pre-assessment) that took place over several weeks in 1997 (SCS 2000).

Observable behavioural changes: The decision of the evaluation team to certify the fishery as well managed was based on requirements for continued improvement for future certification. The evaluation team did find some deficiencies in the fishery complying with Principle 2. Therefore, the fishery has to set in place the requirements put forth by the evaluation team in order avoid having the certificate repealed:

- *To carryout a comprehensive ecological risk assessment*; 14 months were designated for this to be carried out in order to show the risks of the fishery and fishing operations to the ecosystem. Once completed a list of prioritised tasks is set out together

with strategies to address the risks (SCS 2000). The risk assessment is reviewed by independent and external expert reviewers, as well as it being available for the public to comment on. This shows a willingness to be transparent and open within the whole certification process and not just at the initial stages.

What actually occurred was that an extension was given to the fishery in order to fully carryout this requirement. There were several reasons for this. Firstly, a parallel process was occurring at the time for a risk assessment to meet the Australian national requirements the fishery. These two processes needed to be harmonised as they depend on the same sets of information and analyses. Secondly, the workshop participants and conveners agreed that additional information and analyses were needed to provide detailed justification for some of the risk rankings. (Chaffee 2001) This was something that was overseen, for the development of this information required more time than originally anticipated by department staff.

Furthermore, a reason cited by some stakeholders for this lack of detail within the Ecological Risk Assessment was that there was inadequate ecological expertise at the workshop. Attendees appeared not to be selected based on their technical or scientific expertise in fisheries or ecology but on organisational affiliations (Chaffee 2001). This could be seen as a failure on the part of the certifiers and MSC to adequately represent the various stakeholders and therefore be criticised for not being legitimate and transparent enough. Moreover, the criticisms were taken on board and integrated for better involvement next time on.

- *To prepare an environmental management plan within 24 months and have it operational within 36 months* (allowing for 12 months for public comment and input); This will address impacts of the fishery on the environment, include proposed objectives, strategies, indicators and performance measures (SCS 2000).

- *To increase transparency of decision making, specifically increasing the participation of the environmental community and their representatives*; "Within 24 months of certification there will be increased participation of the environmental community or their representatives in the decision-making processes in the fishery. This will include consultation on impending decisions, and involvement (full participation) in decision-making committees at a range of levels in the fishery" (Chaffee 2001).

This is one behavioural change that was successful in a relatively short matter of time. The Conservation Council of Western Australia, an NGO, was offered membership on the Research Subcommittee of the statutory Rock Lobster Industry Advisory Committee (RLIAC). They rejected the offer, but accepted a later offer of observer status. This means they are present at the meetings and may participate but only at the discretion of the chair. The Conservation Council has been allocated funds for the appointment and maintenance of a sustainable fisheries officer, to facilitate more effective communications between the fishing community and the NGOs and fisheries management in Western Australia (Chaffee 2001).

- *To gather data on the by-catch of ICON species especially mammals, seabirds, dolphins and whales* (MSC 2000). This is another successful factor that has met the requirement for the continuation of certification, showing that the MSC's standards did have an effect on the fisheries behaviour. It is based on three initiatives that were carried out: (a) voluntary questionnaire survey of the fisher's recent experience with interactions/catch with icon species; (b) additional columns in the fishers voluntary logbooks to record interactions/catch of icon species; (c) designed monitoring program conducted by research staff of Fisheries Western Australia to record all interaction/catch during the Catch Monitoring Program conducted on fishing vessels for 8 months each year (Chaffee 2001). Moreover, the questionnaires that were sent out were starting to be returned by the fisherman. This highlights a significant change in the attitude of the fishermen brought about by the MSC process.

These have been the main influences of the MSC code of conduct, although it must be noted that as this was one of the first two fisheries to go through the process there was some confusion concerning what was to be expected in order to meet the requirements (DOF 2003).

There have also been significant influences from other sources though. In 2002 the Federal Minister for the Environment and Heritage, Dr David Kemp, and Western Australian Minister for Agriculture, Forestry and Fisheries, Mr Kim Chance, announced that the Western Rock Lobster Fishery had gained exemption from the export controls under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The

Commonwealth Government developed a range of criteria to assess the ecological sustainability of each fishery, which also made recommendations for the fishery to put in place (DEH 2002).

Stakeholder involvement: At the beginning of the evaluation process stakeholders in the fishery were identified and contacted in order to provide input wherever appropriate. They were chosen from industry, government agencies, and the conservation community. They were involved in the first process of identification of technical/scientific experts for the evaluation team; a team that was based on the individuals scientific training and reputation, ability to be objective, and knowledge of Australia's fishery management practices (with specific emphasis on the Western Australian Rock Lobster Fishery) (SCS 2000). Via this involvement the MSC is helping to legitimise its actions and provide transparency throughout by involving lots of critical participants.

These stakeholders were also consulted about their views on the compliance of the fishery with regards to the MSC Principles and Criteria. All stakeholders we met once, however, in the case of the environment community four separate meetings were held due to them being the only stakeholder that expressed concerns about the management of the fishery (SCS 2000). This provides evidence that, at least in the stakeholder involvement process, the MSC is taking views seriously. Where stakeholders have issues with the findings of the certifiers, these are brought up, representing transparency within the certification process.

Markets impacts of certification: MSC certification has definitely raised the profile of WARL. Sales generate about AUS$ 300- 400 million annually in export to markets including Japan, Hong Kong, China, USA and since certification they have opened up in Europe. According to Cathy Roheim "there has been an increase of 20-25 new enquiries to the Western Rock Lobster Development Association since the successful MSC certification of the fishery was announced in March 2000. This represents a 15% increase on the previous year" (Roheim 2002). Furthermore the label may have played a part in the "European Union granting an autonomous tariff quota (ATQ) for 2003 enabling the import of 1500 tonnes of frozen rock lobster for further processing at 6 per cent duty – well

down on the usual 12.5 per cent tariff. In February 2004, the European Union agreed to extend the ATQ until the end of 2006" (Dfat 2004).

The western rock lobster fishery is the most valuable single-species fishery in Australia and usually represents about twenty per cent of the total value of Australia's fisheries. The MSC has helped to formulise arrangements within the fisheries management and has implemented initiatives to address the need for additional monitoring of bycatch. Furthermore it has helped to develop the lobster in Europe.

4.2.3 Alaska Salmon

Five salmon species have been certified:
sockeye (*Oncorhynchus nerka*)
chum (*Oncorhynchus. keta*)
chinook (*Oncorhynchus tshawytscha*)
coho *(Oncorhynchus kisutch*)
pink (*Oncorhynchus gorbuscha)*

The fishery in context: Alaska's statewide commercial salmon fisheries' program, the world's largest, was certified as well-managed and sustainable in September 2000 and was the third fishery to be awarded certification. According to one of its own press releases "the Alaska Department of Fish and Game (ADFG) has been working on the MSC certification since 1996" (ADFG 2000). "Alaska salmon managers have over 40 years of experience in abundance-based, escapement-driven salmon management, where the fish come first," adds Alaska Department of Fish and Game Commissioner Frank Rue. "The department, the Board of Fisheries, fishermen, processors, and other stakeholder in the industry have been co-operative stewards in the conservation and management of salmon and all deserve to share in this recognition" (ADFG 2000).

The biological staff of the ADFG manages the Alaska Salmon fishery. Under the Alaska state constitution it is required that the salmon habitat is conserved and protected.

In 1959, statewide salmon harvests were about 25 million salmon a year. In 1999 Alaska's commercial salmon catch was 214 million fish, the second largest in the state's history. The fishing season runs from May to September (MSC 2004). Catches in the past decade have been generally above 190 million salmon with ex-vessel values exceeding US$ 400 million annually. Numerically, pink salmon predominate, comprising more than one-half of the statewide harvest. Roughly one-fourth of the harvest is sockeye salmon, followed by chum, coho and chinook salmon. In product value, sockeye salmon have always been the primary species. Outside of Alaska, however, many Pacific salmon populations have been depleted, are listed as threatened or endangered, or have disappeared altogether - victims of dam construction, logging-related stream destruction, overfishing, pollution, and many other causes.

The elimination of high seas drift net fishing and the implementation of the Magnusen Fisheries Management and Conservation Act in 1976 have been significant contributing factors to the sustainability of Alaska salmon fisheries. Equally important has been effective fisheries management on the part of ADFG. The state of Alaska continues to invest in research and management programs designed to better assess and manage salmon stocks. Significant hatchery programs also began in 1974 (Chaffee 2000).

According to the MSC website, various management techniques are used and these include “establishing open and closed seasons; setting quotas, bag limits, harvest limits, sex and size limitations; establishing the methods and means employed in the pursuit, capture and transport of fish; watershed and habitat improvement, management, conservation, protection, use, disposal, propagation and stocking of fish; regulating commercial sport, guided sport, subsistence, and personal use fishing as needed for the conservation, development, and utilisation of fisheries” (MSC 2004). Salmon are harvested by nets (drift and set gillnets, purse seine) and by trawling. Other fisheries do work within the Alaska Salmon Fishery area, which is expected due to the size of the fishery. In general, non-salmon commercial fisheries do not overlap in time with the Alaska Salmon fishery.

