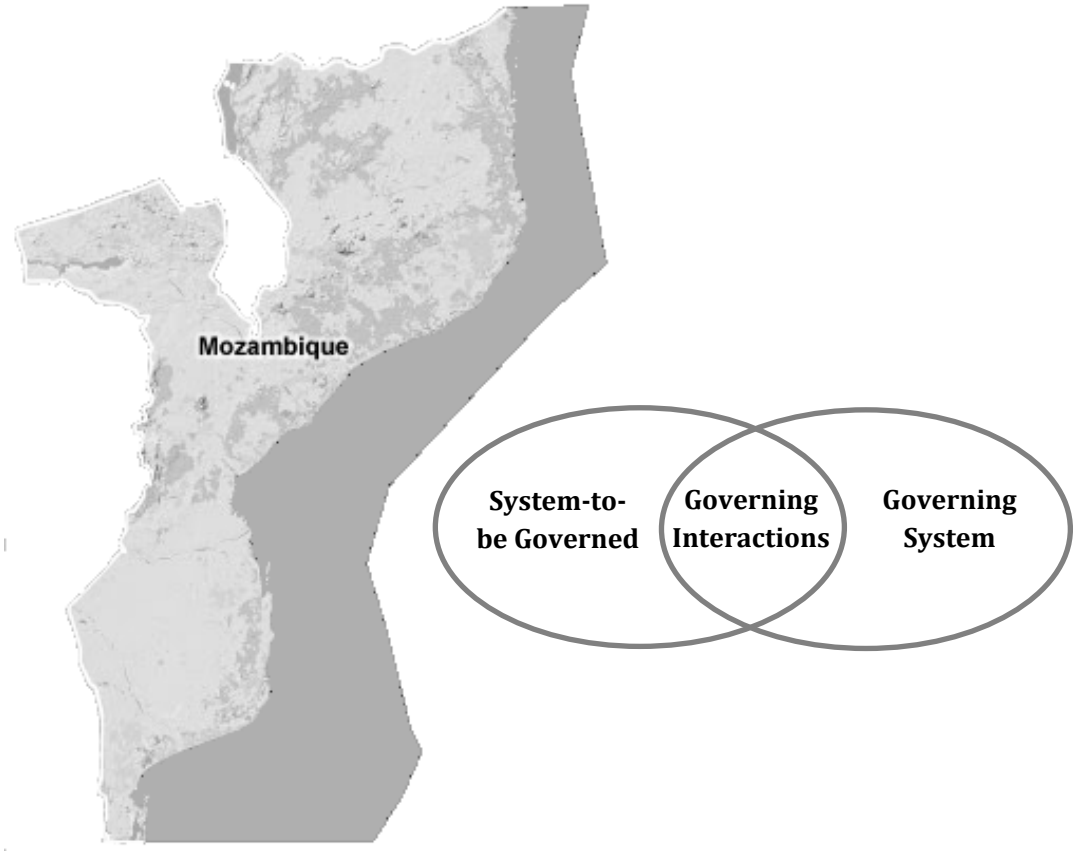
UNIVERSITY OF TROMSØ UIT

NORWEGIAN COLLEGE OF FISHERIES SCIENCE

The European Union's Fisheries Partnership Agreements

- A governability assessment of the case of the Republic of Mozambique



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Abstract

This is an explorative study of the European Union's (EUs) Fisheries Partnership Agreements (FPAs) with African, Caribbean and Pacific countries (ACP). The agreements are criticized for not being able to implement in practice what they promise on paper. The overall objective of FPAs is threefold: securing access for the EU fleet, supplying the Union's internal market and promoting sustainable development of the fisheries sector in the partner country. There is an internal conflict between these objectives and the latter remains the most challenging to implement. By conducting a governability assessment of the FPA between the EU and the Republic of Mozambique this study explores the governance process of such agreements, while seeking to identify what components are limiting the governing system's ability to achieve the given objective. The assessment reveals that participation, availability of data, institutional organization and efficiency, political power and commitment are key elements. Governance interactions that can increase the ability to achieve the given objective are also suggested.

Keywords: Fisheries Partnership Agreement, the European Union, Mozambique, governability, fisheries development.

Acknowledgements

Writing this thesis has allowed me to take a journey, both academically and personally. The choice of topic is a result of my exploratory nature, wanting to find out why the European Union's Fisheries Partnership Agreements constantly are part of discussion and subject to criticism. Later, the relative newly developed governability assessment was introduced to me by Professor Svein Jentoft at the Norwegian College of Fisheries Sciences. The theoretical framework was relatively well developed, but examples of its empirical application were limited. My quest became clear: I wanted to commence an exploration of the FPAs guided by the conceptual roadmap developed in the governability theory.

The road has been bumpy, but very interesting. I have discovered and learned new things along the way, as well as encountered many inspiring people. Many contributed to making my web of informants spinning, and I am highly appreciative towards all my informants both in Norway, Mozambique and Brussels for sharing their time and knowledge with me!
I also wish to thank my two supervisors, Svein Jentoft and Jahn Petter Johnsen. You both encouraged me to commence my exploration, and at times when I thought I was lost you guided me in the right direction. And at last we managed to find a finish line – thank you again!

To my family and friends, who cheered for me, inspired me and waited for me.
I wish to thank my parents for encouraging me in all that I do. While my dad is the critical voice (even inside my head) asking "why" and how", making me dig even deeper into my research to find answers. My mum always convinces me I can do anything I want – even what appears impossible. I also add a thank you to my brothers, Kjell Alfred and Proffen, for reminding me when to take a break. And, Guillaume: You deserve the greatest acknowledgement! Thank you for your enormous patience. I would not have done this without your support!

And with the words of the French author Stendhal: I dedicate this [thesis] *to the happy few*!

Lovise Kvalsund Otterlei
Herøy, August 2011

"When governing systems fail to achieve desired outcomes, the governors are often blamed. But the governors are often expected to handle governance challenges beyond their capacities, and the unfulfilled objectives are rather a result of a mismatch between the needs of the system-to-be-governed and the capacities of the governing system."

- Jan Kooiman

"Commitment matters, in practical terms, because it binds together organizations and legal systems. It makes them work."

- Amartaya Sen

Table of Contents

List of tables

List of figures

List of images*

*Unless otherwise specified, images are produced by the author.

Abbreviations

ACP	African, Caribbean and Pacific
ADNAP	National Directorate of Fisheries Administration
CFP	Common Fisheries Policy
COREPER	Permanent Representatives Committee
DCI	Department of International Cooperation
DG	General Directorate
DNEP	National Directorate of Fisheries Economics and Policies
DWF	Distant Water Fleet
EC	European Commission
EDF	European Development Fund
EEZ	Exclusive Economic Zone
EP	Fisheries School
EPA	Economic Partnership Agreements
EEAS	European External Action Services
EU	European Union
FAD	Fish Aggregating Device
FAO	United Nations Organization for Food and Agriculture
FFP	Fisheries Development Fund
FPA	Fisheries Partnership Agreement
GI	Governing Interactions
GS	Governing System
GT	Gross Tonnage
IDPPE	National Institute for the Development of Small Scale Fisheries
IIP	National Institute of Fisheries Research
INIP	National Institute of Fish Inspection
IOC	Indian Ocean Commission
IOTC	Indian Ocean Tuna Commission
IUU	Illegal, Unregulated and Unreported
LL	Long Liner
MCS	Monitoring Control and Surveillance
MDG	Millennium Development Goal

MoF	Ministry of Fisheries, Mozambique
NGO	Non-Governmental Organization
NIP	National Indicative Program
Nm	Nautical Mile: 1852 meters
OECD	Organisation for Economic Co-operation and Development
PAPA	Action Plan for Food Production
PARPA	Action Plan for the Reduction of Absolute Poverty
PCD	Policy Coherence for Development
PS	Purse seiner
RFMO	Regional Fishery Management Organization
SADC	South African Development Community
SFA	Sustainable Fisheries Agreements
SG	System-to-be-Governed
SWIOFC	South Western Indian Ocean Fisheries Commission
TED	Turtle Exclusive Device
UN	United Nations
UNCED	United Nations Conference on the Environment and Development
UNCLOS	United Nations Conference on the Law of the Sea
VMS	Vessel Monitoring System
WB	World Bank

1. Introduction

The research topic of this thesis is the Fisheries Partnership Agreements (FPAs) between the European Union (EU) and developing coastal states in Africa, the Caribbean and the Pacific (ACP). First the context of the topic will be presented and thereafter the conceptual approach applied to study it will be introduced. Because of limitations on time and resources the conceptual framework will be applied on the specific case of Mozambique, and the reasons for selecting this case will also be explained in the following. The research questions that the thesis will aim to answer are also presented, together with an elaboration on the objectives behind conducting the research project. At the end of the introduction the structure of the thesis will be presented.

1.1 Context

The world's fisheries resources are increasingly being fully and over-exploited, due to a growing demand for fish in the markets around the world. In addition the processes of globalisation have connected resources, producers and markets around the world together in new ways, and the fish chain –from ocean to table – today extends over large geographical distances. The fisheries sector in the EU is a prime example of this, as it comprises a large historically developed fleet, resources in a poor state, a large number of people in need of employment and consumers demanding more and more fish. But the Union is not capable of satisfying its own needs and is, in addition to imports, dependent on establishing access agreements with other coastal states in order to maintain their distant water fleets employed and supply their internal market. The EU today has 15 access agreements with ACP countries, and three with countries in the north (EC, 2011c).

The United Nations Convention on Law of the Seas (UNCLOS) has, since its introduction and worldwide implementations in the 1970s, constituted the legal framework for such agreements. The Convention entitles coastal states to establish exclusive economic zones (EEZs) of 200 nautical miles (nm), giving them both rights and duties in relation to exploitation and management of the resources in their zone. It also determines that coastal states that lack the capacity to harvest the entire allowable catch in their own zone, shall allow other states access to the surplus of this catch through agreements or other arrangements. Agreements with developing states are, however, to be temporary and terminated when the coastal state have capacity to exploit the resources themselves (UNCLOS, 1982).

The fisheries agreement between the EU and ACP countries are considered to be an essential component of the north-south relationship, where developing countries typically grant access to developed countries because they lack capacity to do it themselves (Mwikya, 2006). The first generation of such agreements was characterised by "fish, pay and go – operations" and was heavily criticised through the 1990s, alongside an increased international awareness on global interconnectedness, responsibilities and the principle of sustainability. EU reformed their external policies entering the new millennium. A partnership approach to relations with ACP countries was introduced through the Cotonou Agreement signed in 2000, while the objectives of sustainability, policy coherence and poverty alleviation became overarching (EC, 2006). As a part of this process EU's Common Fisheries Policy (CFP) was reformed in 2002, with a focus on conservation and sustainable fisheries resources. A new integrated framework for fisheries agreements with third countries was also developed, and coherent with the new partnership approach the agreements were re-labelled "Fisheries Partnership Agreements" with the aim of equally benefitting both parties (EC, 2009). The overarching objective of the agreements is three folded and include: securing access for the EU fleet, supplying EU's internal market and promoting sustainable development of the fisheries sector in third countries (COM, 2002). These objectives reflect different interests and stakeholders, some more powerful and influential in the governance process than others. The extent to which objectives are realised will depend on the interplay between stakeholders and governors in this process. Critics argue that it is easy to display objectives on paper, but much more challenging to commit to and achieve them. There are constant discussions on how EU can increase its governance performance and to a higher degree deliver what it promises on paper. In an attempt to address these and other weaknesses a new reform of the CFP is planned in 2012. There is a risk that a new set of paper objectives, with questionable practical realisation, will be developed. In relation to this, an assessment of what factors affect the outcome of governance processes is useful.

1.2 Research approach

Governing this type of partnership agreement involves numerous actors and components and a wide range of possible instruments, and the number and characteristics affects the governing system's ability to reach set objectives. When governance outcomes are not as desired, the governors are often blamed. But in order to understand why a system fails to address certain objectives, it is wiser to study the whole fisheries system and analyse how fit the governing system actually is to handle the challenges involved. This approach also makes it possible to

assess how different components in the governance process may reduce or potentially increase this ability.

Interactive governance, a concept first introduced by Kooiman in 2003 and further elaborated by members of the Fisheries Governance Network (www.marecentre.nl/fishgovfood/), may be used as a basis to commence this study. The governance object is through this framework divided into a System-to-be-Governed (SG), a Governing System (GS) and a set of Governing Interactions (GI). Interactive governance theory argues that these systems are inherently diverse, complex and dynamic, and take place on various scales. The level of these characteristics may challenge the GS's governing abilities, or in other words affect the systems governability. 'Governability' is defined as "the overall capacity for governance at any societal entity or system" (Kooiman, 2008:173), and can be used as a measure for how governable a particular fishery or coastal system is. By developing a governability assessment framework, governance performance can be judged from the potential of the GS given the limitations of the governability related to the SG, GS and GI (Kooiman et al., 2005).

It is however further emphasized that weaknesses and failures in the systems need to be addressed through interventions at the three orders of governance. These orders are where the governing activities take place: first order concerns addressing daily problems; second order about building governing institutions and facilitating the instruments and mechanisms for governing first order; while third order involves ethics, values, norms and guiding principles forming the basis for the two former orders. By first posing questions related to the characteristics of the three systems and further at all governance orders, a framework for analysis comes into place and new ways of addressing challenging issues may be found (Onyango and Jentoft, 2010).

1.3 The case of Mozambique

Mozambique, a underdeveloped and poor country - rich in marine resources, is one of EU's contracting fisheries partners. Previous agreements between the two have involved fishing rights to shallow – and deep water shrimp, but the current agreement includes access to highly migratory species only (KusiLimitada, 2008). The agreement is hence a so-called tuna agreement, as opposed to a mixed agreement involving rights to a wider range of fish stock in their partners' EEZs (EC, 2011c). As there is no domestic capacity to exploit offshore tuna resources, Mozambique is dependent on foreign fleets to generate value from these resources. At present the offshore fisheries is composed of EU vessels fishing under the FPA, as well as

Chinese, Korean and Japanese fleets. There are neither landing nor production facilities in the country, and no value creation in addition to the financial compensation paid for access is therefore acquired by Mozambique (Informant 12; Eide, 2004).

The three folded objective of the FPA framework, mentioned in section 1.1, is the basis also for the agreement between Mozambique and EU. While securing access for the fleet and supplying the internal market, the EU also aims to promote fisheries sector development in the third country. Since Mozambique is a poor country with great potential for the fisheries sector to contribute both to value generation and food security, it is a well suited case for an assessment of contributions and limitations related to achieving set objectives of the FPA framework.

The current FPA between Mozambique and EU expires at the end of December 2011, making it especially relevant to assess the agreement and its potential at the present time. In addition, a well-established dialogue and cooperation between Norwegian and Mozambican fisheries institutions made it more efficient to facilitate a network of informants and collect data within the limited timeframe of a master thesis project.

1.4 Research questions

In order to define the boundaries of the thesis, research questions are developed. The formulation of these questions will decide the scope of the research, and the aim will be to answer the questions – neither more nor less.

Three research questions form the foundation of this research project:

a) How well do the capacities of the GS match the needs of the SG?

b) What components of the SG, GS and GI are limiting the ability to realize set governance objectives, in this case achieving one of the overarching objectives of the FPA framework: promoting sustainable development of the third countries fisheries sector?

c) How may interactions of first and second order governance enhance this ability?

The first question aims to identify if the governing system inherits the necessary capacities to govern the FPA. The second question seeks to assess which components of the governance

object (including all three sub-systems) challenge and potentially reduce the realization of objectives in practice. The overall objective of the FPA framework is as mentioned threefold, but the focus of this thesis will be on the most challenging one, i.e. promoting sustainable development of the third countries fisheries sector. The reason for this is that if this objective remains unrealized while the two other objectives, ensuring access for the EU fleet and supplying the internal EU market, are fulfilled the agreement will not deliver what it promises and in reality only be of a commercial nature. The last research question aims to identify interactions that can enhance the governing system's ability to realize this objective. Since the objectives and principles of meta-order governance are set, the aim will be to suggest forms of interactions at first and second order that can enhance the ability to realize the given objective.

1.5 Research objectives

The main objective of this project is to conduct an exploratory and critical study of the governance process of EU's Fisheries Partnership Agreements and assess to what extent they manage to realise their set objectives – focusing on the objective of supporting development of the fisheries sector in third countries. It is easier to put down objectives on paper, than committing to and realizing them in practice. If the actions of the EU are to be legitimate and the agreements are to benefit their poor contracting parties the way they envision, it is of vital importance that commitment is connected to action and not merely a signature. Governance is an ongoing process, and continuous studies and evaluations of various aspects of the process are therefore important to assess how things are developing.

The overarching objective of the thesis is to take a journey, both academically and personally. As the governability assessment framework is an approach still in its developing phase, this thesis will be another experiment of its applicability. It may be seen as a guide showing where the pieces of the puzzle may be found, and through the process of using it the picture will first be put together before an assessment of how compatible the pieces actually are will be conducted. The exploratory form of the project makes it difficult to assess what level and quality of data can be anticipated, as well as what challenges may emerge while conducting the research. This is one of the risks when conducting exploratory research, but the choice of doing so is legitimised by the need to identify what challenges exist and where the lack of data is a limiting factor. The results can thus give other researchers a basis for more detailed studies of the components identified through this thesis.

At a personal level the objective is to attain as much knowledge and experience as possible. The interdisciplinary nature of the subject of the thesis presents a unique opportunity to learn more about several dimensions of fisheries governance, including scientific, institutional, socio-economic and political components. The objective is hence to achieve a multi-dimensional comprehension of the challenges that exist in the process of fisheries governance and enhance my abilities to assess and discuss how such challenges may be addressed.

The study will also be part of PovFish, an international academic project including partners from 15 countries in Europe, Africa, Asia and America, with the aim of providing new insight to the connections between fisheries and the issues of poverty and food security (PovFish, 2011).

1.6 Structure of the thesis

Chapter 2 will give a presentation of the conceptual and theoretical backbone of the thesis and the governability assessment framework will be explained in detail. An insight into the methodological approach employed during the project will thereafter be given in chapter 3. Chapter 4 contains a presentation of the history, framework and status of FPAs in general, as well as of the case of Mozambique. The assessment of system properties and attributes related to the FPA between EU and Mozambique will be presented in chapter 5, before being discussed in the following chapter. The discussion will be based on the research questions, and focused on how the ability to reach desired objective hinges upon how well GS is matched with SG. Assessing levels of governability will help identify what challenges the GS needs to address and its ability to do so. Using the assessment as a basis makes it possible to suggest how interventions of first and second order governance potentially could improve the level of governability and hence the ability to achieve the desired outcome. A concluding chapter will contain a short summary of the findings of the thesis in relation to the research questions, reflections around the research process and at last suggest areas requiring future research.

2. Theoretical perspective and Conceptual framework

Developments of the last century have made the fisheries sector increasingly complex and the task of fisheries management correspondingly more challenging. A wide range of approaches to managing fisheries has been employed, with varying success. It is often difficult to get a full overview of the actors, components and processes comprising the fisheries sector and the level of insight will thus often determine the level of successful management. Conceptualising the fisheries system in a clear and well-organised manner may help achieve this. According to Blaikie (2010) concepts are the means applied to connect theory with the empirical world. Through identifying relevant conceptual variables and defining an operational procedure to measure them, a framework for organising empirical findings and match them with theoretical perspectives comes into place.

An interactive governance approach is applied to conceptualise the research object and frame the empirical data of this thesis. The configuration of this approach and its theoretical context will be elaborated in the following chapter.

2.1 Fisheries governance in the context of globalization

The entire world society, and the fisheries sector with it, was restructured during the twentieth century: first the industrial revolution boosted production levels and new-inventions replaced manual procedures; later the transition to capitalism changed trade relations and as a consequence also the structure of societies and how people organized their livelihoods. The world got more interconnected through this multifaceted process of globalization, defined as:

"(…) the expanding scale, growing magnitude, speeding up and deepening impact of interregional flows and patterns of social interaction. It refers to shift or transformation in the scale of human social organization that links regions and continents"
(Taylor et al., 2007:2).

As a consequence of this process the challenges of fisheries managers have become greater, including concerns related to overexploitation, allocation, employment and food supply. Variables and relationships multiplied, and both problems and opportunities were generated. The relationship between developed and developing countries is a prime example of this, seen as globalization has the potential to both catalyze and obstruct development – to feed and rob the poor.

Managing fisheries has become a much more comprehensive task, involving high levels of responsibilities and the need to adopt a broader focus has prevailed. In general terms the technical management approach has gradually been replaced by the broader notion of *governance*. (The term fisheries governance will from now on be consistently applied instead of fisheries management throughout the thesis). There is no consensus on its definition, and it is thought to mean different things to different people. According to Chuenpagdee and Jentoft (2009) the word itself has its origin in the Greek verb *kubernân* – to pilot or steer, and it was for a long time exclusively associated with government. But especially after the World Bank introduced the norm of 'good governance' to international development in the beginning of the 1990s, it became more common to use governance to characterise a broader more value based form of governing. In other words a process where not only the state, but also the market and the civil society have prominent positions (Kooiman et al., 2005). According to Gray (2005) this probably came as a result of skepticism towards the existing governing system and its deficiencies, and the need for a broader and more holistic knowledge base for decision making. He further claims that even though governance can have many meanings, there are two main interpretations of the concept: The first is as a structure for decision making, i.e. hierarchical, market run or participative forms; while the second interpretation involves principles with focus on certain elements and Gray uses the definition taken from the reform text of the EU's Common Fisheries Policy (CFP) in 2002 to highlight this view:

"Governance means rules, processes, and behavior that affect the way in which powers are exercised, particularly as regards openness, participation, accountability, effectiveness and coherence" (Gray, 2005:2).

Globalization has made the fisheries more open and vulnerable, the connections between local and global level greater and the effects of governance more influential. Power has become a forceful instrument, and should be exercised with caution. In order to understand the interconnections and develop strategies to deal with the many challenges of a globalised fisheries sector, a global approach to fisheries governance is needed. Interactions, linkages and relationships that extend beyond local and national levels must be emphasized and overarching values and objectives of governance should be discussed in a participatory manner.

2.2 Interactive governance

As a result of the lengthened value chains through globalization, governance has become more and more diverse, complex, dynamic and scale-dependent over time. Since fisheries governors often have overlooked these characteristics, the governing system as a consequence has not reflected real insight and understanding of the governance object. It is however difficult to take consideration of all aspects of a system, and it is necessary to conceptualise the governance object in such a manner that the most important elements can be assessed. One approach developed for this purpose is the multidimensional interactive governance model. Interactive governance as a concept was first introduced to fisheries by the Dutch social scientist Jan Kooiman in 2003, who further elaborated its conceptual basis together with members of the academic network FISHGOVFOOD in the book "Fish for life" (Kooiman et al., 2005). Interactive governance is defined by Kooiman et al. (2005:17) as:

"The whole of interactions taken to solve societal problems and to create societal opportunities; including the formulation and application of principles guiding those interactions and care for institutions that enable and control them."

