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A LEGAL CRITIQUE OF THE EUROPEAN UNION'S BILATERAL FISHERIES AGREEMENTS WITH DEVELOPING COUNTRIES IN WEST AFRICA WITH PARTICULAR REFERENCE TO SUSTAINABILITY

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DECLARATION

I confirm that the work presented in this thesis is my own.

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10 April 2007

ABSTRACT

The European Union currently enjoys access to the coastal fish stocks of numerous developing third countries (particularly in West Africa) in terms of bilateral fisheries agreements. These agreements are concluded under and legitimated by the international fisheries regime, which ardently promotes the sustainable use of fisheries resources and the sustainable development of fisheries. In this thesis I analyse these agreements from a (legal) sustainability perspective. Based on my research, I argue that rather than functioning as legal instruments of conservancy, these agreements operate as means to inequitably promote the respective economic and political self-interests of the parties involved. They run contrary to the sustainability tenet of international fisheries law and expose its inherent weaknesses.

The need to actively promote the sustainable use of marine fisheries arises from the difficulties in ensuring their effective management, which in turn stem from their common resource nature. International law responds by obliging states to foster the long-term sustainable use of fisheries from a biological, social and economic perspective towards the broader goal of sustainable fisheries development. Coastal states, however, particularly developing countries, struggle to achieve these objectives in their own waters. The challenge is not only to ensure the rational domestic management of their fisheries but also to engender the cooperation of foreign states that access their stocks towards these ends. Fishing arrangements between the European Union (EU) and West African coastal states have on the whole not reflected such cooperation, as I illustrate in my thesis with reference to the case study of EU-Senegalese fishing relations. In response to the deficiencies of the international fisheries regime in this regard, I identify possible alternative approaches to future bilateral fisheries interactions which will likely better foster sustainable fishing.

CONTENTS

PREFACE

In this thesis I examine bilateral fisheries relations between the European Union (EU) and West African coastal states. Specifically, I analyse the bilateral fisheries agreements between these parties from the perspective of sustainability with reference to the illustrative case study of EU-Senegalese fisheries interactions. My particular interest lies in assessing the extent to which these agreements operate as mechanisms of conservancy in accordance with the overall tenet of international fisheries law. In examining this issue I address a further underlying concern, namely the ability of the current international fisheries regime in general to effectively promote sustainable fisheries through bilateral fishing agreements as well as more broadly. The subject-matter of this dissertation is not constrained to the legal realm; in addition, it traverses a wide range of other disciplines including fisheries management, environmental regulation, development cooperation and trade relations. My aim in presenting this interdisciplinary work is to bring into the public domain a unique analysis of a subject-area that has to date received little academic coverage. In light of the current dire status of world marine fisheries and the increasingly tangible global sustainable development challenges, the relevance and timing of this thesis is apposite.

It would not have been possible for me to write this thesis without the emotional, intellectual and financial support of various bodies and persons. Firstly, I gratefully acknowledge the generous financial support of the Commonwealth Scholarship Commission and the British Council, without which it would not have been possible for me to embark on this research degree. In addition, I owe a great debt of gratitude to my supervisor Dr Jane Holder at the Faculty of Laws, University College London, for her valuable and insightful input, enthusiasm and constant encouragement throughout the writing of this thesis. I am also most grateful to the various officials who agreed to be interviewed in the course of my research and

who gave most generously of their time and expertise. In addition, I wish to acknowledge the support over the years of Professor Jan Glazewski from the Faculty of Law, University of Cape Town, who inspired me to take an interest in environmental and fisheries law in the first place and who continues to encourage and nurture my various endeavours in this area. I am also indebted to friends and family, in particular Anashri Pillay, Patricia Dingle, Malcolm Dingle and above all, Patrick Göbel, without whose love and support this thesis might not have seen the light of day.

ACRONYMS AND ABBREVIATIONS

ACP:
African, Caribbean and Pacific States

CAP:
Common Agricultural Policy

CBD:
Convention on Biological Diversity

CFA:
Communauté Financière Africaine (franc)

CFP:
Common Fisheries Policy

DPM:
Direction des Pêches Maritimes

EC:
European Community

EEC:
European Economic Community

EEZ:
Exclusive Economic Zone

EIA:
Environmental Impact Assessment

Enda Diapol:
Enda Prospectives Dialogues Politiques

EU:
European Union

FAO:
United Nations Food and Agriculture Organisation

FPA:
Fisheries partnership agreements

GATT:
General Agreement on Tariffs and Trade

GNP:
Gross National Product

GRT:
Gross registered tonnage

ITQ:
Individual transferable quota

IMF:
International Monetary Fund

IUU:
Illegal Unreported Unregulated (fishing)

LDC:
Least developed country

MAGP:
Multi-annual guidance plan

MEY:
Maximum economic yield

MPA:
Marine protected area

MSY:
Maximum sustainable yield

NGO:
Non-governmental Organisation

OECD:
Organisation for Economic Co-operation and Development

TAC:
Total allowable catch

UNCLOS:
United Nations Convention on the Law of the Sea

VAT:
Value-added tax

VMS:
Vessel Monitoring System

WWF:
World Wide Fund for Nature

WTO:
World Trade Organisation

PART I

CORE THEMATIC LENSES

In this section I introduce some of the key theoretical elements that underlie the subject-matter of my thesis. In chapters 2, 3 and 4, I lay the groundwork for this dissertation, presenting three broad thematic disciplines that provide common, inter-related threads throughout this work, namely common resource management and the goal of sustainability, integration towards sustainable development, and the colonial legacy. Each field of study offers a unique insight into my interrogation of the extent to which bilateral fisheries agreements between the EU and developing coastal states operate as legal instruments of sustainability. I draw on these 'thematic lenses' both individually and cumulatively in my study. I begin in chapter 2 by examining the complexity of common natural resource management, focusing specifically on legislative and policy mechanisms employed to promote the goal of sustainable fisheries management. I extend my examination of 'sustainability' to chapter 3. Here, rather than merely following the well-trodden path of discussing the meaning of the concept and its relationship to sustainable development, I focus more on the nature and evolution of principles and regulatory mechanisms that are employed at an international and domestic level to realise this principle in the context of marine fisheries. In particular, I examine integration as a means to foster sustainability towards sustainable fisheries development. Fisheries management decisions - particularly questions of access to fisheries resources - are, however, informed by broader concerns than merely regulatory frameworks. In the final chapter of this section, I explore the socio-economic impact of colonisation on such decisions, examining in detail the particular impact of the European colonial legacy on EU-West African fisheries relations.

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INTRODUCTION

1. Locating the thesis in the broader biological and political context

We are at a stage in the earth's history where the oceans and their living resources are under severe threat from unsustainable use. Currently, an alarming percentage of commercial marine fish stocks have already been harvested to their full capacity. The law, at an international and domestic level, is increasingly urging governments and fisheries managers to harness a precautionary approach in pursuing the rational use of remaining fish stocks and the recovery of depleted species, as well as the conservation of the marine environment. Contrary to aspirations, the imposition of jurisdictional conservation responsibility over coastal fisheries by the 1982 United Nations Convention on the Law of the Sea (UNCLOS) has so far resulted in little significant improvement in fisheries management despite its curtailing of historically unregulated open access to marine resources. The common resource nature of marine fisheries, which makes them notoriously difficult to manage sustainably from a biological, social and economic perspective, continues to dog the efforts of coastal states towards these ends. The sustainable use of marine living resources, however, is a vital aspect of the worldwide imperative of sustainable development, a goal that developing states in particular are struggling to define and to achieve. The successful pursuit of sustainable fishing both necessitates the rational domestic management of coastal fisheries and requires foreign nations that access these stocks to cooperate with the relevant coastal states to ensure the biological sustainability and the sustainable development of their fisheries. The manner in which bilateral fishing relations between the EU and various West African coastal states have historically played out, however, has not followed this route. Instead, it has mirrored patterns of natural resource abuse which were established under past colonial relations between the

parties and perpetuated by subsequent trade and aid policies. This coincides with the EU's broader tendency to export its 'insatiable demands for natural resources' to developing countries to meet its own needs in the face of increasing depletion of domestic natural capital, as noted in the World Wide Fund for Nature (WWF)'s 'Europe 2005: Ecological Footprint' report.[1]

2. Objectives of the thesis

In this thesis I examine bilateral fisheries agreements between the European Union (EU) and developing coastal third countries with a view to exploring the theoretical role and practical effects of these legal instruments with particular reference to sustainability. Specifically, in light of the conservacy thrust of the legal framework within which they are crafted and legitimated (noticeably that of UNCLOS), I interrogate these arrangements to assess whether (and if so, the extent to which) they are informed by and operationalise the objective of sustainable fishing or whether instead, they serve to merely realise the respective parties' socio-economic interests, as shaped by their political legacy of unequal dependency.

My thesis demonstrates that these agreements primarily aim to effectuate the fulfilment of the parties' narrowly-conceived national interests and thus operate potentially as legal vectors of unsustainable fisheries development in the coastal states. This sharply contrasts with the strong conservacy theme of the EU's domestic fisheries policy and, more importantly, the international fisheries regime. The thesis thus highlights the weakness of international law and policy in effectively promoting the objectives of sustainable fishing and sustainable fisheries development, exposing the disparity between the theoretical pursuit of these ideals through

[1] The World Wide Fund for Nature (WWF) International, Global Footprint Network and Netherlands Committee for the World Conservation Union, *Europe 2005: The Ecological Footprint* (WWF Gland, Switzerland, 2005) at 3 and 6. I discuss this report and its implications in greater detail below at pp 124 and 247-249.

legally-sanctioned regulatory means and their practical operationalisation. There is clearly a need for reform in this area, but for reasons illuminated in my thesis, the solution does not lie in simply re-shaping international law to better promote these goals; nothing short of a fundamental overhaul of the sovereignty-based international regime established under UNCLOS would suffice. Rather, an ecologically-sound approach rooted in the recognition of the complex, common resource nature of marine fisheries is required that harnesses alternative regulatory means to advance these objectives, formulated within the boundaries of the law but guided by an alternative supplementary 'ethical' framework. I revisit these suggestions and discuss them in detail below in my conclusions in chapter 9.[2]

3. Thematic 'lenses' employed in the thesis

In this thesis I draw primarily on three main bodies of literature to provide me with thematic 'lenses' for understanding and analysing the subject-matter under examination. These thematic areas of modern (environmental) law and policy broadly comprise: the sustainable use of common natural resources and the regulatory means to pursue this goal, the process and principle of integration towards the pursuit of sustainable development, and the enduring impact of the colonial legacy between European powers and their erstwhile territories on modern inter-state socio-economic relations. A substantial amount has been written on each of these individual topics, but there are relatively few works that draw on all three of these areas to examine a specific socio-legal phenomenon from different yet intricately related angles. In particular, there is no substantial body of literature that employs these thematic lenses to analyse the regulatory role of bilateral fisheries agreements between the EC and developing West African states with respect to sustainability. This thesis contributes towards developing such a body of literature.

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[2] At pp 245-256.

With regard to the 'sustainable use' lens, the literature concerning the meaning of 'sustainability' as a core objective of modern environmental law and natural resource management is vast. The essence of 'sustainability' as a component of and necessary step towards realising the globally-endorsed ideal of sustainable development, has been well-traversed, although less so in the context of marine fisheries. The contents of and means to achieve sustainable fisheries have traditionally been regarded as more elusive topics, largely as a result of the acknowledged complexity of managing these common resources.

Like other natural resources that fall into this category, marine fisheries elude the possibility of sustainable management unless they are subject to regulation in terms of some type of property regime as their physical characteristics make it almost impossible to otherwise control who uses them and how much of them is used. The solution offered by the international regime to the historically poor management of open access fisheries was to introduce a zonal, jurisdiction-based regulatory system in 1982 through UNCLOS, which imposed conservation duties on states over their coastal fisheries stocks up to 200 nautical miles from baseline. UNCLOS was, however, vague in its wording and generous in the sovereign powers that it granted coastal states in managing their fisheries. The interpretation and operationalisation of the Convention's conservation and sustainable use provisions thus varied considerably between states. They were - and remain - able to align their domestic policies with UNCLOS' broad principles and to employ regulatory means legitimated by the Convention while at the same time effectively moving no further towards the over-riding goal of ensuring sustainable fisheries management worldwide. The flawed logic of carving up the ocean into national preserves with politically-drawn boundaries in the hope that coastal states might effectively manage the migratory fish stocks that pass through their jurisdictional

waters in isolation from the broader ecological context, is clear.[3] Global socio-economic realities do little to improve the chances that in particular developing coastal states are able to foster sustainable fishing in their waters. They struggle to prioritise sound, long-term domestic fisheries management over other pressing national priorities and are driven by short-term socio-economic needs to conclude bilateral fisheries agreements with distant-water fishing nations granting them access to their frequently depleted coastal stocks.

In order for me to structure a suitable analytical lens from the vast thematic material comprising this subject-area I first needed to thoroughly grasp the manner in which the concept of 'sustainability' is employed in international fisheries law and management, the specific complexities of managing fisheries as a common resource, and the intercept between these two areas. The importance of examining my thesis subject-matter from this angle justifies the time that I spend crafting this analytical tool.

My second thematic lens is the principle and process of integration towards the pursuit of sustainable development. While the components of sustainable development are widely-acknowledged, how best to operationalise this goal remains contested. At heart, it involves the merging or integration of (economic) development with environmental protection, to be realised through national political action as individual governments best see fit. Although sustainable development is arguably not an international legal obligation to which states may be held accountable, it is generally accepted that states' management of their domestic environments is now a matter of 'international concern' and may be scrutinised against this (albeit 'unmeasurable') standard. Globally, states are thus taking action to realise sustainable development. Integration serves both as a guiding principle in this regard and a procedural tool or process towards this end. As an instrumental mechanism, it facilitates and drives the

[3] See P Copes, 'The Impact of UNCLOS III on Management of the World's Fisheries' (1981) 5 (3) Marine Policy 217 – 228 at 222.

infusion of environmental concerns into all domestic spheres, providing a means to ensure the biological, social and economic sustainability of all projects, plans and policies at a national level. As a guiding ideal, it is both the foundation on which the principle of sustainable development rests and an objective in its own right. It has become an indispensable feature of international and (most) domestic environmental regulation, giving rise to onerous legal obligations to adequately accommodate environmental protection in all aspects of domestic and state activity (exemplified by its prominence in EU legislation).

Integration is a burdensome principle to pursue and a difficult process to effectively operationalise. With minimal clear guidance from the international regime, it has thus been largely up to individual governments at a domestic level to give content to and realise the integration of their environmental needs with other competing national priorities. Governments are increasingly employing procedurally-based regulatory mechanisms to this end, most commonly environmental assessment. In the EU, other 'new' mechanisms are emerging as alternatives to traditional command-and-control means, particularly in the environmental sphere. In fisheries, integration efforts in the EU have been slow to mature, but are increasingly mimicking developments in the environmental sphere in the hope of advancing. The urgent need to harness integration and other related efforts in marine fisheries towards sustainable fisheries development worldwide (due to the crisis-level of many fish stocks) is acknowledged internationally, but if Europe has found the road rough, so much more so have developing coastal states. They frequently struggle to effectively prioritise the need for sustainable fisheries management and development domestically, as typified by the example of Senegal. In the same way that sustainable development efforts in one country cannot truly be isolated from sustainable development efforts in another (as the environment and its ecosystems do not respect political boundaries), integration efforts should arguably be similarly regarded. Assistance from distant-water fishing nations to foster sustainable fisheries

development efforts in developing coastal states is vital if integration is to mean anything beyond a domestic ideal that can only be realised in economically-capable countries. Arguably, means that are better suited to these ends than extraction-based bilateral fisheries agreements should be employed to achieve this.

The enduring impact of the colonial legacy between European powers and their erstwhile territories on modern socio-economic relations between these parties is my third thematic lens. The colonisation of African states by European powers in the late nineteenth century undeniably shaped the socio-economic development of the (then) colonies and laid the foundation for future relations between the parties post-independence. Neo-colonialists argue that such relations have been dominated by the pervading, all-encompassing influence of colonial dependency, with the former colonising powers using capitalist economic instruments to sustain this relationship and maintain the developing former colonies in continued social, economic and political subjugation and impoverishment. I argue that bilateral fisheries relations between the EU and West African coastal states are strongly influenced by past colonial trade and economic interactions, not least in the role that the African states continue to fulfil as suppliers of raw natural materials to Europe via bilateral fisheries agreements. These agreements are concluded against the backdrop of the parties' development cooperation relationship, which evolved from early inter-dependent associationalist relations into an alliance of increasingly unequal dependence in terms of which African states became ever-more reliant on the trade and aid concessions granted to them by Europe.

Viewed from this angle, if - as I propose is the case - bilateral fisheries agreements between the EU and developing coastal states indeed serve primarily as legal instruments to realise the parties' respective self-interests, the potential for sidelining sustainability concerns is high:

the EU is empowered to ensure that it enjoys access to coastal fish stocks on terms that serve its socio-economic needs, while the coastal states are driven to permit such access in order to secure short-term economic benefits and to maintain 'good' political relations with the EU. I discuss this 'colonial legacy' in detail in chapter 4 and use it as an analytical lens for examining the EU's bilateral fisheries interactions with developing coastal states.

3. Scope and structure of the thesis

The scope of this thesis is vast, covering a subject-area that is broad from both a geographic and a thematic perspective. To assist the reader, I have structured the thesis so that it progresses from the general to the more specific; milestones along the way are marked by the division of the work into four parts. Part I begins with the broad, more theoretical subject-matter, Part II places this subject-matter in a domestic policy context and Part III hones the focus even more narrowly to a geographically-contained illustrative case study; in Part IV, I present my conclusions. Because the subject-matter is so extensive and in light of word constraints, I have excluded a number of pertinent yet extrinsic issues from discussion in my thesis. In particular, I do not discuss the pursuit of sustainable fishing in the high seas in any significant detail. While I acknowledge the artificiality of doing so from an ecological perspective especially in light of my discussion on the management of fisheries as a common resource, given the limits of this thesis, I would not have been able to do this subject justice.

I begin in Part I by introducing the three core thematic concepts that underpin my thesis and serve as analytical 'lenses' for examining the socio-economic phenomena explored in this work. Chapters 2, 3 and 4 lay out the thematic lenses for such analyses in turn. Chapter 1 sets the scene, presenting the thesis as an interrogation of the contention that bilateral fisheries agreements between the EU and developing coastal states operate as legal instruments of

sustainability. In chapter 2, I discuss the complexity of marine fisheries management arising from their common resource nature and look at regulatory responses aimed at promoting the 'sustainable' use of these resources. I examine this further in chapter 3, where I focus on the concept of 'sustainable' fishing and on efforts by the international legal regime and domestic fisheries managers to foster this goal. Bilateral fisheries agreements between the EU and developing coastal states are legitimated by international fisheries law and national fisheries policies developed under it; the extent to which they are intended as legal instruments of conservacy, however, is influenced also by the broader socio-economic context in which they are concluded. In chapter 4 I explore this context and highlight the significant influence of the parties' shared colonial legacy and its modern manifestations on the negotiation and content of these agreements.

In Part II, I narrow my focus to examine the extent to which international sustainability objectives and principles inform the EU's regulation of its marine fisheries. I move from a broad overview of EU policy and management in this sector to a detailed investigation of the regulatory measures that shape the Community's external bilateral fishing relations with developing coastal states. I begin in chapter 5 by examining the incorporation into and evolution of sustainability concerns in the EU's fisheries policy, with particular reference to the influential role of integration efforts in this process. In chapter 6, I focus on the extent to which these broader developments in the Community's fisheries policy have (at least theoretically) permeated the EU's policy concerning its bilateral fisheries relations with developing third countries. Specifically, I note a similar trend to that identified in other aspects of the fisheries policy towards adopting 'new' regulatory modes in an effort to better promote the integration of environmental and sustainability concerns in this sphere.

Part III is a discussion and analysis of the practical operationalisation of the EU's bilateral fisheries policy with reference to the case study of EU-Senegalese fisheries agreements, specifically the most recent arrangement. I analyse this agreement with particular interest in its promotion (or not) of sustainable fishing and the extent to which it operates (or not) as a legal instrument of conservacy. I begin by introducing Senegalese fisheries in chapter 7, paying particular attention to the state of domestic coastal fish stocks as a prelude to an in-depth examination of Senegal's most recent bilateral fisheries agreement with the EU in chapter 8. Here, I critically analyse the (legal) nature of this agreement and its impact on sustainable fishing and sustainable fisheries development in Senegal.

In Part IV, I draw on my earlier findings and employ my thematic lenses to formulate the conclusions of my thesis in chapter 9. Most importantly, I surmise that the EU's bilateral fisheries agreements with developing coastal states do not fulfil their intended conservacy functions, but rather operate as legal instruments to satisfy the parties' respective self-interests. In response, I suggest various alternative, complementary means to better foster sustainable fishing.

4. Methodology

The research methods that I employed in this thesis are largely socio-legal as this mode of research is best suited to the chosen subject-matter. I used a combination of theoretical, literature-based, desk-top research and empirical work. My empirical research primarily comprised gathering and analysing data for the illustrative case study of EU-Senegalese fisheries relations with particular focus on the parties' most recent bilateral fisheries agreement. I chose this case study as I believe that the impact of these fishing relations, particularly through the most recent agreement, exhibits the operation of key theoretical

conclusions that I draw in my thesis. At the same time, the case study provides an in-depth insight into an example of the matters discussed in the thesis and renders an otherwise (possibly) unfamiliar area of inter-state interaction more accessible to the reader.[4]

I selected this particular case study for two primary reasons. Firstly, Senegal was the first African country to conclude a bilateral fisheries agreement with the EU and the parties have since renewed this arrangement seven times. There is thus a strong tradition of legitimated Community fishing in Senegalese waters. I was particularly interested in how this relationship had evolved over time in response to and shaped by international legal developments and broader domestic and international socio-economic and political factors. I was initially also drawn to this case study as it is one of the EU's few bilateral fisheries interactions with a West African state that has attracted significant public attention and criticism for its alleged adverse impacts on the state of Senegalese fish stocks and its domestic fishing industry, particularly the livelihoods of its artisanal sector. Questions of sustainability appeared to lie at the heart of these criticisms and it thus seemed an apt case study for my area of interest.

The case study is not intended to be representative of West African or other developing coastal states' bilateral fishing relations with the EU (or other Western fishing nations); it operates merely as an illustrative case study, designed to serve the purposes that I have outlined above. Some of the conclusions in my thesis may nevertheless have a bearing on analyses of fishing interactions between other coastal West African states and the EU; to the extent that I suggest such analogies in this thesis, I do so purely as a matter of logical deduction rather than statistical inference.[5]

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[4] I draw on the work of JC Mitchell, 'Case and Situation Analysis' (1983) 31 Sociological Review 187-211 in justifying my use of such a case study. See in particular at 192.

[5] I refer to Mitchell ibid at 189, 206 and 207 to substantiate such an approach.