Observable behavioural changes: The evaluation team found that the information they were provided on the management of commercial Alaska salmon fisheries statewide pro-

vided sufficient evidence to assert that the commercial salmon fisheries under the management of Alaska's Department of Fish and Game meet the MSC Principles and Criteria. The evaluation team found that the two most significant areas for improvement were in by-catch monitoring and in some aspects of the stock assessments and setting of escapement targets (Chaffee 2000). The escapement targets are of importance because of the migration of these fish through US and Canadian areas. Transboundary stock management is needed in this case, which has caused disputes in the past and will continue to throughout certification. The influence of the MSC to produce more knowledge within this area with regards to actually monitoring the escapement targets may produce better results of co-operation and communication. As Chaffee Points out in the initial report concerning the situation in Alaska "authorities are overlapping and there may be contradictory or confusing regulations for some fishery components…as yet there is little to guide sharing of data and expertise, or in co-ordination of the two regulatory bodies" (Chaffee 2000). This is again another area in which the MSC can help facilitate information sharing, leading to better co-management.

Questions were raised about the fishery and the certification process from other quarters. Trout Unlimited, an organisation also working for the sustainable interests of wild salmon fisheries, has heavily criticised the certification of this fishery. In their opinion, given the failed fishery management regimes throughout the Pacific Rim, coupled with increasing knowledge about the factors that affect salmon productivity, it is no longer sufficient to manage "just" the fishery; rather the salmon fisheries must be managed in the context of preserving both salmon biodiversity and whole ecosystems (Trout Unlimited 2002).

Stakeholder involvement: Due to the scope of all the Alaska Salmon Fisheries not all of the stakeholders could be incorporated. In the Alaska Salmon Final Report (2000) it states " within the budget and scope of the project, it was impossible for the evaluation team to contact and interview every single group individually. And no doubt, there will be some individuals or groups that feel they did not have sufficient access to the evaluation team or sufficient time in which to respond" (Chaffee 2000). This highlights one of the problems that the MSC faces. There are different sized fisheries, and therefore the

budget for each certification needs to be based in this context. From the material available it was unclear whether this is actually happening. If not, then it seriously jeopardises the transparency issue of the MSC, although in this case a valid attempt was made to include as many stakeholders as possible.

Market impacts of certification: What the MSC has done is to raise the profile of Alaskan salmon and help increase its market share in other areas. Cathy Roheim, a professor at the University of Rhode Island and a member on the MSC Stakeholder Council, points out that "it was 2002 before a significant number of companies were certified to sell MSC-labelled products… at present, there are over 60 companies that have MSC chain-of-custody certification, including the 5 largest producers: Trident Seafoods, Peter Pan, Icicle Seafoods, Ocean Beauty Seafoods and Wards Cove Seafoods" (Roheim 2002). Consequently, the potential market impacts of certification may: 1) create an increase in prices; 2) reverse the decline in market share in markets domestic and overseas; and 3) make in-roads into new markets. Taking each of these in turn, it can be shown that Alaskan salmon is in a market position in which the MSC label may well have a positive effect.

Alaskan salmon's market share in key markets (domestic, Japan, Europe) has declined in the last decade because of advertising and promotion of farmed salmon that has been very effective, and has generated new markets for salmon in southern Europe. As the presence of the MSC label and consumer education on sustainable fisheries increases the Alaska Salmon currently remains in a good position within the market to increase its market potential. Other Salmon fisheries are in the process of going through the MSC certification process, which might lessen the effect of the Alaska Salmon.

Summary: Despite the formalisation of a management structure the MSC has triggered very few changes. Having said that, there is a strong case that in formulising the management structure and continuing with regular visits and assessments, the MSC may facilitate the sharing of knowledge within the Alaskan State.

4.2.4 New Zealand Hoki

The fishery in context: The New Zealand Hoki Fishery was awarded certification in March 2001 by Societe Generale de Surveillance (SGS), with the pre-assessment stage beginning in early 2000. The Hoki fishery is the largest in New Zealand and one of its most valuable. Foreign fishing fleets, primarily from Russia and Japan, developed the Hoki fishery in the 1970's and by 1977 the catches were reported to have increased to almost 100,000 tonnes. This figure dropped substantially in 1978 as New Zealand's Exclusive Economic Zone was established. The number of licenses granted to foreign fleets decreased and catch limits were enforced. By the late 1980's licenses were no longer granted to foreign fleets within the EEZ. Before 1986/87 annual catches remained below 50,000 tonnes, however, during 1986/87 the TACC (Total Allowable Commercial Catch) was increased to 250,000 and catches increased to 216,000 by 1987/88 (SGS 2000). For the MSC this is a substantial fishery as in 2001 the TAC was set at 200,000 tonnes. The majority is exported to valuable markets in the US, EU, Japan and Australia and of the $ 294 million Hoki earned in 1998, $ 88 million was from exports to European markets.

A variety of data are collected in order to assess the stock. These range from fishery catch and effort data, information on hydrostatic and bottom trawl surveys, age and length composition, maturity information, and information from studies about stock structure. The fisheries act of 1996 provides for maximum sustainable yield (MSY) as the management target for the sustainable management of fisheries. The fishery in question is said to have two stocks – an Eastern and Western. The eastern stock is about one third of the size of the western but accounts for 40 percent of the current Hoki catch. Fishing takes place all year round in depths of 400-800m, although the main fishing takes place from mid-July to late August.

The Quota Management System was introduced in 1986 to manage and conserve New

Zealand's major commercial fisheries. It is based on an output management regime (commonly known as a quota). The approach used is to directly limit the total quantity taken by the commercial uses and for the conservation of the resource. New Zealand was the first to use quotas on a broad scale in a multi- species fishery. It has been considered by the certifier SGS that during the past fifteen years, the Hoki fishery, managed under QMS has provided an effective mechanism for safeguarding the Hoki stock, increased economic efficiencies in the fishery and improved incentives for fishing participants to utilise the fishery in a sustainable manner.

In 1997 the Hoki Fishery Management Company was established in order to improve the management and economics of the Hoki fishery through better collaboration amongst the shareholders in research, management, organisation, and advocacy. They saw the MSC certification procedure as one way in which to help achieve these goals.

Observable behavioural changes: As previously stated, certification was awarded in March 2001. This was, however, based on the management company carrying out several minor Corrective Action Plans. On the 25th April 2001 the Royal Forest and Bird Protection Society of New Zealand (RFBPS) complained to the MSC against this Certification on the grounds that the SGS report leading to the certificate, failed adequately to interpret and to comply with the MSC Principles and Criteria and the requirements of Certification. Based on these grounds they asked that the Certificate be withdrawn.

Consequently, this complaint was referred to the Board of Trustees of the MSC who subsequently convened a panel to conduct an appeal process. The appeal panel concluded that the Hoki Fishery in its present state is suitable for certification. Accordingly, the panel confirmed the MSC certificate, however, confirmation was conditional upon the structured implementation of the Corrective Action Plan and compliance with a number of recommendations:

1. Ensure that the research programme being pursued by the HFMC includes a genetic component.
2. Seal excluding devices be tested in New Zealand waters as a complement to the trials off Western Tasmania in order to avoid bigger amounts of by-catch.

3. The trawl grounds should be mapped, especially those areas where trawls impact the seabed
4. Using the information from (3), a preliminary risk assessment of the impacts of the fishery on benthic habitats should be undertaken as a priority, even if the full ecological risk assessment proposed in the CAP requires several years to complete.
5. Interim but measurable objectives for key ecosystem components should be set using existing knowledge, consistent with the principles of the Precautionary Approach, and with the full understanding that these objectives would be revised as the Ecological Risk Assessment is completed.
6. The fishery observer programme, and the procedures manual, is to be reviewed for effectiveness and efficiency (SGS 2003).

As part of on going assessment for the continuation of certification some headway has been made with regards to the points just mentioned. The Corrective Action Plan highlights that behavioural changes of the fishermen are required. For example in relation to by-catch of seals, the use of seal excluding devices can be seen as an effect on the fishermen triggered by MSC rules. In other areas, however, behavioural changes will take a considerable amount of time due to the lengthy processes of ecological risk assessment.

Gerry Leape, head of marine conservation at the US-based National Environmental Trust, told a meeting in London back in May 2003 that trawling for hoki kills an estimated 1000 fur seals and 600 endangered albatrosses a year (New Scientist 2003). Based on this and other revelations the article claimed that unless the Marine Stewardship Council cleans up its act, green groups from Greenpeace to the Sierra Club might withdraw their support for the label. Brendan May, the MSC's chief executive said in defence that the green groups' desire for a perfect system was undermining pragmatic efforts to improve fishing practices. May also added that a timetable has been agreed with the fishing companies to improve things in the case of the New Zealand Hoki (New Scientist 2003). Nonetheless, another scathing article was recently published by Paul Brown in the Guardian Newspaper, in which he stated the Hoki fishery had failed to comply with the New Zealand fisheries act that requires action be taken to avoid adverse effects on the

aquatic environment (Brown 2004). The case of this fishery shows the difficulties that the MSC has to deal with in operating a certification system acceptable to industry, governments and the environmental movement.

Stakeholder Involvement: As in the previous case of the Alaska Salmon, due to the size of the fishery not all of the stakeholders were contacted due to the budget and scope of the project. For comments relating to what this entails for the MSC process please refer back to stakeholder involvement in Alaska Salmon.

Market Impacts: Marketwise the MSC has had effects upon this fishery. According to Roheim

> "soon after certification of the New Zealand Hoki fishery, Unilever began to purchase NZ Hoki for the first time, the value of which was thought to be in excess of US$ 3 million. Unilever has indicated that it would take at least 4,000 tonnes a year from local Hoki stocks which will mean the industry benefits by as much as US$ 10 million" (Roheim 2002).

Furthermore the price of Hoki blocks rose by around 10% in 2002 and the volatility within the price has decreased.