The framework suggests an alternative approach for studying and understanding the process of fisheries governance, involving both an analytical and normative dimension. In other words "what is, and what should be". The conceptual basis involves the use of a three system model to study a governance object, its properties and attributes, and assess how capacities and needs affect governance outcomes. The governance object is divided into a System-to-be-governed (SG) which is partly natural and partly social, a Governing system (GS) and a system of Governing Interactions (GI) which connects the two first ones. This is shown graphically in the figure below.

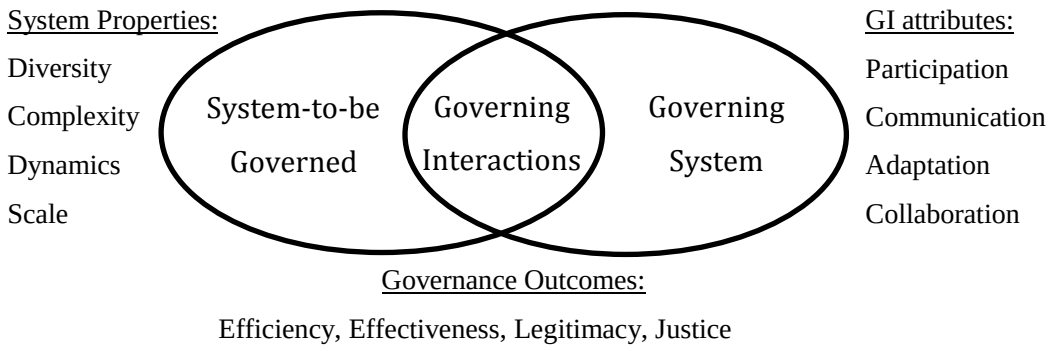

Figure 1: Interactive Governance System Model (adapted from Chuenpagdee and Jentoft (2009:113)).

A systematic study of the properties and attributes of the governance process hence creates a framework for analysis. The figure presented is also of a normative format, as the two main systems are isomorphic in size. This illustrates that the more compatible the characteristics of the GS are with the characteristics of the SG, the more responsive will the GS be and the level of coherence between the governance outcome and the set objective will increase. This process of matching, according to Jentoft (2006a), consists of planning and institutional design. Where the two systems intersect, characteristics meet and system of GIs take place with their own set of attributes affecting the final outcome. Interactions facilitate governance mechanisms, and they are shaped by forces such as power and consent (Kooiman et al., 2005, Song and Chuenpagdee, 2010). According to Chuenpagdee and Jentoft (2009) the outcome can be assessed according to indicators on efficiency, effectiveness, legitimacy and justice.

The multi-dimensional approach of interactive governance, illustrated in figure 2, further emphasizes the need to study three other components of governing activities:

Elements

The intentions behind governance are shaped by elements. These include: *images* of the governance object and its challenges developed to illustrate scenarios and accompanying sollutions; *instruments* chosen to address these challenges as a response to how they analyse their images; and *actions* taken to put the instruments to use.

Orders of governance

Further, it is important to understand that interactions are not of a simple and straight forward design, but rather consists of multiple layers or orders. The outer layer of interactions, *first order governance*, is most visible and represents daily interactions of a practical matter. Then there is *second order governance*, including the institutional framework enabling interactions of first order. While the most inner layer involves *meta – or third order governance*, representing the ethical and social principles underpinning governance interactions.

Modes of governance

Last, but not least, it is important to remember that all interactions take place within structures. This does in other words mean modes or styles that are used to govern interactions. In some systems the government is solely responsible for governing, and a *hierarchical governance* mode is hence applied. Other systems govern their interactions themselves and are therefore examples of *self-governance*. When the government and the people share the responsibilities of governing it is called *co-governance*. However, most of the time different

modes are used to govern different interactions and the systems are therefore commonly hybrid of all governance modes (Kooiman et al., 2005).

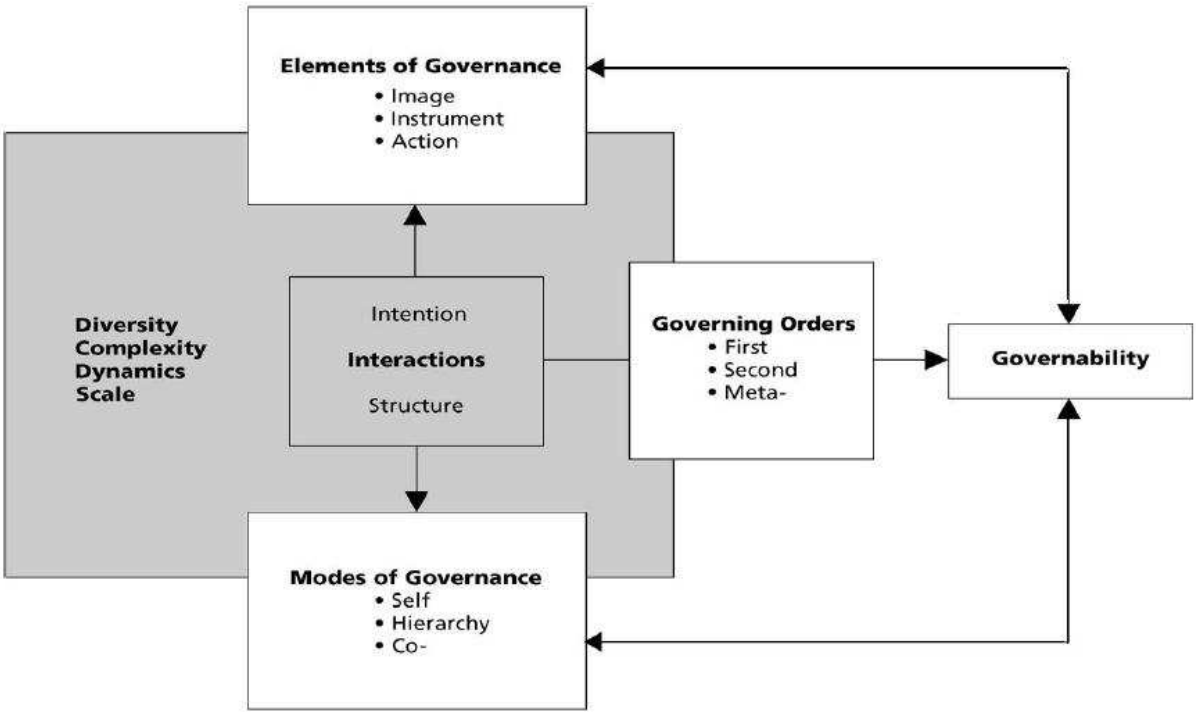

Figure 2: Illustration of the multiple levels of interactive governance (Source: Kooiman et al., 2005:325).

2.3 Governability

The concept of measuring degrees of governance received attention, especially after the WB introduced "good governance" as a measure for successful governing of states, with the opposite being failed states. According to the WB there are especially three aspects affecting state governance: the type of political regime; the process of which authority is exercised with a view to development and the capacity of governments to formulate and effectively implement policies. Other agents, such as the UN, have developed a set of criteria to judge governance performance by and the concept has gained a prominent position within the development discourse (Allen and Thomas, 2000). In the extension of the governance approach to fisheries *governability* similarly was presented as a measure of the overall governance capacity and quality of a societal entity or system. While applying the interactive governance framework as a basis, governability can be assessed in relation to levels of the four system properties – diversity, complexity, dynamics and scale. The process involves identifying the needs and strengths of governance by assessing the match between system needs and governance capacities. High system property levels will generally challenge the

capacities of the governing system. Further, an examination of the different orders of governance interactions can provide useful insight on how to increase governability by making use of governance potential and identify factors reducing this potential (Kooiman et al., 2005).

Interactive governance theory suggests three ways of increasing governability: One is to empower the GS through giving the governors increased access to additional authority, jurisdictional, financial and intellectual instruments; the other way is to promote action from the inside of SG by reducing disturbing elements and make control easier; while the third option is to organize GI in such a manner that interactions between the two systems are more interactive, constructive and less costly. One way of doing this is to create arenas for communication, where knowledge can be shared and contribute to creating common understanding of procedures and actions that are needed (Jentoft, 2007). Governability is however not a static value, but constantly changing as a response to internal and external factors. Interactive governance therefore highlights the importance of developing an operational framework for conducting empirical studies, and matrices with questions related to properties and orders of the different systems have been developed for this purpose.

Governability is a concept under development and the importance of experimenting with its applicability, while searching for new solutions for system problems is important. Kooiman et al. (2005) emphasise that there is no clear cut procedure on how to assess governability, but the approach rather offers a perspective on how to study ways of improving governance. The steps to be taken are not always visible, but appear through an explorative research process aiming for real insight to a present-time situation (Kooiman et al., 2005). A framework to initiate this process is however developed and presented in the next section.

2.4 A framework for assessing governability

The system based interactive governance model is used as a basis for assessing the governability of a governance object. The structure and application of the framework is still under development and should be approached in an explorative manner. Some reference and starting points are however suggested in the following.

2.4.1 Governability assessment

SG and GS have inherent properties determining the needs and capacities of governance, while the attributes of GI affect its form and performance. By identifying and determining levels for these characteristics, the level of governability of a fisheries or coastal system can

be found. This because high property levels normally translate into low levels of governability and vice versa, while high levels of attributes indicate high governability. Levels range from low to high, and are determined on a comparative analytical basis.
This section will contain a presentation of the main system properties and how they appear within the SG and GS, as well as which attributes of the GIs are of relevance when assessing the governability of a system.

Diversity

- characterizes how different entities help form the system, in other words how different they are and to what extent they function as a source of innovation on one side and disturbance on the other. It is generally presumed that the higher diversity of components, the harder it is to develop a high level of governability. Globally, fisheries are highly diverse and the need for a broad interactive approach will generally appear and challenge the capacities of the GS to facilitate this. The relevant attribute for GIs will be related to *participation* in this process.

Table 1: Diversity in relation to systems and interactions

System	**Diversity**
SG Natural: Social:	 Size of resource base or number of species involved in a SG. Most often at a higher level in the tropical oceans than in the more temperate arctic waters. The diversity of stakeholders with an interest in the SG will be determined by socio-economic factors. There may be several fleet segments part of a fishery, with motives ranging from maximising revenue to securing food for the family. Since the marine resources generally belong to the coastal state as a whole, and can contribute to food security, employment, state revenue and foreign exchange earnings, even people not directly part of the fisheries may have an interest in the fisheries. Future generations also have a great interest in the fisheries, and can be accounted for.
GS	The number of actors and actions constituting the GS. These may be both formal and informal, and of small or large size.
Attribute	**Participation**
GI	Diversity will determine the number of pieces needed to get a complete picture of the systems. The higher level of participation, the more interests are accounted for. Generally this will increase the level of governability, but one should be aware that it may be challenging to organise a large number of actors and it is a risk that governability may be reduced.

Complexity

- is an indicator on how relations between parts of the system, the system as a whole and between the system and its environment are composed. The construction of the chain of

interaction and the spatial and temporal distances involved determine the level of complexity of a system. The chain of interaction is very seldom linear and stable, and it is important to make room for different patterns of development in order to improve governability. The level of *communication* attributed to GIs will determine the outcome of this.

Table 2: Complexity in relation to systems and interactions

System	**Complexity**
SG Natural: Social:	How species relate to their ecosystem, as a habitat and feeding place. Some species only feed and spawn under specific conditions, while others have a more generalist behaviour and feed opportunistically. The greater their levels of needs are, the higher is the complexity of the natural system. How complex stakeholder interactions are depend on how conflicting their interests are, and how they manage to interact with each other. If interests are many and conflicting, the complexity is ranged high.
GS	How actors and actions relate to each other determines the complexity of the system. Great variation and inconsistency between them will reduce governability, whilst consistent relations will increase the level of governability.
Attribute	**Communication**
GI	Complexity will make communication and acquiring information more challenging. To what extent interactions relate to each other and information is shared will affect the level of governability. If interactions are coherent and information is shared efficiently, governability will be high.

Dynamics

- refers to the tension in the system that creates the flow of energy, materials and information, and can create potential for both change and disturbance. The processes of globalisation bring with them a high level of dynamics, which reinforces the levels of dynamics and complexity. The GIs ability of *adaptation* will determine how well the GS is able to adapt to the level of dynamics.

Table 3: Dynamics related to systems and interactions

System	**Dynamics**
SG Natural:	The biological and physical changes occurring in the natural system over time, and what drives them. A SG influenced by a wide range of drivers, will have a high level of dynamics while a less exposed system will have a low level. How robust and resilient a system is will further determine how it reacts to the various drivers, and following how vulnerable the system is.

Social:	The dynamics of stakeholder is linked to changes in their composition, values and attitudes over time, and the drivers of these processes. If their composition continuously changes, governability will be reduced.
GS	Changes in the institutions, mechanisms and measures in the GS, and the drivers behind them. A high level of dynamics will give a low level of governability, and vice versa.
Attribute	**Adaptation**
GI	The system's ability to learn and adapt will depend on how dynamic and quick responding the GIs are.

Scale

- is another system property, focusing on the geographical and spatial limitations of the systems. The limits will often depend on the observer, and it is important that these are clear. If several GSs operate within the same limits, a governability problem easily can arise. According to Jentoft (2007), defining scale of the different systems makes it easier to assess how compatible governance is to the governance challenge. The extent to which interactions involve *collaboration* will affect this level.

Table 4: Scale related to systems and interactions

System	Scale
SG	
Natural:	Spatial and temporal range of a natural system and its productivity. A large and highly productive ecosystem will involve a lower degree of governability than smaller and less productive one.
Social:	Where stakeholders are found: local, national, regional or international. The more wide spread stakeholders are found, the lower will the level of governability probably be.
GS	The size, range and function of the GS will determine its scale. A small, well arranged system with few functions will most likely give higher levels of governability than if the scale level is high.
Attribute	**Collaboration**
GI	If governance involves high levels of scale, it is of high relevance how interactions are channelled within and across these scales. The level of appreciation and collaboration through the GIs will affect the overall governability.

By conducting this assessment in a well-organised manner, the results can be used to give governors and evaluators a clearer overview of the governance process and what kinds of interactions are needed to make governance more effective.

2.4.2 Exploring the orders of governance

In addition to studying the system characteristics of the governance object, it is also useful to explore the dimensions of interactions in a more thorough manner. As there are no simple solutions to governance challenges, appropriate interactions including all three orders of governance are needed. By studying these orders and how they relate to the governance object, a deeper understanding of the governing interactions will be developed, as well as give insight into elements and modes surrounding them. The objective is to assess how well-adjusted interactions are to produce desired governance outcomes, and suggest alternative ways of achieving this through interactions at one or several of the governance orders.

First order, including problem-solving and opportunity creation, can be assessed according to their effectiveness. Successful solutions are equivalent with interactions of high governability, while inadequate solutions indicate lower levels. Second order, i.e. building governing institutions and facilitate interactions of first-order, need to be assessed in relation to their legitimacy. If those being governed find the institutions legitimate, the interactions will lead to a higher level of governability. On the other hand, when rules and organisations are poorly matched with the problems they are meant to address, governability will be low. Institutions should therefore be evaluated on a regular basis and reformed when necessary. Meta order involves interactions that govern governance and should be assessed according to their level of responsibility. If interactions reflect the overarching principles and objectives, governability is higher than when these principles not are accounted for (Kooiman et al., 2005) .

The conceptual framework presented above is evidently useful for studying complex research objects, such as the FPAs. It is however important to be aware that the use of such a comprehensive conceptual approach requires careful consideration of which methods should be applied to carry out the study. The methodology applied will be presented in the next chapter.

3. Methodology

Studying the European Union's Fisheries Partnership Agreements through an interactive governance framework while applying a governability assessment as basis for discussion, is a highly explorative exercise. Both the research topic and the conceptual framework applied to study it are complex structures under development, and the research design, as a consequence, needs to have a dynamic form while it is important that the methods applied are standardized. According to Kvale and Brinkman (2010:99) the original Greek meaning of the word *methodology* translates into "the road to the destination", and the aim of this chapter will be to draw up a detailed road map of the journey undertaken through this thesis. In other words describing the point of departure, justifying choices of direction and design and evaluating the data acquired in order to carry out the research project and arrive at a concluding point.

3.1 Research purpose

There are multiple purposes behind conducting this research project. First of all, it is an opportunity to provide empirical data and assessments of the research topic. The EU's Fisheries Partnership Agreements are continuously subject of critical discussions, especially in connection with the upcoming reform of EU's CFP in 2012, and research is therefore essential to ensure that decisions are based on factual knowledge and not speculations. The objective is that this study can contribute to giving evaluators and decision makers a more systematic and detailed overview of challenges and potential surrounding the governance process of the FPAs. The agreement between the EU and Mozambique expires in 2011, making a detailed assessment of the current state of affairs especially relevant as part of the process of renewing the agreement. There exists very little research literature about this specific agreement, and one of the purposes of the project will therefore be to increase the level of available information.

Another purpose of the research project is to make empirical use of the conceptual framework and contribute to its development. By applying it to study the FPAs, its wide usage will be demonstrated. Limitations on available data and time to conduct the project may reduce the ability to fill in the framework in detail. Nonetheless, it will be useful to apply it in an explorative manner in order to identify which components constitute the main challenge as well as which research areas are lacking data.

The thesis will be part of the PovFish project, and the purpose of conducting this research will therefore also be to provide new insight to the connections between fisheries and the issues of poverty and food security. It is highly relevant to study the governance of the FPAs in this regard,

as there are strong connections between the FPA fisheries and poverty and food security, and the potential for increasing the connections are high.

3.2 Research questions, strategy and data selection

According to Blaikie (2010:57): "a research project is built on the foundation of its research questions". The nature of these questions determines the strategy needed to answer them and hence the scope of the research. The questions of this project, presented in chapter 1.4, are of the type "what" and "how". What-questions require a descriptive answer, while how-questions are related to change related to practical outcomes and interventions. An inductive research strategy is chosen to answer the two types of questions in the thesis, providing a logic for conducting the research. The inductive research strategy involves collecting data by operationalising concepts, searching for patterns in the data and developing limited theoretical generalisations (Blaikie, 2010). The research questions and the strategy chosen to answer them determine what type of data needs to be collected. In order to keep this research project within limits of the time and resources available, a case study research is employed as a strategy and method for selecting data. According to Yin (2009:4) "[the use of case studies] allows the researcher to retain the holistic and meaningful characteristics of real life events", and is therefore well-suited to answer 'how'-questions.

There is a range of methods available for data collection, and they may be both qualitative and quantitative. The nature of the research questions of this thesis indicates that qualitative data, in other words not numbers, are needed to answer them and a combination of methods is applied to acquire these.

According to Blaikie (2010) data can generally be divided into three categories:

- *Primary data* refers to data required by the researcher(s) responsible for designing a project, and is 'new' data acquired to answer specific research questions. It is in other words the result of direct contact between a researcher and a source, and is generated by the application of particular methods. There exists accurate knowledge on how and why data is collected.
- *Secondary data* is raw data collected by others, either for some general information purpose or for a specific research project. A secondary user can review and make use of such data, but needs to be aware of the original purpose of collecting the data.
- *Tertiary data* have been analysed either by the researcher(s) who generated them or by a user of secondary data. Raw research material is often not available, and a review of such data will probably be concentrated around results of an analysis.

Blaikie further suggests a range of qualitative methods for collecting these data, including: participant observation, observation, focused interviews, in-depth interviews, oral/life histories, focus groups/group interviews and content analysis of documents. In this thesis in-depth interviews with relevant informants will be used to collect primary data, while a content analysis of existing documents will provide secondary and tertiary data used in a complementary manner. The research design, including what activities were undertaken through the course of the research project, will be described and justified in the next chapter.

3.3 Research design

In order to validate the results found from conducting a research projects, the research methods applied need to be accounted for and justified. The procedures followed through the course of producing this master thesis is therefore documented and assessed in the following.

3.3.1 Literature review

The first phase of the project involved reviewing second and tertiary literature to get an overview of the research topic and the challenges involved, and develop more specific and insightful research questions. According to Blaikie (2010) a literature review is the bridge between the project and the current state of knowledge on the topic, and the results from it may be used in different parts of the thesis in order to provide background information or to supplement primary data findings.

The starting point for the project involved reading a book about how to begin and how to finish a master thesis (Everett and Furseth, 2004). Thereafter methodological literature, including Yin (2009), Blaikie (2010) and Kvale and Brinkmann (2010), was more thoroughly reviewed in order to design the structure of the research project and assess which methods were best suited to collect the required data. In order to comprehend in detail how to apply the conceptual framework, the book *Fish for life. Interactive Governance for Fisheries* edited by Kooiman et. al (2005) was the most important source. In addition articles by Chuenpagdee and Jentoft (2009), Onyango and Jentoft (2010), Song and Chuenpagdee (2010), Scholtens (2009) and Jentoft and Chuenpagdee (2009) provided useful examples of the framework's empirical usage.

The next step in the process involved reviewing literature about the FPAs. The web pages of the EC (2011c) provided the first set of factual information about the FPAs, before two evaluations conducted by the EC itself in 1999 and 2010 provided detailed data. A

comparative study and technical report facilitated by Walmsley et al. (2007a), a workshop report by EBCD (2010) and a report by SSNC (2009) were the most important sources of secondary data. While several reports from CFFA (2005a;b; 2006; 2009 and 2010) WWF (2005a; b and 2010) were the most important sources of tertiary data related to FPAs in general. Books and brochures about the EU system (Bomberg and Stubb, 2003, Borchardt, 2010) were also assessed in order to get a deeper understanding of the governing system.

In order to read up on the case of Mozambique, reports prepared by Eide (2004), Degnbol et al. (2002) together with Norwegian support documents (MoF, 2009) provided general information about the fisheries sector in Mozambique. There is however not much literature available on the specific case of the FPA between the EU and Mozambique. Only two studies were found, one being a report facilitated by the consultants Kusi Limitada (2008) concerning the economic and social impacts of the FPA and the other an analysis conducted by Munyunki (2006) of the fisheries agreements and implication on the Mozambican fisheries industry. IOTC (Indian Ocean Tuna Commission) reports were reviewed in order to attain secondary data about the natural system, as were biological studies facilitated by Potier (2004), Govinden (2010), Fraile (2010) and the web pages of Fish Base. While a project report prepared by Oceanic Developpement (2005) was the most important source of information about the European tuna sector.

3.3.2 Operationalising the conceptual framework

Having a complex conceptual framework with theoretical success is one thing, making it operational in practice is a different matter. By posing questions related to the system variables, i.e. properties, attributes and orders, two matrices are developed in order to keep track of what information is needed and secure systematic documentation of empirical data. Through developing and answering these questions, needs and capacities of the governance system are found and assessed. Concepts are in other words applied as instruments to measure the levels of given variables, thus providing a systematic basis for assessing the governance process and make decisions on how to increase the overall ability to realise set objectives.

The first matrix, shown in table 5, contains questions concerning levels of system properties related to the three systems. These levels are connected to governability and will have opposite levels.