Empirical research was necessary to supplement my theoretical research as apart from primary sources, such as EU legal and policy documents, and general secondary material on international fisheries management by bodies like the United Nations Food and Agriculture Organisation (FAO), there was little formal literature on the topic of EU-developing coastal state bilateral fisheries agreements. In particular, there was a dearth of relevant academic writing. This was true to an even greater extent with regard to the case study of EU-Senegalese fisheries relations. In particular, I was unable to access Senegalese fisheries legislation and policy through traditional reference material.

I used four main methods to conduct my empirical research: formal interviews (conducted by telephone, e-mail and in person with two key stakeholders in the EU, two key national players in the Senegalese Direction des Pêches Maritimes (DPM) and two non-governmental organisation (NGO) representatives based in Dakar, Senegal), semi-structured interviews (carried out in person with four other officials within DPM), observational research (conducted in Dakar, Senegal and its surrounds and in the southern fishing village of Toubab Dialo), and informal interviews (conducted via question-answer e-mail exchanges with the EU stakeholders and two officials in the FAO). The empirical research was carried out after I had completed my initial desk-bound research, primarily during the period of September 2005 to February 2006. The majority was conducted in Dakar, Senegal during a nine day visit from 30 January until 8 February 2006. The first formal interview was conducted with the Brussels-based EU official by telephone in September 2005 following a number of informal investigative e-mail exchanges prior to this date. The remainder of the formal interviews took place in Dakar. In the period between August 2005 and August 2006, numerous informal e-mail exchanges took place between myself and my interviewees (those conducted post-interviews primarily concerned points of clarity and follow-up questions), as well as with two key FAO personnel: a senior scientific officer, who clarified numerous technical and

biological issues concerning West African fisheries, and the former director of DPM and head of the Senegalese bilateral fisheries agreement negotiation team with the EU (Mr Gueye) who provided me with useful contacts in the Senegalese fisheries ministry.

The interviewees were selected for different reasons. The EU representatives were chosen as they respectively occupied positions that had a direct bearing on my area of research: one was head of the bilateral fisheries agreement unit within the EU Commission's Directorate-General Fisheries (DG Fisheries) while the other was the permanent EU representative in Dakar, responsible for over-seeing the EU's bilateral fisheries agreements with West African coastal states.[6] The DPM officials were selected less systematically. After months of frustrating attempts to identify and forge links with suitable person(s) in the Senegalese government, I was put in touch with a DPM fisheries statistician (Mr Ndaw). It was through Mr Ndaw that I was able to secure an interview with the (then) director of DPM (Ms Diop) as well as with a former key national player in the DPM and current legal advisor to the Ministry (Mr Samb, who also played an instrumental role in drafting Senegal's national fisheries laws and codes). These were the only two formal interviews conducted with DPM officials on the basis of pre-prepared interview questions.

The NGO representatives that I interviewed in Dakar were both selected prior to my visit and interview appointments were scheduled in advance via e-mail contact. Firstly, I choose to interview the World Wide Fund for Nature (WWF)'s Western Africa Marine Ecosystem representative. This was based on the fact that the WWF, an internationally-recognised global environmental conservation, research and advocacy organisation, has been particularly active in its criticism of the EU's bilateral fisheries agreements with West African coastal states

[6] As noted in the annexed list of interviewees, the (then) head of the DG Fisheries Bilateral Fisheries Agreement Unit no longer holds this position. He is now the Executive Director of the new EU Fisheries Control Agency (as from June 2006).

from a sustainability perspective as well as in its efforts to advise the respective parties in how to negotiate agreements that better foster sustainable fishing and the sustainable development of the coastal states' fisheries.[7] The second NGO that I selected - Enda Prospectives Dialogues Politiques (Enda Diapol) - is a much smaller, less well-known international organisation that works on coordinating African state policies in the spheres of the environment, fisheries and trade. Its Dakar-based branch focuses exclusively on West African fisheries; its particular aim is to foster coherence between West African states' fisheries policies and their environmental and trade policies at a local, regional and international level. I chose these particular two NGOs for their environmentally-grounded interests in West African fisheries relations with the EU and for their potentially differing perspectives on these relations. My interview questions were based on a written questionnaire. Their aim was primarily to ascertain the respective NGO representatives' official positions on the impacts (positive and negative) of the EU-Senegalese fisheries agreements to date from a sustainability perspective, as well as any recommendations to improve the promotion of sustainable fishing via future agreements (or other means). I was aware that both NGO's were relatively critical of the agreements and thus factored this into my questions. I recorded the answers and comments of my interviewees by hand and subsequently typed them up.

The formal interviews with the EU and DPM representatives were also conducted on the basis of written questionnaires.[8] The questionnaires respectively comprised ten and eleven core questions. They focused primarily on two key aspects of the (then) current EU-Senegal bilateral fisheries agreement, namely resource management issues (including surplus determination, fishing opportunities and the importance of sustainable fishing) and matters of

[7] Largely, this is through the development and promoting of a handbook to this end (see W Martin and others, *A Handbook Negotiating Fishing Access Agreements* (WWF, Washington D C 2001). Currently, a manual for best practice to negotiate fisheries agreements is being developed in collaboration with the World Conservation Union (IUCN) for West African states, coupled with regional training courses to enhance the technical capacity of national negotiators.

[8] The questionnaires are attached to the thesis (annex 1).

compensation and value (including specific questions concerning targeted action payments). In addition, the questions were concerned with the broader context in which the agreement operated, such as the impact of fisheries agreements on the domestic fishing industry (particularly the artisanal sector) and the relation between fisheries agreements generally and EU-Senegalese trade and development interactions. Additional questions were posed to the DPM officials about the state of Senegalese fisheries.

Where possible, the interview questions were sent to the interviewees in advance. In all cases, interviewees' responses were recorded by hand and subsequently typed up. The particular wording of the questions was modified slightly as necessary to match the country or organisational identity of the particular interviewee. In some instances, where interviewees introduced an interesting issue that was related to the topic under discussion or made a comment at a tangent to the specific question asked but nevertheless relevant to my interests, I diverted from the formal questions for a few minutes to listen to and record what was being said and possibly also to ask further related questions or to seek a point of clarity. This enhanced my knowledge of the subject-area under research; it did not detract from the overall utility of having a core set of uniform questions for each interview as this ensured a degree of consistency between the various interviews and guaranteed that comments and views on key matters were obtained from all of the chosen interviewees. It was not, however, my intention to compare the interviewee's responses or to perform any kind of statistical analysis of the data obtained from the interviews. My aim in conducting these interviews was firstly to supplement the written data that I had already accessed on EU-developing coastal state (particularly, Senegalese) fisheries relations and bilateral fisheries agreements. This included clarifying certain points that were somewhat vague in the literature. Through the interviews I also hoped to access relevant Senegalese legal and policy documents (I was successful in this goal). Secondly, I hoped to ascertain first hand the official viewpoints of the state bodies and

organisations represented by my interviewees on specific matters concerning these relations and agreements. All of the data gathered was used as background material to enrich my understanding of the subject-matter of my thesis. In addition, I draw on some of the data in the text of my thesis to clarify, accentuate or question points made in the literature; this is indicated either as a quotation in the text or a reference in the footnotes to the particular source.

All interviewees were informed prior to the interview of my status as a PhD student and the fact that data from the interviews would be incorporated into my thesis. They were all asked during the interview to indicate whether they preferred data used from their interviews to be directly referenced to them by name or whether they preferred to remain anonymous; I reconfirmed their respective decisions via e-mail following the interviews. The majority of interviewees preferred to remain anonymous. Material that is used from these interviews in the text of my thesis is referenced simply as 'interviews (Dakar February 2006)', whereas material that originates from interviewees who indicated that they were content to be quoted is referenced directly to the person concerned. The only evident ethical issue arising from the formal interviews was the tendency of the EU and DPM officials respectively to interject their official responses with personal opinions. The interviewees usually subsequently acknowledged this and requested that these particular comments should remain anonymous if subsequently utilised in the text of the thesis.

The four 'semi-structured' interviews that I conducted with DPM officials were scheduled after my arrival in Dakar with the assistance of Mr Ndaw. While they were similarly based on pre-prepared written interview questions, I devised the questionnaires at relatively short-notice (usually the night prior to the interview) and tailored each set of questions to the area of expertise of the particular interviewee. For example, questions concerning the success (or not)

in using marine protected areas to promote domestic fisheries conservation in coastal areas were directed at the particular individual with a portfolio on marine protected areas. These interviewees were not selected on a systematic basis, but were chosen somewhat randomly, determined largely by who had time and was willing to subject themselves to an interview and which officials could offer potentially relevant input to my research. A limiting factor with regard to these informal interviews was the language constraint – they were conducted in a mixture of fairly basic English and French; in contrast, there were no language difficulties in the formal interviews – they were all conducted in English as the interviewees were competent English speakers.

My observational research comprised surveying fishers, fish processors and sellers in Dakar's ports and in Toubab Dialo, a small fishing village south of the capital where I undertook a two day site-visit with the aim of observing the central role of fishing to the livelihoods and culture of local coastal communities. Here, I watched artisanal fishers harvesting coastal fish in their pirogues and mending their fishing nets on the beach and women preparing the catch on the beach for local consumption (smoking or cooking the fish). I recorded my observations in rough fieldnotes. The data was used purely as background information to expand my knowledge of Senegalese fisheries.

Overall, a limiting factor of my empirical research was the relatively short time period that I spent in Senegal. Poor infrastructure, including telecommunications, made travelling in and around Dakar time-consuming and frequently made scheduling and keeping appointments difficult. Accordingly, had I spent a longer time in Dakar or returned for a second research visit, I would likely have been able to schedule meetings with a wider spectrum of stakeholders in the fishing industry, including officials from the scientific advisory body to the DPM (the Centre de Recherches Océanographiques de Dakar Thiaroye, (CRODT)) and

possibly also representatives from the different domestic fishing sectors.[9] While this would undoubtedly have further enriched my knowledge and understanding of the subject-area, I do not believe that my inability to do so hampered the substantive quality of my research or its utility.

[9] Cross-reference with pp 177, 178 for more on CRODT and the general institutional structure of fisheries management in Senegal.

2

COMMON RESOURCE MANAGEMENT IN FISHERIES: SUSTAINABILITY CHALLENGES AND LEGAL RESPONSES

1. Introduction

World fisheries are currently in crisis. From a biological perspective this is manifested in the fact that around 70 percent of the world's commercially exploitable stocks are either fully-fished, over-fished, depleted or in slow recovery and most of the world's fishing grounds have been exhausted.[10] There is a corresponding increasing recognition of the inadequacies of current biological and scientific fisheries management models.[11] Fisheries management is therefore similarly in turmoil regarding how best to address the biological crises and what (new) methods should be employed to this end.[12] The causes of the crises are not unknown – they include over-capacity of vessels and gear, poor monitoring and enforcement and rampant illegal, unregulated and unreported (IUU) fishing. The solutions, legal and otherwise, however, are less clear. The challenge is to find an effective way to sustainably regulate a common natural resource that is under increasing global demand. It is this challenge that

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[10] Food and Agriculture Organisation (FAO), *State of the World Fisheries and Aquaculture Report* (FAO, Rome 1994) and *State of the World Fisheries and Aquaculture Report* (FAO, Rome 1996). See also R Rayfuse and M Wilder, 'International Fisheries and Sustainability: Dealing with Uncertainty' (2000) Living Resources 114, F Berkes, 'Property Rights and Coastal Fisheries' in RS Pomeroy (ed), *Community Management and Common Property of Coastal Fisheries in Asia and the Pacific: Concepts, Methods and Experiences* (International Centre for Living Aquatic Resources (ICLARM), Manila Philippines 1994), K Crean and D Symes (eds), *Fisheries Management in Crises* (Fishing News Books, Oxford 1996), D Symes, 'Fishing in Troubled waters' in Crean and Symes at 7, JR McGoodwin, *Crisis in the World's Fisheries: People, Problems, and Policies* (Stanford University Press, Standford 1990), ME Smith, 'Chaos in Fisheries Management' (1990) 3 Maritime Anthropological Studies 1 – 13 at 1, and S Hanna, 'Transition in the American Fishing Commons: Management Problems and Institutional Design Challenges' in N Dolšak and E Ostrom (eds), *The Commons and the New Millennium* (Massachusetts Institute of Technology, Massachusetts USA 2003) at 62, 63. Around 50 percent of these stocks are fully-exploited, meaning that they are being fished at their maximum biological productivity; increased fishing will not produce increased sustainable harvests and could reduce reproduction to dangerously low levels. Over-exploited stocks are those where fishing already does not produce increased sustainable harvests and reproduction is at dangerously low levels, while depleted stocks are those where the populations are currently only a fraction of their historical size and require re-building.

[11] Symes ibid at 7.

[12] Ibid, Smith op cit n 10 at 1 and JA Wilson and P Kleban, 'Practical Implications of Chaos in Fisheries: Ecologically Adapted Management' (1992) 5 Maritime Anthropological Studies 67 – 75.

forms the basis of this chapter. I focus in particular on how the international legal regime seeks to promote the goal of sustainable fisheries management. In chapter 3 below, I revisit the concept of sustainability and comprehensively address its meaning and its relationship with the related principle of sustainable use and the ideal of sustainable development. These chapters thus introduce two of the analytical lenses that I employ in my thesis, as I have explained in chapter 1.

2. The challenge of common resource management

Forests, grazing land and fisheries are all examples of common natural resources. Marine fisheries are often described as a 'classical' example of a common natural resource because they exemplify the two defining characteristics of these resources.[13] The first is that it is extremely difficult to prevent users from extracting from a common natural resource (the exclusion problem) while the second is that extraction by one user diminishes the volume of the resource and detracts from the ability of others to use the resource (the subtractability or rivalry problem).[14] These characteristics give rise to two particular management problems: how to effectively regulate access to the resource and how best to control its level of exploitation.[15] It is generally acknowledged that these challenges cannot be adequately addressed unless the common resource is subject to a property rights system, as a resource that is subject to no property regime (open access) is highly susceptible to over-exploitation.

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[13] Berkes op cit n 10 at 51 and CM Rose, 'Rethinking Environmental Controls: Management Strategies for Common Resources' (1991) Feb Duke Law Journal 1 at 3. See also S Ciriacy-Wantrup and R Bishop, '"Common Property" as a Concept in Natural Resource Policy' (1975) 15 Natural Resources Journal 713 – 727 at 722.

[14] E Ostrom and others, *Rules, Games and Common-Pool Resources* (University of Michigan Press, USA 1994) at 6, E Ostrom, 'The Rudiments of a Theory of the Origins, Survival, and Performance of Common-Property Institutions' in D Bromley and others (eds), *Making the Commons Work: Theory and Practice and Policy* (ICS Press, San Francisco California 1992) at 295, RJ Oakerson, 'Analyzing the Commons: A Framework' in Bromley and others at 44, and R Wade, 'The Management of Common Property Resources: Finding a Co-operative Solution' (1987) 2 World Bank Research Observer 219 – 234 at 220.

[15] D Feeny, 'Frameworks for Understanding Resource Management on the Commons' in Pomeroy op cit n 9 at 20.

This is because it is open to use by anybody who has the capacity to exploit it while at the same time nobody has an incentive to conserve it. [16] Arguably, individuals will thus tend to use the resource to maximise their own short-term benefits with little consideration for the long-term implications of their actions. They will likely make no effort to conserve the resource in the belief that other users will either neutralise these efforts or benefit from them without sharing the costs.[17] If nobody conserves the resource, it will of course become over-utilised and may eventually be destroyed.[18]

Some kind of property rights regime is thus arguably necessary (although not sufficient) to prevent the over-exploitation of common resources.[19] There is no definitive answer as to what property regime(s) is better suited to this end but literature and practice suggest that common resources are best managed under one or more of three types of property regimes: state (government) property, private property, or common (communal) property.[20] The characteristics of the particular resource and the context in which it is located will dictate (at least in part) the most suitable property regime(s).[21] A number of writers suggest that a combination of property regimes is best for managing coastal fisheries resources.[22] This view is also reflected in the practice of coastal states – many have implemented state regimes in conjunction with private property rights systems to manage the fisheries in their adjacent

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[16] G Stevenson, *Common Property Economics: A General Theory and Land Use Applications* (Cambridge University Press, UK 1991) at 9, Feeny ibid at 22 and Hanna op cit n 10 at 8.
[17] J Bowers, *Sustainability and Environmental Economics: An Alternative Text* (Addison Wesley Longman, England 1997) at 189.
[18] G Hardin, 'The Tragedy of the Commons' (1968) 162 Science 1243 – 1248 reproduced in JA Baden and DS Noonan (eds), *Managing the Commons* (2nd edn Indiana University Press, USA 1998). Hardin's theory is discussed and analyzed below at p 35. Ostrom (1992) op cit n 14 at 293 and 297 and Wade op cit n 14 at 220.
[19] E Schlager and E Ostrom, 'Property-Rights Regimes and Coastal Fisheries: An Empirical Analysis' (1993) in T L Anderson and R T Simmons (eds), *The Political Economy of Customs and Culture: Informal Solutions to the Commons Problem* (Rowman and Littlefield, Landham 1993) and Ostrom ibid at 293.
[20] As noted by Hanna op cit n 10 at 8.
[21] See for example F Berkes, 'Success and Failure in Marine Coastal Fisheries of Turkey' in Bromley and others op cit n 14 and F Runge, 'Common Property and Collective Action in Economic Development' (1986) 14 World Development 623-635 at 624.
[22] See for example Berkes ibid at 56, Feeny op cit n 15 at 22 and D Feeny and others, 'The Tragedy of the Commons: Twenty-two Years Later' in Baden and Noonan op cit n 18 at 78.

waters. In some jurisdictions, common property rights systems are used (although this is not wide-spread).[23]

In a government or state property regime, the state owns the common resource. It regulates both access to the resource and the level and nature of its use.[24] Most coastal states own and regulate fisheries in their 12 nautical mile territorial waters, as permitted by the United Nations Convention on the Law of the Sea (UNCLOS); in addition, they assert sovereign rights over the fisheries in their 200 nautical mile exclusive economic zones (EEZs).[25] If a private property system is in place, individuals own 'units' of the common resource and have the right to exclude others from using them. In marine fisheries, coastal states may permit individuals to hold a fishing quota – a right to catch a fixed amount of a certain species of fish - or an individual transferable quota.[26] These rights are recognised by the state and are legally enforceable.[27] In a common (or communal) property system, however, the common resource is owned and regulated by an identifiable group of users, who can exclude outsiders from using the resource. Within the group, individual users may enjoy equal rights of access or use

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[23] Such as in Asia and on a project or area-specific basis in countries such as South Africa and Turkey. For examples of co-management projects in South Africa, see M Hauck and M Sowman (eds), *Waves of Change: Coastal and Fisheries Co-management in South Africa* (University of Cape Town Press, Cape Town 2003). For a more general discussion on co-management see RE Townsend and SG Pooley, 'Distributed Governance in Fisheries' in S Hanna and M Munasinghe (eds), *Property Rights and the Environment: Social and Ecological Issues* (The Beijer International Institute of Ecological Economics and The World Bank, Washington DC USA 1995).

[24] For explanations of the various property regimes suitable for regulating common resources, including state property regimes, see for example Bromley and others op cit n 14 at 23, Berkes (1994) op cit n 10 at 56, Feeny op cit n 15 at 22, and Feeny and others op cit n 22 at 79.

[25] Feeny ibid at 22 and Bromley and others ibid at 23. Articles 2 and 3 of the United Nations Convention on the Law of the Sea (UNCLOS) (adopted December 10 1982 , entered into force 16 November 1994) (1982) 21 ILM 1261 regulate the territorial waters while Part V regulates the exclusive economic zone (EEZ). Cross-reference with p 45 below where I discuss the EEZ in greater detail.

[26] These concepts re-visited below at p 48.

[27] See Bromley and others op cit n 14 at 24, Berkes (1994) op cit n 10 at 56 and Feeny and others op cit n 22 at 79.

and their rights may be transferable.[28] While their rights are in some cases recognised by the state, they may operate de facto only.[29]

Historically, Hardin's view that only a state or private property rights system can prevent the destruction of a common resource dominated. In recent years, however, commentators have taken increasing note of evidence that supports the contention that a common property regime can potentially also ensure the sustainable management of a common natural resource.[30] I discuss this further below in the context of a critique of Hardin's theory.[31]

2.1 Hardin's 'Tragedy of the Commons' theory and suggested property-rights solutions

Hardin's 'Tragedy of the Commons' theory is one of the most influential models of common natural resource management. The theory uses the example of common grazing land in an open access system and argues that as a 'rational being' the user of this land will try to maximise his personal gain by grazing an ever-increasing number of cattle on the common land.[32] He will do this because the private benefits from this action exceed the private costs, as the cost of maintaining the land is distributed among all users. The user therefore becomes 'locked into a system that compels him to increase his herd without limit' until the commons can no longer sustain any grazing at all and collapse. 'Therein is the tragedy...freedom in a

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[28] As Ciriacy-Wantrup and Bishop op cit n 13 point out, individuals within the group do no necessarily enjoy equal rights regarding the amount of the resource that they may use over a period of time; they may simply enjoy equal rights to use the resource (at 714, 715).

[29] See Bromley and others op cit n 14 at 25, 26, Berkes (1994) op cit n 10 at 56, Feeny and others op cit n 22 at 79, and Ciriacy-Wantrup and Bishop ibid at 714, 715.

[30] Feeny and others ibid at 86. One of the empirical examples referred to is the cooperative-based management of coastal fisheries in Japan (at 81). Other examples include forests, meadowlands and irrigation works in Japanese villages (at 84) as well as various forms of common property management in South India. Reference is also made to successful common property management of coastal fisheries in Turkey (see Berkes (1992) op cit n 21 at 83).

[31] At p 38.

[32] Hardin op cit n 18 at 7.

commons brings ruin to all'.[33] Hardin argued that the only way to prevent the tragedy is to either allocate individual property rights to individual grazing units of the common land (a private property rights regime) or for the state to control the land and regulate access to it (a state property rights regime).[34]

Gordon proposed a similar theory to Hardin's some fourteen years earlier in the context of fisheries management.[35] He drew on the economic theory of natural resource utilisation to argue that where natural resources such as fisheries are unregulated 'free goods', over-exploitation will occur. This is because fish in such a system are 'valueless' as there is no certainty that if they are not harvested on one day they will still be available the next; a factor of production that is valued at nothing in business calculations yields nothing in income.[36] Competitive harvesting under such a system therefore yields no economic rent (the revenue or excess value that is produced above the cost of harvesting).[37] Accordingly, commercial fishing is not economically sustainable. Even if rent is initially generated it will arguably dissipate: with no limit on who can extract and how much they can take, fishers will either withdraw more than is economically optimal or over-invest in fishing equipment.[38] Gordon suggested the same solutions as Hardin, namely that fisheries should either be subject to public or private property regulation.[39]

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[33] Ibid.
[34] Ibid at 8.
[35] SH Gordon, 'The Economic Theory of Common Property Resources: The Fishery' (1954) 62 Journal of Political Economy 124 – 142, reproduced in Baden and Noonan op cit n 18 at 17.
[36] Gordon ibid at 28.
[37] Ibid at 7 and 28 and Rose op cit n 13 at 13. Rose cites the goal of fisheries management as the identification and maintenance of the use level at which the resource's rents are at their greatest (at 14). See also VT Kaitala and GR Munro,'The Management of Transboundary Resources and Property Rights Systems: The Case of Fisheries' in Hanna and Munasinghe op cit n 23 at 70.
[38] E Ostrom, Governing the Commons: The Evolution of Institutions for Collective Action (Cambridge University Press, Cambridge 1990) at 48.
[39] Ibid at 29.