> "This is particularly true for whitefish, such as Hoki. Companies such as Unilever usually switch between whitefish categories (haddock, cod, pollock) to use in fish sticks with 10% changes in price. Now they are committed to whitefish from sustainable sources, and as a result are not as easily able to switch between whitefish products. This results in lower price volatility. However, we should keep in mind that as more whitefish products become certified (e.g. Alaska pollock) this reduction in price volatility will likely decrease" (Roheim 2002).

Summary: Although a fairly robust management system was already in place, the MSC has had effects upon this fishery, especially regarding principle 2 of the MSC Principles and Criteria. Stakeholder involvement was once again not fully realised due to the size of the project. But stakeholders have had impacts, which is evident by considering the complaint made from the NGO perspective.

4.2.5 Burry Inlet Cockles

The fishery in context: The Burry Inlet Cockle Fishery is based on hand ranking and sieving of cockles and has largely existed in the same way since the 1800s. The Burry Inlet is located between the towns of Llanelli and Burry Port in the north, and the village of Penclawdd in Gower in the south, South Wales, UK, and the fishery is limited to the inter-tidal zone in British Territorial Waters. The pre-assessment began in March 2000 and the MSC certification was awarded in April 2001.

Compared to the TAC of other certified fisheries such as the New Zealand Hoki with its 200,000 tonnes per annum, the Burry Inlet Cockle is a rather small fishery with a catch of 7135 t of cockles in the year 2000. It is a traditional source of food and employment for the local area, dating back to Roman and Mediaeval times. Women usually fished the cockles but with the decline of heavy industry in this area they were displaced by unemployed men in the sixties. In 1921 a minimum landing size was introduced by the South Wales Sea Fisheries Committee (SWSFC) to protect the breeding stock. The committee contains, among others, representatives from local councils, and reports to the Welsh assembly. Already in 1965, the increasing excessive fishing effort led to a tightly controlled management scheme. The Burry Inlet Cockle Order was established to license the fishery and so control the quantity of cockles taken. Since then the number of licenses has varied between 43 and 67. The South Wales Sea Fisheries Committee is the body responsible for managing this order and it sets individual daily quotas of 0.3-0.6 tonnes per person per day depending on an annual scientific assessment of the cockle biomass. Furthermore, it is issuing a number of by-laws, concerning mesh-size, the method of collection and gathering times. The Centre for Environment, Fisheries and Aquaculture Science, Lowestoft, is carrying out cockle stock surveys. From these surveys a level of fishable stock is set and the number of cockle licences and daily cockle quota is then

broadly set to give rise to the desired fishing effort. The minimum cockle sizes are set via a riddle size (a hand held measurement device) to allow the survival of sufficient spawning stock. The stock is said to be very consistent between the years and it seems to be in an excellent condition. The certification report for the fishery sums up that "regulation, combined with regular and effective inspections, has led to a management system, with operational criteria, that require exploitation of the cockle stock to be responsible and sustainable" (Hough and Holt 2000).

Observable behavioural changes:

> "The MSC did not really cause any changes in the fishery's behaviour. We felt that we had a scheme that met the MSC criteria so why not advertise it? No changes in management practice have been required. However, the independent certifiers have requested some corrective actions such as describing and confirming how we go about things" (Coats 2004)[30].

The fishery consistently met the requirements of the MSC Principles and Criteria for Sustainable Fisheries without any major changes. The minor corrective actions that the certifier required concerned the clear statement of its existing objectives. These long and short-term objectives for the management of the fishery have only been implicit in the regulating order and byelaws governing the fishery (Hough and Holt 2000).

Market impacts of certification: Initially, the SWSFC contacted the Marine Stewardship Council after they became aware of it through press information. From the South Wales Sea Fisheries Committee's point of view the motivation for certification has been recognition of their good practice, which has been realised to a large extent (Coates 2004). The cockle industry however hoped for larger markets for their product. Coates sums up the market impact of the MSC certificate as follows:

> "No change for most. Cockles are sought after, so I do not think it has given competitive advantage. In time, only certified sources could be used, but markets are not yet discerning. Dutch operators seem keen that their

[30] For the analysis of the Burry Inlet Cockle Fishery we send a questionnaire to Phil Coates and will refer to this interview as Coates 2004. Contact: South Wales Sea Fisheries Committee, Queen's Buildings, Cambrian Place, Swansea SA1 1TW, +44 1792 654 466. Answered questionnaire received via email on April 21.

> UK subsidiaries gain certification. It may well be that their markets have required this" (Coates 2004).

Similarly to the Thames Blackwater Herring, the Burry Inlet Cockle Fishery is depending on grants for the certification since the costs are not met by monetary benefits. The costs were grant aided for the first three years and unless the SWSFC is not successful in fund-raising, the required upcoming re-classification of the fishery as sustainable may mean that it will not be able continue and withdraw from the MSC programme.

Asking Coats for his opinion on the future market potential of the MSC eco-label for the fishing industry, he sees the Burry Inlet Cockle Fishery as an ideal early project to give the MSC initiative credibility, momentum, and publicity. He believes that once the scheme would get widespread adoption, no market supplier could afford to remain un-certified, but there would be a long way to go.

Summary: With regard to the question of whether the MSC had behavioural impacts it can be summarised that, "the fishery would not differ in any way without the MSC certification. It already aspired and met the principles" (Coats 2004).

4.2.6 South West Mackerel Handline Fishery

The fishery in context: The South West Mackerel Handline Fishery is located at the South West Coast of England and most of the fishing occurs within eight nautical miles off shore. Its targeted mackerel stock is, in line with the International Council for the Exploration of the Sea (ICES) definition, considered to be part of the Western Stock Component of the North East Atlantic Mackerel Stock. The handline fishery is therefore seen as an integral, albeit minor, part of the overall fishery pressure on the stock.

The growth of the fishing industry in the South West of England dates back to the 14th Century. With larger catches on bigger boats, landing data of mackerel catches show a significant decrease in the 20th Century from 5000 t in 1926 landed in Newlyn, to 1000 t in 1950 and only 20 t in the mid sixties. As a result of this decline, restrictions on mackerel fishing in the South West were first put into force in 1977. Allocations of quota for the South West Mackerel Handline Fishery were calculated based solely on track record, i.e. landings during a rolling reference period. Since 1998 the fishery has received an annual allocation of 0.83 % of the UK quota or 1750 t (whichever is the greater). Prior to that, in 1981, the South West Mackerel Box, a special area in which only handliners are permitted to target mackerel, was introduced to protect juvenile mackerel (present in the area in high numbers) from trawling (EU Council Regulation No. 894/97 Article 9). The area of the box was expanded to its present position in 1989. Specific targeting of mackerel within the box is only permitted by handlining, but a derogation of 15% by-catch of mackerel is permitted for vessels fishing for other species. Fisheries management is directed ultimately by the EU under the Common Fisheries Policy. The Council of Ministers determine Total Allowable Catches (TACs) based on the scientific advice they receive from the International Council for the Exploration of the Sea Advisory Committee on Fisheries Management. TACs were apportioned between the EU member states on the basis of historic fishing rights in 1983 and are maintained by the policy of 'relative stability'. The UK quota is then allocated by the UK Department for Environment, Fisheries and Rural Affairs and managed locally, largely by Producer Organisations. The Producer Organisations responsible for the South West Mackerel Handline Fishery are the South Western Fish Producers Organisation and the Cornish Fish Producers Organisation. Fishermen are not permitted to catch fish below a minimum landing size of 20 cm. Landings from the handline fishery are recorded in each port at auction by DEFRA fishery officers which allows the fishery to be closed when the quota has been reached.

The handline method simply uses lines to which 25-30 hooks are attached. As the secretary of the South West Handline Fishermen's Association states, "it is the same method that we have been using for 30 years and there is just no way that we could ever have any

impact on the stock at all. Our quota is less than one per cent of the total UK quota." (Muirhead 2004)[31]. The MSC certification was awarded in July 2001.

Observable behavioural impacts: Muirhead is convinced that the fishery would have gone on the same way regardless of the MSC certification since the actual fishing method is such a simple one that it cannot be altered and DEFRA's quota system is already established and formalised for a long time. Therefore, he cannot identify any behavioural changes in the case of this fishery. "The MSC had an impact in the way that people are looking better after the fish now. The Marine Stewardship Council was very helpful and encouraged the fishery through good marketing and promotion of its products" (Muirhead 2004).

The certifier's report, however, request minor corrective actions that have been carried out by the fishery: The use of logbooks by handline fishers, whether operating vessels of under or over 10m, and recording of landings and by-catch is recommended. Furthermore,clearer information is now provided to fishers on regulations applicable to the handline fishery. The need for such information has been particularly apparent given the lack of knowledge on the minimum landing size.

Market impacts of certification: In the case of this fishery the market seems to respond to the eco-label and reward the classification as sustainable and well managed with a higher value of the product.

> "The main reason for the fishery's involvement with the MSC was to get a better price for the fish to be quite blunt, which certainly appears to be happening. I think consumers are becoming much more conscious about how their fish is caught and if it is caught in a sustainable way they are more likely to buy it" (Muirhead 2004).

[31] For the analysis of the South West Mackerel Handline Fishery we got in contact with David Muirhead and refer to this source as Muirhead 2004. Contact: South West Handline Fishermen's Association, Triss Rose Cottage, Hekston, Cornwall, +44 1326 555813. The telephone interview was conducted and recorded on April 19 2004.

4.2.7 Loch Torridon Nephrops Creel Fishery

The fishery in context: The Loch Torridon Nephrops Creel Fishery (LTNCF) at the North West Coast of Scotland passed the MSC standard for well-managed and sustainable fisheries in January 2003. In supporting around a dozen boats and with a Total Allowable Catch of 100 to 150 tonnes per year it is a fairly small fishery.