Table 5: System property assessment matrix

System Properties	Natural System (SG),	Socio-economic System (SG)	Governing System (GS)	Governing Interactions (GI)
Diversity	What is the level of biodiversity: Species involved in the FPA fisheries, the health of these and the ecosystem they belong to?	Who are involved/have interest in the FPA fisheries: Operators and stakeholders?	Which formal and informal institutions and authorities constitute the GS, and what capacities do they represent?	**Representation** What are the existing forms of interactions and who are represented within them?
Complexity	How are species, habitats and ecosystems inter-linked?	How do stakeholders interact: conflicting, collaborating, communicating, integrating, specializing, complying, or?	How do the goals/visions of the governing actors relate: Differ, compete or co-operate?	**Communication** How well do representatives communicate through interactions, and how does this affect the governance performance?
Dynamics	What are the biological and physical changes that take place over time: Long term, short-term, seasonal; main internal and external drivers?	Are there changes in the stakeholder composition, values and attitudes over time: main drivers and consequences?	Have there been any changes in the governing institutions, mechanisms and measures: Main drivers and consequences?	**Adaptation** How adaptive are the forms of interactions, in relation to dealing with unexpected events and uncertainty?
Scale	What is the size and geographical range of the ecosystem where the FPA fisheries take place; natural boundaries, system uniqueness and functions?	What is the size and geographical range of the social system: Social and economic boundaries; regional connections and globalization?	What is the size and geographical range of the institutions: Local, national, regional: political boundaries, history, uniqueness and functions?	**Collaboration** How well do actors at the different scales (international, national, regional and local) collaborate through interactions?

The second matrix, table 6, is composed by questions related to the three orders of governance interactions. Identifying these interactions provides an opportunity to assess how they

influence the governability of the systems and the ability to realise desired governance outcomes, as well as suggesting what kind of interactions are needed to improve this ability.

Table 6: Matrix related to orders of governance

Variables for assessment	SG	GS	GI
First order: Decision making	What are the social and ecological impacts of the governance decisions related to FPAs?	What governing modes are used to make these decisions?	How do individuals, groups and governing institutions interact as they negotiate decisions?
Second order: Institutions	How are practices, interests and power institutionalized? How are costs and benefits distributed between stakeholders? Equally shared between both parties?	How does the institutional set-up enable and restrict governance interactions? How is power exercised, responsibilities and mandates distributed and with what outcomes?	What are the institutional characteristics of governing interactions? What rules exist pertaining to representation, participation and communication?
Third (meta) order: Values	What values, principles and norms underpin the actions, institutional formation, decision-making and power relations?	How do values, norms and principles of governing institutions relate to problem definition, agenda setting and conflict resolution?	How are values, principles and norms shared among stakeholders in their interactions? Level of coherence between various policy areas?

3.3.3 Collecting primary data

Primary data was collected by conducting semi-structured in-depth interviews with relevant informants. Informants included representatives from different institutions involved in governing the agreements, as well as private fisheries consultants. The interviews took place during one month in Mozambique and one week in Brussels. In addition some data was acquired through emails and phone calls with informants not available for direct interviewing.

Inspired by Yin (2009), a project protocol was developed in order to ensure an overview of the research project. Instruments, procedures and objectives were drawn up, including an interview guide formulating both verbal (level 1) and mental (level 2) questions that needed to be answered. Because of the exploratory nature of the study, open-ended questions were put together aiming to give interviews a dynamic form.

Kvale and Brinkmann (2010) suggest that interviewers can take the role of a miner or a traveler, where the first refers to digging out data through an investigating style of

interviewing while the latter involves taking a more explorative and informal approach. The last approach was applied in this project.

Most interviews were arranged well in advance, but the time informants had available varied. General questions about the informant's position and tasks were asked to start off the interview, before open-ended questions about the topic gave new insight and lead to more specific follow-up questions. Almost all interviews were recorded, making it possible to maintain a flow of questions without stopping up to take detailed notes. The recordings were later transcribed, in other words written down on paper, making it easier to analyse and apply the data obtained.

3.4 Review of data sources

Research results are reviewed according to the reliability and validity of the sources and methods applied to obtain them. Reliability is linked to trustworthiness, and falsifying is a method to ensure it. Validity, on the other hand, is a measure for how well fit the choice of sources and methods are to obtain objectives of the given research project.

3.4.1 Primary data

According to Kvale and Brinkmann (2010) the quality of primary data obtained through interviews is determined from the strength and applicability of the knowledge produced. They further emphasise that even with extensive preparations, interviewing skills are only really acquired through practice. The quality of the primary data is thus partly linked to the level of interviewing experience, which naturally grew throughout the research process. Most informants were personally involved in governing the agreement and therefore had firsthand knowledge about the process and the challenges involved, and validity of informants is consequently high. Seen as a relative high number of informants were interviewed the process involved a certain degree of falsifying information. Even though it is impossible to know how much information informants shared and how accurate it was given, reliability of data retrieved is likely to be relatively high. It is however important to be aware of the fact that the informants attain positions, which can affect the level and nature of information they acquire, and the way they perceive it.

3.4.2 Secondary data

Reports from IOTC, together with communications, reports and evaluations published by the European Commission, constitute the sources of secondary data. IOTC is responsible for

managing the resources part of the FPA and data gathered from these reports hence is of high validity. The lack of reporting to IOTC does however make their level of reliability more questionable. Communications and factual reports from the EC necessarily involve both high levels of validity and reliability, since they constitute the foundation of the framework of the agreements. Evaluations produced by the EC also indicate valid and reliable data, but the possibility that these data can be inadequate or manipulated needs to be taken into account. There exist two evaluations of the agreement between the EU and Mozambique, which naturally include data of high validity. The authorities in Mozambique were however not involved in any of these, and the reliability of data is therefore reduced.

3.4.3 Tertiary data

Tertiary data sources included articles, reports and evaluations prepared by independent researchers, governmental organisations and non-governmental organisations (NGOs). Many of the sources provided general information about the topic, and even though several sources were concentrated on the agreements in West Africa they still provided valid data for the research project. Reliability of such sources is difficult to determine, and the data is applied with caution.

3.5 Research limitations

Lack of specific and detailed data made it challenging to get an overview of the research object, and reduced the ability to make thorough preparations before conducting interviews. The first interviews conducted hence included a wider range of general questions, than the subsequent ones. All interviews included communication in English and most informants held a high level, but the fact that both parties used a secondary language reduced the ability for accurate formulations and increased the possibility for misunderstandings. Some informants had much time available and shared information openly while others had limited time and were more reluctant to share information and this affected the dynamics of the interview and the level of data acquired. The informants with little time for interviews did not answer request by e-mail either and some questions remained unanswered. Last but not least, financial resources and time available for conducting the project put limitations on the duration and scope of research process.

3.6 Possibility for generalisation and relevance of the research project

The quality of the research project is one of the main factors determining the possibility for generalisation, as well as its relevance. Data has been collected through interviews with key informants, and the findings should thus be of high relevance. The lack of detailed data has however reduced the accuracy of the results presented, and this needs to be considered when references are being made.

The fact that the general framework is the same for all FPAs and most agreements similarly to the Mozambican FPA are tuna agreements between the EU and developing countries, makes it relevant to assume that many of the challenges identified in this case study may also exist in relation to governing other agreements of the same type. It is however necessary to be aware of the fact that the contextual differences of the FPAs may vary, and generalisation must be done with caution. The most important function of such a case study is probably therefore to identify where the most challenging components are found and where case specific research should be focused. In addition the research findings may also contribute to increasing the level of empirical data available about the FPAs, and possibly be applied to compare data from other similar studies. In this way the findings can contribute to studies with a wider range of data available and thus a greater possibility for generalisation.

4. Fisheries Partnership Agreements

The members of the EU have a long tradition of fishing in distant coastal waters, a type of fishery which since 1979 has been regulated through bilateral fisheries agreements negotiated by the EC (European Commission) on behalf of the European Union (Walmsley et al., 2007a). A presentation of the historical development, framework and status of these fisheries agreements, as well as specifically for the case of Mozambique, is given in the following.

4.1 Historical development

European fleets, mainly from Spain, France, the Netherlands and Portugal, historically developed large distant water fleets (DWFs). Especially during colonial times the presence of these fleets grew strongly in southern waters, and particularly the west –and east coast of Africa became important fishing grounds for the Europeans. However, during the second half of the 1900s territorial claims increased and the ground rules of the oceans were dramatically changed. From open access and resources belonging to all, a new legal framework came into place through the configuration and implementation of the United Nations' Conventions on the Law of the Sea (UNCLOS). Two conventions in 1956 and 1960 preceded the third and most influential one lasting from 1973 to 1982. The most important provisions of the UNCLOS III include the introduction of 200 nm EEZs, coastal state management responsibility and obligations on allowing other states access to surplus stocks through agreements or other arrangements (Walmsley et al., 2007a). These provisions were gradually implemented and the convention signed worldwide in the years that followed, but it was not ratified until the 60th state had signed the convention in 1994 (WWF, 2005a). According to Mwikya (2006) 99 percent of the world's fisheries came under national jurisdiction as a result of this. The convention was presented as a 'package deal", to be accepted as a whole without the possibility to take reservation on any aspect.

The EU created a 200 nm EEZ in 1976, but did not sign the UNCLOS before 1988. The Union 's first fisheries agreement was signed with the United States in 1977 (IFREMER, 1999), while the first southern agreement was signed with Senegal in 1979. The number of agreements increased the following decade especially after the two large DWF nations Spain and Portugal became members in 1986. The EU sought to sign agreements with countries in the areas where they already were fishing, and agreements with coastal states in western Africa, like Senegal, Angola, Guinea-Bissau and Mauritania, became very important - in

addition to a network of agreements that developed in the Indian Ocean (Walmsley et al., 2007a).

In the late 1980s, after the UN in 1987 introduced the term *Sustainable development* in their report *Our common future*, discussions concerning environmental and societal issues were boosted. In 1992 the first United Nations Conference on Environment and Development (UNCED Earth Summit) was held in Rio de Janeiro, representing a turning point in relation to the topics of environment and development. Agenda 21, a comprehensive plan for global, national and local actions needed to attain sustainability, was adopted by world leaders and a new awareness on global interconnectedness and environmental vulnerability spread internationally (UN, 1997). As part of this the United Nations Organization for Food and Agriculture (FAO) presented a Code of Conduct for Responsible Fisheries in 1995, giving a framework of principles and possible actions needed to attain sustainability in the fisheries. One of its main features was the principle of the precautionary approach, which urged policy makers and practitioners to anticipate harmful effects of an action before it occurs and by doing so account for risk involved related to any action. The same year the UN set up the Agreement on straddling fish stock and highly migratory fish stocks, with the aim of ensuring long-term and sustainable exploitation of migrating fish. The agreement contained provisions on setting up Regional Fishery Management Organisations (RFMOs) that were to be responsible for managing highly migratory species in given geographical areas (FAO, 2011).

Through this international shift of focus, the fisheries agreements increasingly were subject to criticism both in relation to environmental and social aspects. Accusations were made on EU exporting overcapacity, increasing the risk of over-exploiting marine resources and reducing development of coastal states' own fisheries sectors. The agreements were not guided by a comprehensive policy, but negotiated on an ad-hoc, case-by-case basis within the general framework of the CFP. In relation to the process of reforming EU's Common Fisheries Policy (CFP) in 2002, focusing on conservation and sustainable fisheries resource, this concern therefore was taken in. An integrated framework for fisheries agreements with third countries was developed, emphasising partnership and sustainable fisheries development (Walmsley et al., 2007b). According to the interactive governance theory a new governance image was thus created, and a new set of interactions were needed to meet new demands and expectations.

4.2 Framework

All actions undertaken by the EU have to be within the competence granted through two main treaties. The Consolidated treaty on the European Union (EU, 2008a) contains provisions on common values, principles and institutional arrangements of the Union. Article 21 states the following objective for the Union's relationship with third countries:

"The Union shall seek to develop relations and build partnerships with third countries, and international, regional or global organizations which share the principles referred to in the first sub-paragraph. It shall promote multilateral solutions to common problems, in particular in the framework of the United Nations."

The Consolidated treaty on the functioning of the European Union (EU, 2008b) includes more detailed provisions related the Union's operations, the most important in this context being the establishment of a Common Fisheries Policy. The first time the treaty was signed, in 1970, fisheries were part of the Common Agricultural Policy and CFP was not separated and formally created until 1983. The CFP is based on four pillars, including conservation, structural, markets and international policies, with the most important provisions including the definition of EU as one fishing nation, the creation of common 'Community waters' and the principle of relative stability basing allocation of resources on historical percentages.

Other relevant provisions of the treaty on the functioning of the European Union include: a commercial policy seeking to achieve harmonious development and gradual liberalization of world trade; a social policy promoting employment, improved living and working conditions; an environmental policy aiming to preserve, protect and improve the quality of the environment and promote international measures to do so; and a development cooperation policy supporting sustainable economic and social development of the developing countries, integration of developing countries into the world economy and the campaign against poverty. The two treaties are regularly amended by other treaties. The last amendment done, referred to as the Lisbon Treaty, came into force in December 2009 and focused on more participative and efficient decision making (EU, 2010).

The Cotonou agreement, signed in 2000 and amended in 2010, is the more specific framework for relations between the EU and developing ACP countries. The agreement is a partnership for cooperation in relation to political, economic, trade and development matters, and is centred around the common objective of reducing poverty, consistent with the goal of

achieving sustainable development and the gradual integration of the ACP countries into the world economy. Articles 23 and 53 of the agreement contain specific principles for the fisheries sector, including commitment to supporting sustainable economic sector development and negotiating sustainable and mutually satisfactory fisheries agreements consistent with development strategies in the area (EC, 2006).

Shaped by the provisions of both the Cotonou agreements and the reformed CFP, an integrated framework for fisheries partnership agreements with third countries was, as already mentioned, presented in 2002. A cooperative partnership approach to agreements, focusing on sustainable exploitation, mutual benefits and development of the third country's own fisheries sector was suggested. This framework is not legally valid, but the EC's fisheries partnership relations are guided by a set of procedural mechanisms proposed in Council Conclusions from 2004 (Witbooi, 2008). The agreements are to regard the UNCLOS as its most important internationally valid legal frame; apply to decisions made by regional organizations; be aware of the importance of the principles included in the FAO Code of Conduct for responsible fisheries; and establish the dialogue needed to implement third countries fisheries policies. The FPAs generally consist of the agreement itself, a technical protocol and a section of annexes and is normally valid for several years at a time. The flag state of a vessel is responsible for reporting catch numbers to FAO, and when necessary reporting data on highly migratory catches to the RFMO responsible in the geographical area of the catch. Specific reporting requirements are included in the protocol of the agreement (COM, 2007).

The Cotonou agreement also states that fisheries are intended to be WTO compatible, which include that financial contributions under the CFP need to be justified by the mutual interests of the two parties to invest in sustainable fisheries policy and not just a payment for access (CFFA, 2005). The fisheries should subsidy free, meaning that no financial contribution by a government or public body that confers benefit within the territory of a member should be allowed. Gorez and Riordan (2003), as a consequence of this, claim that the private sector needs to progressively take responsibility for the compensation.

An important part of the overall framework is also the Council Resolution on Fisheries and Poverty Reduction from 2001 calling for: fisheries agreements to be based on flexible adjustments of fishing possibilities according to resource assessments, implementation of protective measures for small-scale fisheries and subsistence fishing and a functional Monitoring-System of the environmental, improving economic and social impacts of the agreements (Gorez and Riordan, 2003, CFFA, 2005). An action plan for eradicating illegal, unreported, unregulated fisheries (IUU) and an Action Plan to improve stock

assessment outside Community Waters, are also relevant in the governance of the FPAs (CFFA, 2005).

To accelerate the Union's progress towards achieving the Millennium Development Goals (MDGs), the European Consensus on Policy Coherence for Development (PCD) came into force in 2005. Twelve relevant policy areas were chosen, with the aim of building synergies between them that can increase their potential in relation to the MDGs, and commitments were made on ensuring coherence between these policy areas and the overall development objectives. Fisheries Partnership Agreements constitute one of these policies, and this policy is evaluated according to progress every two years (EC, 2011d).

4.3 Status

There are currently 14 FPAs in force between the EU and ACP countries and one with Greenland. These agreements are listed below. In addition the EU has three northern agreements with Norway, Iceland and the Faroe Islands.

Table 7: Fisheries Partnership Agreements in 2011

Type of Agreement	Partner	Duration	Annual Financial Contribution
Multi-species (Mixed) agreements	Greenland	31.12.2012	14 307 244 €
	Guinea Bissau	15.06.2011	7 500 000 €
	Mauritania	31.07.2012	From 86 000 000 € (1. Year) to 70 000 000 € (4. Year)
	Morocco	27.02.2012	36 100 000 €
Tuna agreements – West Africa	Cape-Verde	31.08.2011	385 000 €
	Gabon	02.12.2011	860 000 €
	Ivory Coast	30.06.2013	595 000 €
	Sào Tomé and Principe	End 2013	682 500 €
Tuna agreements-Indian Ocean	Comoros	31.12.2013	615 250 €
	Madagascar	31.12.2012	1 197 000 €
	Mozambique	31.12.2011	900 000 €
	Seychelles	17.01.2014	5 600 000 €
Tuna agreements-Pacific	Kiribati	15.09.2012	478 400 €
	Micronesia	25.02.2010 (new protocol in the ratification process)	559 000 €
	Solomon Islands	08.10.2012	400 000 €

Source: (EC, 2011a)

The FPAs cost the EU more than 150 million euro in 2009, equivalent to 16.8 percent of the total fisheries budget (SSNC, 2009). Four mixed agreements constitute 94 percent of the FPA budget (EBCD, 2010). According to a report commissioned by DG MARE (EC, 2009), approximately 340 vessels with an estimated combined gross tonnage (GT) approaching 277 000 are fishing under these agreements. Tuna vessels (seiners, long liners and pole-and-line vessels) represent 53 percent of the fleet; long liners and pole-and-line vessels dominating in numbers while the purse seiners in tonnage. While demersal fishing vessels (operating under the mixed agreements in West Africa) represent 43 percent of the fleet and 16 percent of the total tonnage and pelagic trawlers (operating under the agreements with Morocco and Mauritania) account for only 3 percent of the fleet and 19 percent of the total tonnage. Spain accounts for 67 percent of the vessels and 51 percent of the GT fishing under the FPAs, including seiners, long liners and demersal trawlers. France accounts for 14 percent of the total number of vessels and 15 percent of the GT, half of which are seiners and the other half long liners. In addition Portugal, Italy, the Netherlands, Latvia, Lithuania, the United Kingdom, Greece, Poland and Germany also have vessels fishing under the FPAs.

The report further estimates that the average total catch from 2004-2007 caught under the FPAs are 403 663 tons, and suggests that the fleet's turnover averaged 443 million euro per year in the same period. Demersal catches are low in quantities, but constitute almost half of the turnover; while the numbers related to pelagics are higher in terms of tonnage than value. Tuna represent approximately 25 percent both in terms of quantity and value. Based on these estimations the FPA catches represent 8 percent of the Union's catches and 3 percent of its total supplies. The fleets operating under the agreements generate an estimated average added value of 534 million euro, of which 71 percent accrue the EU, 13 percent is distributed amongst third countries and 16 percent is benefitting countries not involved in the agreements but are connected with their spin off activities. Most direct value addition is concentrated in five fisheries agreements, including Mauritania, Seychelles, Guinea Bissau, Greenland and Morocco. An average of 2250 Europeans and 4830 third country crew members were employed on FPA vessels form 2005-2008. It is estimated that each job at sea generate between 0,5 and 1,5 jobs on land in fisheries related sectors.

The CFP states that it is prohibited to increase the capacity of the European fleets regardless of fishing grounds. The Union therefore seeks to maintain the current agreements through improved terms, and re-establish some of the recently declined agreements (e.g. Senegal and Angola). The agreements have in general become less controversial the recent years, probably because the number of tuna agreements has increased and these are less in

conflict with local fisheries than mixed agreements involving rights for demersal and pelagic species closer to the coast. The existing multispecies agreements, especially with Mauritania and Morocco, still generate a lot of debate. The Mauritanian agreement, the largest FPA both in terms of access and compensation, is controversial because the EU fleets compete with the local fishermen reducing the potential of the fisheries as a livelihood and a source to reduce poverty. In addition the state has become heavily dependent on the financial compensation linked to the FPA, making it difficult for the authorities to restrict access to over-exploited resources (CFFA, 2010). The Moroccan agreement on the other hand is disputed because it allows rights to fish in the waters of the controversially occupied West Sahara. The agreement is by many considered to violate international law since it fails to take into account the wishes and interests of the people of Western Sahara, which have been stipulated by the UN as the legal requirement for economic activity in the territory. Because the EU lacks information on how the agreement affects the local Saharawi people, the basis for the agreement is not legitimate. The agreement recently expired, and a temporary protocol is signed permitting continued fishing until February 2012 while EU is given the opportunity to provide information about the links between the FPA and the Saharawi people. The Parliament can however refuse this continuation, and what will happen is unclear (FishElsewhere, 2011).

Critics claim that the EU's handling of controversial agreements show that when their credibility is tried, they fail and it is claimed that the EU is not doing what it says and not saying what it does. They further argue that even though the framework has changed, the basis for the agreements has remained the same and the FPAs therefore have failed to address any criticism. It is however also recognised that FPAs have been a unique experience in relation to trying to reconcile conflicting interests. No other fisheries agreements offer the same level of insight and obligations as the FPAs, also making them easy to criticise (CFFA, 2009).

EU is increasingly dependent on external fish supply both to meet its market and fishing sector demands. This increased demand both has positive and negative potential for the ACP countries. High pressure can lead to overexploited resources, but with a sustainable management of the resources the level of benefits accruing the ACP can potentially be high. Increased competition from other DWF nations, such as China, Japan, Russia and Korea, has made the effects of these potential outcomes even greater (Gorez and Riordan, 2003). In countries with no FPA, private arrangements, joint ventures or reflagging of vessels are ways to maintain access. The exclusivity clause of the FPAs, requiring all vessels fishing in the

given country to be registered under the agreement, has also led to reflagging of EU vessels in order to avoid the requirements of the FPA framework.

The opinions about the FPAs are many, and as mentioned this is partly a result of the relatively transparent nature of the agreements - at least compared to other agreements. The fact that the FPAs seek to be more than commercial arrangements also commits the EU to deliver more than just the access fees. While some feel the agreements represent a nicely wrapped new-colonial instrument for exploiting the fisheries resources in ACP countries, others believe it is the best option for countries unable to fully exploit their own resources. Through the current reform process, the agreements are once again being evaluated and probably reformed. The 13th of July 2011 the Commission published its proposal for the reform in 2012, including a communication on the external dimension of the CFP. The changes proposed involve a re-labelling of the agreement to Sustainable Fisheries Agreements (SFAs) focusing on resource conservation and environmental sustainability, improved governance and effectiveness of sectoral support. Higher levels of scientific cooperation, separation of compensation for access and fisheries support and closer cooperation between the EU's policy areas in order to maintain the coherence of the agreements are some of the actions proposed (EC, 2011a). After the Council and Parliament have revised and approved this proposal, a new framework for fisheries agreements will likely come into place.