The 'free rider' problem is a common, key thread in the above two theories. Both are based on the assumption that humans are narrowly self-interested and will always act to further their own individual interests rather than those of the group.[40] Individuals thus tend not to contribute towards joint efforts if they know that they cannot be excluded from the benefits of the end result; they are tempted to 'free ride' on the efforts of others. The problem is that if all individuals in a group are free-riders, the common good will not be produced.[41] In the context of Hardin's commons theory, free-rider behaviour prevents the group from mutually agreeing on an effective way to manage the common resource.[42]

This assumption of human nature is supported by two other influential models: the 'Prisoners' Dilemma' game theory, and Olson's theory of collection action. The former describes how, in the absence of intervention by a higher authority, the rational strategy of each individual 'player' in a group effort will lead collectively to an irrational outcome that harms the group.[43] This will arise because any given individual player will suspect that every other player will not cooperate fully to address a particular issue but will instead 'defect' at some point. The individual player will therefore also 'defect', viewing this as his/her best option despite the fact that all players may be better off if they cooperated.[44] The theory supports the assertion that no individual(s) will act to conserve a common natural resource and that it will accordingly become depleted.[45] Olson's 'logic of collective action' theory echoes this finding. It presents a pessimistic view of the viability of collective action, challenging the group theory that individuals with common interests will act voluntarily to promote those interests. Olson argues that individuals will not act to achieve common or group interests unless there is some

[40] This assumption about human nature has been criticised and is discussed below.
[41] Runge op cit n 21 at 625 and E Ostrom,'Reflections on the Commons' in Baden and Noonan op cit n 18 at 100.
[42] Runge ibid at 626 and Anderson and Simmons op cit n 19 at 3.
[43] Ostrom (1998) op cit n 41 at 97, 98 and Runge ibid at 625, 626.
[44] Rose op cit n 13 at 4.
[45] Ibid.

special feature that 'makes' them do so.[46] The theory therefore disregards the prospect of voluntary collective action resulting in the successful management of a common resource.[47]

All of these theories discount the possibility that users can extricate themselves from a common resource use dilemma. In particular, they discredit common property regimes as a solution to this predicament. Yet numerous empirical examples refute the inappropriateness of common property solutions, thus presenting a critique of Hardin's theory. Whilst influential, Hardin's theory has been severely criticised on numerous grounds.[48] One of its core failings is its narrow, dichotomous focus on private and state property regimes as the solutions to the effective management of common resources to the exclusion of common property systems.[49] Studies that highlight the capacity of common property regimes to deal with common resource management difficulties just as effectively as private and state property systems, are particularly rich in coastal fisheries.[50] From these and other examples, researchers have compiled a comprehensive 'checklist' of factors that predispose a common resource to effective management by common property regimes relating to the resource itself, the users and the context.[51]

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[46] For example, the group is very small or there is coercion or 'some other special device' - Ostrom (1998) op cit n 41 at 99. Collective action is action by more than one individual that is intended to attain a common goal or satisfy a common interest where the goal or interest cannot be obtained by the individual person on their own (Wade op cit n 14 at 221).

[47] As Wade points out (ibid), his findings (and those of other scholars, such as Ostrom) question this argument. With reference to empirical case studies, Wade engages in a critical analysis of Olson's theory (228, 229). His paper culminates in the production of a list of conditions that are likely to support successful collective action in the management of common resources (231, 232). These should be read in conjunction with a similar list produced by Ostrom (1990) op cit n 38.

[48] See for example McGoodwin op cit n 10 at 89, Anderson and Simmons op cit n 19 and Feeny and others op cit n 22.

[49] Anderson and Simmons ibid at 6.

[50] D Bromley, *Environment and Economy: Property Rights and Public Policy* (Basil Blackwell, London UK 1991) at 25 and Feeny and others op cit n 22 at 80, 81.

[51] See in particular the work of Ostrom (1990) op cit n 38 and Wade (op cit n 14). Ostrom describes these factors as 'design principles' (at 90). For the full contents of these lists and detailed explanations of them, see Ostrom at 90-102 and Wade at 230 – 232. For a critique of their work see A Agrawal, 'Common Property Institutions and Sustainable Governance of Resources' (2001) 29 World Development 1649 – 1672.

Another fundamental critique of Hardin's theory is that it seems to equate open access regimes with regimes of a common property nature.[52] At the very least, it obscures the difference between the two. This stems from Hardin's failure to define the term 'commons' in his paper.[53] He does not identify key characteristics of 'commons' nor does he distinguish them from the property rights regimes in which they operate.[54] This leads him to confuse 'commons' (a type of property) with 'common property' (a property rights regime). As 'commons' are subject to an open access regime in Hardin's theory, this confusion in turn equates an open access regime with a common property system.[55] This has the effect of attributing the 'tragedy of the commons' to common resources held under a common property regime. As noted above, this assumption is incorrect. Arguably, Hardin's theory would have been clearer if the author had defined his key terms and more accurate if his paper had been titled the 'tragedy of open access'.[56]

The theory has also been faulted for being socially and culturally 'simplistic' in that it ignores the impact that social norms may have on individuals' behaviour in differing cultural contexts.[57] Hardin's failure to take cultural norms into account may partly explain the disparity between the predictions of his theory and the successful outcome of numerous empirical examples of common resource management.[58] In addition, the theory is criticised for failing to acknowledge the potential ability of users to extricate themselves from their common resource dilemma. Hardin's portrayal of users as helpless victims trapped in a

[52] McGoodwin op cit n 10 at 92, Stevenson op cit n 16 at 3, Bromley op cit n 50 at 22.
[53] Anderson and Simmons op cit n 19 at 2.
[54] Feeny and others op cit n 22 at 78.
[55] P Larmour, *The Governance of Common Property in the Pacific Region* (National Centre for Development Studies, Canberra 1997) at 3. K Singh, *Managing Common Pool Resources:Principles and Case Studies* (Oxford University Press, Delhi 1994) notes the importance of distinguishing between these two regimes in practice because what may appear to outsiders to be an open access regime might in fact be a common property system managed de facto by internal rules of an identifiable group of users (at 4, 5).
[56] Stevenson op cit n 16 at 3.
[57] McGoodwin op cit n 10 at 93 and Bromley op cit n 50 at 22.
[58] Anderson and Simmons op cit n 19 at 2.

situation beyond their control has been discredited by numerous case studies.[59] In these examples, the users have recognised their destructive extraction patterns and have devised means to avoid 'the tragedy'.[60] Related, is the denunciation of Hardin's assumption about human nature, namely that all humans are 'rational, narrowly self-interested, myopic maximisers'.[61] Collective action theorists and scholars are particularly vehement in refuting this view.[62]

Finally, and particularly relevant to this thesis, Hardin's theory fails to take adequate account of the nature of the common resource in question. This is problematic as the characteristics of the resource invariably shape the effects of its use.[63] In particular, the theory inadequately deals with fugitive resources, such as fisheries.[64] These are mobile resources that are incapable of ownership until they are possessed by capture.[65]

Combined, the above criticisms suggest that Hardin's theory, while insightful, is inadequate and incomplete.[66] It is not as easy to solve common resource management problems as Hardin suggests, particularly those of fisheries. Clearly, open access is not conducive to the long-term survival of common natural resources; some type of property rights system is needed in order to meet this goal. No one property rights regime can be guaranteed to ensure the sustainable use of all common resources; the most suitable regime must be decided on a case-by-case

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[59] Hardin describes users as 'locked' into a system in which they are compelled to perpetuate their destructive exploitative actions (op cit n 17). Those discrediting Hardin's portrayal include Ostrom (1992) op cit n 14, Ostrom and others op cit n 14, Wade op cit n 14, Feeny (1994) op cit n 15 and Berkes (1994) op cit n 10.
[60] McGoodwin op cit n 10 at 92, Bromley op cit n 50 at 22 and Berkes ibid at 59. See also Ostrom and others ibid at 4, 5.
[61] Anderson and Simmons op cit n 19 at 3.
[62] For example, Ostrom (1992) op cit n 14, Wade op cit n 14, Feeny (1994) op cit n 15 and Berkes (1994) op cit n 10.
[63] Feeny and others op cit 22 at 87.
[64] Ciriacy-Wantrup and Bishop op cit n 13 at 724.
[65] Ibid. The theory also inadequately deals with ubiquitous resources, such as air, solar radiation and wind. These resources are not scarce 'prior to some stage of economic development'. They therefore only need to be regulated once this point is reached
[66] Feeny and others op cit n 22 at 86.

basis guided by the nature of the resource and the context in which it is used. This leads me to consider the goal of 'effective' management of common natural resources.[67]

Writers address the objective of effective common resource management in different ways, but the common theme is the goal of 'sustainable use' or the 'sustainability' of the resource in question.[68] It is therefore important to have an idea of the meaning of these concepts. As I discuss them more fully in the next chapter, it is sufficient at this point to understand 'sustainable use' as the regulated use of a natural resource in a way that protects the resource while facilitating the users' ability to maximise their socio-economic benefits.[69] When a resource is used in this manner, it is used 'sustainably'. The objective is thus to ensure both the biological sustainability of the resource and the long-term social and economic well-being of its users.

3. The particular challenges of sustainable fisheries management

Marine fisheries are complex to manage because they are subject to open access in the high seas as well as potentially also in coastal waters. In an effort to facilitate their sustainable management, international law - through UNCLOS - sought to remove much of the world's fisheries from this open access system and subject them to coastal state jurisdiction. Most coastal states have now claimed the 200 nautical mile EEZ to which they are legally entitled and have implemented property regime(s) in these waters to regulate their fisheries. Only the high seas beyond the 200 nautical mile boundary thus remain open access. Here, management

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[67] This conclusion is supported by Ostrom (1992) op cit n 14, Ostrom and others op cit n 14, Wade op cit n 14 and Agrawal op cit n 51, as well as Runge op cit n 21 at 624 and 633.

[68] See for example Ostrom ibid at 293, Wade ibid at 220, Stevenson op cit n 16 at 10, Feeny and others op cit n 22 and Hanna and Munasinghe op cit n 23.

[69] J Bowers op cit n 17 at 192, 192, Hanna and Munasinghe ibid at 5, and WM Lafferty and O Langhelle, 'Sustainable Development as Concept and Norm' in WM Lafferty and O Langhelle (eds), *Towards Sustainable Development: on the Goals of Development and the Conditions of Sustainability* (St Martin's Press Incorporated, USA 1999) at 1.

therefore remains highly problematic and the only way forward appears to be through increased international cooperation underpinned by effective institutional support. Coastal states have, however, struggled to achieve sustainable fisheries management in their waters and continue to grapple with how best to use property rights and other technical measures towards this end. A central element of their fisheries management policies are the scientific models on which they are based, particularly the commonly used Gordon-Schaefer bio-economic model.

A key difficulty facing early fisheries management was how to determine a fishery's maximum sustainable yield (MSY) - the largest long-term average catch (yield) that can be taken from a fish stock without interfering with the species' ability to reproduce and thus maintaining the average size of the stock.[70] Rooted in biological theory, Schaefer's 'logistic model' was the first to present a viable formula to this end. It was deficient, however, as the optimal level of fishing effort cannot be determined in relation to MSY alone; it also depends on economic factors, such as the cost of extraction and the market value of the catch. In 1954, Gordon developed a model that definitively captured the relationship between economics and fisheries (as noted above), relating total revenues from fishing to total fishing effort in a surplus production model.[71] This theory could determine a fishery's maximum economic yield (MEY) which, put simply, refers to the maximum sustainable economic benefits that can be obtained from a fishery. It complemented the earlier Schaefer model and cumulatively, their works gave rise to what is commonly referred to as the Gordon-Schaefer bio-economic model.[72] For many years, fisheries managers worldwide applied this model but they

[70] Bowers ibid at 19 and P Birnie and A Boyle, *International Law and the Environment* (2nd edn Oxford University Press, England 2002) at 551.
[71] Op cit n 35. Cross-reference with p 36 above.
[72] McGoodwin op cit n 10 at 69-71 and Symes op cit n 10 at 5.

nevertheless failed to achieve sustainable fisheries management.[73] This was most likely because of the numerous weaknesses of the model.[74]

The major criticism of the model is that it is too simplistic: it fails to take account of the inherent complexity and instability of the marine environment and therefore discounts the fact that fish stocks might fluctuate for a variety of reasons that are unrelated to fishing effort, such as pollution or temperature and current change.[75] This is highlighted by alternative 'chaos' theorists, who identify various fisheries management challenges that stem from the unpredictability of the marine environment.[76] They emphasise the problematic outcome of fisheries managers' inability to accumulate the necessary amount and type of knowledge to make accurate predictions about fish stocks namely, that it renders conventional fisheries management approaches that manipulate the recruitment of species' populations - such as quotas - inherently weak tools.[77]

The bio-economic model also fails to reflect the fact that it is not only the volume of a catch that impacts the population level of species and their growth rate, but also other variables, such as the age and gender structure of the catch and the location and timing of harvesting.[78] Related is that the model is concerned with regulating single species only. It therefore does not take account of interactions between different species, which can lead to inaccurate stock level predictions.[79]

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[73] McGoodwin ibid at 72.
[74] Symes op cit n 10 at 7. See also S Cunningham, M Dunn and D Whitmarsh, *Fisheries Economics: An Introduction* (Mansell Publishing Ltd, London England 1985) at 98-100.
[75] McGoodwin op cit n 10 at 71, Symes ibid at 6 and Birnie and Boyle op cit n 70 at 552.
[76] Smith op cit n 10. See also Wilson and Kleban op cit n 12, where the authors focuses particularly on the development of practical methods for maintaining sustainability in chaotic fisheries.
[77] Wilson and Kleban ibid at 71. See also Smith ibid at 9, who notes that '...a small change in the local water temperature, a ghost-net, some vessel dumping waste overboard can be the minute disturbance that leads to a change that ripples along the food chain, amplifying in scale as it moves up in scale'.
[78] Bowers op cit n 17 at 190, 191.
[79] McGoodwin op cit n 10 at 72 and Symes op cit n 10 at 6.

Despite its various flaws, the bio-economic model nevertheless remains the primary basis for modern fisheries management perhaps precisely because of its apparent simplicity.[80] Alternative, more conservation-based strategies that seek to address its deficiencies have evolved, such as optimal sustainable population and optimal ecological resource management, all of which are rooted in the objective of sustainable use.[81] They remain less widely-used, however. While some international legal instruments support these newer models, UNCLOS endorses the use of the maximum sustainable yield model in the context of a zonal, property rights approach to effective fisheries management. Specifically, it grants coastal states jurisdiction over their adjacent coastal waters and requires them to ensure that fish stocks in these waters are maintained or restored to levels which can produce the maximum sustainable yield.

4. The legal response

The approach advocated by UNCLOS is comparatively new. Historically, the international legal regime for marine resource management reflected Grotius' concept of the 'freedom of the seas': the sea and its resources were open to use by all and incapable of ownership by any single nation.[82] This regime came under increasing challenge and in the wake of World War II, coastal states began to claim jurisdiction over their adjacent marine waters and the resources in them. The legitimacy of their claims were disputed, however, and there was accordingly a need for legal clarification on the matter.[83]

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[80] McGoodwin ibid at 74 and Symes ibid at 7.
[81] Birnie and Boyle op cit n 70 at 552.
[82] Grotius H, *The Freedom of the Sea or the Right Which Belongs to the Dutch to Take Part in the East India Trade* (trans Magoffin and Scott New York, 1619).
[83] A particularly important challenge was that by the UK and Germany to Iceland's extension of its coastal fishing zone from 12 nautical miles to 50 nautical miles in 1972 - see UK v Iceland [1974] ICJ Rep 3 Germany v Iceland [1974] ICJ Rep 175 (the Icelandic Fisheries Cases). I discuss the claims of coastal states to extended marine fisheries jurisdiction in greater detail at p 146.

The 1982 UNCLOS attempted to impose some order on the management of coastal resources and to tackle the broader issue of the management of the oceans.[84] It set about achieving these goals by (inter alia) establishing various maritime zones in which it granted coastal states different jurisdiction over the marine resources in them.[85] The most relevant zone from a fisheries management perspective is the exclusive economic zone (EEZ), which all coastal states are entitled to claim and in which they enjoy legal control over all marine resources.[86]

Specifically, within the EEZ, coastal states enjoy 'sovereign rights'

> '... for the purpose of exploring and exploiting, conserving and managing the natural resources, whether living or non-living, of the waters superajacent to the seabed and of the seabed and its subsoil...'[87]

These rights are tempered by the obligation to ensure the 'proper' conservation and management of the living marine resources in these waters 'taking into account the best scientific advice available'.[88] In particular, coastal states must prevent the over-exploitation of their coastal fisheries by determining their total allowable catch (TAC).[89] These conservatory obligations are offset by the need to institute measures to ensure the optimal utilisation of coastal fisheries and to ensure that stocks are maintained or restored at levels 'which can produce the maximum sustainable yield as qualified by relevant environmental and economic factors'.[90] To foster the 'optimal utilisation' of their fisheries, coastal states that lack the capacity to fully harvest their TACs are obliged in terms of article 62(2) to grant other states

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[84] Op cit n 25. The preceding conferences were the United Nations Conference on the Law of the Sea I (1958) and the United Nations Conference on the Law of the Sea II (1960).
[85] As I introduced above at p 34.
[86] The EEZ is regulated by arts 55 – 75. From a fisheries management perspective, the most important provisions are located in arts 61 and 62, titled 'Conservation of the living resources' and 'Utilisation of the living resources' respectively.
[87] Article 56(1)(a).
[88] Article 61(2).
[89] Articles 61(1) and (2).
[90] Articles 61(3) (for MSY) and 62(1). While these provisions do not explicitly oblige coastal states to promote the 'sustainable use' of coastal fisheries, their overall tenet clearly promotes this objective. Cross-reference with p 55 where I revisit this discussion.

reasonable access to their surplus stocks on the basis of agreement.[91] This obligation has given rise to numerous bilateral fisheries agreements between coastal states and distant water fishing nations worldwide, including between the EU and various developing coastal states, as I discuss further in my thesis.[92]

The rights granted to coastal states over their EEZ fisheries are, however, arguably a mere 'legal fiction' because the migratory nature of fish makes it impossible for a coastal state to exercise exclusive control over a species throughout its lifecycle.[93] The fugitive nature of fish also means that no state can truly 'own' the fish in its waters prior to capture. In an attempt to make sense of the rights granted to coastal states by UNCLOS, it has been suggested that they should be viewed as rights to the income streams associated with fishery resources, rather than rights to individual fish.[94] This explanation provides some theoretical clarity but it does not alter the fact that even though EEZ stocks are legally no longer part of the fisheries 'commons', coastal states nevertheless struggle to effectively control them because of their common resource characteristics. UNCLOS's exclusive economic zone provisions go some way to assist coastal states towards effective fisheries management, but they are complex to implement given the extent of the data that is required to comprehensively fulfil them. [95] In addition, coastal states enjoy significant scope in interpreting and implementing these provisions. Some states may therefore be inclined to promote their short-term economic interests by down-playing biological and environmental considerations in operationalising the rights and duties contained in the EEZ articles.[96]

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[91] Article 62(2). This obligation is also partially to 'compensate' distant-water fishing nations for their loss of free access to former high seas fish stocks, as I discuss further below at p 140 below.
[92] I examine art 62(2) and its implications in detail in chap 6 below at p 139-143.
[93] S Macinko and D Bromley, 'Property and Fisheries for the Twenty-First Century: Seeking Coherence from Legal and Economic Doctrine' (2004) 28 Vermont Law Review 623-661 at 628-643.
[94] Ibid at 656.
[95] Birnie and Boyle op cit n 70 at 661. For more on the complexity of UNCLOS's total allowable catch and surplus provisions in particular, cross-reference with pp 139-143 below.
[96] Ibid.