The method of capture is baited creels/pots deployed on lines. "This fishery has been going on at the west coast of Scotland for the last 30, 40, 50 years even and we know that the overall captures have been pretty good and regular for a long time" (Starr 2004)[32]. Most of the catch is exported weekly to Spain.

In 1984, a three-mile limit that banned the use of mobile fishing gear was repealed through the Scottish Inshore Fishing Act. As a consequence, trawlers started to fish in the same inshore area for nephrops as the creel boats, which caused conflicts between them. Since these trawlers damaged the eco-system, endangered the jobs of local fishermen and caused damage of creel boat fishing gear, they were seen as unsustainable and the local fishermen started to complain about this situation. The Loch Torridon Creel Fishery actively sought to have an area closed to the mobile fishing gear, which finally was established on November 1st 2000. An experimental three-zone system was created, consisting out of (a) a creel-only, (b) a trawling, and (c) a mixed zone. These areas were defined for an initial period of five years after which they are supposed to be assessed. The assessment is ongoing and it will decide whether the three-zone system is going to be continued in the future.

[32] For the analysis of the Loch Torridon Nephrops Creel Fishery we got in contact with Karen Starr via a questionnaire and a telephone interview and refer to this source as Starr 2004. Contact: Shieldaig Export Ltd, info@shieldaigexport.co.uk, +44 1520 755377. Interview conducted and recorded on April 16 2004, answered questionnaire received on March 30 2004.

Observable behavioural changes: "The removal of trawling has been fundamental to the creation of a sustainable fishery and this change occurred **before** our involvement with the MSC" (Starr 2004). Furthermore, the son of one of the fishermen developed in an undergraduate thesis an escape panel to allow the smaller individuals to escape from the creel before being lifted to the surface. This escape panel was developed as a final product during the assessment process and its realisation might have been pushed by the fishery's desire to achieve certification.

The Creel Fishery decided to apply for MSC certification after it participated in a talk that was organised by the MSC. The fishermen realised that they had to prove to the government that the measures they are using in the creel only zone are actually working in terms of improving the fishery's sustainability. They thought that they could use the independent certifier and the MSC classification as a sustainable fishery to satisfy a great deal of the requirement that the government would have at the end of the five-year experimental period. In this respect, the Loch Torridon Nephrops Creel Fishery's participation in the MSC programme is not motivated by economic incentives but a political decision. The creel fishery could continue without the zone system but it would lose ecological as well as the local economical benefits. Since it would only take three trawlers that do not necessarily land their catches to local companies, the Loch Torridon fishermen are simply fighting for their jobs.

> "We are going through this process not because we think we will immediately get a price benefit from having the MSC logo on our product. The fishery approached the MSC because we see that an independent assessment of our fishery as sustainable would be a significant help in the argument to extend the period for creel only fishing past the end of the five year closure. It is necessary to protect the livelihoods of the people involved. The MSC has been very useful in that, we used it much more as a political than as a marketing tool" (Starr 2004).

Market impact of certification: Although Starr does not think that the Spanish consumers are immediately willing to pay a higher price for products with the MSC logo, she points out that the use of the MSC logo might raise the profile of the MSC in Spain in the future. "Hopefully we will develop a cycle of effort that keeps going. If you manage to raise the MSC profile, more consumers will be interested in having MSC products and

vice versa" (Starr 2004). Her impression is that the MSC is trying to quickly increase the number of certified fisheries in the world, in order to feed that cycle.

Summary: Summarising behavioural changes that the MSC has caused, it is to say that it has influenced the way in which the fishery works. Primarily this has been, similar to the other certified fisheries, by formalising the way in which it manages the stock and ensuring that compliance with the rules is maintained. In this case the MSC might also have contributed to the realisation of the escape panel.

> "But the MSC has not been by any means the ONLY influence over our fishing methods. The fundamental point is that we want this fishery to be here in a hundred years time, still producing a livelihood for people. That is why we made use of the MSC system, it fitted our needs incredibly well" (Starr 2004).

5 Analysis of the MSC

Based on the theoretical background considerations and on the case study, this section is discussing in how far the Marine Stewardship Council is meeting our developed criteria for having a high potential to exert environmental governance in the issue-area of fishing.

The argumentation will follow four steps:

(1) The appropriateness of the established rules: is the MSC code of conduct comprehensive?
(2) The impact of the MSC rules on actors' behaviour: does the MSC trigger change in their behaviour?
(3) Theoretical contemplation about the MSC's future prospects: questioning the MSC's legitimacy and accountability?
(4) Raising awareness: does the MSC raise stakeholders' concern for problems related to fishing?

5.1 The appropriateness of MSC rules

In this section attention is given to the appropriateness of the MSC rules. It is important to consider because if the rules are not comprehensive enough, then the MSC could be criticised for having a weak base.

The MSC's Principles and Criteria took two years to develop. All in all the process involved eight regional working groups around the world and two expert drafting sessions. A wide variety of actors were included in the consultation to deliberate from all angles of perspective. The actors included were from fisheries, environmental scientists, fisheries managers and governmental representatives, environmental groups and a range of stakeholders from the seafood sector – from catching to processing and retailing (MSC 2003).

In order to have a foundation, the United Nations Food and Agriculture's Code of Con-

duct for Sustainable Fishing was used as a model to facilitate carefully considered discussion about what proponents to include and exclude. The standard needed to reflect good fisheries management and the sustainability of fisheries. The FAO's Code of Conduct is largely recognised throughout the fisheries sector as being "the most comprehensive globally accepted consideration of the requirements for sustainable fisheries available and therefore provides a benchmark against which fisheries sustainability could be measured" (Wessels et al. 2001). Thus, the MSC had to make sure its guidelines were developed in accordance with that of the FAO's so that consistency was maintained and contradiction avoided.

As stated previously the MSC standard needs to reflect good fisheries management and sustainability of fisheries, and does this regardless of factors such as size, complexity, geography, intensity or technology. These factors need to be considered because the MSC wants to be fair in what it is trying to do. Thus, the standard has been set to measure the sustainability of wild capture fisheries in developed and developing country fisheries alike. Moreover, the size of the fishery should also not restrict the certification process as large scale fisheries that use sophisticated technology, as well as medium to small scale and community based fisheries that use lower levels of technology, are considered equally. In recognition of this point, the certified fisheries that have undergone the MSC process thus far are in keeping with many of these factors. Small and large-scale fisheries are included, which have different intensities and all use varying methods of capture. Although the fisheries certified have their roots in many geographical locations, they predominate so far in the developed regions. The MSC's mantle to include those fisheries in the developing regions is currently not looking very promising. This was an area in which one critic was made about the MSC when the organisation was getting of the ground. Brian O'Riordan noted in his paper 'Who's being seduced?' that the "MSC's interest in the South would seem to be mainly as a source of fish products which could be accredited. Fish sporting the MSC label will only be marketed in the North. It is unlikely they will be sold in the South" (ICSF 1999). Although presently this is more or less the case a concerted effort has been given to include the South. Right from the beginning the MSC knew that it would have to bide its time in recognition of this point. Laura Cooper of the WWF's Endangered Seas Campaign explained in O'Riodan's paper that 'as far as

the South is concerned, the application of the MSC to developing countries was being put off until after the core programme was established' (ICSF 1999). This highlights that they know they have to approach the process in a different way. Consequently, it employed a consultant to devise a strategy for the South and now has the 'Outreach programme'.

According to Wessels "one of the most significant issues is whether or not to include factors relating to the social and economic circumstances of the fishers and shore based workers" (Wessels et al. 2001). This was an issue of contention at the 1998 FAO Techinical Consultation on the feasibility of developing technical guidelines for ecolabelling fisheries product. Nonetheless, after the lengthy consultation process had finished in considering what exactly should be included in the MSC's Code of Conduct, it was deemed a necessity that the definition of a sustainable fishery should include it to be conducted in a socially and economically fair responsible manner (Wessels et al. 2001). Although attention is given to these factors the MSC Code of Conduct has come under fire for not doing more. Barbara L. Neis, who works for the Department of Sociology at Memorial University, Newfoundland, Canada, argues that the MSC could do more to help women concerned with fisheries. She states that women are not even one of the stakeholders considered in the sphere and are left out (Neis 1998). Alain Le Sann also pointed out in his paper 'Whose Labels? Whose Benefit?' that the Code of Conduct primarily focuses on the environmental aspects of resource management and not the social ones. He states that the MSC does not give due attention to the welfare of workers and market conditions. As the number of boats and fishermen in Europe has been declining, the fishing effort has been increasing, therefore leading to unbearable workloads and an increase in the number of accidents (Le Sann 1998).

With regards to the environmental and ecological aspects the MSC Code of Conduct is fairly comprehensive, although this depends upon how one interprets their rules. The MSC Principles and Criteria take into account the uncertainty by using the precautionary principal. The problem with the precautionary principle exists in that there is no operational strategy for applying it, and no clarity on exactly how to define uncertainty (Wessels et al. 2001). This still remains a problem for the MSC. Greenpeace states that this is

one problem with the Principles and Criteria. It uses the precautionary principle in those fisheries with depleted stocks. It criticises this use for if stocks cannot rebuild and recover over time, and the MSC process helps to increase its strength in the market place, they may inadvertently add to further depletion of the stock[33]

Moreover, Greenpeace site that no fishery should be certified that is subject to a single species management regime. The MSC maintain that they use the ecosystem approach in their certification approach, through using a multi-species approach, and giving due consideration to the by-catch problem and discards. In this sense the MSC has made some headway and is really trying to tackle the bycatch issue constructively as shown in the cases.