4.4 The case of Mozambique

4.4.1 History

The Republic of Mozambique, colonised by Portugal until 1975 and ravaged by a civil war until 1992, is a poor country in monetary terms but rich in resources. Fisheries currently contribute to at least 3 percent of the country's GDP, around 80 000 Mozambicans are employed within the fisheries sector and a large number of small fishing communities depend of fisheries for subsistence. The artisanal fisheries are the most important in terms of number of people employed, while the industrial fisheries especially for shallow-water shrimp generate the most export income. Several of the coastal resources are heavily exploited, while there is still thought to be a surplus of offshore resources. Mozambique lack the capacity to exploit its offshore resources, and this fishery is dominated by foreign operators (MoF, 2009, Degnbol et al., 2002).

The Republic of Mozambique and the EU have a long lasting relationship, in several sectors, and three fisheries agreements have been signed between the two parties. The first entered into force in 1987, was renewed two times with different protocols and was terminated in 1993. The original protocol included rights to fish for shallow water shrimp, deep water shrimp and large pelagics for a financial compensation of 2,5 million euro per year, while the second protocol increased access rights for tuna vessels and the financial compensation correspondingly rose to 3,42 million euro per year. The third protocol however only included rights to fish for large pelagics in exchange for a financial compensation of 275 000 euro per year. The withdrawal of fishing rights to shallow water shrimp came as a result of a new fisheries law in 1990 that restricted access to this highly profitable fishery for national individuals or companies only; while the uncertain state of the deep water shrimp lead to reductions in this fishery also (KusiLimitada, 2008).

A second agreement between the two parties did not come into force before 2004. The agreement included rights for deep water shrimp and tuna fisheries, and a financial contribution of 4,09 million euro per year. The agreement lasted three years, even though none of the deep water shrimp opportunities were utilized due to lack of interests from the European fishing owners. A license fee of 100 euro was paid per ton caught, of which the vessels operators paid 25 euro and the EU 75 euro. The whole financial compensation was linked to targeted actions, including monitoring, institutional development, research, training, quality control and expenses for participating international meetings (Munyuki, 2006).

The financial compensation of this agreement was of a substantial size, and constituted a major contribution to the fisheries sector budget. It boosted a lot of fisheries projects and gave the sector an economic upturn. However, the fleet did not utilize the deep water shrimp opportunities, and they were as a result excluded in the negotiations of a new protocol at the end of 2006. Despite of disagreements between the two parties, especially because the proposition for a new financial compensation was four times lower than the previous, a new agreement came into force the 1th of January 2007 – its content will be presented in section 4.4.3 (KusiLimitada, 2008).

4.4.2 Framework

The framework of the agreement has the same general framework as shown above.
In addition the FPA is a part of Mozambican fisheries policy and needs to be in line with the framework covering this. The main objectives of the fisheries policy in Mozambique are guided by the Government's Fishery Law from 1996 and overall plans including: a Fisheries Plan for the period 1994-2004, a newly issued Master Plan for 2010-2018, a Five Year Program, an Action Plan for Reduction of Absolute Poverty (PARPA II) and an Action Plan for Food Production (PAPA) (MoF, 2009). According to the new master plan, the overarching objective for the sector is to increase benefits generated in the fisheries, such as: increased contribution to improving food security and nutrition in fish for the population; improve living conditions in the small –scale fishing communities; increase the contribution of the fisheries to achieving the country's economic and social development objectives, and increase the net sector contribution to greater equilibrium in the country's balance of payments. This will again contribute to the overall objective of the government in Mozambique, which is poverty reduction.

In addition to the FPA, Mozambique has both development and trade cooperation with the EU. Because of EUs policy coherence, this implies that the FPA needs to be in line with the Country Strategy Paper for development and the Economic Partnership Agreement (EPA) and the other way around. Mozambique is highly dependent on international assistance, and the EU (European Commission and Member States) accounts for approximately 70% of development assistance to the country. Through a Country Strategy Paper, the priorities for the cooperation between the two parties are set. The current one is valid from 2008 to 2013 and presents the focus areas to be: governance, macro-economic support, infrastructure and regional integration, food security, rural development and social sectors. While the overarching priority is to help Mozambique achieve the Millennium Development Goals, as

well as the country's action plan (Poverty Reduction Strategy) to decrease the incidence of poverty and promote fast, sustainable and broad-based growth. The Strategy Paper is accompanied by a National Indicative Program (NIP) that includes the budget and allocation of cooperation funds. The NIP is funded through the European Development Fund (EDF), which is the Union's main instrument for providing aid for development cooperation to ACP countries and overseas countries and territories. The EDF is funded by the member states of the EU, and is subject to its own financial rules and is managed by a specific committee. The current budget for cooperation in Mozambique is 622 million euro, of which about half is allocated to general budget support and 30 percent to sector budget support, in particular in the areas of infrastructures, health, agriculture and rural development. The rest of the portfolio is allocated to specific projects, in particular in infrastructures, technical assistance and non-state actors. In addition 12,1 million euro are set aside for Mozambique's unforeseen needs (EC, 2011e, Goutier, 2010). The EU is also the second major trade partner of Mozambique, being its main export partner and the second import partner after South Africa. The trade relations between the EU and Mozambique are good and those were reinforced by the signature of the interim EPA Agreement in 2009. The interim EPA is already being applied on the EU side with duty-free/quota-free access to all goods coming from Mozambique. On the Mozambican side, liberalization covers 80.5 percent of the goods while the rest – mainly agricultural products including dairy products, meat and fish products, wood products, as well as some chemicals and minerals – are excluded from liberalization. The agreement still needs to be ratified before becoming applicable (EC, 2011f).

4.4.3 Status

A FPA, valid from 2007, is the existing framework for European Union's fishing activity in Mozambican waters. It allows 44 freezer tuna seiners and 45 surface long liners fishing rights for tuna and other highly migratory species. In return the European Union pays a financial compensation of 900 000 euro per year based on a reference tonnage of 10 000, plus a license fee of 35 € per ton caught paid by the ship owners. If operators fish more than this they have to pay an additional fee of 65 euro per ton. The payment shall benefit the fisheries sector and be used with full discretion, but the specific amount of 250 000 € per year shall be dedicated to the support and implementation of the fishing sector policy drawn up by the Mozambican Government. MoF is responsible for managing these funds on the basis of mutual decided objectives and in accordance with annual and multiannual programming. Pre-payments of licence fees are made according to vessel types and reference tonnages (COM, 2007).

The agreement is relatively small, at least seen from EUs point of view, but it still is an important part in a network of tuna agreements in the region (Informant 1, 2010). According to Walmsley et al. (2007a) the EU fleet fish around 70 percent of all tuna catches in the Indian Ocean, dominating the purse seine catches with 66 percent while the long line catches of the EU only represent 1 percent of the total. For Mozambique the agreement represents a major potential both as a source of food and income. But very little information, at least publicly available, exists on the real benefits and potential of the FPA (Informant 5 and 6, 2010). To get a real understanding of the status of the agreement, more studies and evaluations need to be made or accessed.

During the first half of 2011 Mozambique and EU started negotiations on a new agreement, and after tough but constructive discussions the parties agreed on the content of the new protocol and annexes in June 2011. Before a new agreement can be signed and initiated, the Parliament and Council in the EU need to approve it. Since the agreement from 2007 is still valid, it will remain the research object of this thesis. The anticipated changes proposed do however include: a division of the financial payment linked to access and the contribution to fisheries support; a reduction of available licenses by 1 purse seiners and 13 long liners; a reference tonnage reduced to 8000 tons; a financial contribution increased by 80 000 euro per year and obligation of employment of at least one Mozambican crew on each vessel and port inspection (EU/MOF, 2011).

5. Properties and attributes of the FPA between EU and Mozambique

Through reviewing secondary and tertiary literature and conducting in depth interviews with relevant informants, the conceptual interactive governance framework will be applied to organize and puzzle data together with the aim of drawing up a picture describing the governance process of the FPA between Mozambique and the EU as accurately as possible. First, system properties and attributes are presented and their levels assessed. Thereafter, the three orders of governance, linked to interactions in and between systems will be studied and evaluated. In chapter 6 the results will be translated into levels of governability and form the basis for a discussion related to the capacities and potential to increase governability and the ability to achieve given objectives.

5.1 System-to-be-governed

A partly natural and partly social system including: ecosystems, the resources they harbour and systems of users and stakeholders who form coalitions and institutions among themselves.

Natural system

The geographical area where the FPA fishery occurs and the resources found there.

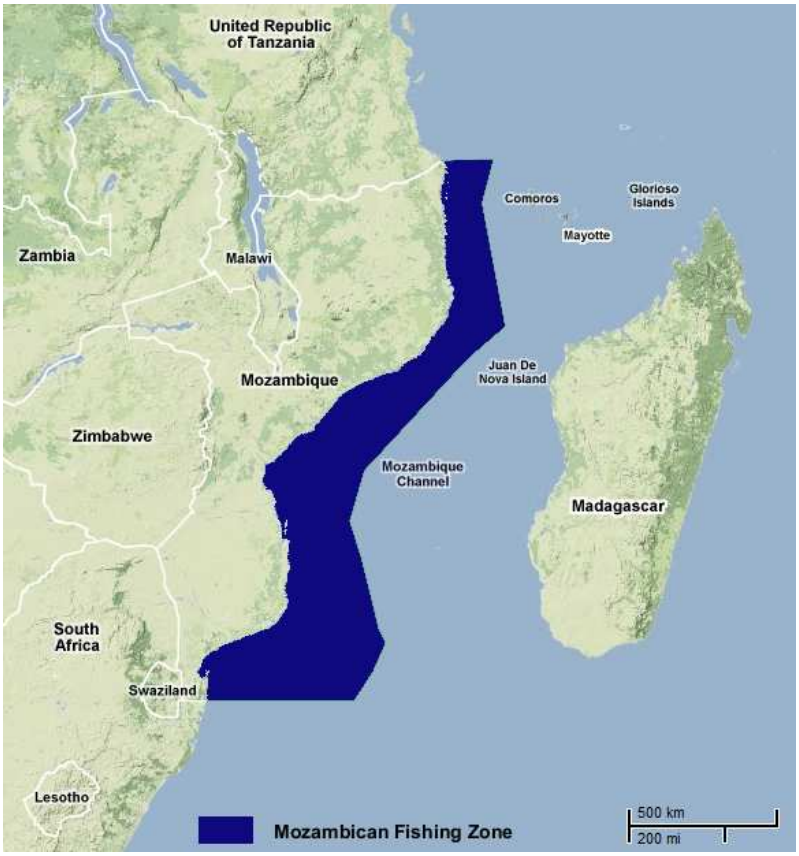

Figure 3: The Mozambican fishing zone (constructed by plotting FPA coordinates into Google-maps).

Diversity

The FPA allows EU vessels access to fish in a restricted fishing zone outside the coast of Mozambique, defined by coordinates given in appendix four of the agreement (COM, 2007). The area stretches from 12 to 200 nautical miles, but because of a dispute related to the French EEZs of Bassas da India and Juan de Nova the area is not constructed like a normal EEZ and is rather referred to as the Mozambican fishing zone (KusiLimitada, 2008). The vessels are allowed to catch highly migratory species, as listed in Annex 1 of the 1982 United Nations Convention on the Law of the Sea (COM, 2007). However, as a result of Mozambican obligations on Turtle Exclusive Devices (TEDs) in trawl nets from 2003[2], it is prohibited to catch turtles, dugongs and dolphins (Informant 1, 2010; WWF, 2003).

Table 8: Diversity of the natural system

Property	SG: Natural system
Diversity	Main targeted species: - Skipjack tuna (*Katsuwonus pelamis*) - Yellowfin tuna (*Thunnus albacares*) - Bigeye tuna (*Thunnus obesus*) - Albacore (*Thunnus alalunga*) - Swordfish (*Xiphias gladius*) Other species: Blue (*Makaira nigricans*), black (*Makaira indica*) and striped (*Tetrapturus audax*) marlin and sail fish (*Istiophorus platypterus).* Neritic tuna species: Bullet tuna (*Auxis rochei*), frigate tuna (*Auxis thazard*), longtail tuna (*Thunnus tonggol*), narrow-barred Spanish mackerel (*Scomberomorus commerson*), Indo-Pacific king mackerel (*Scomberomorus guttatus*) and Kawakawa (*Euthynnis affinis*). By catch: Blue shark (*Prionace glauca*), silky shark (*Carcharhinus falciformis*), oceanic whitetip shark (*Carcharhinus longimanus*), shortfin mako shark (*Isurus oxyrinchus*), scalloped hammerhead shark (*Sphyrna lewini*) and other species of sharks and bony fish. Marine turtles and seabirds are also affected by the fisheries, and their status is monitored (IOTC, 2011c).

[2] Trawl nets are however rarely used for catching highly migratory species, only some species of neritic tunas, and in Mozambique they are mainly used to catch shrimp and prawn species. The prohibition on catching turtles, dugongs and dolphins is however also a part of the FPA regulations (Informant 21, 2011 and informant 1, 2010).

The coastal waters of Mozambique are part of the South West Indian Ocean, which is known to host highly productive ecosystems. But due to reduced research capacity Mozambique currently has limited information both on the composition and state of their offshore resources. However, because of the highly migratory nature of the targeted species, the regional fisheries management organization, the Indian Ocean Tuna Commission (IOTC), is responsible for collecting information and compiling statistics on tuna and tuna-like species in the whole region. In relation to this they also do an effort to understand and identify the different parts of the ecosystem these species are a part of, and four different working groups are set up to focus on: Billfish, Ecosystems and by catch, Tropical tuna and Data collection and statistics (IOTC, 2011c). Mozambique has until recently neither been a member nor cooperating party of IOTC. Detailed country information has therefore not been made available and official IOTC reports and recommendations have been their only source of biological information on their tuna resources (Informant 3, 2010). However, in March 2011 Mozambique was granted status as a cooperating non-contracting party of IOTC, and will from now on extend their capacity to participate in the IOTC processes (IOTC, 2011a).

Regional status' of the main stock were presented at IOTC's last Scientific Committee (2011c). Skipjack tuna is the most caught species, representing a catch of 440 600 tons in the Indian Ocean during 2009. There is a lack of information on the status of the stock, but skipjack tuna is regarded to be resilient to over-exploitation due to its high productivity. IOTC believes the stock is in a good state, but advices close monitoring. Yellowfin tuna is the second most caught species, accounting for 288 100 tons in 2009. In 2010 the Scientific Committee considered the stock to be overexploited, or very close to being so. IOTC, as a result, recommends that total catches in the Indian Ocean should not increase beyond 300 000 tons a year. Levels of big eye tuna are uncertain, and IOTC recommends that catches are kept at or below 102 000 tons, in order to ensure that the estimated MSY level is not exceeded. For Albacore the catches were considered to be within acceptable levels in 2008, but due to recovery of data on historical catches in Indonesia (2003-08), new estimates indicated higher levels than previously indicated and IOTC has now recommended revisiting the status of the stock of albacore as soon as possible. In regards to swordfish effort has declined, and catches remain substantially below the estimated MSY of 29 000 tons. IOTC (2011c) does not consider restrictive management to be necessary, but highlights the importance of continuous monitoring especially in the South-west Indian Ocean where swordfish has been heavily targeted since the mid 1990s and may represent a subpopulation or separate stock of this species. This is especially important as the species is characterized by late maturity, long life

and sexual dimorphism, making it vulnerable to over exploitation. For the other species and components of the ecosystem there is an even greater lack of detailed information, and their status is thus uncertain.

The number of targeted species is relatively low, but lack of information makes it difficult to assess the state they are in or the diversity of the ecosystem they are part of. But from what is known the natural system relevant for the FPA is likely to have a medium degree of diversity.

Complexity

According to Potier et al. (2004) epipelagic ecosystems in the tropical open oceans generally are oligotrophic, but large predators such as tuna and tuna-like species are abundant and ubiquitous with high metabolic rates. Survival of pelagic predators depends on their efficiency to locate prey-rich areas, and since these areas often are patchy, they need to migrate over vast areas. There is limited detailed information on how tunas and tuna like species in the South West Indian Ocean interact with their ecosystem, but existing studies are used to indicate the level of complexity.

Table 9: Complexity of the natural system

Property	SG: Natural system
Complexity	Life strategy: Mono or multi species schools: free swimming or log associated. - Skipjack, yellowfin, albacore and juvenile or small bigeye tunas are often found in association with logs/FADs[3]. - Larger yellowfin and adult bigeye mostly are found in the surface and sub-surface waters (Langley et al., 2009). - Swordfish generally found above the thermocline (FishBase, 2010b). Prey: Findings indicate opportunistic feeding patterns for several species, but also signs of some specialisation according to species and depth. Crustaceans and small fish seem to dominate the prey category, with the mantis shrimp (*Natosquilla investigatoris)* and the swimming crab (*Charybdis edwardsi*) being of key importance. The latter is mainly preyed on in its pelagic phase October to March, during which it matures and spawns (Potier et al., 2004).

[3] Fish Aggregating Devices (FADs): artificial floating objects used to attract pelagic fish which tend to gather around them (Govinden, et al.,2010).

	System productivity: Potential system productivity is unknown. Estimated catch of large pelagics by foreign fleets in Mozambican waters in 2011: 6,568 tons (MoF, 2010).

Existing studies indicate that tunas have some prey preferences according to species and size, while exhibiting opportunistic feeding behaviour to a greater or lesser extent. Potier et al.'s (2004) study on yellowfin and bigeye tunas indicate that considering the importance of the biomass of the two species, it is likely that tuna exerts a significant predation pressure on the epi and meso pelagic communities. Findings indicate that both surface swimming bigeye and yellowfin almost exclusively feed on crustaceans, with the stomatopod *Natosquilla investigatoris* (known as mantis shrimp) highly dominating the category. In addition, yellowfin has shown signs of feeding specialization for fish (*scombrids*) and bigeye for squid (*ommastrphids*). For deepwater swimming fish of the two species, a mixed pattern was observed. Bigeye seemed to have a more generalized feeding behaviour, while the strategy of yellowfin was more balanced between fish, crustaceans and cephalopods. These results indicate that the difference between the two species is that bigeye is able to prey on fish at deeper waters. The swimming crab (*Charybdis edwardsi*) is also regularly observed as a part of the tuna diet. According to Fishbase (2010b) swordfish are opportunistic feeders, known to forage for their food from the surface to the bottom over a wide depth range. They are known to feed mainly on fish, but also crustaceans and squids. They use their sword to kill the prey.

Species composition of bycatch, i.e. non-targeted species, depends on the equipment being employed and the spatial organisation of the fisheries. Seabirds, turtles, sharks and juvenile sword fish are prominent in the bycatch of long liners, while sharks, turtles and juvenile tuna dominate purse seine bycatch. The evolution of FAD fisheries has made the challenge of avoiding bycatch greater (Dagorn et al., 2008).

Since crustaceans and small-size fish seem to dominate the diet, it is likely that there is a short food chain leading to tuna in the Western Indian Ocean. Lack of detailed data makes it difficult to accurately assess the complexity of the natural system, but on the basis of what is known a medium level is suggested.

Dynamics

According to FAO (2002) the east coast of Africa is the site of some of the most dynamically varying marine ecosystems in the world. The Somali current develops during the south-west monsoon to become one of the fastest open ocean currents known, and the upwelling that occurs along the coast during the intensified phase of this current creates a major coastal upwelling system. In Mozambique this occurs south to about 16º S, resulting in a southward coastal current and a north going counter current (Lichucha et al., 2003). Both the upwelling system and the currents drive nutrient-rich water to the surface, creating the basis for resource productive areas. These and other components affecting the dynamics of the ecosystem are summarised in the table below, followed by a more detailed elaboration.

Table 10: Dynamics of the natural system

Property	SG: Natural system
Dynamics	Biological and physiological changes over time: Long term: Monsoon and coastal upwelling, currents, climate variations and presence of logs or introduction of FADs. Seasonal: Winds, rainfall, river run-offs and occurrence of mantis shrimp and swimming crab. Affecting conditions for productivity: Salinity and oxygen levels, chlorophyll concentration, algae bloom, thermocline depth and temperatures.

The climate of Mozambique is according to Lichucha et al. (2003) predominantly tropical humid to sub-humid: South of the Zambezi River a passage of the depressions of the South-Eastern Trade Wind Zone dominates, while the region north of the river is part of the southern end of the East African Monsoon system. The coast receives rain all months of the year, with a maximum during the southern summer. North of Save River there is a well-defined rainy season, while the rainy season is irregular and unpredictable south of the river. Rainfalls give lower levels of salinity and oxygen, affecting the conditions of tuna and other species that are sensitive to changes in these levels. River run-offs especially from the Zambezi River are also important, draining nutritious water into the coastal environment every year. Further, winds affect the dynamics in the ecosystem by mixing surface waters and alter temperature and thermocline depth depending on how strong and constant the winds are. In the north of

Mozambique the winds follow the alternating monsoon system with north eastern winds during the southern summer, and south western winds during the southern winter; while the central and southern parts of Mozambique receive easterly prevailing winds, and especially during the southern summer gales can affect fishing activity (Lichucha et al., 2003).

A study conducted by Fraile et al.'s (2010) shows that the highest Catch per Unit Effort[4] of both skipjack and yellowfin occurred in areas characterized by high chlorophyll concentration and reduced thermocline. Even though there are many biotic and abiotic factors influencing the occurrence of tuna, depth and gradient of thermocline together with chlorophyll concentration seem to be the most important factors affecting their presence. This because tuna often prefers staying between the layer of warm and cold waters, feeding on the trophic chain generated by high primary production. There is also significant evidence that years with high levels of mantis shrimp and/or swimming crab forming pelagic swarms invading the region will generate high recruitment of tuna (Informant 6, 2010). Cyclonic conditions on the other hand are probably not suitable for tuna.

The introduction of FADs and development of associated fisheries affect the dynamics in the natural system. According to Robert et al. (2010) releasing thousands of FADs in the tropical oceans obviously represents a change in the natural habitat of tropical fish and argue that some scientists consider that it could lead to changes in the behaviour and biology of tuna. There are several hypotheses on why tunas have developed associative behaviour with floating objects: it could be a result of an evolutionary process where logs were used as indicators on nutritious water, or it could be a behavioural strategy for tuna in poor condition to save energy. FAD fisheries benefit from this behaviour and now constitute nearly half of the tuna catches worldwide (Fraile et al., 2010).

The biological and physical changes affecting the dynamics of the natural system seem to be relatively stable over time. However, the occurrence of mantis shrimp and swimming crab affect the levels of tuna productivity more than other factors, as do the introduction of FADs. Dynamics of the natural system is likely to have a medium level.

Scale

There is a lack of detailed information on where the tuna species migrate to feed and spawn. Since nutritious waters may be patchy, they probably migrate over large areas while feeding.