The reasons for the failure of states to secure more effective management of their coastal fisheries to date are thus complex and are largely rooted in domestic weaknesses. They include inadequate scientific data collection and analysis, political pressure to prescribe conservation and management measures that are insufficiently strict, non-compliance of fishers with regulations facilitated by poor enforcement, and the over-capacity of domestic fleets.[97] But clearly it is not possible for any one state to ensure the sustainable use of coastal fisheries alone; foreign states fishing in its waters must cooperate towards this goal both by complying with domestic fisheries laws and by seeking access on terms that promote sustainability objectives. In addition, all fishing states must cooperate to ensure the sustainable use of fish in waters adjacent to the EEZ as the extension of coastal jurisdiction has led to increasing and more competitive fishing in these waters as well as in the ocean beyond the 200 nautical mile zone. While UNCLOS obliges such cooperation in the high seas, it does so less expressly in coastal waters. As a result, the access agreements concluded between coastal states and foreign fishing nations are not always conducive to fostering sustainable fishing.[98]

4.1 UNCLOS' zonal approach: a partial solution?

By subjecting areas of the ocean to coastal state control, UNCLOS introduced a 'zonal' approach to fisheries management. A number of economists have endorsed this method as a potentially powerful means to mitigate fisheries management difficulties that stem from their common resource nature.[99] They argue that the 'sovereign rights' granted by UNCLOS over EEZ fisheries confer 'absolute' sovereign property rights on coastal states; while these rights

[97] RR Chuchill and AV Lowe, *The Law of the Sea* (3rd edn Manchester University Press, UK 1999) at 321.
[98] I explore this in greater detail below in chap 6.
[99] See, for example, D McRae and G Munro, 'Coastal State "Rights" within the 200-mile Exclusive Economic Zone' in PA Neher, R Arnason and N Mollet (eds), *Rights Based Fishing* (Kluwer, Dordrecht 1989) at 98 and 108 in particular. Also W T Burke, 'The Law of the Sea Convention Provisions on Conditions of Access to Fisheries: Subject of National Jurisdiction' (1984) 63 Oregan Law Review 73-119.

are 'shaped' by the various duties that UNCLOS imposes on coastal states and the rights it affords foreign states, they are in no way diminished by these circumscriptions.[100] Coastal states are therefore potentially empowered to efficiently manage what were formally common property resources.[101] Other writers, however, refute the contention that coastal states enjoy such extensive powers in their EEZs, arguing that the EEZ is a 'limited functional zone' in which coastal states simply enjoy extensive rights.[102] They support this view by emphasising the restrictive nature of the many obligations imposed on coastal states in these waters, including the duty to allow other states to access their surplus stocks.[103] I revisit this debate below in greater detail in chapter 6.[104]

Regardless of the exact degree of their control over their fisheries, coastal states are potentially empowered to impose suitable property regime(s) in their EEZs towards the sustainable management of their fish stocks. Most states currently favour a highly-centralised approach which combines a state property regime with some form of private property rights. The most common form of private property rights are quotas, which grant fishers rights to a fixed portion of the TAC. Some states have instead introduced individual transferable quotas such as New Zealand, Australia and the Netherlands.[105] Individual transferable quotas are different from conventional quotas because they can be either used by their holders or traded on an open 'quota market'.[106] They foster greater economic efficiency in fisheries and

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[100] McRae and Munro ibid at 104.
[101] Ibid at 103.
[102] Birnie and Boyle op cit n 70 at 659.
[103] AV Lowe, 'Reflections on the Waters: Changing Conceptions of Property Rights in the Law of the Sea' (1986) 1 International Journal of Estuarine and Coastal Law 1-14, particularly at 9.
[104] I discuss it in detail at pp 139-143.
[105] See D Symes and K Crean, 'Privatisation of the Commons: the Introduction of Individual Transferable Quotas in Developed Fisheries' (1995) 26 Geoforum 175-185 and W Davidse, L McEwan and N Vestergaard, 'Property Rights in Fishing: From State Property towards Private Property? A Case Study of Three EU Countries' (1999) 23 Marine Policy 537-547. Currently, ITQs are the preferred property rights for fisheries in New Zealand and Iceland – see Yandle T and Dewees M 'Privatising the Commons...Twelve Years Later: Fishers' Experiences with New Zealand's Market-based Fisheries Management' in Dolšak and Ostrom op cit n 10 and Eythórsson, E 'Stakeholders, Courts, and Communities: Individual Transferable Quotas in Icelandic Fisheries' ch 6 in Dolšak and Ostrom op cit n 10.
[106] Symes and Crean ibid at 176 and Davidse, McEwan and Vestergaard ibid at 539.

arguably reduce over-capacity, but also have potentially adverse conservation and social impacts. Their contribution towards sustainable fisheries management is thus highly contested.[107] As noted above, some states have chosen to regulate their coastal fisheries using a common property regime.[108] Those who advocate this system argue that the more complete the set of property rights that fishers hold over fish resources, the more likely they are to invest in their effective management.[109] This approach is particularly well-suited to small-scale in-shore fisheries management.[110] Fisheries management problems differ, however, according to the location of the fisheries and as a result, no one property rights regime is best-suited to promote sustainable fisheries management in all circumstances. Different states have tried various options, but overall, success has been low.

5. Conclusion

Progress towards sustainable coastal fisheries management has not improved significantly since the introduction of UNCLOS despite the increased management capacity that is granted to coastal states by the Convention.[111] The short answer as to why this has occurred is that there have been inadequate efforts to promote sustainable fisheries management at both a domestic level and at a cooperative inter-state level, particularly in the context of bilateral fisheries agreements as my thesis demonstrates. A more complex answer is that it is rooted in the inadequacy of the international legal regime and the regulatory tools that it employs to promote sustainable fishing.[112] This arises from the common resource nature of fisheries which makes it difficult for the international regime to devise an appropriate framework to

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[107] As I discuss further at pp 78 and 79.
[108] At p 34.
[109] Schlager and Ostrom op cit n 19. The authors identify and distinguish between 'operational-level' property rights of access and withdrawal, and rights at the higher 'collective choice' level, which include rights of management, exclusion and alienation (at 14, 15).
[110] Berkes (1994) op cit n 10 at 60 and McGoodwin op cit n 10 at 96.
[111] Churchill and Lowe op cit n 97 at 321, 660 and Birnie and Boyle op cit n 70 at 684.
[112] The reasons for this contention unfold in my thesis and are re-visited in my conclusions in chap 9 (at pp 227-233).

effectively foster sustainable fishing. In turn, fisheries managers are frustrated in their efforts to translate loose legal ideals into practice.

3

THE REGULATION OF FISHERIES TOWARDS SUSTAINABILITY

1. Introduction

In the previous chapter I discussed fisheries management difficulties arising from their common resource nature. I identified one of the key management goals of the international fisheries regime as the 'sustainable use' of living marine resources both in the high seas and in coastal waters. In this chapter I focus on this objective in greater detail, particularly in the context of coastal waters. I examine its meaning in international law and its relationship to the ideal of sustainable development. In particular, I look at how international law promotes the sustainable use of fisheries and discuss various management concepts and measures used to pursue this objective. The extent to which these are included in legal arrangements between coastal states and foreign fleets seeking access to their waters says much about the degree to which these agreements foster the sustainable use of fishing resources. I discuss this in detail in chapter 8 with reference to the case study of EU-Senegalese bilateral fisheries relations.

This chapter confirms the findings in chapter 2, namely that managing fisheries towards their sustainable use is particularly challenging. The international legal regime continues to struggle to truly foster this goal; it is constantly evolving and new instruments are emerging that present alternative and potentially more effective means to move forwards. There is increasing emphasis on the need to improve scientific knowledge about stocks and to effectively incorporate this knowledge into fisheries management decisions and measures, guided by a precautionary approach.

2. International law and the concept of 'sustainable use'

The 'sustainable use' or 'sustainability' of natural resources is a core component of the almost universal objective of 'sustainable development'.[113] An independent notion in its own right, 'sustainable use' is the older of the two concepts in the international legal sphere. As an objective of natural resource management, it was first used in the context of eighteenth century German forestry policy.[114] It referred to the exploitation of a single, renewable resource in a manner that avoids physical depletion of the stock. This meaning was subsequently expanded to refer also to the use of a group of resources in the same manner.[115] In the international arena, the objective of the 'sustainable use' of natural resources emerged from and should be understood in the context of the evolution of the concept of 'conservation' in international law. Initially concerned only with narrow protectionist and preservation aims, international resource law developed over time to reflect an increasing interest in also meeting human needs.[116] The 1992 United Nations Conference on Environment and Development (the Rio Conference) focused international attention on the need for the sustainable use of natural resources in the context of promoting sustainable development.[117] Various international instruments emerging from and in the wake of the Rio Conference echo this objective, including the Rio Declaration, Agenda 21 and the Convention on Biological Diversity.[118]

In international fisheries law prior to the landmark 1982 United Nations Convention on the Law of the Sea (UNCLOS) fisheries treaties were concerned only incidentally with

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[113] Lafferty and Langhelle op cit n 69 at 1.
[114] Ibid at 1, 4.
[115] Ibid at 4, 5.
[116] Birnie and Boyle op cit n 70 at 88, 551.
[117] United Nations Conference on Environment and Development (UNCED), Rio de Janeiro, 3-14 June 1992 (Rio Conference).
[118] UNCED, *Report of the UNCED* vol 1 UN Doc A/Conf 151/26/Rev 1 (New York, UN 1992), UNCED, *Agenda 21: Programme of Action for Sustainable Development* (New York, UN 1992) and Convention on Biological Diversity (1992) 31 ILM 818 (open for signature 5 June 1992, entered into force 29 December 1993) (CBD).

conservation.[119] They functioned primarily as distributive regulatory instruments, establishing national quotas for fish stocks.[120] This was mirrored in domestic law and policy, with fisheries management focused primarily on promoting the growth and development of commercial national fisheries.[121] The continued decline of fish stocks globally, however, necessitated a new international regulatory approach towards the conservacy of living marine resources. UNCLOS attempted this by transferring jurisdiction over much of the world's fisheries to coastal states and endorsing the management concept of maximum sustainable yield, to be promoted both in the high seas and coastal waters. As we saw in chapter 2, at a national level fisheries managers paired this biologically-driven ideal with the objective of maximum economic profit by applying the Gordon-Schaefer bio-economic model. Ten years later, however, Agenda 21 expressly emphasised the importance of the sustainable use of marine living resources in chapter 17. By doing this, it aligned international fisheries policy more closely to international environmental and natural resource law, in contrast to its past somewhat dislocated development. The Johannesburg Plan of Implementation, which emerged from the United Nations World Summit on Sustainable Development (the ten year follow-up to the Rio Conference) echoes Agenda 21. It urges for international cooperation to promote the conservation and sustainable development of the oceans in accordance with chapter 17 of Agenda 21, and emphasises the need to promote 'sustainable fisheries'.[122] It does so in the context of endorsing natural resources management in a 'sustainable and integrated manner [that] is essential for sustainable development' and urging states to improve 'efficiency and sustainability in the use of resources'.[123] The United Nations Straddling Stocks Convention, concluded a few years after Agenda 21, was the first international

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[119] UNCLOS op cit n 25.
[120] Birnie and Boyle op cit n 70 at 653.
[121] M Sutton, 'Harnessing Market Forces and Consumer Power in Favour of Sustainable Fisheries' in TJ Pitcher, PJB Hart and D Pauly, (eds) *Re-Inventing Fishery Management* (Kluwer, Dordrecht 1998) at 126.
[122] See principles 31-32 of Agenda 21 op cit n 118.
[123] World Summit on Sustainable Development, 26 August – 4 September 2002. See principles 24 and 25 of the United Nations Plan of Implementation of the World Summit on Sustainable Development (UN, New York 2002).

fisheries instrument to explicitly endorse the 'sustainable use' of fisheries.[124] Developed alongside the International Court of Justice's hearing of the *Gabčikovo-Nagymaros Dam* case, it reflects in a fisheries context the Court's acceptance of the need for environmental constraints on development.[125] The Straddling Stocks Convention, together with later international fisheries instruments such as the 1995 United Nations Food and Agriculture Organisation (FAO)'s Code of Conduct for Responsible Fisheries (discussed below), have now ensured that the long-term sustainable use of marine living resources is firmly situated at the forefront of the international legal regime.[126]

There is little agreement among writers on what exactly the modern concept of 'sustainable use' entails. There is consensus, however, that it has moved beyond its initial narrow biological focus to now include a broad range of human concerns within its ambit. In essence, it refers to the regulation of human activities to protect natural resources while facilitating the maximising of economic benefits and the preservation of social systems, and has been described as a 'social-physical-economic concept related to the level of social and individual welfare that is to be maintained and developed'.[127] This broad, multi-faceted understanding of the concept has led some writers to blur the distinction between the 'sustainable use' or 'sustainability' of natural resources and 'sustainable development', using the terms interchangeably rather than viewing them as distinct yet intricately related entities.[128]

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[124] United Nations Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (Straddling Stocks Convention) (adopted August 4 1995, entered into force 11 December 2001) (1995) 34 ILM 1542.

[125] Case concerning the Gabčikovo-Nagymaros Dam Project (Hungary v Slovakia) [1997] ICJ Rep 7.

[126] United Nations Food and Agricultural Organisation (FAO) *Code of Conduct for Responsible Fisheries* (FAO, Rome 1995. Birnie and Boyle op cit n 70 at 670, 671.

[127] Bowers op cit n 17 at 192, 192, Hanna and Munasinghe op cit n 23 at 5, and Lafferty and Langhelle op cit n 69 at 1and 5. See also T Zylicz, 'Economic Value and Policy Implications' in A Nordgen (ed), *Science, Ethics, Sustainability: The Responsibility of Science in Attaining Sustainable Development* (Uppsala University, Uppsala Sweden 1997) at 107.

[128] For example Zylicz ibid.

International environmental law is a little more helpful in defining the concept of 'sustainable use'. In relation to biodiversity, the Convention on Biological Diversity (CBD) describes it as

> '...the use of components of biological diversity in a way and at a rate that does not lead to the long-term decline of biological diversity, thereby maintaining its potential to meet the needs and aspirations of present and future generations'.[129]

This reflects the interpretations outlined above, confirming that 'sustainable use' embraces biological as well as social aspirations in the context of regulating natural resource use.

Within the international fisheries regime, however, there is reluctance to assign a meaning to the term. This may be related to the fact that the effectiveness of traditionally-endorsed management concepts to achieve the objective of 'sustainable use', such as maximum sustainable yield, are disputed.[130] As noted in the previous chapter, the key international instrument regulating fisheries – UNCLOS - does not expressly promote the objective of the 'sustainable use' of marine fisheries. Instead, it obliges states to ensure the conservation of their coastal marine living resources and to promote their 'optimum utilisation.' Fish stocks in exclusive economic zones (EEZs) are to be maintained or restored to levels that can produce the maximum sustainable yield as qualified by 'relevant' environmental, economic and other factors.[131] Noticeably, the otherwise conservatory, biologically-based objective of maximum sustainable yield is thus tempered by the obligation to factor in a broad, potentially unlimited range of socio-economic considerations. Coastal states are further required to establish the total allowable catch for their EEZ fish stocks.[132] UNCLOS articulates these duties in very broad terms, however, and does not define key concepts such as 'optimum utilisation' and 'conservation'. Accordingly, coastal states have substantial discretion in the meanings that

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[129] Article 2 'Use of terms' Convention on Biological Diversity (CBD) op cit n 118.
[130] Cross-reference with pp 43-44 and 71.
[131] Article 61(3) of UNCLOS op cit n 25. Cross-reference with p 45.
[132] Article 62(1) and 61(1) respectively. See pp 45-49 for more on fisheries management within the EEZ.

they assign to these key management concepts and in how they elect to fulfil their duties.[133] This is bolstered by the fact that their EEZ fisheries management decisions are exempt from compulsory dispute settlement under UNCLOS.[134] Thus, while the over-arching objective of these provisions is the 'sustainable use' of coastal fisheries, it is largely up to individual states to interpret and realise this end as they see fit.

As mentioned above, the Straddling Stocks Convention expressly requires states to promote the sustainable use of fisheries resources.[135] While its scope is limited to promoting the long-term conservation and 'sustainable use' of straddling and highly migratory fish stocks, the Convention provides a useful insight into the objective of 'sustainable use' in marine fisheries generally.[136] The Convention advocates a precautionary approach towards this end and obliges parties to adopt management measures based on the best scientific data to ensure the 'long-term sustainability' and optimal utilisation of highly migratory and straddling stocks and to take measures to prevent over-fishing and excess fishing capacity.[137] As with UNCLOS, the Straddling Stocks Convention noticeably does not define its key terms, however, providing minimal insight into what is meant by 'sustainability' or 'sustainable use' and more specifically, the extent to which their ambit extends beyond biological considerations to include social, economic and broader ecological factors.

Released in the same year as the Straddling Stocks Convention, the FAO Code of Conduct for Responsible Fisheries also expressly promotes the 'sustainable utilisation' of fishery

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[133] Churchill and Lowe op cit n 97 at 289 and S Kaye, *International Fisheries Management* (Kluwer Law International, The Hague, Netherlands 2001) at 100. See also A Platt McGinn, 'Rocking the Boat: Conserving Fisheries and Protecting Jobs' Worldwatch Paper No 142 (Worldwatch Institute, Washington DC 1998) at 56, where it is noted that the fisheries conservation principles found in UNCLOS have been difficult to apply as the language and intent of the convention in this regard is unclear. Cross-reference with p 46.
[134] UNCLOS op cit n 25 at art 297.3. Cross-reference with p 141.
[135] Op cit n 124.
[136] Straddling Stocks Convention op cit n 124 at art 2.
[137] Ibid at arts 5(b),(c) and (g) and 6.

resources.[138] Developed by the FAO, which plays an active role in fostering sustainable fisheries management in its quest to promote worldwide food security, this voluntary code provides a framework for efforts to ensure the responsible, sustainable exploitation of living marine resources and to promote sustainable development in fisheries.[139] It specifically emphasises the need to prevent over-fishing and the use of excess fishing capacity.[140] States are encouraged to pursue these objectives by adopting measures based on the best scientific evidence available that are designed to ensure the

> '...long-term sustainability of fishery resources at levels which promote the objective of their optimum utilisation and maintain their availability for present and future generations; short term considerations should not compromise these objectives.'[141]

'Sustainable utilisation' is not defined, nor is the meaning of 'sustainability' clarified in the Code. Nevertheless, it is clear from the above quote that the long-term sustainable use of fisheries goes hand in hand with their optimal utilisation. Along with an express concern for inter-generational equity, this indicates an understanding of 'sustainable use' and 'sustainability' that regards meeting human needs as an inherent component of these concepts. This is captured by the FAO's express interest in promoting a

> '...shift from a conventional fishery management framework (essentially based on biotechnical considerations) to a broader fisheries sustainability framework. This kind of framework represents all dimensions of fisheries together with the relevant dimensions of the broader social and economic context within which the sector operates'.[142]

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[138] Op cit n 126. See for example the preface and general principle art 6.2.
[139] Kaye op cit n 133 at 205, notes that the FAO has contributed significantly toward fisheries management at an international level via (inter alia) assisting in the operation of international fishery bodies, acting as a channel of discourse between international fisheries organisations, and functioning as a clearing-house to disseminate fisheries data worldwide.
[140] FAO Code op cit n 126 at general principle art 6.3.
[141] Ibid art 7.1.1 'Fisheries management'.
[142] Preamble to Food and Agriculture Organisation (FAO), *Indicators for Sustainable Development of Marine Capture Fisheries* (FAO, Rome 1999) at 3.

The international fisheries regime thus clearly supports the conclusion that in coastal waters (as well as the high seas) the concept of the 'sustainable use' of fisheries has acquired sufficient 'normative content' to be used as a yardstick for judging the permissibility of states' natural resource exploitation.[143]

As I noted above, international environmental law instruments emerging from the Rio Conference and in its wake were also explicit in their endorsement of the 'sustainable use' of fisheries. Agenda 21, a framework programme of action to implement the Rio Declaration, consists of forty chapters covering a range of issues. Chapter 17 provides an integrated strategy to manage the oceans and seas towards sustainable development and advocates the 'protection, rational use and development' of their living resources.[144] To achieve this, it outlines 'programme areas' for marine and coastal management and development at domestic, regional and international levels.[145] These include actions designed to achieve the sustainable use and conservation of marine living resources within the high seas and under national jurisdiction.[146] The CBD, which was adopted at Rio, promotes the 'sustainable use' of all biological diversity - on land and in the oceans. The Jakarta Mandate on Marine and Coastal Biological Diversity, adopted at the CBD's 1995 Conference of the Parties, is particularly relevant to fisheries.[147] One of its five thematic areas is the promotion of the conservation and long-term sustainable use of marine and coastal living resources in a manner that respects both societal interests and the integrity of ecosystems.[148] Suggested activities to this end include the elimination of destructive fishing practices and the restoration and maintenance of

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[143] These conclusions are strongly supported by for example, the Straddling Stocks Convention (op cit n 124). See Birnie and Boyle op cit n 70 at 89.
[144] Chapter 17 of Agenda 21 (op cit n 118) 'Protection of the Oceans, All Kinds of Seas, including Enclosed and Semi-enclosed Seas, and Coastal Areas and the Protection, Rational Use and Development of their Living Resources'.
[145] Ibid at para 17.1.
[146] Ibid at Programme Area C, paras 17.44 – 17.68 and Programme Area D, paras 17.69 – 17.95.
[147] Jakarta Mandate on Marine and Coastal Biological Diversity adopted by the Convention on Biological Diversity's Conference of the Parties at its second meeting in Jakarta, Indonesia, 6-17 November 1995.
[148] See in particular Decision VII/5 of the Jakarta Mandate ibid.

fisheries stocks to sustainable levels by the year 2015.[149] Cumulatively, through their express emphasis on the sustainable use of marine fisheries and their articulation of concrete actions towards its realisation, the CBD and Agenda 21 made a significant contribution to raising the status of this objective in the international arena. Their promotion of the sustainable use of natural resources was no doubt influenced by the fact that this concept is one of the core components of sustainable development, the focus of the Rio Conference.

3. The relationship between 'sustainable use' and 'sustainable development'

'Sustainable use' and 'development' were first formally coupled at an international level in the World Commission on Environment and Development's 1987 Report (the Brundtland Report), giving rise to the concept of 'sustainable development'.[150] At the subsequent Rio Conference in 1992, the influence of sustainable development on the progressive development of international environmental law and policy received overwhelming endorsement. The ideal of sustainable development was reflected in the international instruments that emerged from the Rio Conference and in almost all of those concluded subsequently. As noted above, the *Gabčikovo-Nagymaros Dam* case was particularly influential in this legal evolution in light of the International Court of Justice's express endorsement of the objective of sustainable development.[151] While there is debate as to whether sustainable development is a legal principle to which states can or should be held internationally accountable (as I revisit below), it is generally accepted that the case nevertheless rendered states' management of their domestic environments a 'matter of international concern' for the first time.[152]

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[149] Ibid at Programme element 2: Marine and coastal living resources, Operational objective 2.1 (h).
[150] The World Commission on Environment and Development (WCED), *Our Common Future* (Oxford University Press, Oxford 1987) (Brundtland Report).
[151] Op cit n 125 at para 140.
[152] Birnie and Boyle op cit n 70 at 85.

In simple terms, sustainable development refers to economic development that satisfies the constraints of sustainability while ensuring that both the present and future generations are able to meet their needs.[153] It has been adopted as a policy by numerous governments worldwide and shapes the application and development of international law and policy.[154] While its content is clear, the understanding of its key elements and the envisaged interaction between them remain ambiguous, as do their specific 'normative implications'.[155] Sustainable development is defined in the Brundtland Report as

> 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs'.[156]

The Report identifies the two key elements of the concept as 'needs', in particular those of the world's poor 'to which overriding priority should be given', and the 'limitations' of technology and social organisation on the environment's ability to meet these needs.[157] This description of sustainable development was subsequently fleshed out at the Rio Conference, in particular by the Rio Declaration on Environment and Development, which maps out the main principles underpinning the ideal.[158]

The substantial and procedural components of sustainable development identified in the Rio Declaration are not new ideas in the international environmental legal arena, but were brought together in a succinct, systematic way for the first time in the Declaration.[159] In total, the Declaration outlines twenty-six principles of sustainable development. The procedural aspects, which are necessary to foster sustainable development at a national level, include

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[153] Brundtland Report op cit n 150 at 43 and Bowers op cit n 17 at 192 and 206.
[154] Lafferty and Langhelle op cit n 69 at 1 and Birnie and Boyle op cit n 70 at 84.
[155] Lafferty and Langhelle ibid, Bowers op cit n 16 at 192, D Pearce, A Markandya and BB Barbier (eds), *Blueprint for a Green Economy* (Earthscan Publications, London 1989) and Birnie and Boyle ibid at 85.
[156] Brundtland Report op cit n 150 at 43.
[157] Ibid.
[158] This amplification was invaluable in light of the Brudtland Report's 'inadequate and unhelpful prescription, which begs elaboration' (Birnie and Boyle op cit n 70 at 89).
[159] Ibid at 86.

environmental impact assessment and access to information.[160] Numerous substantive components of sustainable development are identified; below, I focus on those that are particularly relevant to my thesis.