Overall, it appears that the MSC rules are comprehensive but not exhaustive. They are fairly similar to the FAO's Code of Conduct, which is the flag in responsible fisheries. Therefore, we regard them to be good enough to tackle many of the issues within fisheries. Despite this claim, it has to be said that there is room for improvement in the rules. The MSC structure allows for continued assessment of the rules from all stakeholders. The real question that is brought up concerning the rules is whether a fishery should only gain certification after improvements in the fishery have actually occurred, and not on the basis of a promise of improvements? A fishery can enjoy the marketing advantages of the MSC label for five years before it has to account for its conduct – ample time to secure a dominant position in the market place. This remains a contentious issue, but the MSC believes that they are going down the right path.

[33] For a critique of Greenpeace on the MSC Principles and criteria visit www.rcep.org.uk/fisheries/p2ewid/p2-greenpeacecritique-mscprinciples.pdf, accessed February 12th 2004.

5.2 The Impact of MSC rules – tracing changes in actors' behaviour

The most important criteria of the performance of a private governance mechanism is its ability to alter actors' behaviour in accordance with the established rules. In looking specifically at the influence upon the behaviour of fishermen, we assess that overall, few changes have materialised in accordance with the MSC code of conduct for sustainable fisheries.

This is not to say that the fisheries do not meet the required standards. They rather have been operated in a way that already harmonised with the MSC code of conduct to a high degree before their application for certification. Furthermore, it becomes apparent that the fisheries are very different in nature and size. Five out of seven are fairly small, with Total Allowable Catches ranging between only 40 t (Thames Blackwater Herring) to 10,000 t (Western Australian Rock Lobster) and are fishing for more exclusive, high priced species such as cockles, shrimps, and lobster. Among the certified fisheries, only the New Zealand Hoki as a whitefish fishery with annual landings of approximately 200,000 t and Alaska Salmon are considered to be large commercial enterprises. With regard to the Marine Stewardship Council's ambitious goal of addressing overfishing globally, this is a fact that should not be forgotten.

The behavioural changes we could observe do not indicate that the fishermen had to alter the way they fish, for example, through reducing the amount that they catch or changing the season of when they fish. However, these kinds of changes might be the ones that are needed to contribute to the solution of global overfishing. Therefore, we rate the changes that were triggered through the Marine Stewardship Council overall as minor effects.

What the MSC has done is to concentrate on the issue of bycatch. This fishing issue is of controversial importance and although most of the certified fisheries in the MSC profile are considered to not have a problem with bycatch, the MSC has made sure that each fishery addresses its effects concerning this regard. Explicitly, in the case of the Loch Torridon Fishery they have implemented the work of an undergraduate student who developed an alteration to the gear used so that bycatch can be minimised. Furthermore, in

the case of the New Zealand Hoki, ways to minimise the bycatch have been extensively looked at, as this is a contentious issue to stakeholders in the area. Currently, trials are carried out on gear usage to specifically reduce bycatch to seals, birds and (something). Due to the size of the hoki fishery, this change caused by the MSC might have the biggest ecological impact.

Other than by-catch, fishermen in some fisheries have had to alter the way they record their data. As shown in section 3.1.2, reliable data is of great importance for fisheries management, and although the fisheries so far certified have adequate recording methods in conjunction with national and international standards and laws, the MSC has helped to improve the situation further. In the case of the Thames Blackwater Herring Fishery the MSC has influenced the fishery to now record exactly where they fish, how much they fish and what by-catch is caught. In the case of the Australian Rock Lobster Fishery the MSC has added an extra category for the fishermen to fill out concerning exactly what interactions/catch they have of ICON species such as sea mammals. Furthermore, a monitoring programme has been designed to record all interactions/catch with ICON species. The fishermen have agreed to these specifics demands indicating a change in their attitude. In fact, the fishermen have already started to fill out and send back voluntary questionnaires relating to their experiences with these species.

Other observable changes relate to the actors other than the fishermen themselves. In all cases the MSC process has required the formulisation of a management plan of the fisheries. Therefore bringing about some kind of standardisation. Principle 2 of the MSC (fishing operations should allow for the maintenance of the structure, productivity, function and diversity of the ecosystem) has had the biggest effect in this regard. The ecosystem approach within fisheries is not the norm and is requiring changes in thinking about how managers view and carryout the management plans. The MSC principles and criteria have meant that fisheries under their label pay more attention to this point. This is why the MSC is in the process of helping fisheries carryout Ecological Risk Assessments in order to then carryout a more comprehensive Environmental Management Plan.

In light of the ‘FAO’s Technical Consultation on the feasibility of developing technical

guidelines for ecolabelling fisheries products' from 1997, the MSC has tried hard to gather and maintain a broad base of stakeholders involvement at every stage in the certification process. Good management within fisheries requires the input of all stakeholders, in order to take into consideration all possible views. The case studies highlight the ongoing efforts to achieve this. The Thames Herring case emphasises this point with the reestablishment of the Herring Management Committee. This is a clear indication that some actors are making a concerted effort to converse with others to improve the fisheries.

The issue of building co-operation and communication between actors is shown in the Alaska Salmon example. This is through the MSC trying to improve the sharing of knowledge in hope of producing a better situation. Although communication between the regulatory bodies is adequate, some criticism has been given concerning how they may be delivering contradictory messages by not sharing resources.

Overall, the increased participation of stakeholders, created because of the MSC process, is a healthy sign. The fact that stakeholders are voicing the opinions and are being listened to is exemplified in the Lobster case where the Conservation Council of Western Australia. They have been given funding to employ an officer specifically to enhance communication between environmental groups and other actors.

The Marine Stewardship Council certification had different economical effects on a wide group of stakeholders involved. One of the goals of the MSC is to strengthen the economic foundation of the fishery by giving the fishery a market advantage over its competitors. The analyses reveals that the results for this are mixed. In some circumstances the MSC has positively contributed by 1) increasing the price of the commodity; 2) helping to establish the product in new markets and consolidating the product in older ones; and 3) reducing the vulnerability of price volatility. Despite these gains, some fisheries have so far not economically benefited from the MSC process.

Table 6: Overview of behavioural effects of MSC rules upon stakeholders.

Fishery	Behavioural effects of certification upon stakeholders
Thames B lackwater Herring Driftnet Fishery	♦ recording of by-catch ♦ formalisation of management plan ♦ improved co-operation and communication through rees-tablishment of stakeholder group ♦ governmental involvement through financial aid
Western Australian Rock Lob-ster	♦ recording of by-catch ♦ ecological risk assessment ♦ formalisation of management pan ♦ increased participation of stakeholders ♦ increased awareness (15% increase of inquiries) ♦ reduction of EU tariffs on the product
Alaska Salmon	♦ recording of by-catch ♦ stock assessment ♦ formalisation of management plan ♦ improved stakeholder communication ♦ raising of profile in the market place
New Zealand Hoki	♦ recording of by-catch ♦ change of gear to reduce by-catch ♦ formalisation of management plan ♦ raising of profile in the market place ♦ increase in revenue (commitment of Unilever to buy the product)
Burry Inlet Cockles	♦ formalisation of management plan ♦ governmental involvement through financial aid
South West Mackerel Han-dline Fishery	♦ formalisation of management plan ♦ recording of by-catch ♦ improved knowledge-brokering ♦ increase of price in the market place
Loch Torridon Nephrops Creel Fishery	♦ development of the escape panel ♦ formalisation of management plan ♦ influence upon government (extension of the five year ex-perimental zones)

5.3 Consideration of the MSC's legitimacy and accountability

As mentioned in chapter one, an exhaustive effort to assess the MSC's governance potential does not solely focus on criteria such as effects on stakeholder behaviour or appropriateness of the created rules. We already analysed that the MSC is exerting governance to a limited degree. In doing so, it is theoretically taking over functions of states and public actors – so far, however, only to a very limited degree. While public actors are seen as legitimised to allocate values authoritatively and enforce rules, the status of private actors in this respect is often unclear. Therefore, the argumentation turns now to questions of (a) the legitimacy and (b) the accountability of the Marine Stewardship Council.

The reflections in chapter 2 highlight the ongoing debate about a general lack of effectiveness in international governance systems and new forms of governance that are currently emerging. Some authors refer to this lack as the governance systems' reduced output legitimacy (Scharpf 1998a, Brühl and Rittberger 2002). We follow Scharpf in the distinction of legitimacy in *input* and *output legitimacy*. In general, output legitimacy is achieved or maintained whenever "collectively binding decisions serve the common interest of the constituency" (Scharpf 1998b, 3). The common interest of the constituency in fishing can be defined as a sustainable use of the resource. As discussed above, international governance systems have not been sufficiently effective in dealing with existing problems and have thus failed, for the most part, to achieve output legitimacy. Facing transnational environmental problems, it might be conceivable to allow output-oriented legitimacy to compensate for a lack of input-oriented legitimacy (grounded in the possibility of stakeholders to influence policies). MSC rules are supposed to serve the common interest of sustainable resource use; however, there is not much evidence that they produce an outcome in fisheries governance that differs substantially from the one that public actors already maintain. Accordingly, there is so far only very little evidence that the MSC proves to possess or even to increase output legitimacy. Nevertheless, conceiving of legitimacy derived from the quality of outputs as a substitute for the lack of input legitimacy can be problematic, given that such a form of legitimacy is not democratic in and of itself (Papadopoulos 2003, 483). Hence, it is indispensable to turn to the second

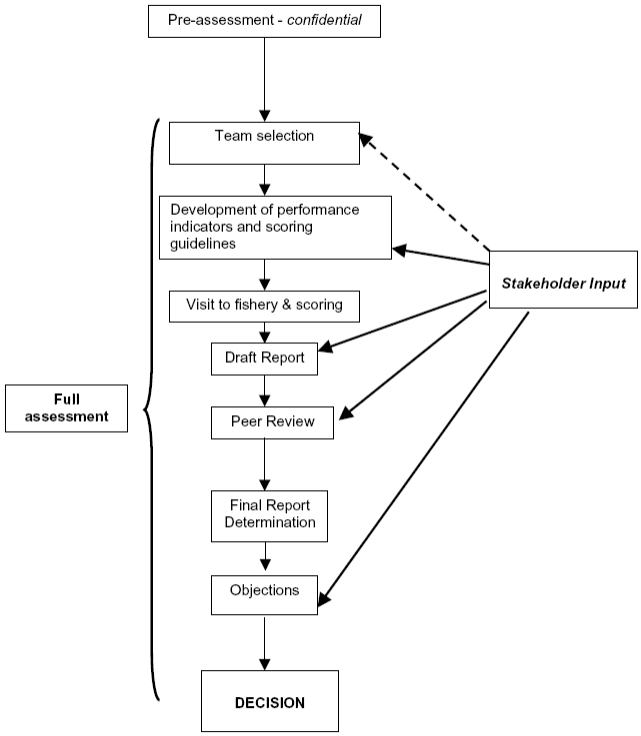
category of legitimacy concerning the input side.