[4] Catch per Unit Effort is a unit applied to standardize catch data by dividing total catch with the total amount of effort (i.e. time, area or capacity) used to harvest the catch (OECD,2001).

Information on spawning grounds is also insufficient, but IOTC (2011c) provides details on two of the main species:

- Yellowfin tuna spawns from December to March in the equatorial area, the main spawning grounds being west of 75º E, and the secondary spawning grounds being off Sri Lanka, the Mozambican channel and in the eastern Indian Ocean off Australia.

- Skipjack tuna spawns opportunistically when conditions are favourable throughout the year in the whole inter-equatorial Indian Ocean.

Table 11: Scale of the natural system

Properties	SG: Natural system
Scale	Geographical scale: The target species migrate over large areas in the West Indian Ocean ecosystem, across nation borders and coastal systems. Some species are also abundant in local coastal areas. Temporal scale: Average age: 8-11 years Most targeted species minimum population doubling time 1, 4 - 4, 4 years. Swordfish 4, 5 – 14 years (Fishbase, 2010a,b,c,d,e).

Concerning temporal scale it is relevant to study age structure and reproduction rate of the different species. Numbers provided by FishBase indicate that most species live around 8 to 11 years. Fishbase (2010a) estimates the minimum population doubling time for skipjack tuna to be 1,4 to 4.4 years, and the species to be moderately vulnerable. Skipjack is highly robust to overfishing because of its rapid growth, early maturation and high reproductive potential. The population doubling time of yellowfin is the same as the previous one, but it is moderately resilient and moderately to very vulnerable (Fishbase, 2010d). The minimum population doubling time of bigeye and albacore are similar to the two previous species. But because of their high market value the species are given a high to very high vulnerability status (Fishbase, 2010c:e). Swordfish has a minimum population doubling time of 4, 5 – 14 years, and is because of this, less resilient than the mentioned tuna species. In addition it has a high market value, making it very vulnerable (FishBase, 2010b).

The highly migratory nature of the targeted species indicates that the natural system is of a large geographical size, enclosing local, national and regional areas. Most species, with the exception of swordfish, reproduce over a relatively short period of time and have a resilient biological nature, but some species are more vulnerable to overexploitation due to their high market values. With all these factors taken into consideration, the scale issue is assessed to be medium to high level.

Socio-economic system

Image 1: Spanish fishermen (Tunaseiners.com, 2009).

Image 2: Fish sellers, Mozambique

Diversity

The socio-economic system linked to the FPA includes a wide range of actors having an interest in the agreement, directly or potentially. These are presented in the table below, followed by a more detailed elaboration on the most important stakeholders.

Table 12: Diversity of the socio-economic system

Property	SG: Socio-economic system
Diversity	FPA fleet (licensed vessels 2010): Purse seiners (PS): 21 Surface long liners (LL): 16 + ANABAC (5), AGAC (3) and Orthongel (4) (Informant 2 and 14, 2011). Crew: European and ACP (Mauritania, Morocco, Senegal, Côte d'Ivoire, etc.). European DWF communities: Spain (Basque country, Galicia and Asturias) and France (Brittany and La Réunion) (EC, 2009). Industry: Producers (mainly canneries) in Europe: Spain, France, Italy and Portugal. Canneries in Seychelles (Indian Ocean Tuna Ltd.) and Madagascar (Pêche et Froid Ocean Indien) Consumers: FPA-caught fish mainly supply European markets (Spain, France, Italy, UK and Germany), as well as the North American market (Informant 24, 2011; OceanicDeveloppement, 2005). Mozambique: MoF: financial compensation Fisheries sector: funds potentially can contribute to domestic development, employment, food security and so on for the Mozambican people. Mozambican Semi-industrial and artisanal vessels occasionally catch some tuna. Others: Non-EU fleets licensed in the tuna fisheries: 12 Japanese, 2 Spanish, 3 Korean and 4 Chinese Joint Venture long liners (Informant 14, 2010). Politicians and potential investors. Neighbouring countries in the region: management cooperation and trade. Pirates: Somali or others making profits from the tuna fisheries Future generations.

The vessel operators make their living directly from the fisheries, and naturally have a great interest vested in the FPA. A small quantity of tuna is caught by semi-industrial and artisanal fishermen, but even though the potential for these fleets to catch larger quantities needs to be explored, Mozambique lack capacity to exploit their own offshore resources and foreign fleets

dominate the fisheries. The agreement allows 44 freezer tuna seiners and 45 surface long liners access to the FPA fisheries. But in 2010, as shown in the table above, only 21 seiners and 35 long liners were licensed. The reasons why not all licenses are utilized is not known, but piracy is thought to be one of them. The long liners are mainly Spanish and Portuguese, while the purse seiners are Spanish and French (Informant 1 and 2, 2010).

In chapter five of the agreement it is stated that at least 20 percent of the crew employed shall be of ACP origin and of these at least 40 percent shall be Mozambican if possible (COM, 2007). Detailed information about the crew fishing onboard the FPA vessels in Mozambique is not available, but according to a report prepared by the European Commission (2009) crew on tuna vessels are mainly of Spanish (Basque country, Galicia and Asturias) and French (Brittany and La Réunion) origin in addition to fishermen from ACP countries (Mauritania, Morocco, Senegal, Côte d'Ivoire and so on). Since crew members often are recruited from the same areas, DWF represent an important source of employment in certain communities.

The majority of the fish caught by EU vessels in the West Indian Ocean is frozen onboard and shipped off to Europe for further processing. The distance and extent of the Indian Ocean necessitate the use of local ports for refuelling and other requirements (transhipping, provisioning and maintenance), and the vessels fishing in Mozambican waters often use Port Victoria in the Seychelles. The vessels licensed under ANABAC, OPAGAC and Orthongel are foreign vessels, most often which are from the Seychelles, owned investors from the EU. While some of these vessels (at least those licensed under OPAGAC) are owned by companies with their own processing plants, the majority of fish is sold to different producers through agreements and auctions. A lot of fish is shipped back to Europe to supply the tuna industries especially in Spain and France, but some is also landed in the Seychelles or on Madagascar and supply local canneries there. Small tunas (skipjack, yellowfin and albacore) caught by purse seiners are mostly canned. While larger line caught tunas are used to produce higher quality products, e.g. sashimi, or sold for direct consumption. (OceanicDeveloppement, 2005).

Mozambique is dependent on foreign fleets to generate any revenue from their offshore resources, but only receives a small share of the potential value from the resources as neither EU nor the other operators bring any value creation to Mozambique other than paying for access. The whole financial compensation paid by the EU is to benefit the fisheries sector, while access fees by other operators are shared equally between the state budget and the fisheries sector budget. MoF naturally has a great interest in maximizing the financial

contribution, while optimising the benefits created from it. Fish is an important source for food, employment and income, and Mozambique is a poor country in need of all three things. The people of Mozambique thus have a great interest in the tuna resources and the potential benefits they can give. Even though the agreement contains provisions encouraging landings, production and employment in the third country, this has not been the case so far (Informant 7 and 8, 2010; Eide, 2004).

The socio-economic system linked to the FPA includes a wide range of actors and stakeholders both in Europe, Mozambique and other countries in the South West Indian Ocean region, and a high level of diversity is therefore suggested.

Complexity

Stakeholders and interests are many and conflicting, some being more powerful and advocated louder than others.

Table 13: Complexity of the socio-economic system

Property	SG: Socio-economic system
Complexity	Main interests: Through the FPA the DWF aims to maintain access and the European Industry seeks supplies at a minimum cost. Mozambican stakeholders seek to maximise revenue and other potential benefits. Sustainable exploitation is in all parties' interest. Fishing field: No direct conflict between the Mozambicans and the EU fleet. Long liners and Purse seiners normally operate in different areas. EU fleets competing with Asian DWF fleets. Piracy involves physical attacks and creates a security threat. IUU levels are unknown, leading to speculations on its extent. Stakeholder organisation: Fleet and industry: - Foreign EU owned vessels are represented by ANABAC, OPAGAC (Spain) and Orthongel (France). - Cepesca represent all Spanish ship owners - Spanish tuna canners are organised in Anfaco-Cecopesca, French canner in FIAC. - The interests of all of the above are represented by EUROTHON, based in Brussels. In addition all national shipowners are represented by EUROPECHE. (Informant 22 and 24, 2011). Mozambican stakeholders: - Fisheries sector and people's interests voiced by the Ministry of Fisheries (MoF).

Because of limited MCS capacity it is difficult to know exactly what is happening offshore and to what extent fleets comply with regulations. The fleets operate under the cover of distance, speculations arise and the fleets are accused of IUU fishing. One of the main challenges these days is that Somali piracy has increased along the coast of East Africa in the recent years. Vessels are high jacked, catch is being stolen and security of the crew is being jeopardized (Informant 6, 2010).

There are clear conflicts between the interests of the stakeholders. The EU fleet and industry seek to maximize exploitation, while minimizing the financial compensation. Competition with other DWFs affects their operations, and they will seek a level playing field where all fleets have to follow the same regulations. The focus of Mozambican stakeholders will be to maximize revenue at a minimal level of exploitation (CFFA, 2006).

A complex range of stakeholders constitute the socio-economic system linked to the FPA, some of them being more organised and powerful than others. The most active and benefiting stakeholders are found in the EU fleet, industry and market, while the Mozambican stakeholders are less visible and only receive a small share of potential benefits through fisheries projects funded by EU money. Somali piracy currently increases the level of complexity related to the FPA fisheries, and the overall level is suggested to be high.

Dynamics

Changes in stakeholder composition, values and attitudes over time are presented in the table below, followed by a more detailed explanation on their drivers and consequences.

Table 14: Inherent dynamics of the socio-economic system

Property	SG: Socio-economic system
Dynamics	Composition of operators has been the same during the last years: Vessels from Spain (LL and PS), France (PS) and Portugal (LL) dominate the EU fleet. Only EU vessels in the purse seine fisheries, while the EU and Asian fleets are equally active in the long line fisheries. Recently a couple of new Joint Ventures have joined (Informant 1, 2010). Somali piracy has lead to changed patterns of fishing: vessels not fishing in all areas. Boats fishing together, security guards onboard and increased costs (Informant 3, 2010).

Mozambicans stakeholders lack resources to realize their potential share of the resources, and even though a few joint ventures have been set up between Mozambique and Spain, China

and Korea, the fleet is dominated by foreigners. Due to lack of financial capacity there has neither been any development of boats nor production facilities in Mozambique, and the Mozambican stakeholders only receive a part of the rent extracted. There is however indications on increased presence of Asian operators, as both Japanese and Chinese investors have shown interest in Mozambique (Informant 2, 2010).

Somali piracy has lead to severe changes in the patterns of fishing in the West Indian Ocean. The Mozambican Channel has been regarded as a relative safe area, but attacks are increasing. Fleets as a consequence avoid certain areas and take security considerations involving guards onboard and fishing two and two vessels together. The ability to explore large areas and track free swimming schools have been reduced, increasing the fisheries for log associated schools. This might affect the expected yield per recruit as well as bycatch levels. Some vessels have also moved to other oceans (IOTC, 2011c).

Dynamics of the socio-economic system generally seem to be relatively low, seen as financial capacity hinders Mozambican stakeholders to become more involved and the composition of active stakeholders have been relatively stable over recent years. In addition to the EU operators, Asian operators have increased the competition for the offshore resource. In addition piracy and IUU fishing bring insecurity into the sector, affecting fishing and estimates on resource pressure. Taking this into account, dynamics are likely to be at a medium level.

Scale

The processes of globalisation have increased the connections between actors around the world, increasing the size and range of the socio-economic system. The FPA include stakeholders in Mozambique, Europe and in the ACP region. The boundaries and importance of the FPA is presented below.

Table 15: Scale of socio-economic system

Property	SG: Socio-economic system
Scale	Mozambican stakeholders include state, fisheries sector and population. Fleet, industry and market: International, regional and local levels, in Spain, France and Portugal as well as in ACP countries. - Employees in the fleet: 390 (based on the reference tonnage) (KusiLimitada, 2008). - Direct and indirect value of the FPA operations: 2,4 million (EU: 1,7; Mozambique: 0,3 and other third countries: 0,4). - Production and marketing: 0,5 million (EU: 0,4; Mozambique 0 and other third

	countries 0,2). Other third countries include Seychelles and Madagascar (canneries) and crew from ACP countries (EC, 2009).

It is evident that the scale issue related to the socio-economic system is high. The fleet involves crew from many countries; the fish is often shipped from one part of the world to another for production and thereafter sent to international markets. The high level of globalisation linked to the FPA fisheries involves both a positive and negative potential for the lower levels, communities and population. The numbers related to direct and indirect value of the FPA operations do however show that the organisation of the value chain channels most of the value to the EU, leaving only a small share for Mozambique and other third countries in the region (EC, 2009). When governing the FPAs, it is highly important to assess the scale issue, and what benefits and challenges are related to each of them.

5.2 Governing system

Social, man-made system of institutions, steering instruments and mechanisms.

Image 3: The Commission of the European Union, Brussels

Image 4: The Ministry of Fisheries, Maputo

Diversity

The Governing system of the FPA comprises a range of departments, directorates and institutes both in the EU, Mozambique and the West Indian Ocean, some being directly involved in the governing process while others play less prominent parts. These units and their main responsibilities are presented below.

Table 16: Diversity of the Governing System

Properties	GS
Diversity	Mozambique: - Department of International Cooperation (DCI): political relations - Department of administration and finances (DNEP) - Department for Aquaculture - National Directorate of Fisheries Administration (ADNAP): technical management (licensing, MCS) - National Directorate of Fisheries Economics and Policies (DNEP): responsible for budget and policy making - National Directorate of Human Resources - National Institute of Fisheries Research (IIP): collect resource data - Fisheries Development Fund (FFP): accounting - Institute for Small-scale fisheries development (IDPPE) - Fisheries School (EP) (Omar, 2006). EU: - European Commission: negotiations and governance. DG Mare – Unit of Bilateral Agreements and Fisheries Control in International Waters Advisory committees: Regional or by topic; including NGOs, industry, scientists and other stakeholders or experts. Inter services Consultations: Including relevant DGs. - External Action Services: secure coherence and efficiency. - Parliament: co-decision authority and approval Issues prepared and presented by the Fisheries Committee - Council of Ministers: legislative authority (Informant 15, 2010; Bomberg et al., 2008). Regional organisations: - IOTC: Responsible for managing straddling and highly migratory fish stocks in the Indian Ocean. EU a member and Mozambique a cooperating non-contracting party. - Other : UN (FAO), IOC, SWIOC, SADC, OECD (EBCD, 2010)

The Ministry of Fisheries (MoF) is through the Fishery Law from 1990 legally responsible for management and development of marine resources in Mozambique (Omar, 2006). The structural composition of MoF, as we know it today, was however only officially created by Presidential decree in 2000. Many of the institutions existed in different forms before this, but time was needed to establish a structure adjusted to a new and independent Mozambique. Today, as presented in the table above, three departments, three directorates, four semi-autonomous institutes, a fisheries school and provincial directorates and services constitute the MoF (Lichucha et al., 2003, Degnbol et al., 2002). Not all of these are directly involved in governing the FPA, but they are however part of general discussions and consultations in the Ministry regarding initiation of new agreements or execution of funds. DNEP is responsible for developing matrices for how funds are spent and how this relates to overall governance objectives. Before funds can be executed, they need to be approved both by the Parliament and the Ministry of Finances. FFP is responsible for accountants in relation to the actual execution of FPA funds, securing that funds are applied for the agreed projects and so on (Informant 8, 2010).

As a result of the CFP from 1983, a large part of the governance responsibilities in the EU is centralised, and in relation to FPAs, almost all tasks lie within the main institutions in Brussels. The European Commission is responsible for following up and negotiating agreements, and tasks are executed by representatives within DG MARE[5] – generally found working under the Unit for Bilateral Agreements and Fisheries Control in International Waters. It is the responsibility of the Commission to collect information from stakeholders, normally done through working groups of experts participating in Advisory Committees and Regional Advisory Councils consult, and through the governance process trying to represent and reconcile the different interests in an optimal way. Through inter services consultations other General Directorates (DGs) are consulted, the most important being DG Development and Cooperation - EuropeAid and DG TRADE. The first DG generally assesses and makes comments on how agreements relate to the Union's development policy. Due to the European Consensus on Coherence for Development from 2000 all policy areas of the Union need to be coherent with the overarching development policies. DG Trade investigates how agreements relate to trade issues. If an agreement is to be (re-) initialled, only the Commission has the right to propose this for the Council. The Council discusses the proposal at three levels: working groups at civil servant-level, Permanent Representatives Committee (COREPER)

[5] DG MARE is short for Directorate-General for Maritime Affairs and Fisheries (EC,2011b).

and in the Council of Ministers. If agreement is reached at the lower levels, final decisions on proposals are made in the Council by voting. The Parliament also needs to approve the proposal, and after the Lisbon Treaty entered into force in 2009 their powers are extended through the co-decision procedure, as they gained law-making powers. The fisheries committee is responsible for elaborating and presenting fisheries issues for the Parliaments general assembly. Another result of the Lisbon Treaty was the foundation of European External Action Services (EEAS), which are to assist the EU's newly appointed high representative for foreign affairs and security policy. The aim of EEAS is to increase the impact and coherence of EU's foreign policy (Borchardt, 2010).

The IOTC is an intergovernmental organization established in 1996 under the auspices of FAO. The RFMO is responsible for managing the highly migratory resources in the Indian Ocean and adjacent seas (FAO statistical areas 51 and 57), and has its headquarters in the Seychelles. Representatives of governments of the coastal states in the area as well as states fishing there take part in regional cooperation on preparing assessments of the resources and formulate resolutions on how to manage them. In addition, organisations such as the Indian Ocean Commission (IOC) and South Western Indian Ocean Fisheries Commission (SWIOFC) are potentially important in relation to regional cooperation on fisheries management (WWF, 2005b). These organisations do not have management mandates, but are nonetheless important in guiding their members towards common policy directions. In 2002 Mozambique also ratified the SADC Fisheries Protocol, a legal framework aiming to guide fisheries managers in SADC countries in the same direction, especially in relation to what concerns deeper regional integration, poverty reduction and achieving the MDGs (SADC, 2010). In addition, both the EU and Mozambique are members of UNCLOS, FAO and the Organization for Economic Cooperation and Development (OECD) and are jointly committed to follow the regulations and advice given by these organisations.

With the number of units and responsibilities part of the Governing System, diversity must be assessed to be high.

Complexity

A governing system including a high number of sub-units is likely to involve complex positions, views and goals. The different objectives of the GS units involved in the governance of the FPA are elaborated on in the following.

Table 17: Complexity of the governing system

Property	GS
Complexity	Mozambique: The departments and institutes constituting the MoF generally have the same goals regarding the FPA: Collect as much resource rent as possible, without compromising the sustainability of the resources. Even though the units responsible for scientific and technical management of the resources tend to have a greater focus on biological concerns than the units responsible for economic affairs, the Mozambican governing units generally have the same overarching goals and co-operate on achieving these. EU: - Commission: aims to reconcile all stakeholder interests, i.e.: industry, environment, aid and other interests advocated through the Advisory Committee for Fisheries and Aquaculture, the Regional Advisory Council for Long Distance fishing or other forms of consultations. Secure access and supply the EU industry, while at the same time promoting development in the third country. Minimise costs, maximise exploitation. - Parliament: is the voice of the people and aims will depend upon the members' political positions. Decisions are made by voting. - Council: Fisheries ministers, permanent representatives (COREPER) and working groups aim to secure national interests, and protecting the industry is often a high priority for socio-economic reasons. Constant power struggle within and between governing units: Commission ←→Parliament ←→ the Council (Informant 18, 2011; Bomberg et al., 2008). Regional The mandates and provisions of regional organisations are sometime unclear, and since they mainly are based on voluntary cooperation compliance is a challenge.

In the governance process within the EU, the aim is to take in as many interests as possible, making the governing units highly complex. The Commission seeks to reflect the complexities as best as possible. The Parliament is composed by political parties with different priorities and goals, and when proposals are to be approved, these interests will decide the outcome of voting. The Council of Ministers represents different countries, some focusing on the economic importance of the industry while others emphasize environmental conservation. Generally countries in the south of Europe with interests in the FPAs, like Spain, France and Portugal, vote for the agreements, while northern countries like Sweden, Denmark and the UK are more critical (Gorez and Riordan, 2003). Industrial interests are

generally very strong within the EU, but the Union's responsibilities in relation to the environment, justice, development and poverty reduction are increasingly being advocated especially as a result of the obligations of the European Consensus on Policy Coherence for Development from 2005, the enhanced involvement of the Parliament (where especially the Greens follow the FPAs with critical eyes) and the introduction of regional advisory councils in 2004 (giving a wider range of stakeholders the opportunity to influence policy development). Goals and interests are often colliding, as when commitments on cooperation and development support are confronted with commercial interests related to the FPAs. The outcome is a result of a political process and power struggle between units and actors (CFFA, 2006).

The objective of the IOTC is to promote cooperation among its members with a view to ensure appropriate management, conservation and optimum utilization of tuna and tuna like species and encourage sustainable development of fisheries based on such stocks. To achieve this, the Commission has the following functions and responsibilities: gather and analyse the situation of the stocks; encourage, recommend, and coordinate research and development activities in respect of the stock and fisheries; adopt conservation and management measures, on the basis of scientific evidence, in order to ensure conservation of the stocks and promote optimum utilization throughout the area; and keep under review the economic and social aspects of the fisheries based on the stocks bearing in mind the interests of developing coastal states (IOTC, 2011a). The lack of data and enforcement of requirements challenge these activities, and it is a complex task to make the IOTC function in an optimal way.

The number of governing units constituting the MoF may also increase the level of complexity related to the governing task, and coordination is vital to attain the desired level of performance. Lack of evaluations of performance and strategies may however lead to misinterpretations related to the actual level of complexity involved and affect the use of the capacities of the GS. In the case of governing the FPA between the EU and Mozambique there is however no doubt that the complexities within the GS are high.

Dynamics

The dynamics of the GS indicate how stable the system is, how flexible it is in its functions and how well the system can adjust to changes related to the system-to-be-governed.

Table 18: Dynamics of the Governing System

Property	GS
Dynamics	Mozambique: Bureaucratic structure of the GS, seeking to be participatory. Political powers seem to affect technical decisions. Recent changes to the GS: - ADNAP became autonomous in 2010, and gained a more independent voice within the GS - Mozambique became a cooperating non-contracting party of the IOTC in 2011 EU: The large and bureaucratic size of the EU's GS, challenge its dynamic. The Lisbon treaty altered the structure of the GS within the EU, affecting the procedures related to FPAs: - Parliament got a more prominent role through the co-decision procedure. - Possibility to introduce Qualified Majority voting within the Council (member state votes weighed) - European External Action Services established to ensure coherent external policies. - DG Development and Cooperation - EuropeAid new structure, uniting the previous DG DEV and DG Aid. Field research units and executing units work more closely,while geographical units moved to new services. Goal to work more constructive and effective (Informant 13, 2011). IOTC: The quantities of data and coordination of members affect the dynamics of the organization. The lack of data makes it challenging to develop effective and dynamic management measures (Informant 23, 2011).