The 'sustainable use' of natural resources is not expressly identified as a principle of sustainable development, but principle 8 of the Rio Declaration calls for states to '...reduce and eliminate unsustainable patterns of production and consumption'. This qualifies the earlier affirmation that 'states have...the sovereign right to exploit their own resources pursuant to their own environmental and developmental policies'.[161] It is clear from these principles that sustainable development necessarily involves limits on natural resource use, as does the overall tenet of the Declaration. As I noted above, key international agreements signed at and post the Rio Conference also expressly endorse the concept of the 'sustainable use' of natural resources.[162]

An important element of securing the sustainable use of natural resources is adopting a precautionary approach. This is necessary in light of current scientific uncertainty about the state of natural living resources, particularly fisheries; it is increasingly emphasised in international and domestic fisheries policy and law in response to the failure of fisheries management models and mechanisms to date to satisfactorily acknowledge and respond to the paucity of data on marine fisheries. The Rio Declaration endorses such an approach, requiring that

[160] Op cit n 118 at principles 17 and 10 respectively.
[161] Ibid at principle 2.
[162] Ibid.

> '[w]here there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.'[163]

This duty is subject to the rider that states need only apply this method 'according to their capabilities'.[164] This is offset, however, by the Declaration's concern with addressing inequality in the existing international economic system. Specifically, it imposes a duty on all states to address the special interests and needs of developing countries and obliges them to cooperate to eradicate poverty. [165] Poverty-alleviation is regarded both as a means to achieve sustainable development - a 'precondition for environmentally sound development' - and as an important end in itself.[166] This emphasis on addressing inequality indicates the centrality of 'intra-generational equity' to sustainable development. While this specific term is not used in the Declaration, it promotes the overall concept, as do the Brundtland Report and Agenda 21.[167]

Related, but concerned with equity between rather than within generations, is the concept of inter-generational equity. Couched as a qualifying factor to the right to development, it is endorsed in principle 3 as 'equitably meeting the developmental and environmental needs of present and future generations'. The theory of inter-generational equity requires each generation to use and develop its natural and cultural heritage in such a way that it can be passed on to subsequent generations in 'no worse' condition that it was received.[168] The significance of inter-generational equity as a core component of sustainable development was emphasised by the Brundtland Report's definition (quoted above) and is echoed by various writers, although they disagree about the exact content of the heritage that must be passed on

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[163] Ibid at principle 15.
[164] Ibid.
[165] Ibid at principles 6 and 5 respectively.
[166] Brundtland Report op cit n 150 at 69 and 8.
[167] Birnie and Boyle op cit n 70 at 91.
[168] Ibid at 89.

to the next generation.[169] This emphasis on equity, both between and within different generations, arguably distinguishes sustainable development from the traditional understanding of the concept of 'sustainable use' or 'sustainability'. It raises the issue of whether the transition from the conservation-inspired objective of 'sustainable use' to the multi-faceted ideal of 'sustainable development' has marginalised the importance of ecological concerns by emphasising human socio-economic needs. Supporters of the 'strong' approach to sustainable development (which I discuss below) support this interpretation.

A final key element of sustainable development is the integration of environmental protection and development. A common thread in the Rio Declaration and Agenda 21, 'integration' has become an intrinsic feature of international environmental regulation and numerous domestic regimes, including the EU. Within the Community, compliance with the Treaty obligation to integrate environmental concerns into all sectors, including fisheries, continues to prove vital yet problematic, as I discuss in chapter 5 below.[170] Principle 4 of the Rio Declaration explains the concept of integration –

> 'in order to achieve sustainable development, environmental protection shall constitute an integral part of the development process and cannot be considered in isolation from it.'

How to achieve a balance between these competing values is the ultimate challenge; it is largely left to national determination. It is imperative that this balance is found, however, as the effective realisation of integration between environmental needs and other competing development priorities lies at the heart of achieving sustainable development.[171] While achieving this balance may seem to be an ideal that is incapable of realisation, all states are

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[169] Such as Pearce, Markandya and Barbier op cit n 155 and A Asheim, 'Economic Analysis of Sustainability' in Lafferty and Langhelle op cit n 69.
[170] Article 6 of the Consolidated Version of the Treaty Establishing the European Community (EC Treaty) [2002] OJ C325/01. Cross-reference with pp 118-124.
[171] Birnie and Boyle op cit n 70 at 85.

bound to make efforts to get as close to its achievement as practicable. The World Commission on Environment and Development anticipated the difficulty that states would experience in adjusting their policies and actions towards achieving sustainable development; in the Brundtland Report it thus proposed the establishment of an international 'charter' prescribing new norms for state and inter-state behaviour to guide governments in the transition to sustainable development.[172] The idea of developing an 'Earth Charter' was first introduced in 1992 at the Rio Conference; it was subsequently revitalised as a civil society initiative under the guidance of an independent Earth Charter commission in 1994. Following extensive international consultation and numerous re-drafting, the Earth Charter was officially launched by the commission in 2000 at a meeting held at the United Nations Education, Scientific and Cultural Organisation's (UNESCO) headquarters. The Charter presents sixteen principles to guide the establishment of a global 'partnership' towards attaining sustainable development, offering a viable alternative (yet complementary) framework to that of the international legal regime in pursuing sustainability goals.[173] I discuss the Earth Charter and the key role that it can play towards the achievement of sustainable (fisheries) development in greater detail in chapter 9.[174]

The way in which the concept of 'sustainable development' is to be understood and operationalised has received a lot of attention in the literature.[175] As noted above, at heart it involves a merging of development and environmental protection. Economic growth is a central element of development and is thus a key aspect of sustainable development.[176] However, economic policies that are concerned only with increasing gross national product

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[172] Article 80, 85 and 86 at 122, 123 of UN General Assembly Document A/42/427 'Development and International Economic Cooperation: Environment Report of the World Commission on Environment and Development Note by the Secretary-General' (1987).
[173] For more on the content of the Earth Charter, see pp 246-248.
[174] Ibid.
[175] See for example Lafferty and Langhelle op cit n 69 at 16 – 22 and Zylicz op cit n 127 at 108, 109.
[176] Ibid and Birnie and Boyle op cit n 70 at 44.

per capital run the risk of side-lining environmental concerns. Economic growth that promotes 'sustainable development' should instead take due cognisance of environmental matters. Arguably, sustainable development is ultimately about achieving equity in the economic system both between and within generations; it is concerned with the 're-orientation' of the world's economic system to ensure a better distribution of economic and environmental benefits and burdens. One part of this involves requiring the burden of environmental protection to fall more heavily on the shoulders of the more economically-advanced states, as reflected by the concept of 'common but differentiated responsibilities'.[177] Another part is to assign suitable economic values to environmental processes or 'services' and natural resources rather than to regard them as 'free goods', and to incorporate these values into economic policies and planning.[178] However, assigning economic values to environmental services and resources that are not mediated through market transactions, such as the ozone layer or mangrove swamps, is difficult if not impossible in practice. An alternative may be to place constraints on economic activities in the form of environmental standards, such as discharge and stock standards.[179] This would dispense with the need to value the environmental effects of economic activities as instead, the costs of ensuring the sustainability of the resource or environmental service in question would be reflected in either the economic benefits that are forgone (if the economic activity cannot go ahead) or the additional costs incurred in meeting the required standards.[180]

The partner to this economic growth is what the Brundtland Report refers to as 'physical sustainability', namely that at minimum the natural systems that support life on earth (such as the atmosphere, water and soil) must not be endangered.[181] According to the Report, 'physical

[177] Outlined in principle 7 of the Rio Declaration op cit n 118. See Birnie and Boyle ibid at 45.
[178] Pearce, Markandya and Barbier op cit n 155 at 5-7.
[179] Bowers op cit n 17 at 197,198.
[180] Ibid at 199, 201.
[181] Ibid at 43, 45.

sustainability' can only be achieved if development policies embrace the need for equity by promoting (inter alia) equitable access to resources and fair distribution of costs and benefits. Accordingly, even the narrowest view of sustainable development as comprising only 'physical sustainability' necessarily includes considerations of social justice between and within generations.[182]

'Sustainable development' is undeniably focused on meeting human needs; its anthropocentric bias is evident in both the Brundtland Report and in the Rio Declaration. The latter explicitly confirms this, stating that 'human beings are at the centre of concerns for sustainable development'.[183] Given that sustainable development is at core an on-going balancing of development goals with environmental concerns, however, there is considerable debate as to whether there is an inherent hierarchy of values in the concept. Specifically, the question is whether, given the human-centred nature of sustainable development, it requires human needs and social equity to necessarily trump ecological sustainability ('physical sustainability') should the two clash in a particular policy decision.

The various opinions expressed in the literature tend to reflect whether writers support a 'strong' or 'weak' view of sustainable development. These two divergent approaches arise in the context of examining the inter-generational element of sustainable development, specifically the exact nature of the 'heritage' that is to be passed on from present to future generations. 'Weak' sustainable development requires simply that the current generation

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[182] Ibid and Lafferty and Langhelle op cit n 69 at 8, 9.

[183] Principle 1 of the Rio Declaration op cit n 118 See also Wetlesen, 'A Global Ethic of Sustainability?' in Lafferty and Langhelle ibid at 36, 37. See also W Håland, 'On Needs – a Central Concept in the Brundtland Report' in Lafferty and Langhelle. This is, however, challenged by the Earth Charter, which arguably adds an additional 'ethical' element to sustainable development, namely inter-species equity or justice (particularly through its principles 1-4 and 5-8), thereby challenging the idea that the centre of concerns for sustainable development should be humans; instead, its should be the 'community of life' or the 'planetary ecosystem' (K Bosselmann 'In Search for Global Law: The Significance of the Earth Charter' (2004) 8 (1) World Views: Environment, Culture, Religion 62-75). I discuss this later in greater detail at pp 245 and 246.

leaves the subsequent generation at least as much 'capital wealth' as it inherited. This bequest can comprise a mixture of man-made capital and natural capital (the stock of natural environmental assets). Supporters of this approach argue that most 'natural' capital can be substituted by man-made capital and it thus does not matter to what extent environmental assets are depleted as long as they can be adequately substituted; maintaining the aggregate quantity of 'capital wealth' is what that matters, not its composition.[184] Seen in this light, it is imperative that environment and natural resources are valued 'properly' if sustainable development is to be achieved.[185] Provided that this is the case, human needs and social equity are of paramount importance and can potentially trump environmental protection.

On the other hand, environmental conservation dominates the theory of 'strong' sustainable development.[186] It requires that the stock of environmental assets (natural capital) is maintained at the same level as between generations. Stocks of both natural and man-made capital per capita must thus not decrease from one generation to another; the accumulation of man-made goods cannot compensate for the diminished availability of natural capital. This is based on the rationale that many environmental functions cannot be substituted by man-made capital; even if they can in the short-term, uncertainty often remains as to whether they are truly suited to substitution in the long-run. Taken to its extreme, this approach requires that non-renewable natural resources should not be exploited even if they have no economic value and their exploitation would not harm the environment.[187] In practice, however, many supporters of 'strong' sustainability take a less radical stance and accept that non-renewable resources can be exploited as long as their use is compensated by the accumulation of suitable renewable resources.[188]

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[184] Ibid and Pearce, Markandya and Barbier op cit n 155 at 3 and 48.
[185] Pearce, Markandya and Barbier ibid.
[186] Asheim op cit n 169 at 164.
[187] Ibid at 165 and Zylicz op cit n 127 at 108.
[188] Asheim ibid.

Ideally, however, a situation that demands weighing up human versus environmental concerns should not arise in the first place. In pursuit of true 'integration', policy-makers should instead always exclude 'development paths' that do not take both ecological sustainability and human equity equally into account -

> 'sustainable development defines both a development path and the scope or limits within which this development should occur. In other words, it is not just any development, but a desired development which fulfils certain conditions of sustainability'.[189]

While this might appear to be an attempt to side-step a thorny issue, it is perhaps the most honest explanation that can be offered. As writers Birnie and Boyle conclude, while the concept of 'integration' is no panacea, it is most likely the best means to attempt to achieve an acceptable balance between environmental protection and competing human development needs.[190]

Sustainable development clearly requires political action in order to be realised. Governments need to decide on a clear 'sustainable development path' that meets the criteria outlined above and to implement suitable policies in all sectors towards this end.[191] This necessitates making difficult social, political and economic decisions. Arguably, choices will ultimately be determined by national needs and interests, underpinned by subjective value judgements. This is likely to result in a diverse range of domestic governmental policies in pursuit of sustainable development.[192] As noted earlier, there is no definitive yardstick against which to measure these policies at an international level in order to determine which states' development fall short of being 'sustainable'. This supports the view that the principle of

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[189] O Langhelle, 'Nature, Market and Ignorance: Can Development be Managed?' in Lafferty and Langhelle op cit n 65 at 111 and Lafferty and Langhelle op cit n 65 at 13. See also Håland op cit n 183 at 53.
[190] Birnie and Boyle op cit n 70 at 87. I discuss the importance of integration in the context of the EU later at pp 116-124.
[191] Lafferty and Langhelle op cit n 69 at 17.
[192] Birnie and Boyle op cit n 70 at 47.

'sustainable development' is primarily intended to be applied and achieved at a national level by individual governments rather than as a legal principle to which governments should be held to account at an international level. The role of the United Nations Commission on Sustainable Development arguably verifies this contention – its mandate is simply to review progress and facilitate the implementation of Agenda 21 and the Rio Declaration; it has no authority to pass judgement on whether particular development efforts are sustainable or not.[193] Given that it is up to individual governments to determine how best to pursue sustainable development nationally, it is necessary to examine how they might go about this in their fisheries sectors.

The FAO has produced a set of guidelines to assist national governments towards achieving sustainable fisheries development. It cites objectives of sustainable fisheries development as including sustainable harvesting and processing activities, ensuring the long-term viability of fishery resources, promoting the well-being of fishers within both their community and the wider economic context, and maintaining the health and integrity of the marine ecosystems.[194] The guidelines advocate the use of a system of indicators in monitoring progress towards these goals and offer suggestions on what indicators can be used.[195] Simply put, sustainability indicators assist in assessing the performance of fisheries policies and management in relation to sustainable development objectives. They also act as stimuli for action to achieve these objectives, assisting fisheries managers in determining what measures should be implemented to restore or maintain the sustainability status of the fishery concerned. Indicators thus operate as a 'bridge' between sustainable development objectives and management action.[196] To be

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[193] United Nations Commission on Sustainable Development website <http://www.un.org/esa/sustdev/csd/csd_mandate.htm> accessed 1 July 2006. See also Birnie and Boyle ibid at 85.

[194] FAO op cit n 142 at para 1.2.

[195] With the particular aim of fostering the implementation of the FAO Code of Conduct on Responsible Fisheries (op cit n 126).

[196] FAO op cit n 142 at para 1.3 and A Charles, *Sustainable Fishery Systems* (Blackwell Science, Oxford 2001) at 190-197.

effective, they must be organised within a framework that represents the various 'dimensions' of sustainable development. This may simply entail subdividing sustainable development into its human and environment dimensions, or the dimensions may be based on definitions of sustainable development. The FAO guidelines outline a comprehensive set of indicators in relation to dimensions that are derived from the FAO's definition of 'sustainable development', namely the economic, social, environmental (ecosystem/resource) and institutional/governance realms.[197] Suggested indicators in the 'environmental' dimension include the catch structure (examining the types of species caught and their size), the quality of critical habitats and fishing pressure in different geographical locations. Indicators for the economic component include the profitability of the fishery and the existence and effect of subsidies, while in the social dimension, employment figures are a key indicator. Regarding the governance component, the capacity to manage a fishery (from a human, financial and institutional perspective) and the state of the compliance regime concerning that fishery are important indicators.[198]

Ultimately, the extent to which the sustainable use of fisheries resources and sustainable development in fisheries is effectively fostered is strongly influenced by the fisheries management policy that is in place. I now turn to discuss this issue.

4. Sustainable fisheries management

It is clear from the discussion so far in this chapter that the dividing line between the concepts of 'sustainable development' and 'sustainable use' is by no means clear and is frequently blurred by law and policy alike. In academic and scientific literature, the two concepts are often used inter-changeably or are merged into the single objective of a 'sustainable fishery'.

[197] Ibid at for example paras 2.2 and 2.3. See also definition of 'dimensions' in Annex 1 Glossary.
[198] Ibid at annex 4.

The vagueness of important terminology and the inconsistency with which key terms are used can be confusing and so it is useful at this point to take stock of the meanings and relationship between these concepts. Sustainable development is the broader of the two and operates as an over-arching objective; 'sustainable use' is an essential element of and step towards this goal. Simply put, 'sustainable use' advocates the rational use of natural resources towards ensuring their long-term 'sustainability'. In current legal regimes sustainable use is no longer regarded as an ultimate objective in itself; it is coupled with the need to foster socio-economic development and must thus be pursued within the framework and towards the goal of sustainable development. To talk of the 'sustainable use' of fisheries resources or the pursuit of 'sustainable' fisheries is thus not synonymous with discussing the furtherance of sustainable development in fisheries (or 'sustainable fisheries development'), but both are inherently part of a progressive movement towards this broader end. In sum, it seems safe to say that the modern over-riding objective that guides fisheries managers at a national level is that fisheries must be managed and used in a way that ensures their long-term sustainability towards the ultimate goal of sustainable fisheries development.

Various writers talk about the goal of a 'sustainable fishery'. Below, I spend some time briefly discussing this concept and how it might be achieved. Firstly, it is necessary to define what is meant by a 'fishery'. A variety of definitions exist, ranging from narrow bio-ecological meanings to broader multi-dimensional explanations. An example of the latter is 'the range of activities related to the exploitation of a single stock or a group of stocks subjected to joint harvesting'.[199] This can be expanded to describe a fishery as a system of interacting ecological, biophysical, economic, social and cultural components. Key

[199] D Gréboval and G Munro, 'Overcapitalisation and Excess Capacity in World Fisheries: Underlying Economics and Methods of Control' in D Gréboval, (ed) *Managing Fishing Capacity: Selected Papers on Underlying Concepts and Issues* FAO Fisheries Technical Paper No 386 (FAO, Rome 1999) at para 4.2. In the narrow sense, it may refer to a group of fish species, a physical fishing area, or to the 'area where fishing occurs and the mix of species captured' (Platt McGinn op cit n 133 at fn 7).

components of a fishery are thus the natural system (fish, ecosystem, and biophysical environment), the human system (including fishers, fishing communities, the post-harvest community, and the social, economic and cultural environment), and the fishery management system (comprising fisheries policy and planning, management, development and research).[200] This broad understanding of a 'fishery' is most commonly used in modern literature on fisheries management.[201] It thus does not make sense to talk of the 'sustainable use' of a fishery, but its 'sustainability'; as noted above, 'sustainable use' is subsumed into the broader concept of 'sustainability'. Maximum sustainable yield is promoted as the primary objective of a 'sustainable fishery' and is endorsed as such in UNCLOS. Yet as I have explained, it is a somewhat discredited concept that has contributed little to the achievement of sustainability to date.[202] As evidence of the problems with the concept of maximum sustainable yield unfolded, the perception of 'sustainability' at a fisheries management level began to change, expanding over time to include various socio-economic factors within its ambit. Thus, while there is still much debate about what exactly constitutes a 'sustainable' fishery, it is now generally accepted that it is concerned not only with the biological status of the fishery in question, but also the state of its broader economic, social and institutional aspects.[203] 'Sustainable fishing' can thus be taken to refer to fishing activities that do not result in 'undesirable changes' in the biological or economic productivity of a fishery, its biological diversity, or its ecosystem structure and functioning in a manner that 'forecloses options for future generations'.[204]

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[200] Charles op cit n 196 at 1, 3 and 10.
[201] T Pitcher and D Pauly, 'Rebuilding Ecosystems, not Sustainability, as the Proper Goal of Fishery Management' in Pitcher, Hart and Pauly op cit n 121 at 312.
[202] See pp 42 and 43. See also Churchill and Lowe op cit n 97 at 282 and Cunningham, Dunn and Whitmarsh op cit n 74 at 98-100.
[203] Charles op cit n 196 at 186 and C Deere, *Net Gains: Linking Fisheries Management, International Trade and Sustainable Development* (IUCN, Cambridge 2000) at 20.
[204] National Research Council (US) Committee on Ecosystem Management for Sustainable Marine Fisheries, *Sustaining Marine Fisheries* (National Academy Press, Washington DC 1999) at 14.

4.1 The components of a 'sustainable fishery'

There is general consensus that a 'sustainable fishery' comprises four broad components, namely ecological sustainability, socio-economic sustainability, community sustainability and institutional sustainability.[205] Overall sustainability of the fishery is attained when all four components are simultaneously achieved.[206] Institutional sustainability, which is achieved when there is long-term financial, administrative and organisational capability in a fishery, is a prerequisite for achieving the other three components. In particular, the policy measures and rules by which the fishery is managed significantly impact all of its other facets.[207] Ecological sustainability is attained if sustainable harvesting levels of target and related species are ensured and the health of the ecosystem is maintained. This component has historically received the greatest attention in fisheries management and is analogous to the traditional understanding of the concept of 'sustainable use' (although broader ecological concerns were not initially included in its ambit). To ensure the socio-economic and community sustainability of a fishery, the long-term socio-economic welfare of all fishery participants must be secured and the cohesiveness, welfare and health of fishing communities must be maintained.[208] In a similar manner to that of the FAO (described above), writers have suggested indictors to measure the extent of sustainability in each of these 'sustainability components' of the fishery. Indicators of ecological sustainability include catch level, fish size and environmental quality, while community resiliency (indicated by diversity in employment), equity and food supply are indicators of socio-economic or community

[205] Charles op cit n 196 at 188 and S Cunningham and J-J Maguire, 'Factors of Unsustainability in Fisheries' Discussion Paper 1 in Gréboval, D (comp), *Report and Documentation of the International Workshop on Factors Contributing to Unsustainability and Overexploitation in Fisheries, Bangkok, Thailand, 4-8 February 2002* FAO Fisheries Report No 672 (FAO, Rome 2002) at 54. See also N Haggan, 'Reinventing the Tree: Reflections on the Organic Growth and Creative Pruning of Fisheries Management Structures' in Pitcher and Pauly op cit n 201 at 26 on the author's suggested essential elements of a sustainable fishery.
[206] Charles ibid at 190.
[207] Ibid at 189.
[208] Ibid at 188.

sustainability. Institutional sustainability indicators include management effectiveness, capacity-building and institutional viability.[209]

Both the sustainability and sustainable development of a fishery are strongly influenced by the fisheries management arrangement that regulate it.[210] The most common management methods currently used in fisheries (often in combination) are output controls, input controls and technical conservation measures. I examine the potential impact of these methods on a fishery's sustainability below.