"As more and more public policies are made by or in international institutions, the general public or particular stakeholders are frequently excluded from their deliberations and decisions. Thus, input legitimacy is reduced as well" (Brühl and Rittberger 2002, 22). Input legitimacy is given when collectively binding decisions derive from the constituents' active consent (Scharpf 1998a, 85). Participation and consent thus are essential elements of input legitimacy. As Brühl and Rittberger further remark,

> "The addressees' acceptance of norms and rules as binding hinges on their participation in creating and implementing them. Effective governance depends both on the invention of beneficial solutions to pressing social needs and on general access to the political process. The subjects' loyalty can be obtained only by preserving their right to participate actively in political decision-making processes" (Brühl and Rittberger 2002, 23).

Fisheries management is a very prominent example for a constellation in which the addressees of regulation, the fishermen, do often not accept regulation and try to bend rules that where created in a command-and-control approach. Being kept away from the political process, actors tend to ignore the established order whenever feasible. Does the MSC increase input legitimacy through stakeholder involvement? The MSC tries to gather and maintain a broad base of stakeholder involvement at every stage in the certification process. The formulation of the code of conduct took, as shown in section 5.1, two years and included a wide variety of actors, thus paying attention to the

Flowchart 4: Stages of stakeholder input in the assessment process.



Following a favourable decision, the fishery earns the claim of being a well-managed and sustainable fishery.

question of input legitimacy. Furthermore, the case studies deliver hints to the input legitimacy of the Marine Stewardship Council in showing that stakeholders are getting involved in the decision-making processes. Their influence on different stages of an assessment is shown in flowchart 4.

> "The MSC promotes its process as open and transparent. Certifiers are required to be proactive in identifying stakeholders and soliciting comments from such stakeholders on a fishery's conformance, or lack thereof, with the MSC standard. A certifier's final determination on certification can be challenged through an Objections Procedure that can result in the MSC Board of Trustees establishing a panel to consider the challenge." (Gilmore 2003, 2).

However, when one agrees with the demand for democratic structures in the international system, legitimacy is not solely a question of in- and output. As Keohane explains, in democratic theory, individuals are regarded as inherently equal, in fundamental rights, and political power is granted to officials by the people, who can withdraw that authority in accordance with constitutional arrangements. "The legitimacy of an official action in democracy depends in part on whether the official is accountable" (Keohane 2002, 2). An accountability relationship is one in which an individual, group or other entity makes demands on an agent to report on his or her activities, and has the ability to impose costs on the agent. (Keohane 2002, 12). Furthermore, one has to make a distinction between internal and external accountability. The case studies showed that MSC is internally accountable to its stakeholders. In the case of the New Zealand Hoki, the Royal Forest and Bird Protection Society of New Zealand (RFBPS) complained to the MSC against the certification and asked that the certificate be withdrawn. This complaint was referred to the Board of Trustees of the MSC who subsequently convened a panel to conduct an appeal process, providing an example for a situation in which stakeholders made a demand on the MSC to report and question its actions. Nevertheless, with regard to external accountability, there is no institutionalised relationship to an authoritative agent that holds the MSC accountable. The MSC, however, is depending on the funding of around thirty organisations, including trusts, companies, individuals, and agencies. One could argue that these agents hold the MSC accountable to *their* interests, which polarises the MSC's external accountability away from the main stakeholders in fisheries.

5.4 Concern-raising through the MSC

Without concern for the issue of unsustainable fishing, the MSC could not exist. It ultimately depends on the consumers' behaviour, which are expressing their preferences in purchasing decisions. The US based Seafood Choices Alliance published a study on the marketplace for sustainable seafood, stating that, overall, the surveyed consumers show relatively little interest in the sustainability of the fish species they are buying. However, 75% of respondents said they did not have enough information to base purchasing decisions on sustainability issues (Seafood Choices Alliance 2003). Consequently, a very important task for the MSC is to raise the awareness of consumers for the labelled products. This thesis does not undertake a market survey, though, the case studies indicate varying successes. For the lobster, hoki, salmon and mackerel fisheries the market seemed to have responded to the certification. As David Muirhead sums up, "the Marine Stewardship Council was very helpful and encouraged the fishery through good marketing and promotion of its products" (Muirhead 2004).

In contrast, the lack of demand for labelled herring and the unaltered demand for labelled cockles and nephrops indicates that the MSC does not manage to increase consumer concern in these cases. Karen Starr from the Loch Torridon Nephrops Fishery does not think that consumers are immediately willing to pay a higher price for products with the MSC logo. However, she hopes that the ever-growing distribution of MSC labelled products in Spain will cause a feedback loop in which concern will increase (Starr 2004). Phil Coats from the Burry Inlet Cockle Fishery also makes the experience that concern for sustainable fished cockles is low, yet he hopes for future market development as well (Coates 2004).

"Consumer access to the product is key to the effectiveness of the eco-label. The effectiveness of the eco-label also depends on consumer awareness of the label. (...) Awareness is generally a result of a successful promotion" (Roheim 2002). Therefore, an important impact determining the MSC's potential is its PR-work and awareness raising measures. In this respect, the potential of the MSC rises with the extent to which it is able to promote and communicate its work. There are various ways that the Marine Steward-

ship Council can appeal to the consumers. For the MSC it is imperative that it engages with retailers for they are the actors most involved with the consumer. In order to do so, the MSC operates a commercial section to enlist major seafood buyers to participate in the labelling programme and to build brand familiarity with the consumer. Some of the largest supermarket corporations around the world (predominantly in North America and Europe) are supporting the MSC programme, carrying MSC labelled product in their stores and doing major promotions of these seafood products. Thus, consumer access to MSC – products is growing, especially as the supermarkets attitudes are very positive, with a continued commitment to carry and promote MSC labelled products. Sainsbury's for example, a leading supermarket in the UK, became the first retailer in the world to commit to ensuring that all of the wild fish sold in its supermarkets would be sourced from sustainable fisheries by 2010 (MSC, 2003). Furthermore, they have sponsored a three-year project to investigate management of tuna fisheries around the world and whether the MSC Principles and Criteria could be applied in their cases. This highlights the supermarkets commitment to the MSC programme and its desire to raise the awareness of its consumers. The MSC also conducts an outreach programme to encourage support among members of the environment community of a market-based approach to promote sustainable fishing.

Overall, there are two main factors that restrain the MSC's performance to raise concern so far: the limited amount of certified products available, and the short period of availability of these products in the market place. A MSC memorandum prepared for its Stakeholder Council in August 2003 notes that products baring the MSC logo have been on sale for just over two years and the MSC has yet to conduct a consumer awareness programme in order to improve its profile.

6 Conclusions

This thesis tries to grasp and analyse the phenomenon 'Marine Stewardship Council' from an International Relations perspective. In this understanding, the MSC provides an innovative private governance mechanism whose role and functions in global environmental policy need to be scrutinised. The underlying global governance debate suggests that the engagement of private actors in rule making and implementation on a global level increasingly challenges and complements established governance systems that are becoming ineffective. Accordingly, this thesis aims to generate a deeper understanding for the problems and opportunities of the Marine Stewardship Council. For clarification it poses the question 'what is the potential of the MSC to exert environmental governance in the issue area of fishing?' Four criteria for governance potential are developed: (1) appropriateness of rules, (2) legitimacy of the governance mechanism, (3) behavioural changes of stakeholders triggered through the governance mechanism, and (4) the ability of raising concern. On the basis of our analysis we come to the following conclusions:

Governance has at least two aspects: (a) the making and (b) the implementation of rules. The MSC is making rules that potentially contribute to a sustainable management of the resource fish. This assessment is based upon the understanding that the MSC standard is similar to the 'Code of Conduct for Responsible Fisheries' of the United Nations Food and Agricultural Organisation. This is universally considered to be comprehensive enough to provide a guiding light for sustainable fishing. Therefore, the MSC has made appropriate rules but questions to the legitimacy of these rules are outstanding.