The table above shows how the governing structures both in Mozambique, the EU and on regional basis have relatively bureaucratic structures affecting their dynamics.

The structure of the MoF appears to have been relatively stable over the recent years, with well established mandates and procedures. The system does however seem to be relatively bureaucratic, and lack of capacity to collect information and make evaluations reduces the ability to make efficient and solid founded decisions. Lack of qualified personnel also seems to make the system slightly person-dominated, but there are evidently

improvements in this area with more replacements being done in the head staff than previously. With ADNAP becoming more autonomous, the fisheries technicians gain a more independent voice opposed to the politicians and bureaucrats in the GS (Informant 2 and 7, 2010).

The EU is constantly trying to find the best composition of GS, and the aim is to develop a dynamic system able to respond efficiently. The dynamics of the main governing units, the Commission, the Parliament and the Council is affected by how the interests within them manage to affect decision making. Industrial interests are strong within all three units and the level of conflict between these and obligations in relation to conservation and development affect the dynamics of the EU's governance process. The Lisbon treaty altered some of the existing structures and procedures, aiming to create more efficient and dynamic decision making processes, and many actors are now trying to navigate in this new terrain where power is distributed between the units to a higher degree than previously (Informant 15, 2011).

The dynamics of the IOTC is affected by their lack of verified data in order to implement measures for governing the natural resources. The dependency on cooperation from a high number of members and non-contracting cooperating parties in order to implement resolutions challenges the organisation's ability to act efficiently (Informant 23, 2011).

The GS is governing a relatively dynamic SG, and the dynamics of the GS itself will therefore highly affect its ability to do this. The Mozambican system may seem to be a bit slow-reacting due to reduced financial and governance capacities, while the bureaucratic nature of the EU system requires time to move forwards. The level of dynamics of the IOTC is affected by the dependency on voluntary cooperation, compliance with resolutions and reporting of data. Changes are also continuously being made within the GS, some accelerated faster and having greater consequences than others. In conclusion, the GS is likely to have a medium level of dynamics.

Scale

Scale of the units within the GS is essential in order to match the boundaries of the SG.

Table 19: Scale of the Governing System

Property	GS
Scale	Mozambique: MoF institutions centralised, while provincial directorates are involved in general discussions. Mainly national, but also regional and local interests advocated (Informant 8, 2010). EU: Commission: reflects stakeholder interests, experts and the obligations set in the treaties Council: Member states interests Parliament: political interests. Some focusing on internal interests, while others are also pre-occupied with third country interests. Regional: IOTC: involves coastal states in the Indian Ocean and countries fishing there. - Other regional organizations like IOC, SWIOFC (South West Indian Ocean Fisheries Commission) and SADC are not involved specifically in governing tuna, but cooperation on other issues (such as IUU, trade and ecosystems) can be important. - International organizations such as UN, FAO (the most relevant UN org.) and OECD are important fora to discuss and decide on international standards related to FPA issues (EBCD, 2010)

While the Mozambican governing institutions concentrate on their national interests, including local and provincial, as well as regional commitments, the EU institutions cover the interests of the member countries, stakeholders– and political interests within different coalitions as well as ACP interests.

IOTC covers the whole area where highly migratory stocks are found, and coordinates the management of these stocks for all countries in the Indian Ocean. IOC, SWIOFC and SADC are not directly involved in governing the highly migratory species, but through these organizations issues affecting the FPA fisheries can be discussed (Informant 23, 2011).

The UN is the main international institution responsible for governing international fisheries. Through UNCLOS and the UN Fish stock agreement requirements and provisions related to bilateral fisheries agreements are given, and since both Mozambique and the EU are members, these need to be fulfilled. In addition, the two have signed the FAO's Code of Conduct and are member of IOTC, and the principles and recommendations advocated by them need to be taken into account (EBCD, 2010).

The units of the GS cover national, regional and international levels and the scale issue is therefore suggested to be high.

5.3 Governing interactions

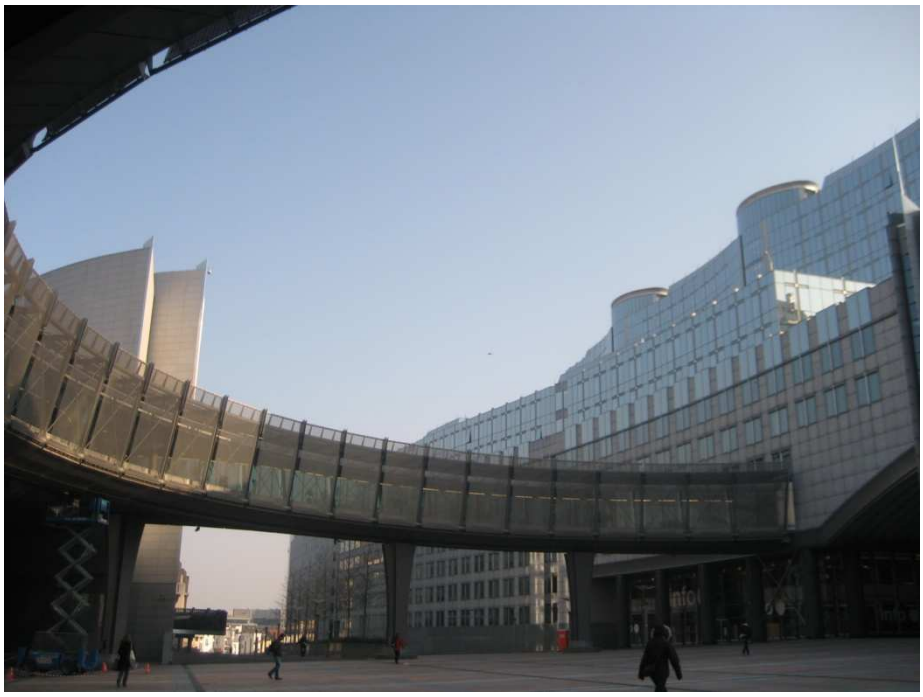

Image 5: European Parliament, Brussels

Image 6: Local council in a Mozambican fishing community

Participation

The existing forms of interactions between the GS and the SG, as well as who are represented, are presented in the following.

Table 20: Participation within Governing Interactions

Attribute	GI
Participation	Technical interactions: EU approves vessels for the FPA fisheries, and ADNAP grant licences. Fleet report VMS data, entry-exit information and catch numbers to ADNAP, IIP, flag state and IOTC. Catch verification by flag states' scientific institutions (Spain: Instituto Español de Oceanografia; France: Institut de Recherche pour le Développement; Portugal: Instituto de Investigacão das Pescas e do Mar) and IIP (COM, 2007). IOTC: EU is a member. Mozambique recently became a co-operating party and will now participate in meetings They attended their first meeting with two representatives from ADNAP (IOTC, 2011a). Joint Committee meeting: (Forum for direct governance decisions and negotiations) ADNAP, DNEP, DCI, IIP, IOTC When in Brussels: Mozambican embassy representatives EU Commission: DG MARE representatives (one regional EU representative). Member states representatives Scientific Meeting: In addition to most of the same as above: Fisheries Development Fund (FFP) (Informant 1and 9, 2010).

Technical interactions mainly involve, as shown above, ADNAP, the Commission, the fleet and scientific institutions. The flag state of the vessel is responsible for verifying catches through scientific institutes. In the original text of the FPA, IIP was included in this process, but in the translated English version of the agreement it was not included and was therefore not involved before this was noticed.

Stakeholders and governing units of the two parties first carry out discussions and consultations amongst themselves, before selected representatives from the two meet in Maputo or Brussels. First a scientific meeting is set up to discuss technical matters, and directors of the most important governing units as well as technicians are represented. Through this meeting, as well as through e-mail, an agenda for the Joint Committee meeting is developed. This is the main forum for governance discussions, negotiations and decisions

related to the FPA, and are according to the agreement supposed to be held once a year. This has not been the case during the current agreement. The Mozambican delegation normally includes directors of the main institutions and senior consultants, as well as embassy representatives when in Brussels. Reduced financial means can potentially reduce the number of Mozambicans travelling to Brussels. The greatest share of the EU delegation consists of representatives from DG MARE's unit for Bilateral Agreements and Fisheries Control in International Waters, specialised on FPA matters. There is also one fisheries representative from the EU Delegation in Maputo and one regional EU representative. In addition, member states are represented, seen as an extension of the Council's working group. All member states are allowed to participate, but normally only the ones having vessels fishing under the FPA are represented (SSNC, 2009).

Through IOTC meetings and working parties, stakeholders collaborate on managing highly migratory species in the Indian Ocean. A wide range of coastal states in the Indian Ocean, as well as states fishing there, are members. There are not any representatives from the IOTC Secretariat participating directly in the process of governing the FPA, but as the IOTC resolutions are meant to be implemented at a national level, the countries governing and negotiating FPAs should have the resolutions in mind as they interact (Informant 21, 2011).

Not all stakeholders participate in the governing interactions, and especially the people of Mozambique – present and future generations – are dependent on the voice of others to advocate their interests. Due to the specific nature of FPAs, only specialists on the agreements are directly involved in governing interactions and there is a low level of knowledge about the governance process both within the overall governing systems and among the general public. The level of participation is thought to be moderate.

Communication

How well representatives communicate and cooperate through governing interactions will affect the overall governance performance. The different forms of communication applied through interactions are presented below.

Table 21: Communication within Governing Interactions

Attribute	GI
Communication	Technical interactions: Data and information is communicated between the parties by using the internet, fax and

	post. VMS involves information being transmitted by satellite (Informant 2, 2010). IOTC: Through working parties, scientific meetings and an annual session, the members and cooperating parties meet for discussions (Informant 21, 2011). Governance interactions Views and agendas are discussed by e-mail and telephone, before representatives from the two parties meet. The EU Delegation in Mozambique is of key importance in regards to communication between the two parties. Experts within the EC make ex-ante and ex-post assessments before and after initiating agreements, in order to prepare negotiations and governing interactions. These are not shared. Open dialogue through the meetings (Informant 1, 2 and 6, 2010).

According to the FPA all fishing vessels with an overall length exceeding 15 metres operating in the Mozambican fishing zone shall be equipped with a Vessel Monitoring System (VMS) transmitting data on position, course and speed by satellite to control centres on shore. This data should ideally be complemented by observer data (COM, 2007). Communication of a technical matter has however been challenging because of both problems with internet connections and setting up the VMS protocol in Mozambique, reducing the level of technical communication. But according to ADNAP (Informant 2 and 3, 2010) the VMS is now up and running and they are able to receive data from the EU vessels.

Reports on entry-exit times and catch validations shall also be communicated to ADNAP. Catches are first validated by scientific research institutes in the flag states. Since 2002 data from European fleets have been collected within the framework of the EU "Data collection regulation", followed in 2008 by the "Community framework for the collection, management and use of data in the fisheries sector and support for scientific advice regarding the Common Fisheries Policy (Chassot et al., 2010). The EU Delegation in Mozambique has a very important role in the communication between the two parties. All license schemes are passed through the Delegation, and when there have been problems with the VMS and other reporting mechanisms the Delegation has been responsible for communicating great quantities of data to the Mozambican GS.

The IOTC receives data from the flag states in aggregated form, including data from purse seiners reported within 1º by 1º squares and long liners within 5º to 5º squares. Due to this format of reporting data, the IOTC does not have specific data on how much is being caught in the Mozambican Fishing zone. But rather assesses the state of the stocks and level of exploitations in the region (Informant 21, 2011).

The EU has since 2003 been legally obliged to assess impacts on sustainable development through undertaking impact assessments of all policies, including FPAs, both before (ex-ante) and after (ex-post) agreements are concluded (CFFA, 2005). These are however not shared openly with the partner country. Communication through governance interactions is according to representatives from the two parties (Informant 1, 2, 9, 10 and 18) constructive and friendly, even though conflicting interests lead to intense discussions. The parties do however not attain the same levels of information, seen as information on actual and potential benefits are calculated by the EU while Mozambique neither has the resources to conduct such assessments nor the opportunity to access the ones prepared by the EU. This, together with the fact that the EU delegation is specialised in FPA-matters while the Mozambican representatives only focus on the agreement a small portion of their time may affect the quality of communication. Communication between the parties involved in governing the FPA is assessed to be moderate.

Adaptation

The level of adaptation within the governing interactions will determine the governing systems ability to interact with the system-to-be-governed in an efficient and effective manner.

Table 22: Adaptation within Governing Interactions

Attribute	GI
Adaptation	Technical interactions: Reduced MCS capacity reduces the ability to continuously investigate the level of compliance and adjust technical interactions thereafter (Informant 3, 2010). Biological interactions: Difficult for the IOTC to develop management measures, due to the lack verified data giving a basis for evaluating the actual state of the stocks (Informant 21 and 23, 2011). Governance interactions Increasingly higher demands related to governing interactions, e.g. partnership, transparency, coherence and so on. Interactions are facilitated in a manner trying to adapt to these new demands and challenges. Lack of information, resources and capacity reduces Mozambican ability for adaptive interactions. In addition the bureaucratic structure of the GS in both EU and Mozambique reduces flexibility of representatives through interactions (Informant 6, 2010).

Even though the structure and format of governing interactions has changed in order to adapt to new demands over the recent years, adjusting interactions in practical terms remain a challenge. Lack of resources and capacities in the Mozambican GS reduces their ability to respond quickly and effectively when there is a lack of compliance with regulations. In addition, the bureaucratic structures of both the Mozambican and European GS reduces their flexibility through governance interactions, especially as the EU represents a wide range of interests that are difficult to reconcile.

Due to the lack of biological data and ability to implement instruments to govern the offshore fisheries, governance of the resources is not very adjustable. IOTC set a limitation on fishing capacity in 2003, but even though there have been signs of high exploitation of some species, no other management measures to adjust the levels of fishing effort have been introduced (Informant 21, 2011). The scientific meeting set up for governing the FPA does however need to take the state of the resources into consideration, and the FPA includes a clause which allows the fishing opportunities to be revised in the light of scientific evidence (COM, 2007). The financial contribution will be increased or reduced proportionally, according to Walmsley et al. (2007a) there has however been few examples of reduction of fishing opportunities.

The framework for governing the FPAs seeks to establish more adaptive forms for interactions, but the practical realization is challenging and the level of adaptation is therefore identified to be moderate.

Collaboration

Many of the interactions, of technical, biological and political nature, involve actors at many scales and how well these collaborate will be vital for their final outcome.

Table 23: Collaboration within Governing Interactions

Attribute	GI
Collaboration	Technical interactions: - ADNAP is dependent on the fleet to comply with regulations and fulfil requirements. Levels have been inadequate. - Catch verification is in principle to be performed by scientific institutes of flag state in cooperation with IIP (Informant 2 and 4, 2010). Biological It is crucial for IOTC members and cooperating parties to collaborate in order to implement resolutions and develop sustainable resource management.

	Flag state reports to IOTC. If the flag states fail to implement the relevant IOTC resolutions on data reporting the whole structure becomes weak (Informant 21, 2011). Governance meetings: Representatives collaborate on preparing and carrying out meetings and negotiations.

How well actors at different scales collaborate appears to vary. The main problem is that some actors lack the incentive to collaborate, which especially is the case for the fleet and industry that potentially can benefit from not reporting catch positions and numbers. Politicians and technicians can also be reluctant to collaborate if interactions do not serve their main interests. In the case of the FPA, many representatives will be unwilling to commit to interactions that inflict on socio-economic interests. However, there appears to be a good dialogue between the representatives from the different governing institutions, and the EU Delegation in Mozambique seems to be of key importance by building a bridge of collaboration between the two parties. The fact that representatives in the Delegation are present in Mozambique and know how the systems of both parties work highly influences this process. Collaboration attributed to the GIs is assessed to be at a medium to low level.

5.4 Orders of governance

Interactions at the three orders of governance are explored in order to achieve a deeper understanding of what is being done to achieve governance objectives, as well as what hinders it. The presentation that follows is based on the questions in table 6 and the findings will hopefully provide the researcher with the ability to make suggestions, in chapter 6, on how current or new forms of interactions could improve governance performance.

5.4.1 First order governance

SG

What impacts decisions have on the natural system is crucial, since the ecosystem constitutes the foundation for conducting the FPA fishery. Decisions regarding fishing effort, practices and MCS clearly will have an effect on the resources, but the level of impacts and connections are not well studied. Potier et al. (2004) however refer to simulations conducted with a ECOSIM model, suggesting that removal of tuna by fishing could produce substantial structural changes in the ecosystem. Especially if catches are higher than the maximum

sustainable yield[6] of the resources, consisting of high levels of juveniles and by catch or caught using environmental destructive fishing methods, the ecological impacts may be severe.

Decision making further involves determining the number of vessels allowed in the fisheries, provisions on landings, crew, fees and quotas of fish. The distant water fleet is dependent on access through agreements to remain fishing, and ship owners, crew and their families depend on these fisheries for a living. Further producers need supplies of fish to maintain levels of employment and production. Prices and availability of tuna products on different markets may also be affected (EC, 2009).

There is no direct connection between the FPA fishery and Mozambican stakeholders, but through decision making they can be affected. Most significantly in relation to the level of financial compensation and its application, but also with regards to which provisions are given in terms of landing, production and employment in Mozambique. Such decisions can potentially both affect generation of income and level of food security (KusiLimitada, 2008). In conclusion, decisions may have substantial ecological and social impacts and these need to be accounted for before decisions are made.

GS

Technical management decisions concerning fishing practices, reporting requirements and so on are made and enforced by the government. The responsibility of biological management of the highly migratory resources does however fall under the responsibility of the IOTC, which is an organisation dependent on collaboration from the countries in the region and those fishing there in order to gather information about and manage the resources (Informant 1, 2010; Informant 21, 2011). The level of engagement of stakeholders will however dictate how effective it is. There has not been developed any explicit harvest policy/management strategy, in other words a fully specified set of rules determining management actions, such as determining annual catch quotas or effort. But there is at present a resolution addressing these issues being discussed in IOTC forums. A management strategy generally includes specifications for a monitoring system, an assessment procedure, and a decision rule. In the Indian Ocean the involved parties have not managed to develop and agree on such a strategy. One reason for this is the lack of data needed as a basis to determine which strategies are best suited, and the different strategies also have disadvantages (Tong and Chen, 2010). The

[6] Maximum Sustainable Yield (MSY) is the biologically calculated level of catch that, given a level of effort, can be taken from a stock over an indefinite period of time (Charles,2001).

report from IOTC's Scientific meeting (2011c) emphasizes that given the multi-species nature of the fishery, management measures directed towards a single stock is likely to have effects on other stocks as well. The direction of magnitude of these effects can be difficult to understand. Piracy further impacts research programs in the Indian Ocean, especially the observer program.

The governance processes both in the EU and Mozambique involve participative stakeholder interactions such as consultations and hearings. Through technical and joint committee meetings and negotiations these interests are represented and the parties collaborate on reaching agreement of both technical and political character. However, even though agreement is found at the technical level, decisions in reality often are made top-down and political power is decisive. This was exemplified in the process of negotiating the current agreement in 2006. Agreement was not reached after several rounds of negotiations in Brussels, as the Mozambican representatives were not content with the terms laid out. But when negotiations were about to close, there were given orders from the top political level to sign the agreement. On what grounds this decision was made is not clear for the public, but it is said that it was because of diplomatic reasons. Political considerations are common when decisions are to be taken, but the lack of clarity may lead to speculations on the motives. One of these speculations is that Mozambique did not want to jeopardize the good relationship they have with the EU – especially in relation to development support (Informant 2, 6 and 9, 2010).

Co-governance procedures are in other words widely applied making decisions related to the FPAs, but some decisions are made using a top-down mode of governance. This includes decisions regarding enforcement of technical regulations, as well as top-level decisions of political importance. All decisions are part of a highly political environment, and it is claimed that political governance is the most important mode applied to decision making seen as political power seem to be able to affect and possibly even dictate the outcome.

GI

The parties carry out governance interactions under banners of shared benefits and equal powers. Conflicting interests are put up for discussion and negotiation, with the aim of satisfying both parties. While the Mozambican representatives have a clear objective of maximising revenue from a sustainable fishery, the EU representatives attend the meeting with a more complex agenda involving both economic, environment and development issues.

Most major governance decisions are made during joint committee meetings, where a total of around twenty representatives from the two parties participate. While the EU delegation normally consists of representatives specialised on FPA matters and decision making, the Mozambican representatives are involved in such processes only once a year or more seldom. Mozambique neither has the financial capacity to make evaluations of the potential of their offshore resources nor the effect of the FPA, while EU on the other side makes evaluations both before and after concluding agreements. EU does not share these evaluations openly, and the representatives thus have unequal levels of knowledge before making decisions. They do however, according to members of the Committee, interact in an open and constructive manner during meetings and there is a good relationship between the two parties, - even though they sometimes have difficulties in reaching agreement (Informant 1, 2 8, 9 and 10 2010; Informant 18, 2011).

5.4.2 Second order governance

SG

Interests are institutionalised through an open governance process including stakeholder participation at several levels. All stakeholders can participate and advocate their interests, but it is up to the Commission in the EU and the MoF in Mozambique to determine their level of importance and how they are to be represented in the proceeding steps of the process. Industrial and commercial interests do however tend to be better organised and attain a higher level of financial means than for instance those advocating environment, development or third country interests. This may affect their level of influence, and even though both the EU and Mozambican governing systems aim at reconciling a range of interests, those involving generation of economic and financial benefits will generally be more powerful than those representing costs (Informant 1, 2, 6 and 12). Onyango and Jentoft (2010) claim that there is a risk that problems remain unresolved if powerful interests get to define the agenda. Many stakeholders are often brought to the table, but their level of institutional influence tends to vary and it is a risk that some stakeholders dominate.

GS

Institutions both in Mozambique and in the EU are designed to enable participative interactions at all levels, with the aim of making the outcome of decisions efficient, effective and legitimate. Within the EU the Commission is given a great share of the responsibility, including practical management matters, collecting data, making proposals and conducting

negotiations. The Council and the Parliament does however hold the legislative powers. Through this structure the Commission will make proposals reflecting a range of stakeholder interests, and it is up to the legislative authorities to approve it. Both within the Parliament and the Council there is a continuous struggle between interests. In relation to FPAs, countries with great economic and societal interests in the agreements, like Spain, France and Italy will most often protect these interests and vote in favour of proposals supporting continued fishing, while countries in the north like Sweden, Denmark and the UK generally will vote more in favour of protecting the fish. This pattern recently manifested itself in the process of approving the controversial agreements with Mauritania and Morocco. Seen as the Parliament recently has gained more power, the political parties are able to influence governance decisions more than previously. Their stands related to FPAs will vary, but the Green parties will generally take the most critical position (Informant 15 and 17, 2011).