4.2 The role of fisheries management methods

While unsustainability can arise in an unexploited fishery due to natural stock fluctuations caused by changes in the broader ecological context or adverse impacts on marine habitats from non-fishing human activities (such as coastal developments), the likelihood of unsustainability becomes higher once exploitation begins.[211] The greater the exploitation, the higher the chances of unsustainability; there is accordingly a strong relationship between over-exploitation and unsustainability.[212] The sustainability of a fishery can, however, be fostered by appropriate management measures. These are generally adopted at a domestic level as part of a national fisheries management policy and are implemented in national waters and on vessels registered in the coastal state that fish beyond national jurisdiction. Vessels fishing in the waters of other coastal states must comply with the fisheries laws and regulations of these states. Bilaterally, appropriate measures should be incorporated into fisheries access arrangements to ensure the sustainable exploitation of fisheries targeted by

[209] Ibid at 194, 195
[210] Ibid at 58.
[211] Ibid at 55, 56.
[212] Ibid at 57.

foreign fleets in other coastal states' waters. Ideally, these should be dove-tailed with the domestic fisheries management regime of the coastal states in question.

One of the most prevalent management techniques is 'output controls', that is measures to control the physical output of a fishery (the amount of fish extracted). Most commonly, governments set annual total allowable catches (TACs) for particular species on the basis of scientific advice (usually based on maximum sustainable yield). Portions of the TAC are then allocated to individuals or vessels in the form of quotas. Output controls address a key fisheries management difficulty arising from their common resource nature, namely how to regulate the level of extraction from a fishery.[213] As they do not regulate access to the fishery, however, they are usually paired with input controls, which specifically address this matter.[214] Output controls have the potential to hamper progress towards the sustainable use of fisheries and their use must thus be carefully controlled and monitored.

A fundamental problem with employing output controls to promote sustainable fishing is the incompleteness, uncertainty and subsequent lack of reliability of the scientific data on which TACs are frequently based.[215] Insufficient understanding about the dynamic nature of fish stocks, the complexity of the ecosystems within which they are found and the true impact of fishing on stocks give rise to this problem.[216] This stems from the related scientific weaknesses of the maximum sustainable yield model on which TACs are based, as discussed

[213] Cross-reference with p 75.
[214] Food and Agriculture Organization (FAO), 'Marine Fisheries and the Law of the Sea: A Decade of Change' in FAO, *State of Food and Agriculture* (FAO, Rome 2002) at 63.
[215] A Karagiannakos, 'Total Allowable Catch (TAC) and Quota Management System in the European Union' (1996) 20 Marine Policy 235 – 248 at 236, F Foders, *Reforming the European Union's Common Fisheries Policy: Issues in Conservation and Policy Options* (European Policy Forum Ltd, England 1994) at 17 and C Coffey, *Sustainable Development and the EC Fisheries Sector: An Introduction to the Issues* (Institute for European Environmental Policy, London 1999) at 38, 39. See also Cunningham and Maguire op cit n 205 at 65 – 67. UR Sumaila, 'Protected Marine Areas as Hedge against Uncertainty: An Economist's Perspective' in Pitcher, Hart and Pauly op cit n 201 at 304, Charles op cit n 196 at 203 and C Walters, 'Designing Fisheries Management Systems that Do not Depend upon Accurate Stock Assessment' in Pitcher, Pauly and Hart op cit n 201 at 284.
[216] Sumaila ibid at 305 and Kaye op cit n 133 at 165.

in chapter 2.[217] Furthermore, the scientific bases of most TACs are inherently flawed as the method focuses on single species stock assessments. This fails to take account of the fact that many TAC species are found in mixed fisheries and their status is thus inherently linked to that of the other species in the fishery; the concept of maximum sustainable yield suffers from a similar problem.[218] These issues are exacerbated in developing countries where governments frequently lack the necessary technical and financial resources to conduct comprehensive scientific research and to analyse and apply its findings. In all fishing nations, however, it is alleged that scientific advice is in any event often not heeded by policy-makers, who instead succumb to political pressure to set TACs above ideal levels.[219]

Clearly, a broader, more ecologically-based approach is required to ensure that output controls foster rather than impede sustainable fishing. This necessitates improved scientific knowledge of stocks and marine ecosystems generally and an increased emphasis on a precautionary approach to setting TACs.[220] A precautionary approach requires that a lack of scientific certainty is not used as a reason to postpone or fail to take conservation and management measures to conserve target and other species or the environment.[221] Such an approach is endorsed by the Rio Declaration, implied in UNCLOS and explicitly advocated by the subsequent Straddling Stocks Convention, which, as I noted earlier, spells out its application in the context of marine fisheries management.[222] This has significant potential

[217] Cross-reference with p 43.
[218] See for example CD Payne, 'Policy-Making in Nested Institutions: Explaining the Conservation Failure of the EU's Common Fisheries Policy' (2000) 38 Journal of Common Market Studies 303-24 at 319, Coffey op cit n 215 at 47 and Karagiannakos op cit n 215 at 237. Cross-reference ibid.
[219] Churchill and Lowe op cit n 97 at 322, Birnie and Boyle op cit n 70 at 121 and 654, Sutton op cit n 121 at 127, Payne ibid at 217, Karagiannakos ibid at 214 and Foders op cit n 215 at 18.
[220] Churchill and Lowe ibid at 322, Birnie and Boyle ibid at 654 and Coffey op cit n 215 at 39.
[221] Derived from principle 15 of the Rio Declaration (op cit n 118) and art 6(2) of the Straddling Stocks Convention (op cit n 124). See also art 3(i) 'definitions' in Council Regulation (EC) No 2371/02 of 31 December 2002 OJ L358/59 and Commission of the European Communities, 'Communication from the Commission on the Reform of the Common Fisheries Policy "Roadmap"' (Roadmap Communication) COM (2002) 181 final at para 1.1. For a discussion of the contents of the precautionary approach, see Birnie and Boyle ibid at 115-121.
[222] Article 6 of the Straddling Stocks Convention (ibid). See also Birnie and Boyle ibid at 117,118 and 120, 121.

implications for national governments when setting their TACs and determining the existence (or not) of surplus stocks in their coastal waters.

A further key problem with output controls is that they tend to exacerbate discarding, a major problem in modern fisheries.[223] Discards are marine resources that are caught but immediately returned to the sea either because they are non-targeted species (by-catch discards) or they are in excess of quota limits or below the minimum landing size (quota discards).[224] Discarding runs counter to sustainable use primarily because it is a waste of natural resources.[225] It can also cause conflict between different user groups. This most commonly arises when discards by the industrial sector include species that are targeted by small-scale or artisanal users.[226] As I discuss later in this thesis, the EU's fishing in Senegalese waters provides an example of such problems.

The use of TACs and quotas arguably fosters high levels of discards as they encourage fishers to abandon excess-quota fish in order to comply with regulations and to maximise the value of their catch.[227] Progress in fisheries technology designed to increase the quantity rather than the quality of the catch, together with market forces that are value-biased in favour of certain target species, further encourage discarding.[228] Particularly problematic is that the full extent of discards is rarely reported, with the result that management measures are based on

[223] It is estimated that discards of fish (excluding other marine resources) amount to nearly one third of annual marine catch. See Churchill and Lowe op cit n 97 at 322 and Platt McGinn op cit n 133 at 21.
[224] M Holden, *The Common Fisheries Policy* (Fishing New Books, Oxford 1994) at 75, 199, Coffey op cit n 215 at 5 and K Crean and D Symes, 'The Discards Problem: Towards a European Solution' (1994) 18 Marine Policy 422 – 434 at 423.
[225] Crean and Symes ibid at 422 and Holden ibid at 199.
[226] Crean and Symes ibid.
[227] Ibid at 424-427, Karagiannakos op cit n 215 at 245 and 246, Foders op cit n 215 at 18, Charles op cit n 196 at 297and Cunningham and Maguire op cit n 205 at 71.
[228] Crean and Symes op cit n 224 at 424 – 427.

inaccurate stock extraction statistics.[229] A ban on discards, requiring all harvested material to be landed, is a possible solution, but would only be successful if it was adequately enforced and used in combination with effective gear regulations. [230] Most output controls are paired with measures designed to minimise discards, such as by-catch limits.[231]

There is some support for the idea that individual transferable quotas (ITQs) could help to eliminate the adverse impacts of output controls on fisheries' sustainability.[232] ITQs, as noted in chapter 2, aim to reduce over-capitalisation and thereby improve the economic efficiency of the fishing fleet by redistributing fishing quotas from less to more profitable fishing enterprises via the price mechanisms of the quota market.[233] This in turn fosters the economic efficiency of the fishery. Nevertheless, the contribution of ITQs to the overall sustainability of fisheries is questioned. Some writers argue that they promote stock conservation as quota holders have a vested interest in the sustainability of the stock due to their status as property rights holders.[234] Others, however, refute this. They emphasise that ITQs do not confer 'real control' over the resource, but merely a right to a flow of fishery resources. Accordingly, the usual difficulties in ensuring the conservation of a common resource remain.[235] In addition, ITQs may contribute to an increase in discarding. Arguably, fishers who have paid a high market price for quotas are driven to maximize their revenue by methods that likely include

[229] Karagiannakos op cit n 215 at 245 and K Truelove, 'Australia: Policy options for Fisheries Bycatch' in OECD (Organisation for Economic Co-operation and Development), *Towards Sustainable Fisheries: Issue Papers* OECD/ GD (97) 54 (OECD, Paris 1997) at para 2.2.
[230] Crean and Symes op cit n 224 at 423, 428, National Research Council USA op cit n 204 at 81-84, Truelove ibid at para 2.1.3 and A Karagiannakos, *Fisheries Management in the European Union* (Ashgate Publishing Ltd, Avebury England 1995) at 427.
[231] Karagiannakos ibid at 430 – 432.
[232] Countries that have adopted individual transferable quota (ITQ) systems include New Zealand, Australia, Canada, Iceland and the Netherlands. M Milazzo, 'Subsidies in World Fisheries: A Re-Examination' World Bank Technical Paper No 406 Fisheries Series (World Bank, Washington DC 1998) at 6 suggests that ITQs have contributed towards 'significant progress' in effective fisheries management in these countries.
[233] Symes and Crean op cit n 105 at 176, 180, Davidse, McEwan and Vestergaard op cit n 105 at 539 and JD Wingard, 'Community Transferable Quotas: Internalising Externalities and Minimising Social Impacts of Fisheries Management' (2000) 59 Human Organisation 48-57 at 48, 49. See also Platt McGinn op cit n 133 at 63, and Gréboval and Munro op cit n 199 at 32. Cross-reference with p 48, 49.
[234] Wingard ibid at 49, 50 and Platt McGinn ibid at 66.
[235] Symes and Crean op cit n 105 at 182 and Charles op cit n 196. Cross-reference with p 49.

discarding.[236] The social dimension of sustainable fisheries may also be adversely affected by ITQs as they tend to concentrate harvesting rights in the hands of a few fishing companies to the detriment of small-scale fishers and local fishing communities.[237]

Clearly, output controls are a potentially effective management method to promote the sustainable use of fisheries resources. However, measures must be carefully designed and implemented in combination with other suitable management means in order to maximise efforts to promote this objective.

Input controls are another common fisheries management method. As noted above, they are used to restrict access to fisheries resources. This is achieved by issuing a limited number of licenses to fishers and/or fishing vessels thereby controlling entry into the fishery.[238] The aim is to limit potential fishing capacity (determined by the efficiency of the vessel and its gear), which in turn helps to conserve stocks and to generate greater economic benefits for license holders, thereby promoting sustainable fishing.[239] Input controls must be used in combination with other management measures, such as technical conservation measures, however, as they are unable to control the gradual expansion of fishing effort once fishers have entered the fishery, which may lead to over-capacity.[240] Over-capacity – the excess potential fishing ability (or capacity) of a vessel or fleet above what is required to harvest the desired catch at the lowest cost - is one of the current leading causes of over-fishing; it is estimated that

[236] Symes and Crean ibid and Charles ibid at 297, 298.
[237] Wingard op cit n 233 at 50, Symes and Crean ibid at 181 and Charles ibid at 303, 304. See also Platt-McGinn op cit n 133 at 63, 66 and Gréboval and Munro op cit n 199 at 41, para 4.3. Limiting the transferability of ITQs to within a given fishing community is a potential solution, although it has not proven to be particularly effective to date - for example in Iceland (Symes and Crean at 179).
[238] Cunningham, Dunn and Whitmarsh op cit n 74 at 161.
[239] Charles op cit n 196 at 293, Milazzo op cit n 232 at 4, and J Kirkely and D Squires, 'Measuring Capacity and Capacity Utilisation in Fisheries' in Gréboval op cit n 199 at 76, para 1 and 86.
[240] Cunningham and Maguire op cit n 205 at 63, Charles ibid and Cunningham, Dunn and Whitmarsh op cit n 74 at 164.

modern fleets have at least 30 percent more capacity than they require.[241] It must thus be urgently addressed in order to foster sustainable fishing. At an individual fisheries level, capacity can be constrained not only by controlling vessel numbers through licensing, but also by regulating other inputs (such as vessel engine size) by attaching restrictive conditions to licenses. These must in turn be capable of adjusting to 'capacity-creep', that is enhanced fishing capacity as a result of improved fisheries technology.[242] In order to counter the risk that fishers will shift their focus from investing in regulated inputs to expanding their use of other unregulated inputs (for example, hiring more crew or fishing out at sea for longer periods), policy makers should take care to regulate sufficient components of effort.[243]

A 'user fee' should be charged for fishing licenses to cover the 'environmental cost' of using the resource and to contribute towards fisheries management efforts.[244] As noted above, valuing environmental services and resources is an important aspect of fostering sustainable development. In addition, failing to charge a suitable levy arguably amounts to a 'cost-reducing' subsidy.[245] Fisheries subsidies potentially make a significant contribution to unsustainable fishing, as I discuss later in this chapter. In addition, not charging for licences may result in too many fishers entering the industry if licenses are allocated on the basis of historical involvement in the fishery, as is common practice.[246]

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[241] Milazzo op cit n 232 at 6 and Gréboval and Munro op cit n 199 at 3. Fishing 'effort' refers to the combination of fishing capacity and the labour and time spent fishing (Milazzo at 4 and Kirkley and Squires op cit n 239 at 126, appendix V). The exact definitions of 'capacity', 'over-capacity', and 'effort' are, however, contested (Kirkley and Squires at 75 –80 and Milazzo at 4, 5).

[242] Charles op cit n 196 at 295. In practice this may be achieved by requiring vessel owners to compensate for efficiency increases in, for example, certain gear by making adjustments elsewhere in their fleet to ensure that overall catching capacity does not increase.

[243] Cunningham, Dunn and Whitmarsh op cit n 74 at 164 and Charles ibid at 294. Gréboval and Munro op cit n 199 at para 3.3.2 at 23, 25.

[244] Milazzo op cit n 232 at 56, 58, L Westland, *Draft Guide for Identifying, Assessing and Reporting on Subsidies in the Fisheries Sector* (2002) FAO Fisheries Department at para 6.2.9 and Cunningham and Maguire op cit n 205 at 66.

[245] Milazzo ibid at 57, Westland ibid. See also Cunningham, Dunn and Whitmarsh op cit n 74 at 162,

[246] Cunningham, Dunn and Whitmarsh ibid.

Technical conservation measures are likewise very useful in promoting the conservation and sustainable use of fisheries and the protection of the marine habitat. Their primary objective is to protect and restore fish stocks by reducing fish mortality, especially amongst juveniles.[247] Closed areas can protect vulnerable fish stocks and their habitat, while measures that restrict fishing gear, such as net size, also contribute towards minimising by-catch and reducing the harmful effects of fishing activities on the marine environment. Other examples of technical conservation measures include limits on vessel length and engine size, minimum landing size for fish and closed seasons.[248]

As with other fisheries management measures, governments must take care to minimise the potential of technical conservation measures to inadvertently contribute to unsustainable fishing practices. Minimum landing size restrictions, for example, have the potential to increase discards (discussed above) and should accordingly be coupled with selective gear requirements, such as restrictive mesh sizes, or economic incentives to encourage more selective fishing methods.[249] The use of closed seasons and closed areas should also be carefully considered. They control total output by either limiting the period within which fishing may occur (closed seasons) or prohibiting fishing in certain areas for all or part of a season (closed areas), primarily to protect young and spawning fish. They are a potentially highly effective method of promoting biological sustainability. However, they detract from the economic sustainability of fisheries and may thus encourage fishers to concentrate their harvesting activities in adjacent waters or in alternative seasons to compensate for their

[247] Cunningham and Maguire op cit n 205 at 58.
[248] Coffey op cit n 215 at 40 and Cunningham and Maguire ibid at 58, 152.
[249] Crean and Symes op cit n 224 at 425, Commission of the European Communities, 'Green Paper on The Future of the Common Fisheries Policy' (Green Paper) COM (2001) 135 final at para 1.2, Roadmap Communication op cit n 221 at para 5.1.2 and Coffey op cit n 215 at 41.

economic losses.[250] They should thus be regarded as short-term measures to be used sparingly.[251]

All three of the fisheries management measures outlined above are concerned primarily with promoting the biological (ecological) sustainability of a fishery. As we have seen, however, the objective of sustainable use or the 'sustainability' of a fishery is also concerned with broader socio-economic concerns. Fishing subsidies play a particularly controversial role in this regard. Aimed at boosting profits in the fishing industry, subsidies foster economic growth in the fisheries sector and secure the livelihoods of fishers and fishing communities. Arguably, however, they do so at the expense of securing biological sustainability in fisheries. At an international level, the regulation of fisheries subsidies by the World Trade Organisation (WTO) regime is currently under review. It remains to be seen if the current regime will be changed and if so, how stringent future fisheries subsidy regulation will be. Any revision to the existing regime, however, has potentially far-reaching implications for domestic fisheries regulation and inter-state fishing relations. I thus briefly discuss this complex yet crucial issue below.

4.3 The impact of fisheries subsidies

Subsidisation of the fishing industry is common among fishing nations.[252] According to the World Bank, global fisheries subsidies range from $14-20 billion, which amounts to 20-25 percent of the total revenue of the sector. As I discuss later in my thesis, subsidies are highly relevant to the impact of the EU's fishing in developing third country waters.[253] It is generally

[250] Cunningham, Dunn and Whitmarsh op cit n 74 at 157, 158.
[251] Ibid at 157.
[252] Ibid at 72 and WE Schrank, *Introducing Fishing Subsidies* FAO Fisheries Technical Paper No 437 (FAO, Rome 2003) at iii.
[253] Cross-reference with p 130.

accepted that subsidies to the fishing industry can have a potentially negative impact on the sustainability of fisheries. There is less agreement, however, on the extent of this impact and on how fisheries subsidies should be defined, quantified and regulated to mimimise it. The effects of fisheries subsidies on a range of key issues such as over-capacity, sustainable development and sustainable fisheries management are currently being researched by various inter-governmental organisations such as the FAO, WTO and World Wide Fund for Nature (WWF).[254] While they disagree on the extent to which fishing subsidies adversely affect capture fisheries, they recognise that not all fishing subsidies are environmentally-harmful; some seek to foster sustainable fisheries development and poverty-alleviation and should therefore be permitted, albeit tightly regulated.[255]

How to define fisheries subsidies in order to identify their use is the first challenge. According to the WTO's Agreement on Subsidies and Countervailing Measures (ASCM), a subsidy exists where there is some form of financial contribution from a government or public body which confers a benefit.[256] The FAO defines fishing subsidies broadly as any government intervention, action or non-action, that affects the fishing industry and has an economic value i.e. it increases revenues or decreases costs of the industry.[257] For purposes of analysis and debate, the FAO categorises fisheries subsidies into four broad groups: direct financial transfers, services and indirect transfers, regulation affecting fisheries, and lack of

[254] See FAO, 'Technical Consultation on the Use of Subsidies in the Fisheries Sector: A Summary of Recent Work on Subsidies in the Fishing Sector' (2004) TC SUB/2004/Inf 3 Rome Italy 30 June – 2 July (FAO, Rome 2004) (FAO Subsidies Report) at, for example para E (ii) (at 9) (FAO contribution), para F (iii) (at 16, 17) (OECD contribution), and para H (at 22, 23) (WTO contribution).

[255] Ibid at paras E (FAO contribution) and I (WWF contribution). See for example the ASEAN contribution (para B at 6) and para I (WWF contribution).

[256] Marrakesh Agreement Establishing the World Trade Organisation WTO *Legal Texts* 3 (in force 1 January 1995) Annex 1A Agreement on Subsidies and Countervailing Measures (ASCM) at art 1.

[257] FAO Subsidies Report op cit n 254 at para E (FAO contribution) at 10. This reflects the 2002 definition utilised by the FAO, namely '...government actions or inactions that are specific to the fisheries industry and that modifies – by increasing or decreasing – the potential profits by the industry in the short-, medium, and long-term'.

intervention.[258] The Organisation for Economic Co-operation and Development (OECD) also subscribes to a wide understanding of 'fisheries subsidies' and subdivides these subsidies into similar categories to that of the FAO, namely direct payments, cost-reducing transfers, general services and market-price supports.[259] The purchase of new vessels, vessel decommissioning payments and direct export incentives fall under the category of direct government subsidies to the industry, while examples of indirect or cost-reducing subsidies include government payment for fishing rights in foreign coastal waters, government-funded fisheries research, subsidised loans and fuel tax exemptions. General services subsidies include funding fisheries research and management and enforcement expenditures.[260] Subsidies that amount to 'non-intervention' include free access to fishing grounds (as noted earlier), lack of pollution control and non-implementation of existing regulations. Such non-action by governments allows fisheries producers to impose their costs of production on society and the environment rather than to absorb them themselves.[261]

The impact of fishing subsidies depends on their constitution, the manner in which they are implemented, how they interact with other existing government policies and the nature of the fisheries management system in place.[262] Generally speaking, fishing subsidies impact in three core ways: they affect the economic growth of the country in question, impact on international trade, and affect the sustainability of domestic fisheries.[263] In particular, there is

[258] Ibid FAO contribution at 9.
[259] Ibid. See A Cox, 'OECD Workshop on Environmentally Harmful Subsidies –A Stocktaking of OECD Work on Subsidies' Paris, 7-8 November 2002 paper presented OECD Workshop on Environmentally Harmful Subsidies International Energy Agency 7 November 2002 <http://www1.oecd.org/agr/ehsw/SG-SD(2002)16.pdf> accessed June 2006 at 4 and 12.
[260] A combination of Schrank op cit n 252 at 13, 14, FAO definition in FAO Subsidies Report op cit n 254 at para E (ii) (at 9) (FAO contribution) and OECD definition in FAO Subsidies Report at para F (iii) (at 16, 17).
[261] Westland op cit n 244 at para 5.4.
[262] O Flaaten and P Wallis, 'Government Financial Transfers to Fishing Industries in OECD Countries' FAO Expert Consultation on Economic Incentives and Responsible fisheries (OECD, Paris 2000) at 11.
[263] Ibid at 44.

strong support for the contention that subsidies foster unsustainable fishing practices.[264] This does not necessarily hold true for all subsidies, however – as noted earlier, a distinction should be made between fishing subsidies that are 'environmentally-harmful' and those that are 'conservation' subsidies.[265] Conservation subsidies are designed to enhance the resource base, reduce fishing operations and capacity, and foster 'cleaner' harvesting technology.[266] Examples include funding vessel and fishing permit buyback schemes (decommissioning), re-training fishers for alternative professions, socio-economic measures to encourage fishers to leave the industry (such as early retirement packages), and research and development in 'clean' harvesting gear.[267]

The overwhelming majority of fishing subsidies worldwide, however, are intended to foster increased harvesting and to enhance fishing capacity and thus fall into the alternative category of 'environmentally-harmful' subsidies.[268] A common example is government financial support for modernising vessels in order to increase their harvesting capacity.[269] As I discuss later in chapters 5 and 7, this type of subsidisation is prevalent in the EU and in many developing countries that seek to boost the growth of their domestic fishing industry, such as Senegal.[270] This generates short-term economic benefits, but without careful control can lead to over-capacity and resultant unsustainable fishing practices, as evidenced by the EU example.[271] Other subsidies that fall into this category include the funding of fisheries infrastructure, such as constructing and upgrading fishing ports, government-subsidised loans

[264] Schrank op cit n 252 (in particular, at 21), Flaaten and Willis ibid, A Cox and C Schmidt, 'Subsidies in the OECD Fisheries Sector: A review of Recent Analysis and Future Directions' (OECD, Paris 2002), Cunningham and Maguire op cit n 205 at 72, Cunningham, Dunn and Whitmarsh op cit n 74 at 97 and Milazzo op cit n 232 at 79.
[265] Milazzo ibid at 12, 14.
[266] Ibid at 64.
[267] Ibid at 65. The author suggests that no more than five percent of all fisheries subsidies support 'conservation'.
[268] Ibid at 74, 78 and 79. It is estimated that they amount to approximately 20 to 25 percent of world capture fisheries revenues.
[269] Cunningham, Dunn and Whitmarsh op cit n 74 at 98.
[270] Cross-reference with pp 129 and 166.
[271] Schrank op cit n 252 at 1. Cross-reference with pp 129, 130.