The analysis of the seven certified fisheries does not deliver evidence for a high output-legitimacy of the Marine Stewardship Council. As defined above, output legitimacy is achieved or maintained whenever rules serve the common interest of the constituency. The MSC adds only minimally to serving the common interest of sustainable fishing through the evidence shown in these cases. Overall, the environmental performance of these certified fisheries was already appraised as sustainable before their actually involvement with the MSC. Consequently, it is most likely that the output of the already existing governance systems would not differ substantially without the certification-

programme. In contrary to the output dimension, it appears that the MSC possesses a relatively high degree of input-legitimacy. There are great efforts to include a wide variety of stakeholders into the process of rule making and the assessment of the fisheries. The high input-legitimacy of the MSC rules and assessment decisions could thereby increase the acceptance of and compliance with its decisions. Accordingly, this input-legitimacy suggests a theoretically noticeable potential of the MSC to exert governance. In sum, the MSC is internally accountable to its stakeholders, while its external democratic accountability is restricted to donators and consumers and therefore gives rise to concern. These agents might be able to express their demands on the MSC and hold it accountable to themselves through funding and purchasing decisions; but they are neither inherently equal in their ability to do so, nor are they necessarily the people who are affected by the MSC rules.

Measuring the Marine Stewardship Council against the most important criteria, its effects on the behaviour of fishermen, counterfactual reasoning (following the question - what would the fishermen do without the MSC?) reveals that it has not caused major changes. Ergo, it is to conclude that the MSC exerts governance only to a rather limited degree. There is no evidence yet that it has the power to implement environmentally decisive rules. Moreover, the cases of Burry Inlet Cockles, Thames Blackwater Herring and Loch Torridon Nephrops show that the basis of the governance mechanism, namely the market-based instrument of eco-labelling, does not always work. The market did not respond to certification in these cases and the fisheries do not have an incentive to continue the costly annual assessment procedure apart from their future expectations of the label. In fact, without additional financial aid from the state, two fisheries are most likely going to withdraw from the programme. Thus, the MSC loses for the most part its power to demand any behavioural changes and to govern these fisheries.

In order to classify the private governance mechanism MSC in the context of the global governance debate, it is essential to reflect on its scale. In this regard, the analysis points out two factors that appear to be crucial and will ultimately limit the scale to which the MSC could possibly exert environmental governance: (a) the overall market share of eco-labelled products on the demand side, and (b) the size of the certified fisheries and their

current fishing capacity on the supply side. A recent study on the future prospects of labelled organic food and beverages in the OECD countries shows that their share of total food sales in 2002 ranges between only 0.5% and 3.7% (Yussefi and Willer 2003, 25). Some argue that consumers who are buying fish would show a higher concern for their food in general and would therefore be more likely to buy eco-labelled fish. Even if the market-share of eco-labelled fish should be significantly higher than the statistics on organic agricultural products indicate at the moment, consumer demand is limiting the MSC's power to exert governance. This directs the attention to the boundaries in which the MSC is captured. It also calls into question the position of proponents of a global environmental governance architecture in which private actors are supposed to play a major role in rule-making such as the initially quoted Executive Director of the Business Council for Sustainable Development (section 1.3).

Five out of seven fisheries turned out to be relatively small; therefore talking about private global governance through the MSC in the area of fisheries management would probably be exaggerated at this point in time. The MSC's goal to develop market-based incentives for better management of the world's fisheries and to help achieve global sustainable seafood production on the one hand side, and the certification of some small-scale, well-managed, exclusive lobster, cockles and nephrops fisheries on the other, do not seem to match up.

This thesis' definition of 'governance potential' does, however, bear in mind future developments. In respect thereof, the case studies of the fisheries unravel an interesting pattern. It appears that the Marine Stewardship Council is at a turning point in its short history. The MSC follows a strategy of trying to get many well-managed fisheries on board in order to push labelled products in the market, gain publicity and increase concern. In this respect, even the fairly small fisheries might be helpful to 'kick-start' the MSC programme. Karen Starr calls this a cycle of effort in which the MSC tries to raise its profile in order to increase concern and consumer demand and vice versa (Starr 2004). Although the certification did not pay off financially for the cockle fishery, Phil Coats is of the opinion that it is one of the ideal early projects to give the MSC initiative credibility, momentum, and publicity. He believes, that at a certain point the label could become

firmly established and no market supplier could afford to remain uncertified (Coats 2004). It is conceivable that the MSC's power to trigger changes in actors' behaviour will increase. The number of fisheries thus far certified is small, yet between March and April of this year three new fisheries have been awarded certification. There are 11 fisheries undergoing the 'full assessment process' and therefore the MSC predicts greater expansion in the near future. Several significant fisheries are comprised among this group including the Alaska Pollock. This fishery is with landings of about 1.5 million t per annum the largest fishery in the United States. Its certification would most likely have major beneficial impacts on the limiting supply side of consumer access to eco-labelled fish products and might trigger a feedback-loop in which the whole governance mechanism is strengthening. Jim Humphreys, the Director of the MSC's Americas Regional office in Seattle, recently added

> "we're seeing more and more fisheries wanting to be certified to both protect their fisheries for the long term and to provide new marketing opportunities for their products. Also, we're seeing an increasing number of products being offered in more outlets which educates the consumer about responsibly managed fisheries and allows them to choose whether to buy seafood from certified sources. It's a preference for certified fish which has and will continue to drive our growth by providing incentive for additional fisheries and companies to become involved" (MSC, 2004).

Overall, the analysis reveals that while the MSC's potential to exert environmental governance in the issue area of fishing remains limited at present, it is likely that it increases in the near future. With regards to the global governance debate, however, the case study in the environmental area provided evidence that private governance initiatives will only be able to complement public governance systems in a restricted manner.

7 Perspectives

What are the roles and functions of private actors and initiatives in global governance? There seems to be consensus that international governance systems are to a large extent ineffective in solving trans-sovereign problems. "Finding ways to close these governance gaps is one of the most prominent tasks of politicians and political scientists" (Brühl and Rittberger 2002). In this respect, partnerships of different actors in different constellations have recently raised great expectations. In analysing a private environmental governance initiative, we did not find the remedy that closes global governance gaps. However, what we found is an optimistic perspective. There is evidence of the involvement of private actors in rule making and implementation in the environmental area and there is a lot of indication that it will grow. Due to the dynamic character of the MSC and the upcoming certification of several large-scale fisheries, this initiative deserves to be kept under further surveillance.

"Coercion and bargaining will be the chief means of influence, not persuasion and emulation. Hence the state will remain a central actor. Power will not be diffused" (Keohane 2002). Even though the power of private governance mechanism to implement rules is tied to market or moral authority, and might therefore remain limited, private rule making could provide a catalyst for public agents to react. In this respect, it will be interesting to follow the development of the Marine Stewardship Council and investigate whether it triggers a cascade of norms that affects the co-operative behaviour of states and international organisations. We concentrated on the MSC's impacts on the stakeholder level. Therefore, what needs to be further investigated are the effects of the MSC on a national political system level and on the global political system level. Through further analysis of these points one might find more vital evidence that the tide is turning for the MSC. A future research agenda should focus on other co-operative forms of governance. In this respect, states might react to incorporate private governance initiatives such as in many of the Johannesburg Type-II partnerships.

8 Bibliography

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9 Appendix

9.1 The MSC Principles and Criteria for Sustainable Fishing

At the centre of the MSC is a set of *Principles and Criteria for Sustainable Fishing* which are used as a standard in a third party, independent and voluntary certification programme. These were developed by means of an extensive, international consultative process through which the views of stakeholders in fisheries were gathered.

These Principles reflect a recognition that a sustainable fishery should be based upon:

- The maintenance and re-establishment of healthy populations of targeted species;
- The maintenance of the integrity of ecosystems;
- The development and maintenance of effective fisheries management systems, taking into account all relevant biological, technological, economic, social, environmental and commercial aspects; and
- Compliance with relevant local and national local laws and standards and international understandings and agreements

The Principles and Criteria are further designed to recognise and emphasise that management efforts are most likely to be successful in accomplishing the goals of conservation and sustainable use of marine resources when there is full co-operation among the full range of fisheries stakeholders, including those who are dependent on fishing for their food and livelihood.

On a voluntary basis, fisheries that conform to these Principles and Criteria will be eligible for certification by independent MSC-accredited certifiers. Fish processors, traders and retailers will be encouraged to make public commitments to purchase fish products only from certified sources. This will allow consumers to select fish products with the confidence that they come from sustainable, well-managed sources. It will also benefit the fishers and the fishing industry who depend on the abundance of fish stocks, by providing market incentives to work towards sustainable practices. Fish processors, traders and retailers who buy from certified sustainable sources will in turn benefit from the assurance of continuity of future supply and hence sustainability of their own businesses.

The MSC promotes equal access to its certification programme irrespective of the scale of the fishing operation. The implications of the size, scale, type, location and intensity of the fishery, the uniqueness of the resources and the effects on other ecosystems will be

considered in every certification.

The MSC further recognises the need to observe and respect the long-term interests of people dependent on fishing for food and livelihood to the extent that it is consistent with ecological sustainability, and also the importance of fisheries management and operations being conducted in a manner consistent with established local, national, and international rules and standards as well as in compliance with the MSC Principles and Criteria.

Preamble

The following Principles & Criteria are intended to guide the efforts of the Marine Stewardship Council towards the development of sustainable fisheries on a global basis. They were developed assuming that a sustainable fishery is defined, for the purposes of MSC certification, as one that is conducted in such a way that:

- it can be continued indefinitely at a reasonable level;
- it maintains and seeks to maximise, ecological health and abundance,
- it maintains the diversity, structure and function of the ecosystem on which it depends as well as the quality of its habitat, minimising the adverse effects that it causes;
- it is managed and operated in a responsible manner, in conformity with local, national and international laws and regulations;
- it maintains present and future economic and social options and benefits;
- it is conducted in a socially and economically fair and responsible manner.