Hearings and consultations about the agreements are carried out also in Mozambique, but the specialised nature of the agreement and the lack of stakeholder organisation reduce the level of participants. Through different departments, directorates and institutes of the governing system, different interest fields are institutionalised. ADNAP is responsible for practical management tasks, DNEP and DCI for overarching economic and cooperation interests, while IIP is responsible for advocating biological concerns (Informant 6, 2010; Degnbol et al., 2002)

An increasing number of interests are being institutionalised, but the powers associated with them affect how they are represented in the decision making process. Priorities and commitment further determine the outcome of decisions.

GI

During recent years the framework and set-up of institutions both in Mozambique and in the EU have increasingly been subject to new demands, and reforms have been carried out in order to satisfy these. Characteristics such as participation, transparency, responsiveness and accountability should ideally be of high levels in order to gain legitimacy. According to the theory of new institutionalism, institutions need to be organized in such a way that they attain legitimacy within their institutional environment. To establish this relationship they need to reflect and respond to their cultural, social and political environment. Institutions will in other words evolve in response to the strategic actions of a field of actors (March and Olsen, 2005). The institutional structures of governing interactions related to the FPA include all these elements, and can be characterised as highly political, multi-levelled and bureaucratic.

Institutions seek to reflect and represent the stakeholders in the environment they are part of, and as a consequence they are of a very complex structure. Their performance will be determined by the efficiency and effectiveness of the governing interactions.

5.4.3 Meta order governance

SG

The operators are mainly concerned with economic profitability, while many of them also will consider sustainability an important principle to conserve the resources they are exploiting. They are also concerned with maintaining a fair playing field on the fishing grounds, where all operators should be required to adhere to the same principles and regulations. Maintaining economic profitability is also an important part of the foundation for institutional formation and decision making. But the principles of responsibility and sustainability have increasingly become integrated into the institutions governing the FPA. These principles have become essential in order to legitimize and assess the quality of interactions, and problem solving has become more comprehensive than previously. Sustainability is a pre-requisite for maintaining the fisheries and securing a basis for continuous development of the sector. The principle of responsibility has increased the obligations of the GS in the governance process. Previously the EU could attain pure commercial agreements with developing countries, but today this is more difficult due to increased number of international obligations towards supporting the developing countries. But even though the mentioned principles have gained a more powerful position the recent years, it is still challenging to make decisions that reduce economic profitability. The interactions between stakeholders and governors are highly affected by the dynamics between them and the power they have to influence the governance interactions.

GS

The values, norms and principles of the governing institutions will highly affect how problems are defined, the agenda set and conflicts resolved. The institutions involved in governing the FPAs generally represent a wide range of different interests. While the focus of the scientific institutions, i.e. IOTC and IIP, will be to protect the resources and advocate principles on sustainability and precaution. The other institutions generally compromise economical, social and environmental interests, and will seek to have a broad focus reflecting all these dimensions. The fact that both institutions of the EU and the Mozambique aim to reflect a range of interests, as well as the principles of partnership, transparency, credibility,

subsidiarity and coherence, has made problem definition related to the FPA much wider and the agenda more comprehensive than previously. The increased number of interests and principles to maintain has however made conflict resolution more challenging. There is generally a lack of concrete indicators related to the the implementation of principles, and there might be disagreement on the extent to which they are adhered to.

GI

Stakeholders are increasingly focused on sustainability and legitimacy of interactions, and there is generally a good dialogue and cooperation on these matters. Representatives from the EU and Mozambique are besides obliged to promote many of the same objectives and ensure coherence between policy areas both between each other and at their internal arenas. These include transparency, legitimacy, coherence, good governance and so on. The EU has committed to contribute towards achieving the MDGs, and the overarching objective of EUs relations with African countries is eradication of poverty. Due to the Consensus on Policy Coherence for Development policy areas, such as the FPA, with potential to contribute to achieving these objectives need to be coherent with the overall development policy. In addition the FPA also needs to be coherent with the objectives of the Mozambican fisheries policy. The FPA is neither incoherent with the EU development policy nor the Mozambican fisheries policy, but is not expected to make any significant contribution either. The Country strategy paper does not address fisheries explicitly, but there is a potential for infrastructure and macro-economic support sectors to indirectly contribute if connected in a beneficial manner. The FPAs also have a potential to contribute to achieving MDGs related to poverty reduction, food security and so on, if implemented in an optimal manner. There is however different opinions on whether the FPAs shall be considered as development instruments or if they merely need to ensure that they are not incoherent with the development policy. The latter involves avoiding negative impacts the FPAs may have on development in the third country, while the former implies a commitment to realize a greater share of the development potential related to the FPAs.

6. Assessing governability and the potential of interactions

The purpose of this study is to assess the limitations and potentials of the GS, including the EU, Mozambique and regional organizations, ability to govern the FPA and achieve a given objective. In order to do this, the system properties and attributes will first be translated into levels of governability. Assessing these levels will help identify how different components affect governance performance and give an overview of the main challenges facing the GS. Matching the needs of the SG with the capacities of the GS is very useful as the ability to achieve desired governance outcomes is highly related to the match between the properties of the two systems. A discussion related to the levels of governability related to the different systems and how they affect governance performance follow in section 6.1. Thereafter interactions of the different orders of governance that can increase governability and enhance the ability to attain desired outcomes are suggested in section 6.2.

6.1 Governability assessment

Levels of system properties and attributes identified in chapter 5 are shown and translated into levels of governability in the table below.

Table 24: Level of system properties, attributes and governability

System properties	**SG**		**GS**	**GI**	**GI Attributes**
	Nat. syst.	**Social system**			
Diversity	Medium	High	High	Medium	*Participation*
Governability	Moderate	Low	Low	Moderate	
Complexity	Medium	High	High	Medium-low	*Information*
Governability	Moderate	Low	Low	Moderate-low	
Dynamics	Medium	Medium	Medium	Medium	*Adaptation*
Governability	Moderate	Moderate	Moderate	Moderate	
Scale	Medium-High	High	High	Medium–low	*Collaboration*
Governability	Moderate-Low	Low	Low	Moderate-low	

SG

Natural system

The relatively small number of species involved in the FPA fishery indicates a moderate level of governability, as does the complexities and dynamics within the ecosystem these species are part of. The geographical scale of the natural system is however high, seen as the highly migratory behaviour of the species makes it necessary to take local, national and regional considerations. This challenges governance capacities and reduces governability. The temporal scale is however relative short, with reproduction rates and robust biological characteristics of most species making the system less vulnerable than in cases where the resources need longer time and more specific conditions in order to reproduce. The overall governability of the natural system is assessed to be moderate.

One of the main challenges related to governing the natural system is that limited information about the resources and interconnection within the ecosystem, as well as levels of exploitation, make governance outcomes uncertain. This constitutes a major governability problem, which is highly challenging for the GS to handle. Caution should be applied, but it is important to be aware that there are limits to how cautious a GS can be before it becomes ungovernable itself (Jentoft, 2006b). The IOTC applies the principle of the precautionary approach in their recommendations, but fishing activity is carried out also on stocks of an uncertain status. The regional character of the resources challenges governance cooperation across borders, especially in relation to handling IUU fishing and piracy. These days piracy is a very important component reducing governability, both because catch levels are uncertain and because fishing operations and patterns are changed due to security reasons. Walmsley et al. (2007a) emphasize that weak management and corruption are factors that can leave the fisheries open to IUU fishing and financial contribution open to misappropriation. This can potentially limit the impact the FPA can have on improving fisheries management and contribute to sustainable fisheries, and it is important that the performance of the GS is monitored in order to identify such problems. The natural system is the basis for fisheries development and long term generation of benefits for Mozambique, and it is therefore crucial to increase governability and handle the existing governance problems in an optimal manner.

Socio-economic system

Fish can, as mentioned, be a source of food, employment and revenue, and the diversity of stakeholders with different interests and motives in relation to the FPA is as a consequence high - as are the complexities and dynamics between them. The European fleets and industry, including crew, production workers and the communities they are part of, put pressure on maximising fishing effort while reducing costs. The government and people of Mozambique on the other hand aim for maximized benefits. Conservation orientated actors exist at both sides, putting pressure on long term sustainability. The stakeholders are found at all scales; local, national, regional and international. The overall governability of the socio-economic system is as a result of all these factors low.

The wide range and scale of stakeholders reduces the governability of the SG in the process of trying to reconcile highly conflicting interests. The organisation of and power associated with the different stakeholders tend to affect the governance process, and it is a challenge for the GS to facilitate their involvement in such a manner that decision making is fair and efficient. As for the case of the FPA where the objectives of the agreement are threefold, it is decisive how stakeholders supporting each of the objectives are represented and how they are linked to power that can influence the outcome. The fact that industrial interests tend to be better organised and have more institutional influence than other stakeholders is a factor that enhances the ability to achieve objectives that favour these, while it is a risk that the objective of promoting development of sustainable development of the fisheries sector in the third country may be reduced. Internal conflict and disagreement of what commitment involves may also reduce governability. Different actors have different views of what should and could be done, and without discussions and coordination much of the potential to realize the given objective may remain unrealized.

GS

The governing system is characterized by high diversity and complexity, with medium to high levels of dynamics and scale being a highly important issue. Both the governing systems in Mozambique and in the EU consist of numerous units representing a wide range of different and conflicting interests, and the task of trying to reconcile these both within and between units reduce governability. Based on the high level of system properties, governability related to the GS is assessed to be low.

GS's ability to perform is hinged upon how well its capacities are matched with the needs of the SG. In the case of governing the FPA it seems there is a relatively good match between the two systems. The properties of the socio-economic part of the SG are identical, while the properties of the GS generally are a bit higher than the ones of the natural system. This indicates that there exists more than sufficient capacities to govern the SG. This ability is however also dependent on how well the GS manages to govern itself. The highly diverse and complex structure of the GS both in Mozambique, in the EU and in regional organisations makes this a challenging task in itself. According to Jentoft (2006b) there are limits to how high system properties the GS can have before it becomes ungovernable. As a consequence of the reduced level of detailed information about the resources and their value, the structure of the GS is based on theories and hypotheses about the form of the SG. The construction of mechanisms and procedures to handle this in an optimal manner is as mentioned one of the most important and challenging tasks of the GS. The performance of the GS will further depend on its commitment and effectiveness in the governance process. Lack of commitment naturally reduces the potential for achieving given objectives. If decisions are made without any effort to withhold them, they have no effect in practice. The execution of power within the GS is another component affecting governance outcomes. Jentoft (2006a) emphasizes that fisheries governance must be backed up by power in order to be effective, and decision making, implementation and enforcement are all acts of power. Fisheries governance may also provoke power and encounter resistance. The political and institutional context affects power relations, and it is important to assess how it is executed and affects outcomes. Within the GS of this case study, power seems to be a highly relevant component, seen as it in principle shall be a result of all incorporated interests. Some interests do, as mentioned, seem to be more influential than others and they will to a higher degree affect how power is executed. It is, according to Jentoft (2006a); important to be aware of the fact that the most powerful may have the possibility to ensure that the process benefits them and block reforms that could reduce this level. Reduced compliance with set procedures on how institutional power shall be developed and a lack of clear mandates on how power shall be executed might reduce governability.

GI

The governing interactions between the GS and SG determine how governability is facilitated. The levels of participation, communication, adaptation and collaboration will affect how

effective this process is and thus the ability to achieve objectives. Attributes of the governing interactions related to governing the FPA are generally at a moderate to low level, indicating that there lies potential for improved performance of the governing system if the level of attributes is increased. It is however necessary to be aware that, for instance, high levels of participation and communication need to be properly facilitated in order to increase governability and not reduce it.

The efficiency, effectiveness, legitimacy and the level of justice related to the GIs will determine the outcome. The efficiency of the GIs related to governing the FPA is moderate to low. The selection of a narrow range of participants taking part in the main governing interactions, such as the Joint Committee, the Scientific Meeting and IOTC meetings makes interactions more efficient than if a wider range of actors were to participate. The participants do however represent a wide range of interests, making it difficult to make important decisions before consultations are carried out and this is time consuming. The effectiveness of interactions will depend on how coherent they are and how well participants cooperate on enforcing them. If interactions of the different actors are highly contradictory or if decisions are not adhered to or enforced, the effectiveness will be reduced. This is likely to be the case when governing the FPA, seen as the participants have contradicting objectives and their willingness to comply or voluntary enforces decisions that undermine their main interests will be low. Legitimacy of outcomes is linked to their level of acceptance from the stakeholders. The level of collaboration between them through interactions will therefore affect this level. In the case of the FPA a wide range of stakeholders are involved in order to maintain a high level of legitimacy. The risk is that the processes seek to enhance legitimacy, but it is the execution of power that will determine the outcome. According to Walmsley et al. (2007a), a partnership indicates comparable status and power within a relationship. Even though cooperation between the two parties are good and Mozambique are becoming a stronger partner than previously, the EU still has more resources, more information and more experience and remains more powerful. The outcome of interactions often has a higher level of benefits accruing the EU than Mozambique. It is difficult to determine how just this is, and the wide range of opinions will be based on different views of what commitment involves.

6.2 Interactions of the orders of governance

As presented in chapter two of the thesis, a combination of interactions related to the three orders of governance is needed to achieve desired governance outcomes. According to Kooiman (2008), interactions are specific forms of actions taken by actors to remove

obstacles or create new opportunities. In the case of the FPAs the objectives related to meta-order governance are already set, and the focus of this study will therefore concentrate on how interactions of first and second order are carried out in order to complement this. The institutionalisation and practical implementation, including problem solving and opportunity creation, of objectives determines the format of governance outcomes. Based on the limitations identified through the governability assessment in section 6.1, interactions that can improve governance performance in relation to promoting sustainable development of the fisheries sector in Mozambique are suggested in the following. In order to present these governance interactions in a clear manner, they are linked to the three systems.

SG

Natural system

Natural resources are the basis for fisheries development, and can potentially generate wealth for eternity if governed in a sustainable manner. Developing capacities, measures and instruments to do so therefore needs to be a priority also in relation to governing the FPA (EBCD, 2010). Doing more research on the highly migratory species and the ecosystem they belong to is vital if the GS's ability to govern the SG is to be enhanced. In terms of second order governance this involves institutionalizing as much scientific research capacity as possible. Since the resources are of regional character and the management responsibility belongs to IOTC, cooperation with them is highly important. EU has since the conception of IOTC in 1996 been an active member of the organization, while Mozambique on the other only has observed some of its work. But in March 2011 Mozambique was granted status as cooperating non-contracting party of the IOTC, and commit to implementing all IOTC resolutions (IOTC, 2011b). There is as a consequence of this great potential for increased governability, depending on how well the institutional arrangements are set up and how actions of first order governance support this. According to the IOTC secretariat (Informant 21, 2011), it is vital that the members and cooperating non-contracting parties of the IOTC process develop an understanding of how the IOTC works and what their responsibilities are in order to address institutional and technical shortfalls. As the responsibility for implementing the decisions of the Commission are devolved to state level, it is only when they understand and reflect on their ability to make the required decisions that progress will be made. How well prepared and engaged the various states are before the decision making is of key importance for the success of the IOTC process. In addition, it is of key importance

that the members and cooperating parties not only take pride in being part of decision making, but also effectively implement these decisions at national level. Decisions are made in a cooperative manner within the IOTC, but it is the responsibility of the states to give effect to them.

In order to ensure long term sustainability, the FPA should be based on comprehensive management plans, and there should be flexible adjustments of access based on yearly resource assessments (Mwikya, 2006). The agreement includes provisions on reviewing the fishing opportunities by mutual agreement after advice from the scientific meeting. The problem is however that there is a lack of data to give such advice. IOTC provides regional data on the stocks, but these are applied with caution. There is currently no harvest limitation related to highly migratory species, and with the exception of a limitation on fishing capacity there is not any other measures to govern the resources either. The reference tonnage of the FPA is not a harvest limitation, but a catch level linked to a given financial compensation. The vessels are allowed to fish more, if they pay an additional fee per tonne (COM, 2007). This link between the financial compensation and the level of catch may give the Mozambican government an incentive to allow higher catches than what is recommended. To decouple access from funds is one way of increasing the governability, because the incentive mentioned above is eliminated and sustainability will be the core focus of resource managers.

It is also crucial that catch numbers and other data given in by vessels and research institutes are as correct as possible. Lack of reporting and underreporting of catches reduce governability. IOTC receives aggregated data from the flag states of the fleets fishing in the region, and it is vital that resolutions on data reporting are implemented in flag state institutions (second order governance) and adhered to in practice (first order governance). IUU is a huge problem in the South West Indian Ocean, and it is important that MCS capacity is improved in order to enforce governance measures in practice. Ilnyckyj (2007) claims that a general lack of enforcement feeds a culture in which IUU fishing is tolerated and indirectly encouraged, rather than punished and stigmatized. Implementation of IOTC's observer programme, auto sampling (collection of data of trained personnel) and registration of bycatch are actions of first order governance that potentially can help correct the catch numbers. It is also highly important that the level of fishing activity of other fleets in the area, Asian and local small – and semi-industrial fleets, are determined and shared in a more transparent manner in order to develop an accurate estimation on the state of the stocks. Witbooi (2008) emphasizes the need for enhanced regional cooperation among coastal states to develop more sustainable fisheries governance both domestically and regionally through improved

generation and flow of fisheries data and improved MCS capacities. Measures to fight IUU and systems for data analysis need to be harmonised, and structures and mechanisms that enable dialogue between researchers, managers and professionals should be set up at a regional basis. Interactions could include joint surveillance missions and harmonization of legislation on technical measures. Much of this type of cooperation can be facilitated through the IOTC and other regional organisations like IOC, SWIOFC and SADC, but the mandates of the different organisations need to be evaluated in order to coordinate cooperation in an effective manner. More and better support should be generated to support these organisations.

Informant 1 (2010) claims that limited availability of marine resources, also can hamper development of the fisheries sector in Mozambique in the long run. The government can't project development that goes beyond the potential resources that are below 400 000 tons. In order to increase the fisheries production, development of the aquaculture sector is encouraged. This is highlighted both in the new Master Plan of the fisheries sector in Mozambique and a objective related to developing aquaculture is also included as one of the objectives related to the execution of the FPA funds. In addition sustainable governance of the artisanal fisheries must be mentioned, seen as it is vital to maintain its generation of benefits to the coastal population in Mozambique.

Socio-economic system

The high level of stakeholders indicates low governability. But according to Walmsley et al. (2007a), the multiplicity of stakeholders is a potential source to be tapped rather than a problem and stakeholder participation is also emphasized in the governance literature. Inclusive interactions will increase the ability of learning and in the process make the system more adaptive. It is however vital that involvement is organised and institutionalised in a proper manner while interactions need to be well structured if participation is to increase governability and not make interactions inefficient. Stakeholders are according to Jentoft (2006b) identified by the urgency of their concerns, the legitimacy of their interests or the power they hold. The European fleets and industry are well organised and represented in several advisory committees related to DWF and a regional advisory council on long distance fisheries within the EC. Conservation oriented stakeholders are also part of such committees and councils, but are not as many in number. Because of the specialised nature of the FPA there is most often little interest from the general public. The stakeholders that are represented in different fora are therefore of a relative narrow range and of a specialised nature. Trying to

generate more public interest and involvement both in the EU and Mozambique would give the discussions more voices, and if institutionalised in a constructive manner potentially improve the level of governability. More voices advocating development of the fisheries sector in third countries could generate more initiative and potentially development of new strategies on how to realise this objective in practice.

The agreement includes provisions encouraging setting up joint ventures, landing catch and bycatch and employing Mozambican crew. Implementing these initiatives would increase the promotion of development of the fisheries sector in Mozambique. None of the provisions are however obligatory and there has been little or no sign of implementation in practice. The high seasonal variation and regional nature of the fisheries makes it difficult to set up joint ventures, as the vessels only stay a short time in Mozambican waters. According to Obaidullah and Osinga (2010) it is also necessary to be aware that joint ventures can include reflagging of EU vessels and the loss of EU control over the fleets. This could potentially undermine fisheries governance and make it hard to determine actual levels of foreign fishing effort. CFFA (2009) points to the need for cost-benefit analyses before investments are started and it should be an overarching principle that these investments not shall be at the expense of local initiatives. Lack of port and production facilities further makes landing and production of catch impossible as the situation is today. The need for developing an onshore infrastructure, including port facilities, cold stores and production plants is high. Investment to develop this should be generated, either through private investors or through foreign development support. This should not be done without thorough evaluations of costs and potential. Both the Seychelles and Madagascar have developed domestic infrastructures for landing and producing tuna, and experience from these two countries should be evaluated. There are different opinions of the quantity and value of bycatch, but it is claimed that even relatively low levels can be a significant contribution to food security in Mozambique. CFFA (2006) however emphasizes that it is necessary to be aware that landings of low value non-targeted species may disrupt local markets and undermine viability of local artisanal fisheries, and it is therefore important to develop appropriate mechanisms to distribute these resources. Lack of skilled Mozambican crew, different cultural background and logistical costs are according to Mwikya (2006) reasons why there is no Mozambicans employed aboard FPA vessels, and further suggests that policies aimed at training local crew and staff should be implemented. Acquiring experience from the offshore fisheries would contribute to building social capital valuable if Mozambique wishes to participate in this fishery themselves in the future. In addition it would be a source of employment, benefitting Mozambican families. In

order to give greater incentives for implementing such provisions, one could possibly give support or reduce fees for vessel owners fulfilling certain requirements - such as using sustainable equipment, employing Mozambican crew and landing fish in Mozambique. It is already suggested to make port inspection of vessels prior to starting to fish obligatory in order to gain more control and possibly generate some income from the vessels use of port facilities and other services. It is also important to remember that FPA operators have more obligations than other DWF, and it is important to ensure that all fleets fishing in the Mozambican Fishing zone need to comply with the same technical requirements. If there is not a fair playing field, the incentive of the operators to comply can be reduced.

At the moment Mozambique receives 100 euro per ton of fish caught, of which the vessel operators pay 35 euro for access and the Union 65 euro as financial support. In addition the EU pays 250 000 euro specifically to support of the development of the Mozambican fisheries sector. Given levels are pre-paid according to quantities and species, in order to secure a certain level of payment independent of fishing activity (COM, 2007). The FPA vessel operators pay lower license fees than other foreign operators fishing for highly migratory species in Mozambique, but the EU financial support increases the total level. Critics argue European fleets are subsidised by the Union, something which is in conflict with the framework of the EU. In addition, the fact that the financial compensation is linked to levels of exploitation may give incentives for Mozambique to allow access to unsustainable levels, while vessels might be motivated to underreport catches to reduce costs. To prevent this, vessel operators should pay the total cost of access for fishing and the financial support from the Union should be completely uncoupled from levels of catch. The new reform proposal suggests such actions (EC, 2011a). In order to prevent underreporting, MCS capacity, involving interactions both of second and first order, needs to be increased. Institutional capacity needs to be further developed, while interactions of first order are crucial for practical implementation. Mozambique has had some problems setting up the VMS protocol, but as this now is functioning, more data should become available (Informant 2 and 3, 2010). In addition, the new cooperation with IOTC will also provide Mozambique more information about the EU fleets activity and thus increase governability. Lack of reporting of entry-exit information and catch numbers are according to informants (Informant 1, 2 and 3, 2010) still insufficient and there is a need for stronger commitment and more enforcement in order to improve these levels. Mozambique has the opportunity to withdraw licenses when requirements are not being withheld and it is important that the Mozambican authorities

actually use the hammer and enforce the requirements through first order interactions when this happens.