(mainly for construction, modernisation and repair of vessels) and tax preferences, including exemptions from fuel tax.[272]

'Environmentally-harmful' subsidies can contribute towards unsustainable fishing in various ways.[273] Their main effect is to 'artificially' lower the costs of fishing. This increases profitability and encourages participation in the fishery.[274] If the management system is unable to adequately control access to and regulate harvesting in the fishery, this can lead to excess effort and capacity and may consequently cause over-fishing and resultant unsustainability.[275] In addition, subsidies enable economically inefficient industries to continue operating, which is not conducive to the long-term sustainability of a fishery.[276]

Critics argue that subsidies are as much a symptom of ineffective fisheries management as a cause of the current crises in fisheries.[277] While others continue to contest the empirical link between subsidies and unsustainable fisheries, these critics are convinced of the relationship and are accordingly currently calling for subsidy reform. They argue that the elimination or reduction of environmentally-harmful fishing subsidies will reduce pressure on fish stocks, free up financial resources for other uses, enhance economic efficiency by removing price and profit distortions, and stimulate increased international trade.[278] With regard to subsidies that are retained, their design and implementation should be improved in order to maximise their

[272] Milazzo op cit n 232 at 21, 42 – 55.
[273] Milazzo argues that the results of his study 'strongly' suggest that such subsidies are a 'significant' factor in undermining the sustainable use of wild fish resources in much of the world (ibid at 79).
[274] Ibid at 31. J Surís-Regueiro, M Varela-Lafuente and D Garza-Gil, 'Profitability of the Fishing Fleet and Structural Aid in the European Union' (2002) 26 Marine Policy 107-119, in particular at 118. See also Platt-McGinn op cit n 133 at 7, where the author notes that about one third of all revenues from fisheries are a result of government subsidies.
[275] Cunningham and Maguire op cit n 205 at 72.
[276] Schrank op cit n 252 at 7.
[277] Ibid at 77 and G Porter, *Fisheries and the Environment. Fisheries Subsidies and Over-Fishing: Towards a Structured Discussion* (United Nations Environment Programme, New York 2002) at 11-13.
[278] Milazzo op cit n 232 at 79, 80 and Platt McGinn op cit n 133 at 67.

efficiency while minimising their adverse environmental effects; 'conservation' subsidies should be permitted.[279]

The extent to which national governments are engaged in reforming their fisheries subsidies policies will likely be accelerated by current developments in the WTO forum. The Ministerial Declaration of the fourth WTO Ministerial Conference in Doha in November 2001 (the Doha Declaration) identified fisheries subsidies as part of the agenda for new global trade discussions.[280] Specifically, it stated that members should 'aim to clarify and improve WTO disciplines on fisheries subsidies taking into account the importance of this sector to developing countries'.[281] This provided a mandate for negotiations on fisheries subsidies and committed WTO members to refine world trade rules in this area. The relevant discussions and negotiations have primarily taken place within the WTO's negotiating group on rules to date.

The need for clarity on subsidies in fisheries arose because many members were of the opinion that they are inadequately regulated by existing WTO rules. Currently, fisheries subsidies are governed by the general Agreement on Subsidies and Countervailing Measures (ASCM); they were excluded from the subsidy reduction commitments in the 1994 WTO Agreement on Agriculture as fisheries were seen to fall outside the ambit of agriculture.[282] In terms of the ASCM, all subsidies (as defined in the agreement) are either prohibited,

[279] Milazzo ibid. Cox and Schmidt op cit n 264 at 42. See also Platt-McGinn ibid.

[280] Doha WTO Ministerial Declaration WT/MIN (01)/DEC/1 20 November 2001 adopted 14 November 2001 (Doha Declaration).

[281] See para 28 of the Doha Declaration ibid: '... we agree to negotiations aimed at clarifying and improving disciplines under the Agreements on Implementation of Article VI of the GATT 1994 and on Subsidies and Countervailing Measures, while preserving the basic concepts, principles and effectiveness of these Agreements and their instruments and objectives, and taking into account the needs of developing and least-developed participants. In the initial phase of the negotiations, participants will indicate the provisions, including disciplines on trade distorting practices, that they seek to clarify and improve in the subsequent phase. In the context of these negotiations, participants shall also aim to clarify and improve WTO disciplines on fisheries subsidies, taking into account the importance of this sector to developing countries...'

[282] ASCM op cit n 256 and Marrakesh Agreement Establishing the World Trade Organisation WTO *Legal Texts* 3 (in force 1 January 1995) Annex 1A Agreement on Agriculture. In terms of art 2 read together with annex 1 of the Agreement on Agriculture, fish and fish products are excluded from the products covered by the Agreement.

'actionable' (subject to challenge within the WTO framework), or non-actionable.[283] As fisheries subsidies arguably give rise to numerous sector-specific queries and concerns, the agreement does not comprehensively or adequately deal with them.

During the negotiations it became clear that WTO members disagree on the extent to which fisheries subsidies lie at the root of over-exploitation and declining world fisheries stocks as opposed to poor fisheries management coupled with increasing world demand for fishery products.[284] Those supporting the need for new measures to regulate fisheries subsidies argue that over-capacity, a significant element of over-exploitation, is caused primarily by subsidies. This, they contend, cannot be offset by sound fisheries management regimes as the very realisation of these regimes is impeded by the existence of subsidies. Fisheries subsidies should therefore be better 'disciplined'. Combined with sustainable fisheries management policies and increased trade liberalisation, this will likely result in more efficient fisheries production while simultaneously promoting long-term environmental benefits.[285] If this view is persuasive and results in tighter regulation of fishing subsidies within the WTO regime, the definition of fishing subsidies and the way in which they are regulated will have potentially far-reaching effects in world fisheries.[286] Of particular interest to us is whether their definition will be sufficiently broad to encompass financial payments under bilateral fisheries arrangements between the EU and third countries and whether EU development cooperation projects that fund fisheries development in African, Caribbean and Pacific (ACP) states will

[283] ASCM ibid at Part II and Part IV respectively. Subsidies are defined in art 1.
[284] As reflected in the Report to the Conference adopted by the Regular Session of the Committee on Trade and Environment's (CTE) in July 2003 prior to the 5th Session of the WTO Ministerial Conference in Cancún, Mexico in September 2003.
[285] FAO Subsidies Report op cit n 254 at para H (WTO contribution). With regard to the positions of the various Members, see - 'WTO Rules Negotiations: Deep Divides Prevail on Harmfulness of Fisheries Subsidies' Bridges Weekly Trade News (2002) 6 (36) <http://www.ictsd.org/weekly/02-10-24/story1.htm> accessed July 2006.
[286] B Gorez and B O'Riordan, 'An Examination of Fisheries Relations Between the European Union and the ACP Countries' (paper presented at International Seminar (CTA/CW) on ACP/EU Fisheries Relations: Towards a Greater Sustainability 7-9 April 2003 Brussels) <http://www.cta.int/events2003/fisheries/documents.htm> accessed February 2006 at para 3.4.

fall within its ambit.[287] Clearly, the trade rules that emerge will strongly impact the direction of future fishing relations between the EU and West African coastal states. The EU supports a prohibition of all capacity-enhancing subsidies and the retention of 'conservation' subsidies.[288] It does not regard Community compensation for access to the coastal waters of developing countries under its new 'fisheries partnership' policy as a subsidy; it thus envisages that such payments will be unaffected by any new WTO rules.[289]

The 2005 Hong Kong Ministerial Declaration recommitted the WTO rules group to progress in its fisheries subsidies work.[290] It expressly noted the 'broad agreement' among members on the need to strengthen the regulation of fisheries subsidies, including by prohibiting those that contribute to over-capacity and over-fishing.[291] The Declaration further calls for 'appropriate and effective special and differentiated treatment for developing and least-developed members' to be an integral part of the negotiations in light of the importance of fisheries to the development priorities, poverty-reduction and livelihood and food security concerns of these countries.[292] It urged the rules group to complete its analysis of participants' proposals 'as soon as possible' in order to ensure that the suggested amendments to the ASCM are prepared in time for the final stage of negotiations.[293] Any revision of the ASCM will thus only be clarified by the end of 2006, as this is the new end date of the Doha Development

[287] Partnership agreement between the members of the African, Caribbean and Pacific Group of States (ACP) of the one part, and the European Community and its member states, of the other part, signed in Cotonou on 23 June 2000 [2000] OJ L317/3 (Cotonou Agreement). FAO Subsidies Report op cit n 254 at paras F (i) (OECD contribution) at 12 and E (FAO contribution). See also Gorez and O'Riordan ibid at para 3.4.
[288] Submission by the EU to the Rules Group, April 2003 <http://trade.ec.europa.eu/doclib/docs/2006/may/tradoc_122825.pdf> accessed July 2006. To date, the EU has submitted two papers to the Rules Group, the first in April 2003 and the second in April 2005. The second suggests mechanisms for the implementation and enforcement of any new disciplines in this area which may be devised by the WTO <http://trade.ec.europa.eu/doclib/docs/2005/may/tradoc_120387.pdf> accessed July 2006.
[289] Interviews EU representatives (telephone interview 21 September 2005 and interview Dakar 2 February 2006). The new fisheries partnership approach is discussed in detail at pp 151-157 below.
[290] Ministerial Declaration of the sixth WTO Ministerial Conference in Hong Kong December 2005 WT/MIN (05)/DEC 22 December 2005 adopted on 18 December 2005.
[291] Ibid at Annex A: Agriculture.
[292] Ibid at para 9.
[293] Ibid.

Agenda.[294] Only at this stage will it be clear to member states to what extent they will need to adapt their domestic policies and international fisheries relations.

5. Conclusion

The international regime regulating fisheries has yet to find a way to effectively promote the sustainable use of marine fisheries worldwide. Its framework guidance is nevertheless a starting point for state action towards this end both in national waters and beyond. The effect of fisheries management mechanisms and subsidies on the sustainability of fisheries are increasingly known and it is thus up to individual states to ensure that their fisheries policies are suitably formulated to contribute positively towards sustainability. In addition, international agreements between coastal states and foreign nations seeking to access their waters should accord with international fisheries law by actively promoting sustainable fishing and sustainable fisheries development. Specifically, agreements should require the use of appropriate management and technical measures towards this end.

In practice, however, bilateral fisheries agreements are not merely (if even predominantly) concerned with fostering sustainable fisheries. Instead, they are largely concerned with the realisation of the respective self-interests of the two contracting parties. These interests are influenced by the broader socio-economic and political relations between the parties. In the case of agreements between the EU and West African countries, these relations are in turn strongly shaped by the parties' shared colonial history, as I discuss in detail in the following chapter.

[294] At the time of completing writing (December 2006), no revision of the ASCM had been clarified.

4

THE COLONIAL LEGACY: POLITICAL, SOCIAL AND ECONOMIC TIES BETWEEN WEST AFRICAN STATES AND THE EU

1. Introduction

Bilateral fisheries agreements between the EU and African states, particularly those in West Africa, are strongly influenced by the historically-based socio-economic links between the parties. Specifically, the colonisation of West African states by European powers in the late nineteenth century impacted both the social and economic development of the colonised territories and established trends for future relations between the parties which were subsequently sustained by a long-standing series of development cooperation agreements between them. These agreements, which are dominated by trade and aid concessions, were initially imposed on the (then) African colonies at the formation of the European Economic Community (EEC) but subsequently evolved into comprehensive negotiated arrangements between the EC and the African, Caribbean and Pacific (ACP) states. Their impact is key to understanding the broader interests and issues that inform bilateral fishing relations between the EU and individual West African states, as I discuss in this chapter. In particular, I examine the role of the colonial legacy between the parties on the fisheries access arrangements concluded between them.

2. The impact of European colonisation on African states

2.1 Historical introduction

European expansion into Africa began in earnest in the eighteenth century and accelerated in the 1800s. In the 1870s, heightened competition among the major European states triggered numerous territorial claims on the continent in what later became known as the 'Scramble for Africa'. At the 1884 Berlin Conference competing claims were settled and the majority of Africa was divided into European colonies.[295] Colonial rule was pervasive, impacting particularly the economic and political sectors of the colonised states. Challenges to colonial rule rose during the 1900s fuelled by the growth of nationalism and the associated emergence of anti-colonial struggles and peaked after World War II.[296] The first major wave of decolonisation occurred among the British and French West African territories in the 1950s; the colonising powers withdrew swiftly in the hope of minimising conflict and maintaining positive economic and political relations with the new governments.[297] France in particular succeeded in maintaining a strong influence in many of its former colonies.

2.2 The origin of EU-African socio-political relations

Colonisation had a profound effect on the economies of the African colonies both during the period of occupation and post-independence. In particular, it impacted upon the economic development of the colonies and their economic relations with Europe.[298] Prior to

[295] The Berlin Conference November 1884 – December 1885 resulting in the Berlin Act of 1885. Most the territory in West Africa was designated as French colonies.
[296] O'Toole, 'The Historical Context' in AA Gordon and DL Gordon (eds), *Understanding Contemporary Africa* (3rd edn Lynne Rienner Publishers Inc, London and Colorado 2001) at 51 and DL Gordon, 'Africa Politics' in Gordon and Gordon at 63.
[297] Gordon ibid at 66.
[298] ER Grilli, *The European Community and the Developing Countries* (Cambridge University Press, UK 1993) at 5.

colonisation, African economies had already been subsumed into the European-dominated international economy by the seventeenth century slave trade, which resulted in a mass loss of productive human labour and an associated decrease in agricultural production in the affected African states.[299] The subsequent period of colonisation corresponded with the spread of the industrial revolution throughout Europe, giving rise to an increasing demand for raw materials from the African colonies, primarily agricultural products, minerals and metals. In the West African colonies traditional subsistence farming was accordingly largely substituted by the cultivation of export crops such as palm oil, rubber, cotton, cocoa and peanuts.[300] At the same time, the colonies served as markets for Europe's newly manufactured textiles, household goods and farm implements. A unique pattern of consumption and trade in and between Europe and its territories was thus established during colonisation, traces of which are still evident to date.

Following de-colonisation, the economic progress of the newly independent states remained largely contingent on European markets, finance and expertise as the economic policies that they had inherited had been designed to foster Europe's growth and development not their own socio-economic self-sufficiency.[301] European powers encouraged this trend - struggling with reconstruction and rising commodity prices in the wake of World War II, it was in their interests that the new African governments retained the colonial capitalist system and its associated trade patterns along with the supporting political structures.[302] In the face of limited resources, most African governments thus encouraged increased exports of raw materials to Europe and maintained the monocrop economies established under colonial rule.[303] Those governments that attempted to restructure their economies, primarily by

[299] V DeLancey, 'Economies of Africa' in Gordon and Gordon op cit n 296 at 102 and 103.
[300] Gordon op cit n 296 at 58, 58 and O'Toole op cit n 296 at 50.
[301] Gordon ibid at 59, 60.
[302] Ibid at 67.
[303] Ibid at 78 and DeLancey op cit n 299 at 107.

increasing executive control and nationalising key sectors of the economy, were largely unsuccessful. The inherited colonial legal frameworks constrained the efficacy of their new laws and policies and in many instances, their development plans were deficient, frequently over-emphasising industrial development to the detriment of the agricultural sector.[304] Regional efforts to promote African economic self-sufficiency similarly floundered. Spear-headed by the Organisation of African Unity, numerous regional economic organisations were established during the 1980s to promote intra-regional trade towards the self-sustaining economic development of the continent.[305] Most African states nevertheless continued to struggle economically and thus turned to international monetary bodies (such as the World Bank and the International Monetary Fund) and foreign governments for financial assistance.[306] Loans were conditional on the implementation of structural adjustment programmes which required receiving governments to reorder their domestic economies to stimulate increased primary product exports and encourage foreign investment;[307] this further entrenched the role of African states as the suppliers of cheap raw materials in the global economy.[308] Specifically, borrowing governments were obliged to adjust their exchange rates, reduce government expenditure, liberalise trade, privatise state-owned enterprises, and eliminate subsidies to urban consumers.[309] The majority of African economies failed to respond positively to this restructuring and governments fell heavily into debt. Efforts towards

[304] Y Ghai (ed), *Law in the Political Economy of Public Enterprise: African Perspectives* (Scandinavian Institute of African Studies, Uppsala and International Legal Centre, New York 1977) at 10. See also Y Ghai, 'Control and Management of the Economy: Research Perspectives on Public Enterprise' in Ghai at 26. DeLancey ibid at 122-125.

[305] Organisation of African Union (OAU),'Charter of the Organisation of African Union' (1963). In 1999, The OAU was superceded by the African Union through the Constitutive Act of the African Union, 11 July 2000, Lomé, Togo (which entered into force in 2001).

[306] PJ Schraeder, 'African International Relations' in Gordon and Gordon op cit n 296 at 150 and DeLancey op cit n 299 at 157, 158. By 1989, all but five of 44 sub-Saharan African states were borrowing from the International Monetary Fund (IMF) (Gordon op cit n 296 at 84).

[307] As outlined in World Bank, *Accelerated Development in Sub-Saharan Africa: An Agenda for Action* (World Bank, Washington DC 1981).

[308] D Edye and V Linter, 'The Lomé IV Convention: New Dawn or Neo-Colonialism?' European Dossier Series No 22 (1992) at 5.

[309] Gordon op cit n 196 at 83, 84 and DeLancey op cit n 299 at 131- 135.

economic development were further impeded by civil conflict, which was rife in many African states.[310]

2.3 Maintaining socio-economic ties: associationism

At the founding of the EEC in 1957, political and economic ties between the then African colonies of France, Belgium and Italy and the EEC were formally preserved by the Treaty of Rome, which

> 'promote[d] the economic and social development of the [associated] countries and territories and ... establish[ed] close relations between them and the Community as a whole'.[311]

The two main pillars of these relations were free trade between the EEC and the associates and economic aid from the Community to the associate states.[312] The Treaty provisions entrenched the policy of 'associationism', which advocated maintaining economic and political cooperation between colonising powers and their colonies in order to secure 'mutual benefits'.[313] They had the effect of establishing a unilaterally-created free-trade area between the EEC states and their colonies and rendering the EEC states collectively responsible for the financial well-being of the colonies. Following independence, the former associated territories were no longer bound by the Treaty of Rome. To maintain the benefits afforded them under the Treaty they subsequently concluded a Convention of Association with the EEC in 1963 (the Yaoundé agreement), which provided for reciprocal trade concessions, technical cooperation and economic assistance. [314] The agreement was renewed for a further five years

[310] Gordon ibid at 133.
[311] Part IV of the Treaty Establishing the European Economic Community (Treaty of Rome) (adopted 24 March 1957, entered into force 1 January 1958) 298 UNTS 11, arts 131-136. See also Grilli op cit n 298 at 2, 3 and 7.
[312] Article 131 of Treaty of Rome ibid.
[313] Grilli op cit n 298 at 1.
[314] Council of the European Communities, 'Convention of Association Between the European Economic Community and the African and Malagasy States Associated with that Community and Annexed Documents' (1963) (Yaoundé agreement). Eighteen newly independent (largely francophone) African nations and the six

in 1969 and was subsequently succeeded by a series of four 'Lomé' agreements (the first was concluded in 1975), which extended EEC trade and aid concessions to the broader African Caribbean and Pacific (ACP) group of states.[315] The terms of the agreements altered over time, reflecting the change in relations between the EEC and the ACP group. Most noticeable was the increasing shift in power in favour of the EEC as associationism evolved from a policy that was initially highly beneficial to the EEC, cushioning it from the possible adverse socio-economic effects of decolonisation, to an approach that offered it few advantages as a result of political and economic changes both globally and within the EEC.[316] The agreements thus concretised the increasing socio-economic dependence of the former African colonies (and other ACP states) on the EEC in a manner that could be described in some instances as neo-colonial.[317]

Associationism was particularly strongly advocated by France in its West African colonies both during occupation through its approach of 'direct' rule and post-independence.[318] As a result, the foreign policies of former French colonies remained strongly aligned with French interests in the early years of independence and France maintained significant economic influence.[319] This was bolstered by the continued operation of the 'franc zone', a supra-

member states of the EEC were party to the agreement. Just prior to independence in 1959, almost 80 percent of the associated territories' exports went to the EEC and nearly all of the aid that they received came from EEC countries (Grilli ibid at 15, table 1.2).

[315] ACP-EEC Convention of Lomé (1976) OJ L25/2 (Lomé I).

[316] Grilli op cit n 298 at 36-39 and 42. See also S Wright, 'Negotiating Economic Partnership Agreements: Contexts and Strategies' in O Barbarinde and G Faber (eds), *The European Union and the Developing Countries: The Cotonou Agreement* (Martinus Nijhoff Publishers, Leiden and Boston 2005) at 78.