The Principles represent the overarching philosophical basis for this initiative in stewardship of marine resources: the use of market forces to promote behaviour which helps achieve the goal of sustainable fisheries. They form the basis for detailed Criteria which will be used to evaluate each fishery seeking certification under the MSC programme. Although the primary focus is the ecological integrity of world fisheries, the principles also embrace the human and social elements of fisheries. Their successful implementation depends upon a system which is open, fair, based upon the best information available and which incorporates all relevant legal obligations. The certification programme in which these principles will be applied is intended to give any fishery the opportunity to demonstrate its commitment to sustainable fishing and ultimately benefit from this commitment in the market place.

Scope

The scope of the MSC Principles and Criteria relates to marine fisheries activities up to but not beyond the point at which the fish are landed. However, MSC-accredited certifiers may be informed of serious concerns associated with post-landing practices. [34]

The MSC Principles and Criteria apply at this stage only to wildcapture fisheries (including, but not limited to shellfish, crustaceans and cephalopods). Aquaculture and the harvest of other species are not currently included.

Issues involving allocation of quotas and access to marine resources are considered to be beyond the scope of these Principles and Criteria.

Principle 1

A fishery must be conducted in a manner that does not lead to over-fishing or depletion of the exploited populations and, for those populations that are depleted, the fishery must be conducted in a manner that demonstrably leads to their recovery [35]:

Intent:

The intent of this principle is to ensure that the productive capacities of resources are maintained at high levels and are not sacrificed in favour of short term interests. Thus, exploited populations would be maintained at high levels of abundance designed to retain their productivity, provide margins of safety for error and uncertainty, and restore and retain their capacities for yields over the long term.

Criteria:

1. The fishery shall be conducted at catch levels that continually maintain the high productivity of the target population(s) and associated ecological community relative to its potential productivity.
2. Where the exploited populations are depleted, the fishery will be executed such that recovery and rebuilding is allowed to occur to a specified level consistent

[34] Other complementary certification programmes (e.g., ISO 14000) provide opportunities for documenting and evaluating impacts of post landing activities related to fisheries products certified to MSC standards. Constructive solutions to address these concerns through appropriate measures should be sought through dialogue with certification organisations and other relevant bodies.

[35] The sequence in which the Principles and Criteria appear does not represent a ranking of their significance, but is rather intended to provide a logical guide to certifiers when assessing a fishery. The criteria by which the MSC Principles will be implemented will be reviewed and revised as appropriate in light of relevant new information, technologies and additional consultations.

with the precautionary approach and the ability of the populations to produce long-term potential yields within a specified time frame.

3. Fishing is conducted in a manner that does not alter the age or genetic structure or sex composition to a degree that impairs reproductive capacity.

Principle 2:

Fishing operations should allow for the maintenance of the structure, productivity, function and diversity of the ecosystem (including habitat and associated dependent and ecologically related species) on which the fishery depends.

Intent:

The intent of this principle is to encourage the management of fisheries from an ecosystem perspective under a system designed to assess and restrain the impacts of the fishery on the ecosystem.

Criteria:

1. The fishery is conducted in a way that maintains natural functional relationships among species and should not lead to trophic cascades or ecosystem state changes.
2. The fishery is conducted in a manner that does not threaten biological diversity at the genetic, species or population levels and avoids or minimises mortality of, or injuries to endangered, threatened or protected species.
3. Where exploited populations are depleted, the fishery will be executed such that recovery and rebuilding is allowed to occur to a specified level within specified time frames, consistent with the precautionary approach and considering the ability of the population to produce long-term potential yields.

Principle 3:

The fishery is subject to an effective management system that respects local, national and international laws and standards and incorporates institutional and operational frameworks that require use of the resource to be responsible and sustainable.

Intent:

The intent of this principle is to ensure that there is an institutional and operational framework for implementing Principles 1 and 2, appropriate to the size and scale of the

fishery.

A. Management System Criteria:

1. The fishery shall not be conducted under a controversial unilateral exemption to an international agreement.

   The management system shall:

2. demonstrate clear long-term objectives consistent with MSC Principles and Criteria and contain a consultative process that is transparent and involves all interested and affected parties so as to consider all relevant information, including local knowledge. The impact of fishery management decisions on all those who depend on the fishery for their livelihoods, including, but not confined to subsistence, artisanal, and fishing-dependent communities shall be addressed as part of this process;
3. be appropriate to the cultural context, scale and intensity of the fishery – reflecting specific objectives, incorporating operational criteria, containing procedures for implementation and a process for monitoring and evaluating performance and acting on findings;
4. observe the legal and customary rights and long term interests of people dependent on fishing for food and livelihood, in a manner consistent with ecological sustainability;
5. incorporates an appropriate mechanism for the resolution of disputes arising within the system[36];
6. provide economic and social incentives that contribute to sustainable fishing and shall not operate with subsidies that contribute to unsustainable fishing;
7. act in a timely and adaptive fashion on the basis of the best available information using a precautionary approach particularly when dealing with scientific uncertainty;

[36] Outstanding disputes of substantial magnitude involving a significant number of interests will normally disqualify a fishery from certification.

8. incorporate a research plan – appropriate to the scale and intensity of the fishery – that addresses the information needs of management and provides for the dissemination of research results to all interested parties in a timely fashion;
9. require that assessments of the biological status of the resource and impacts of the fishery have been and are periodically conducted;
10. specify measures and strategies that demonstrably control the degree of exploitation of the resource, including, but not limited to:
    a) setting catch levels that will maintain the target population and ecological community's high productivity relative to its potential productivity, and account for the non-target species (or size, age, sex) captured and landed in association with, or as a consequence of, fishing for target species;
    b) identifying appropriate fishing methods that minimise adverse impacts on habitat, especially in critical or sensitive zones such as spawning and nursery areas;
    c) providing for the recovery and rebuilding of depleted fish populations to specified levels within specified time frames;
    d) mechanisms in place to limit or close fisheries when designated catch limits are reached;
    e) establishing no-take zones where appropriate;
11. contains appropriate procedures for effective compliance, monitoring, control, surveillance and enforcement which ensure that established limits to exploitation are not exceeded and specifies corrective actions to be taken in the event that they are.

B. Operational Criteria

Fishing operation shall:

12. make use of fishing gear and practices designed to avoid the capture of non-target species (and non-target size, age, and/or sex of the target species); minimise mortality of this catch where it cannot be avoided, and reduce discards of what cannot be released alive;
13. implement appropriate fishing methods designed to minimise adverse impacts on habitat, especially in critical or sensitive zones such as spawning and nursery areas;

14. not use destructive fishing practices such as fishing with poisons or explosives;
15. minimise operational waste such as lost fishing gear, oil spills, on-board spoilage of catch, etc.;
16. be conducted in compliance with the fishery management system and all legal and administrative requirements; and
17. assist and co-operate with management authorities in the collection of catch, discard, and other information of importance to effective management of the resources and the fishery.

9.2 Contact list of the interviewees

Name	Fishery	Contact	Interview Procedure
Ronan Roche	Thames Blackwater Herring	The Essex Estuaries Initiative, Colchester Borough Council, PO Box 885, Colchester Essex, CO1 1ZE Tel: +44 (0)1206 282480	Recorded telephone interview
Phil Coats	Burry Inlet Cockles	South Wales Sea Fisheries Committee (SWSFA) Phil Coates / Mark Stafford, Queen's Buildings Cambrian Place Swansea SA1 1TW Tel: + (0) 1792 654 466 E-mail: swsfc@aol.com	Questionnaire
David Muirhead	South West Handline Mackerel Fishery	South West Handline Fishermen's Association. David Muirhead Triss Rose Cottage, The Lizard, Helston Cornwall Telephone: 01326 555813 Fax: 01326 563 828	Recorded telephone interview
Karen Starr	Loch Torridon Nephrops Creel Fishery	Shieldaig Export Company Limited Telephone: +44 (0)152 075 5366 Mobile: +44 (0)773 306 3079	Recorded telephone interview + questionnaire

9.3 Contact list of independent certifiers

Moody Marine Ltd Salisbury House Stephenson's Way The Wyvern Business Park Derby DE21 6LY UK Tel: +44 (1704) 834 644 Fax: +44 (1332) 675 152 Contact: Dr. Andrew Hough Email: ahough@moodymarine.com Website: www.moodymarine.com	Organizacion Internacional Agropecuaria[OIA] Av.Santa Fe 830 Acassuso (B1641ABN) Buenos Aires Argentina Tel: +[54-11] 4798 9084 Fax: +[54-11] 4793 4340 Contact: Pedro A. Landa Email: oia@oia.com.ar Website: www.oia.com.ar	Scientific Certification Services 2000 Powell Street Suite 1350 Emeryville, CA 94608 U.S.A. Tel: +1 510 452 8000 Fax: +1 510 452 8001 Contact: Dr Chet Chaffee Email: chaffe3@attglobal.net Website: www.scs1.com	SGS Product & Process Certification PO Box 200 Malledijk 18 3200 AE Spijkenisse The Netherlands Tel: +31 181 693292 Fax: +31 181 693572 Contact: Aldin Hilbrands Email: aldin_hilbrands@sgs.com Website: www.sgs.com	Tavel Certification Inc. 2000 Barrington Street Suite 502, Cogswell Tower Halifax Nova Scotia P3J 3K1 Canada Tel: +1 902 422 4511 Fax: +1 902 422 9780 Contact: Steve Devitt Email: sdevitt@tavel.ca Website: www.tavelcertify.com	TQCSI - MSC Quality House, 117A Tapleys Hill Road, Hendon, 5014, South Australia, Australia Tel: + 61 8 8347 0603 Fax: + 61 8 8445 9423 Contact: Craig Bates, MSC Manager or Jade Minhard, MSC Coordinator Email: craig-bates@jlbates.com.au website: www.tqcsi.com