It is claimed that the dependency on EU funds could hinder development of the tuna fisheries in Mozambique. According to Walmsley et al. (2007a), fisheries agreements may not provide the right incentive to improve governance and fisheries policy. They may rather distract the ability to achieve this due to the steady stream of guaranteed income for several years, without the need to govern the stocks in a manner that provides sustainable resource rent. Some tuna is already being caught by small-scale and semi-industrial fleets, and the potential to increase these levels should be explored. The capacities of these fleets should be assessed and there should be greater mobilization of potential investors in order to develop joint ventures or even Mozambican offshore vessels. CFFA (2006) emphasizes the need for developing a favorable environment for economic activity around tuna in order to increase fisheries development in the long term. The small and semi-industrial fisheries sectors in Mozambique are generally fully exploited, and it is vital for Mozambique to be more involved in the offshore sector in order to maintain and improve levels of revenue from the fisheries also in the future. While some argue that in today's globalised world it does not matter who does the fishing as long as the host country maximizes rent capture. Others claim that fishing is much more than trade, with socio-economic benefits that are better realized with domestic fishing. Both arguments need to be considered. Mozambique has no capacity to exploit their offshore resources at the moment, and access agreements are currently the only source of revenue. Given the high cost of developing an offshore fleet, the agreements might be the best option at present. But thorough cost-benefit analysis should always form the basis for entering such agreements, enhancing Mozambique's opportunity to claim appropriate levels of rent. A gradual development of a domestic offshore fleet would however give the Mozambicans more control of and a better opportunity to extract higher levels of rent from the fisheries. Chartering vessels or setting up joint ventures could be the first steps in this process, reducing the cost and risk associated to owning vessels. Evaluations of facilities and incentives are needed to increase fisheries development in Mozambique are vital, as are the development of a strategy on how such development is envisioned in both the short and long term.

GS

The high level of uncertainty related to the SG requires the GS to be correspondingly flexible, involving interactions that continuously transfer information between the two systems and

efficiently feed into the GS. The capacities within the GS are high, but in order to apply these to solve governance challenges related to the SG and achieve desired outcomes, they need to be organised in an effective manner. Borrman and Busse (2007) claim that the quality of institutions is vital and that the real dimension of institutional challenges is often not fully recognised due to lack of empirical insight. In order to enhance the performance of the GS, integrated forms of second order governance is needed, involving building bridges between formal and informal institutions. In relation to the FPAs, this is already done through advisory committees, regional advisory councils and inter-service consultations in the EU and ministerial consultations and hearings in Mozambique. It is the responsibility of DG MARE's unit for bilateral agreements and fisheries control in international to coordinate these interactions within the EU and incorporate the result of them into the GS and represent them in the governance process. In Mozambique, DNEP is the most important coordinator, but other departments and institutions are also involved in preparing consultations. According to new institutionalism theory (March and Olsen, 2005), there is a contemporary trend to involve stakeholders and interests in the GS in order to attain legitimacy. There is however a risk that the lack of connection to institutional power reduces their possibility to actually affect governance outcomes, and stakeholder involvement remains more of a cosmetic fix. It is therefore important to study the GS in its political and institutional context in order to assess power relations. According to Jentoft (2006), fisheries governance is not only an instrument for power, but also the outcome of power. The institutional procedures on how institutional power is shaped and exercised therefore need to be explicit and transparent and indicators on performance need to be developed. Schaik and Kaeding (2008) claim the organization within the EU has a administrative level and a political level. There are signs that this is also the case in Mozambique. If objectives are to be achieved, interactions at both levels need to be coherent. Reporting lines and responsibility for activities need to be clear and transparent in order to secure that governance performance is maintained.

Song and Chuenpagdee (2010) claim there is a tendency to overrate the capacities of the GS, and hence increasing the risk for inappropriate design of institutions. Jentoft (2007) suggests that institutional experimentation can be necessary to identify what type of interactions are needed and what potential exists within the institutions. It is further vital that the GS manages to define an appropriate balance between biological, economic and social dimensions, and determines the importance and forms of representation related to each dimension in the governance process. Clear strategies and mandates will make the process more efficient and the outcome more predictable. It is also important to be aware that the high

level of scale of the SG poses a great challenge on the units of the GS. When states do not match the scale involved, regional and international organizations need to take responsibility. The problem with such organizations is that they often are too weak to fill the gap, and governability is reduced. Commitment to improve global governance should according to the United Kingdom's permanent representation to the EU (2009) be a priority since an increasingly high number of governance problems accrue on the global scale.

Institutional procedures decoupled from first order interactions have no effect in practice. It is hence essential that practical problem solving and opportunity creation are carried out through institutional arrangements. To give technical support and advice that can support fisheries development in practice is very important and cooperation between actors at all levels of the two parties need to be encouraged. Institutional commitment to promote and implement the objective is another factor of vital importance. Commitment determines the performance of the GS. Because of the wide range of interests represented within the GS, voluntary commitment will be challenged at many levels. The strong representation of commercial interests within various units of the GS can undermine interactions, both of first and second order, that are reducing economic profits. It is essential to develop a certain level of voluntary commitment to make the GS function. This should be motivated by moral principles and the will to legitimize interactions and should be collectively enforced. The high conflict level within the GS does, however, indicate a need for governmental enforcement to ensure commitment. In relation to the objective of promoting fisheries development, concrete indicators or terms and conditions should be developed in order to measure the level of implementation. Without such indicators it will be very difficult to assess what is and what should be done, and it will be easy to claim success when it is not or criticize when there is no reason to do so. As a result of the Lisbon treaty the European External Action Service is set up in order to ensure coherence between EUs external policy areas, and this unit could potentially evaluate the level of commitment to development objectives. Synergies within the GS that could enhance this ability to achieve the given objective should also be explored. The potential of other policy units to contribute should be encouraged. Closer interdisciplinary cooperation between development representatives in DG Development and Cooperation – EuropeAid and DG MARE, for instance through working groups, could help identify alternative forms of first order interactions that could enhance governance performance.

In addition to ensuring EU commitment, it is just as important to secure that the Mozambican authorities commit to implementing the objectives of the FPA. Commitment is needed at all levels in the GS. In order to promote fisheries development they need to employ

the financial contribution from the agreement in an optimal way, while putting pressure on the provisions of the agreement that can give additional benefits and added value to the country. Through the current agreement the Mozambican authorities have full discretion on how the financial support is spent, but the total amount is to benefit the fisheries sector and 250 000 euro is to be used specifically for the support of fisheries development. Mozambique has developed a matrix showing their priority areas for utilizing the money, linked to both specific projects and overall objectives. The recent years, a great share of the money has been applied for building new facilities for the MoF or improving governance infrastructures. While some consider top facilities essential for carrying out governance interactions and attracting high level personnel, others are critical of the choice of priorities. It is nonetheless important that all decisions and interactions are based on evaluations prioritizing the needs of the sector, and further account openly for these choices and develop long term strategies for the spending of the EU funds. The possibility to connect FPA activities with ongoing projects in Mozambique is also an opportunity that should be explored. Capacities and potential both within and outside the GS should be assessed. Governmental or non-governmental projects concentrated in the same domain as the priority areas of the FPA could improve the GS's performance. The Mozambican GS could also potentially benefit from being more open, and cooperate with external actors on evaluations and projects that could improve their level of information and capacities.

GI

The specialized nature of the FPA leads to a narrow range of participants in the main governance interactions. In order to increase insight and generate more involvement, both the interactions through the Scientific meeting and Joint Committee meetings should be more participatory – including representatives from the civil society, member states without direct relations to the DWFs, other sector representatives (development, trade, etc.) and external researchers. Information on the agreements, involving ex-ante and ex-post evaluations, should be made publicly available both to ensure transparency of the processes and make it easier for the general public to generate knowledge and views about the agreements.

Uneven representation and power relations between the stakeholders may push governance outcomes in certain directions. The fisheries industry is of great economic and social importance in many countries and may, as a result, also has a strong political influence both on the EC representatives and the member states representatives. It is challenging to make decisions reducing fishing when both household budgets and national economies

depend on it. The European fleets and the tuna industry involved in the FPA are very well organised and powerful, while stakeholders in third countries often are less organised and possess less resources. Environmental and development actors and others defending the principles of conservation and long term sustainability have however gotten stronger and more numerous over the years. Political power seems to be a decisive factor for the outcome of interactions and in order to prevent that some actors dominate, it is important that mandates are clear and restrictions are put on how power is executed. The technical and political levels of governance should be clearly separated and all channels to economic and political interests should be transparent. When signing an agreement is a political decision overruling technical discussions, the reason for making such a decision should be made clear. Lack of information leads to speculations and reduces legitimacy and information should therefore be shared openly in order to avoid this. It is important to be aware that the GIs have intended and unintended consequences, the latter being a result from tension among objectives, interests and purposes behind interactions.

It is important to be aware that all governance interactions affect the outcome, also those that are not planned (Kooiman et al., 2008). There is a need to genuinely appreciate and understand the different interests, motives and values held by the various stakeholders. If the industrial interests are not heard and economical profitability of the fleets is undermined, these stakeholders may get an incentive to not comply with the regulations. In order to enable a truly collaborative process that can reconcile the existing differences, all stakeholders need to be heard and understood. If stakeholders agree on the form of first and second order interactions, they will generally tend to have a greater will to respond to them and governability will increase. The industrial stakeholders are neither involved in the Joint Committee nor the Scientific Committee, but their interests are represented through the EC and the member state representatives. According to a representative from Cepesca (Informant 24, 2011), they are not part of the meetings but they will often travel to the place the meeting is held and follow the development of negotiations. They normally get informed about the status through the member state representatives. The Commission on the other hand does not interact with the stakeholders at this level of the process. It is highly important that the form of such interactions is agreed upon by all stakeholders, in order to prevent that the process can be influenced through the back door.

Furthermore, the level of information and experience of the parties involved in the governance interactions will affect the outcome. While the representatives from the EU are highly specialized on the FPA issue, the Mozambican representatives are less experienced.

There is a risk that Mozambique shares a lot of information, while the EU calculates what it shares, undermining the partnership dimension of the agreement. It is therefore highly important that the Mozambican representatives are well prepared for both first and second order interactions. They need to develop an understanding of the institutional system and capacities involved in order to enhance their performance. An EDCD (2010) report emphasize the importance of cooperation between ACP countries as a source to increase this ability. By sharing information and experience in relation to governing the FPAs, performance of the GS can potentially be improved through new forms of governance interactions. The report further focuses on the importance of enforceability: "[Without enforceability] the outcome will be a function of an underlying power equation, which does not necessarily do justice to equity" (EBCD, 2010:61).

According to representatives involved in the interactions (Informant 1, 2, 8 and 9, 2010; Informant 18, 2011), there is a good dialogue between the parties and the FPA between the EU and Mozambique is claimed to be one of the best agreements with regards to the will to support. It is clear that the provisions of the agreement generally are improving, but the lack of implementation remains a challenge. Many of the norms and principles related to the FPA are relatively abstract and the lack of specific definitions and concrete indicators makes it challenging to assess if and at what level they are being applied. Unclear definition of objectives can also be a way of handling conflict and increase governability, this because there will be room for discussions, and the lack of consensus around definition will make it more difficult to identify winners and looser. Unclear objectives will however make it difficult to achieve them, and in order to effectively implement them, it is first of all important to develop a common understanding of what they involve. Through a cooperative process, indicators related to their performance should be developed. It is further important to facilitate different instruments in order to implement the different objectives. Enforcement is necessary if commitment to achieve objectives shall be maintained. If indicators related to promoting sustainable development in Mozambique are low, access could for instance be limited or fees increased.

An important component related to the GIs of the FPA is that the process of governance cooperation provides Mozambique with an opportunity to learn and enhance their governance capacities. Through cooperative interactions both at first and second order, information and experience can be acquired. Cooperative discussions on governance issues, execution of funds and how development of the fisheries sector in Mozambique can be

enhanced, can contribute to identifying new opportunities and ways of solving problems. Through this process of learning governability can be increased.

The fact that Mozambique is dependent on DWF to exploit the offshore resources, while the EU fleet is dependent on access to remain fishing, creates a mutual interdependency of developing agreements. The FPA has the potential to benefit both parties and the agreement can be viewed as a public and commercial investment in mutual interests of the two parties. Collaborative interactions are vital to ensure that the agreement is maintained, and the responsibility to do so is shared between the parties. It is however important that the boundaries for interactions related to the agreement are clear, so that not only one of the parties benefits. In the long run the objectives of maintaining access and developing a Mozambican fishing fleet are not compatible, and strategies for how this future development shall be met needs to be developed.

7. Conclusion

In this concluding chapter, the research objectives will be revisited in section 7.1, before a short assessment of the research process – its challenges and results- is conducted in section 7.2. At last a review of future research needs is given in section 7.3.

7.1 Revisiting the research objectives

By conducting a governability assessment of the FPA between the EU and Mozambique, the components involved in the governance process have been studied in a systematic manner. Needs of the system-to-be-governed have been described, capacities of the governing system assessed and the limitations and potential of governing interactions have been explored.

- The first research question was focused on studying the match between the GS and the SG, a determining factor for how responsive the GS is. The assessment shows that the existing capacities of the GS generally are a bit higher than the needs of the SG, and should therefore in principle be able to handle the challenges involved. It is however important to be aware that the properties of the GS are at such high levels that it is challenging to govern the GS itself. The high level of interests represented, number of governing units and bureaucratic procedures involved is likely to reduce governability and the responsiveness of the GS.

- The second research question aimed to identify which components of the SG, GS and GI that limit the ability to achieve one of the overarching objectives of the FPA: promoting sustainable development of the fisheries sector in the third country. The findings from the assessment indicate that the lack of information about the natural system makes governance outcomes uncertain. Even though the catch data is reported to both Mozambique and IOTC, and the latter prepares stock assessments and recommendations for the highly migratory species in the Indian Ocean, the actual level of exploitation and the state of the stocks are uncertain. The outcome of any decisions related to exploiting the resources will correspondingly also be uncertain, making it difficult to assess the available potential for further fisheries development. Informant 1 (2010) also highlights that limited marine resources can hamper development, as the government cannot project development beyond the potential of the resources (400 000 tons).

The wide range of stakeholders having an interest in the FPA further affects the governance outcomes through their involvement in first and second order governance, in other

words, through institutional arrangements and practical problem solving and opportunity creation. The fact that some of the stakeholders are better organised and more powerful than others affects the dynamics of the process. Commercial interests are often well-organised and better connected with institutional powers than other stakeholders, something that can reduce the ability to promote development of the fisheries sector in Mozambique. It is not that these stakeholders necessarily are against this objective, but their willingness to promote actions that reduce economic profitability is low or non-existing.

The high level of system properties related to the GS makes it challenging to govern. Reduced efficiency and effectiveness related to the processes of decision making and distribution of responsibilities may further reduce the ability to achieve the given objective. Unclear mandates related to execution of power clearly reduce governability, as the GS processes that are meant to dissolve power amongst stakeholders in reality simply become sub-ordinate arrangements, with limited influence on the actual execution of power. Disagreement of what successful implementation of the objective involves also makes it challenging to assess the current state of affairs. The lack of indicators related to what promoting sustainable development of the fisheries sector involves could reduce the ability to assess what is and what could be done to improve this ability. Mozambique has however developed a matrix where FPA funds are linked to objectives and projects in the Mozambican fisheries sector, and this increases governability.

Further the lack of enforcement related to commitment, public or governmental, tends to reduce the ability to implement objectives that are not economically profitable. The number of representatives involved and the information and experience they hold through governing interactions will also highly affect the governance outcome. While the EU delegation includes experienced well-informed representatives, the Mozambican representatives have more limited experience with governing such agreements and their level of knowledge is much lower. This may reduce the ability of the Mozambicans to identify and promote components with potential of increasing fisheries development.

- The last research question aimed to explore what interactions of first and second order governance potentially can improve the ability to promote the objective of sustainable development in the third country. Interactions were suggested in relation to the three systems. First, in order to improve the governability of the natural system, making it easier to achieve given objectives, institutionalization of scientific research capacity is essential. Interactions of first order governance include data collection, reporting and enforcement of regulations

related to exploitation of the resources. Then, regional cooperation on MCS, especially related to the fight against piracy and IUU fishing is highlighted. It is also emphasized that the potential of the marine resources is not infinite, while the potential for increasing production from aquaculture is immense and this should be developed. In addition, the artisanal fisheries should be governed in a sustainable manner, in order to maintain benefits for the coastal population.

Including stakeholders in interactions of second order governance will generally increase governability, but their organization and the procedures connecting them to execution of power will determine the outcome. The industrial stakeholders related to the FPA are generally much better organized than other stakeholders. Efforts to involve the civil society in both the EU and Mozambique through second order governance can give the discussions more voices advocating development. Of first order governance any involvement of Mozambican stakeholders in FPA operations contributes to promoting fisheries sector development. This could involve employing Mozambican crew and encourage landings of catch and bycatch creating employment. The potential number of jobs that could be created should be identified, and Mozambique should develop strategies on how to increase the benefits from the FPA accruing the Mozambican stakeholders.

The GS needs to facilitate first and second order governance interactions in an efficient and effective manner. Distribution of responsibilities and execution of power need to be defined in a clear manner. Commitment at all levels of the system should be enforced and synergies within the system that can increase the ability to achieve the given objective should be explored. Projects and initiatives related to the development both within the EU and in Mozambique could be coupled with FPA projects. Workshops should be institutionalized and matrices showing all projects and links between them should be developed in order to identify such potential. First order interactions supporting the objective should be rewarded, while the lack of will to carry out such interactions could lead to limitations on access or higher fees.

The main governance forums, the Joint Committee and the Technical Committee should be more open in order to institutionalize a wider range of interests also directly into the governing interactions. Political governance should be clearly separated from the technical level in order to avoid speculations on the procedures and motives behind decisions. It is also essential that all the involved representatives agree on the form of interactions, the responsibilities of those represented and what commitments actually involve. While some consider the FPA purely as an access agreement that needs to be coherent with the EU's development policy and not undermine the fisheries policy in Mozambique, others consider

the FPA as an instrument for development. The terms of the agreement should be made clear for everyone, in order for stakeholders to know what to expect and avoid disagreement. Further, interactions of first order governance need to be coherent with what is decided on. Actors should not apply power to carry out interactions outside their mandate, but it is also important that actors use the hammer when necessary. Mozambican authorities for instance need to withdraw licenses or fine vessels owners when regulations are not being withheld. The FPA funds need to be employed in a manner supporting fisheries sector development and should be coherent with long term strategies on how to achieve this.

There seems to be political will to support the objective of promoting sustainable development of the fisheries sector in Mozambique, but the challenge of implementing it remains. The internal conflict between the objectives of the FPA makes it challenging to coordinate interactions in a coherent manner, and the governance outcome will be a result of the dynamic between the objectives and the stakeholders representing them. Boundaries for how interactions are carried out, how power is executed and what shall be expected from the parties are essential. Further commitment is needed at all levels. This should first and foremost be seen as voluntary, based on moral responsibilities and the need to legitimize actions. However, because the principle of economic profitability is so strong, it may be wise to introduce regulations which will give the stakeholders greater incentives to support the objective. Alternatively, enforcement mechanisms which can ensure commitment could be developed.

7.2 Assessment of the research process

The research process has been highly exploratory. While applying the interactive governance framework, the process of governing the FPA between the EU and Mozambique has been described and assessed. The lack of information about this process prior to commencing the research made it difficult to predict how much and what kind of data could possibly be collected, and hence also the scope of the research project. Through the course of the project it became clear that the nature of the governance issue made it difficult to make detailed conclusions, and the aim of the project should rather be to describe the process while seeking to identify which components challenge the governing system's ability to deliver one of the objects it commits to on paper.

Because of the complex nature of the research object and the mentioned lack of existing information the need for a well-structured research approach prevailed. The

interactive governance theory provided such a framework, and in addition the governability assessment made it possible to measure and compare how different components of the systems affected the governance outcome. Because of the comprehensive nature of the approach, time was needed in order to understand and apply it in a constructive manner. But when this was done, it provided me with a very well-structured and suitable instrument to study the comprehensive research object. It would have been much more difficult to know where to begin and what to look for, as well as ignore important components, without this framework.

The project can be criticized for having too high ambitions, because there is not enough data available for making thorough conclusions related to the levels of governability of each component. The response to this critic will be that in many cases detailed data does not exist, and this demonstrates one of the governability problems in itself. The governing system is required to handle uncertainty and construct interactions on the basis of theories about the system-to-be-governed. The scope of the thesis is in any case not to analyze one component in depth, but rather explore the whole process and identify where the most decisive components are found. In this way the research project will also take the form of an academic exercise, where the aim is to learn how to apply the conceptual framework on specific empirical case.

The wide research terrain made it challenging to navigate and easy to get lost, but also highly interesting to explore. The contemporary relevance of the subject made it especially interesting to follow new development, and the interdisciplinary character of the study gave me insight into a wide range issues related to global fisheries governance. From a personal point of view the experience with designing a research project, performing interviews and analyzing great quantities of data is invaluable.

7.3 Future research needs

This study has taken an exploratory form and has aimed to identify the most important components challenging governance performance. Each component or even each cell of the governability matrices shown in table 5 and 6 can be the basis for more detailed research. The need for more information about the natural system and connections within it seems most urgent in order to increase the existing level of knowledge about implications and potential of the FPA fisheries. In addition, a cost-benefit analysis of the FPA would be highly important, especially for Mozambique, in order to calculate the real values of the agreement.

The interactions suggested in section 6.2 to increase governability should be further explored and research projects investigating the interactions hypothetically could be useful to assess their relevance and potential.

As a consequence of the limited scope of this project, it is challenging to apply the findings of this research to generalize about the FPAs in general. The findings can, however, contribute to more comprehensive research projects and be applied to compare findings from other similar projects. Seen as the governance process and the level of governability related to it continuously changes, assessments are needed on a regular basis in order to follow its development. With the upcoming reform of the CFP in 2012, an assessment of its implications on the governance of the FPAs will be highly relevant after a certain period of time.

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Appendix I

Informant	Institution	Year
1	Fisheries officer, EU delegation Maputo	2010
2	ADNAP	
3	MCS advisor	
4	Private consultant, Mozambique	
5	IDPPE	
6	FAO	
7	Private consultant, Mozambique	
8	DNEP	
9	DCI	
10	IIP	
11	FFP	
12	ADNAP	
13	EuropeAid	2011
14	External Action Services	
15	Fisheries Adviser, Parliament	
16	CFFA	
17	Norwegian Delegation to the EU	
18	DG MARE	
19	Fisheries Adviser, Parliament	
20	IOTC	
21	IOTC	
22	EuroThon	
23	CFFA	
24	CEPESCA	