[317] Neo-colonialism refers to the socio-economic dependence of politically-sovereign developing countries on their former colonial powers, rooted in and perpetuated by the colonial capitalist system. See EEG Iweriebor, *The Age of Neo-Colonialism in Africa* (African Book Builders Ltd, Nigeria 1997) at 1, 12 and 26 and K Nkrumah, *Neo-Colonialism: The Last Stage of Imperialism* (Panaf Books Ltd, London 1965) at ix. At its most extreme, neo-colonialism is aligned with the neo-Marxist school of peripheral capitalism and the contemporary neo-Marxist school of under-development. See Iweriebor at 19 and S Amin, *Unequal Development: An Essay on the Social Formations of Peripheral Capitalism* (The Harvester Press Ltd, England 1976) at 333 - 364. See also Ghai op cit n 304 at 30 and Nkrumah at x.

[318] Iweriebor ibid at 49. France ruled via centralised administration and stressed policies of assimilation, in terms of which it extended French citizenship to the inhabitants of its colonies.

[319] Exemplified by Senegal during the presidency of Léopald Sédar Senghor (from 1960 to January 1981). Schraeder op cit n 306 at 147.

national financial system established by France in 1945 to bind its West and Central African colonies with a common currency, the Communauté Financière Africaine (CFA) franc. Initially tied to the French franc and guaranteed by the French treasury, the CFA franc was subsequently pegged to the Euro when France acceded to the single European currency in 1999.[320] The extent of the ex-colonies' economic dependence on France became evident in 1994, when French devaluation of the CFA franc profoundly affected West African economies.[321]

Strong socio-economic ties thus continued to bind the majority of African states to their former colonial powers following independence, particularly those in West Africa. To date, European political influence remains powerfully persistent, shaped by the broader economic objectives of both individual member states and the European Community (EC). The series of preferential trade and aid agreements concluded between the EC and African states post-independence cemented a relationship of increasingly unequal inter-dependence between the parties.

[320] Article 111(3) EC Treaty (op cit n 170) enables France to maintain its existing agreement with the CFA franc zone by providing for monetary and foreign exchange arrangements with third countries. Regional integration has occurred within the franc zone, giving rise to two distinct African monetary unions, namely the West African Economic and Monetary Union (UEMOA) and the Central African Economic and Monetary Community (CEMAC). They share the single currency of the CFA franc. Schraeder ibid at 226, 227.

[321] This was exemplified by its effect on the Senegalese fisheries sector, which I discuss below at p 167. The CFA was devalued by fifty percent in response to economic crises in West Africa (Schraeder ibid at 162 – 165).

3. The EU's development cooperation policy towards Africa: cementing historical ties

3.1 The emergence of a Community development cooperation policy

The Community pursues its objectives in the development sphere by three principal means – policy dialogue, development cooperation and trade.[322] Prior to 1993, there was no treaty basis for EC development cooperation action. In the absence of a guiding legal framework and clearly defined objectives, it thus operated in a rather uncoordinated manner. With regards to the ACP countries, the Yaoundé and Lomé arrangements served as unique EC development cooperation models in relation to a specific, geographically-defined group of states.

This changed with the conclusion of the Maastricht Treaty, which introduced the legal basis for a Community policy in the sphere of development cooperation and outlined its primary objectives, namely to foster sustainable socio-economic development in developing countries (particularly the most disadvantaged), facilitate their gradual integration into the world economy, and combat poverty within them.[323] The Treaty obliged the Community to ensure coherence with these objectives in implementing all policies likely to affect developing countries.[324] These goals were recently further refined in the renewed Community development policy in which the primary objectives of the policy are cited as the eradication of poverty in the context of sustainable development (including the pursuit of the Millennium Development goals) together with the promotion of democracy, good governance and respect

[322] Commission of the European Communities, 'Communication from the Commission to the Council and the European Parliament: The European Community's Development Policy' COM (2000) 212 final (European Community Development Policy) at para 2.1. The Treaty provisions governing development cooperation are found in Title XX (arts 177-181) of the EC Treaty (op cit n 170).
[323] Article 177(1) EC Treaty ibid.
[324] Article 178 EC Treaty.

for human rights.[325] These are to be pursued by promoting ownership of development strategies and programmes of partner countries, enhanced policy dialogue and delivering increased and more effective aid.[326] In addition, the EU will assist developing countries to implement 'sound' trade policies, promote regional trade integration and pursue new trading opportunities, specifically in the context of completing the EU-ACP economic partnership agreements (discussed below).[327]

Development cooperation is a shared competence between the Community and member states and the Treaty thus requires coherence between the policies of the Community and the individual member states.[328] Their development cooperation efforts have not always been complementary, however, which has resulted in duplication and friction at times.[329] The Community's development cooperation activities are compartmentalised along geographical lines, one of which is the ACP bloc. The Community currently pursues its development cooperation policy towards the ACP group through the Cotonou agreement, the successor of the Lomé arrangements.

The series of Lomé conventions represented the longest-standing development cooperation arrangement between the ACP group and the EC. Operating from 1975 until 2000 with three major re-negotiations, they were touted as the 'flagship' of the EC's development cooperation initiatives as their provisions constantly adapted in response to changes and new challenges at

[325] Articles 5 and 42 of the European Parliament, Council and Commission, 'Joint Statement by the Council and the Representatives of the Governments of the Member States Meeting with the Council, the European Parliament and the Commission on European Union. Development Policy: "The European Consensus"' [2006] OJ C46/1, which builds on the earlier European Community Development Policy (op cit n 322). Note that throughout these documents the terms 'development' policy and 'development cooperation' policy are used interchangeably. The Millennium Development goals comprise eight ambitious development-related goals to be achieved worldwide by 2015. I discuss them further in the context of my conclusions in chap 9.

[326] Ibid at arts 14, 17 and 23-29 respectively.

[327] Ibid at art 72. Environmental partnership agreements are explained below at p 104.

[328] See art 177(1) EC Treaty op cit n 170.

[329] Article 180 EC Treaty ibid: '[t]he Community and member states shall coordinate their policies on development cooperation and shall consult each other on their aid programmes...They may undertake joint action'. See also C Santiso, 'Reforming European Foreign Aid: Development Cooperation as an Element of Foreign Policy'(2002) 8 European Foreign Affairs Review 395-415 at 404.

national and international levels.[330] They afforded the ACP states a number of concessions, the most significant of which were non-reciprocal trade preferences and economic assistance.[331] The agreements nevertheless failed to achieve their stated broad objective of fostering sustainable socio-economic development in the ACP states.[332] Critics argue that the agreements instead locked the ACP states into a colonial-like dependency on the EU by hindering their export diversification and discouraging foreign direct investment from outside the Community.[333]

The agreements affected bilateral fisheries interactions between the parties both via the specific obligations that they imposed on the respective parties in this regard and as a result of their broader impact on relations between the parties. Under Lomé I, the Community declared its willingness to develop the fisheries 'and related industries' of ACP states; in return, the ACP countries were obliged to negotiate bilateral fisheries agreements with the EC's member states that were 'likely to guarantee satisfactory conditions in the fisheries activities in the sea waters within their jurisdiction'.[334] Lomé I thus provided for potentially close bilateral fisheries relations between the EC and individual ACP states, both in terms of sectoral development and access to coastal ACP states' stocks. Prior to November 1976, when competency to conclude bilateral fisheries agreements was transferred to the Community, a number of access arrangements were concluded between individual member states and West

[330] O Barbarinde and G Faber, 'From Lomé to Cotonou: ACP-EU Partnership in Transition' in Barbarinde and Faber op cit n 316 at 4.
[331] Edye and Linter op cit n 308 at 6.
[332] Ibid at 14. The aim of the Fourth ACP-EEC Convention (1989) OJ L229/ 3 (Lomé IV) was 'to promote and expedite the economic, cultural, and social development of the ACP states, and to consolidate and diversify their relations' (art 1). This should be read in the context of the development cooperation objectives outlined in Title XX EC Treaty (op cit n 170).
[333] Edye and Linter op cit n 308 at 13.
[334] Articles 1 and 2 of the Joint Declaration on Fishing Activities, Annex XI to the Lomé I op cit n 315.

African nations.[335] The 1980 access arrangement between Senegal and the EC was the Community's first bilateral fisheries agreement with an African nation.[336]

The obligations imposed by the current Cotonou agreement are considerably less demonstrative: parties are merely constrained in their fisheries relations by broad policy objectives. Specifically, the parties must cooperate to 'support sustainable policy and institutional reforms and the investment necessary for equitable access to economic activities and productive resources' in pursuit of the sustainable development of fisheries and marine resources in ACP states' coastal waters.[337] They must further cooperate to foster the sustainable use and management of natural resources by (inter alia) supporting the fulfilment of international commitments concerning marine and fisheries resources.[338] With regard to bilateral fisheries agreements, the parties are simply obliged to negotiate agreements consistent with fisheries development strategies.[339] To understand the effect of these provisions as well as the broader impact of the agreements on bilateral fisheries arrangements between the EU and individual ACP states necessitates a more in-depth knowledge of the agreements' contents. The most significant themes of the agreements are trade concessions and financial aid and I thus divide my discussion below along these lines.

[335] Competency was transferred to the Community via Council Resolution of 3 November 1976 on Certain External Aspects of the Creation of a 200-mile Fishing Zone in the Community with Effect from 1 January 1977 [1981] OJ C105/1. This should be read together with art 300 EC Treaty (op cit n 170). Agreements were concluded for example between Italy and Senegal in January 1975, France and Benin in February 1975 and Portugal and Morocco in March 1976. For a discussion of these and other bilateral fisheries agreements concluded during the negotiation of UNCLOS (op cit n 25) see JE Carroz and MJ Savini, 'The New International Law of Fisheries Emerging from Bilateral Agreements' (1979) Marine Policy 79 – 98. Cross-reference with p 147 where I refer to these agreements again briefly in the context of a detailed examination of the EU's bilateral fisheries agreement policy.

[336] Council Regulation (EEC) 2212/80 of 27 June 1980 on the Conclusion of the Agreement Between the Government of the Republic of Senegal and the European Economic Community on the Fishing off the Coast of Senegal, of the Protocol, and of the Exchange of Letters referring thereto [1980] OJ L226/16.

[337] Article 23 the Cotonou Agreement (op cit n 287).

[338] Ibid at art 32(1)(c)(i).

[339] Ibid at art 23(d).

3.2 The impact of trade concessions on EU-African relations

At its formation, the EEC's trade policy towards its colonies reflected its internal interests in fostering European development in the post-World War II period and establishing an economic union between its member states.[340] As provided for by the Treaty of Rome, the EEC promoted reciprocal trade preferences between itself and the associate states en bloc.[341] Mutual trade preferences were maintained in the subsequent Yaoundé agreement but the initial single free-trade area was replaced by eighteen free-trade areas between each of the former colonies and the Community. The EEC's concern with maintaining sound economic ties with its former colonies arose from the desire to protect the commercial interests of its member states and to penetrate markets that had previously been the exclusive domain of the colonising member states.[342]

Under the Yaoundé agreements, ACP trade with the EEC failed to increase significantly. This trend continued under the new non-reciprocal system of trade preferences introduced in Lomé I, in terms of which ACP industrial and agricultural products enjoyed favourable access to the European market. ACP exports lagged behind those of other developing countries in Asia and Latin America.[343] Factors contributing towards this poor performance included the erosion of the ACP bloc's preference margin by the EEC's introduction of a General System of Preferences for all non-ACP developing countries and its conclusion of preferential bilateral trade agreements with other developing countries; domestic factors within ACP states such as trade policies and export taxes were also instrumental.[344] Most noticeably, ACP exports

[340] Grill op cit n 298 at 152.
[341] Ibid at 137 and art 183 EC Treaty op cit n 170.
[342] Grilli ibid at 144 and 160.
[343] Almost all industrial products enjoyed tariff- and quota- free access to the EEC market while agricultural products were granted less favourable preferences and were required to comply with strict rules concerning their origin.
[344] Grilli op cit n 298 at 170 and 148, 151. The General System of Preferences (GSP) granted developing countries market access for industrial products at tariffs below most favoured nation rate. Examples of

remained highly concentrated at both a country and a commodity level, mirroring past colonial trade patterns.[345] A further influential factor was that in order to benefit from the trade preferences, products were - and still are - required to 'originate' from ACP states, meaning that were either 'wholly' obtained in these states or were obtained in the ACP states incorporating materials that had undergone 'sufficient working or processing' in these states.[346] 'Wholly obtained' fisheries products are defined in relation to the ownership of the fishing vessel rather than whether the fish were caught in the jurisdictional waters of the ACP country or not and arguably favour EU-registered vessels.[347] If not 'wholly obtained' in ACP states, processed fisheries products can only be classified as 'originating' from ACP states if they are 'sufficiently worked or processed' in these states.[348] The rules of origin are strict and with the exception of minor amendments to, for example, the derogation rules, have remained the same since the first Lomé convention. They have been criticised on various grounds including their complexity, inflexibility, and their tendency to perpetuate the dependency of ACP states on the EU – they arguably provide a substantial incentive for coastal states that lack the capacity to profitably harvest their own stocks to grant the Community fleet access to these stocks on terms that favour the EU.[349] The rule of origin regarding tuna (particularly canned tuna) has been subject to particularly ardent criticism as its restrictiveness results in a

preferential trade agreements are Council Decision (EC) 658/2000 of 28 September 2000 on the Conclusion of the Economic Partnership, Political Coordination and Cooperation Agreement between the European Community and its Member States, of the One Part, and the United Mexican States, of the Other Part [2000] OJ L276/46 and Council Decision (EC) 979/2002 of 18 November 2002 on the Conclusion of the Agreement establishing an Association between the European Community and its Member States, of the One Part, and the Republic of Chile, of the Other Part OJ [2002] OJ L352/1.

[345] Grilli ibid at 168 and 169.

[346] As outlined in Annex V of the Cotonou Agreement 'Trade regime applicable during the preparatory period referred to in article 37(1)' and Protocol 1 'Concerning the definition of the concept of "originating products" and methods of administrative cooperation' at arts 2(1)(a) and (b) respectively.

[347] Ibid at arts 3(1) – 3(3).

[348] As outlined in detailed provisions of Annex II of the Protocol. See Article 4(1) read together with Annex II 'List of working or processing required to be carried out on non-originating materials in order that the product manufactured can obtain originating status'. These conditions must be fulfilled 'without interruption' in the ACP state in question in order to qualify the products as 'originating' in the ACP state (art 11(1) 'territorial requirements').

[349] See for example CFFA (Coalition for Fair Fisheries Agreements), 'Comparing EU Free Trade Agreements: Fisheries' (2005) 6J European Centre for Development Policy Management (ECDPM) InBrief (ECDPM with CTA (Technical Centre for Agriculture and Rural Cooperation ACP-EU), Maastricht 2005) <www.ecdpm.org/ftainbriefs> accessed March 2006.

significant portion of potentially highly-valuable ACP tuna catches being unable to comply with the rule and accordingly, not benefiting from preferential access to the EU market.[350]

The Cotonou agreement, which replaced the Lomé agreements in June 2000, introduced fundamental changes to the trade arrangements between the EU and the ACP group.[351] These changes aimed to foster the development of 'sound' economic policies in the ACP states towards macro-economic stability and to promote trade as an engine of growth and sustained development in the ACP states.[352] The new system provides for the continued operation of the uniform, non-reciprocal trade preferences instituted under Lomé until January 2008, when they will be replaced by a new WTO-compliant arrangement.[353] The primary instruments of the new arrangement will be a series of negotiated regional economic partnership agreements that will mutually liberalise trade between the parties. Non-reciprocal preferences for least-developed ACP states will be maintained under the EU's preference programme for least

[350] See for example, CFFA ibid, Block L and Grynberg R 'EU rules of origin for ACP tuna products (HS Chapter 16.04)' (2004) paper for Commonwealth Secretariat. Cross-reference with pp 188, 204 and 205, where I discuss this in relation to Senegal. The ACP states' declaration as recorded in the Cotonou agreement is indicative of their dissatisfaction with the existing rules of origin – they request that all catches harvested in their territorial waters and EEZs and those obligatorily landed in their ports should enjoy originating status: Declaration XXXIX 'ACP Declaration relating to Protocol 1 of Annex V on the origin of fishery products', which notes that the 'ACP States reaffirm the point of view ... that following the exercise of their sovereign rights over fishery resources in the waters within their national jurisdiction, including the exclusive economic zone, as defined in the United Nations Convention on the Law of the Sea, all catches effected in those waters and obligatorily landed in ports of the ACP States for processing should enjoy originating status'. In March 2005, the Commission presented a communication to the Council, the European Parliament and the European Social and Economic Committee on suggested revisions of the rules of origin to make them simpler and more transparent (Commission of the European Communities 'Communication from the Commission to the Council, the European Parliament and the European Social and Economic Committee: The Rules of Origin in Preferential Trade Arrangements - Orientations For the Future' COM (2005) 100 final). The Communication followed the adoption by the Commission of an earlier Green Paper on the topic (Commission of the European Communities 'Green Paper on the Future of Rules of Origin in Preferential Trade Arrangements' COM (2003) 787 final) and with regard to fisheries products, suggested that current criteria relating to characteristics of the fishing vessel may need to be reviewed, proposing that the origin of the fish should be based on the flag, registration and 'simplified yet adequate conditions' regarding property, while the crew conditions should be removed (at para 1.1.1.).

[351] Cotonou op cit n 287. The agreement was concluded between the fifteen member states of the EU and 77 ACP states. The agreement is binding for twenty years, subject to review every five years. Various practical components, such as the finance provisions and the trade regime will be re-negotiated at shorter intervals.

[352] JA McMahon, 'Negotiating Continuity or Change?' in Barbarinde and Faber op cit n 205 at 32, 40 and 50 and Commission of the European Communities, 'Green Paper on Relations between the European Union and the ACP Countries on the Eve of the 21st Century – Challenges and Options for a New Partnership' COM (1996) 570 final (Green Paper on Relations with ACP Countries) at iv and 17.

[353] Cotonou op cit n 287 at arts 36 and 37.

developed countries (LDCs), while non-reciprocal trade relations under the EU's General System of Preferences will be available for any non-LDC states unable to conclude economic partnership agreements.[354] In both instances, preferences will be conditional on the country's ability to comply with the appropriate rules of origin.[355]

The new trade arrangements are strongly rooted in a regionalist approach that promotes regional integration and intra-regional trade as means to boost ACP economic development.[356] The potential gains from trade arrangements based on regional integration include trade creation and increased direct foreign investment, although it is argued that benefits will be minimal for those poorer states that do not engage in intra-regional trade on any significant scale.[357] Negotiations for the new trade arrangements are currently underway. While it is unclear what their final texts will contain, they will likely be rooted in the neo-liberal economic policies of the World Trade Organisation (WTO) framework and will attempt to redress the incompatibility of Lomé's non-reciprocal trade regime with the WTO's most favoured nation principle, which was highlighted by the 1997 WTO Dispute Settlement Panel rulings on the Lomé banana protocol.[358]

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[354] Article 37. The EU's non-reciprocal preference programme for LDC countries falls under its 'Everything But Arms' programme (a special arrangement under its GSP), which grants tariff-free access to the EU market for almost all exports other than arms from the 49 UN-classified LDCs. The GSP grants products imported from GSP beneficiary countries either duty-free access or tariff reduction on entering the EU market depending on whether the products are classified as non-sensitive or sensitive. The current GSP scheme runs from January 2006 until December 2008 (Council Regulation (EC) No 980/05 of 27 June 2005 Applying a Scheme of Generalised Tariff Preferences [2005] OJ L169/1).

[355] The rules of origin for products covered by the GSP are contained in arts 66-97 and annexes 12-18 and 21 of Commission Regulation (EEC) No 2454/93 of 2 July 1993 Laying down Provisions for the Implementation of Council Regulation (EEC) No 2913/92 Establishing the Community Customs Code [1993] OJ L253/1 as amended.

[356] Although it is unclear to what extent this support of regionalism aims to promote collective self-reliance or to tie these economies more closely to the EU's 'trade orbit'. Wright in Barbarinde and Faber op cit n 316 at 71.

[357] Ibid at 84, G Faber, 'Economic Partnership Agreements and Regional Integration among the ACP Countries' in Babarinde and Faber ibid at 87-92 and DW te Velde and S Bilal, 'Foreign Direct Investment in the Cotonou Partnership Agreement: Building on Private Sector Investment' in Babarinde and Faber ibid at 93 and 197 – 218.

[358] Wright op cit n 316 at 20-22 and 68-70. See 'EC-Regime for the Importation, Sale and Distribution of Bananas – Complaints by Ecuador, Guatemala, Honduras, Mexico and United States' Report of the Panel (22 May 1997) WT/DS27/R and 'Regime for the Importation, Sale and Distribution of Bananas' Report of the Appellate Body (9 September 1997) WT/DS27/AB/R. The most favoured national principle requires equal treatment and non-discrimination among member states. Although a waiver from WTO rules was subsequently granted to the EU and ACP group, it was valid only until 2000.

The progression of the discussions on the new trade arrangements is likely to provide an insight into how future negotiations on other matters, such as fisheries access arrangements, might proceed.[359] In particular, it will be interesting to see how Cotonou's emphasis on the need for regular 'comprehensive' and 'deep' political dialogue between the parties plays out in practice in these and other future interactions between the EU and ACP states.[360] The express aim of this commitment is to foster information exchange and mutual understanding between the parties and to assess progress towards the 'essential elements' of the agreement (respect for human rights, democratic principles, and the rule of law) and 'good governance'.[361] Cotonou confirms the 'equality' of the partners and their ownership of their respective development strategies, but qualifies this freedom by the obligation to have 'due regard' for the essential elements. The essential elements thus act as constraints on the development strategies that the ACP states may adopt. 'Political dialogue' and 'equality' are cited as two of the fundamental development cooperation principles on which the agreement is based, the third being 'differentiation and regionalisation'.[362] This new emphasis on proactive, positive political dialogue between the parties represents a culmination of the parties' movement away from past ad-hoc political interactions, which were historically largely limited to addressing human rights and democracy concerns.[363] It is echoed in the EU's new policy on bilateral fisheries agreements with developing coastal states in the

[359] S Ponte, JR Nielsen and L Campling, 'Trade and Competitiveness in African Fish Exports: Impacts of WTO and EU Negotiations and Regulation' Trade Brief for Trade Law Centre for Southern Africa (TRALAC), 13 September 2005, <http://www.tralac.org/scripts/content.php?id=4070> accessed 20 September 2005 suggest that the renegotiation of current bilateral fisheries agreements with developing countries will likely be affected by the negotiations of the new EPAs.

[360] Cotonou op cit n 287 at arts 8(1) and (2).

[361] Ibid at arts 2 and 8(4). The essential elements are outlined in art 9(2) and reflect art 177(2) EC Treaty (op cit n 170). 'Good governance' refers to 'transparent and accountable management of human, natural, economic and financial resources for the purposes of equitable and sustainable development' (art 9(4)). It is included as a 'fundamental' rather than an 'essential' element and has risen in status from that of a 'particular aim' under Lomé IV, although it remains unclear what the exact legal implications of this new legal classification are.

[362] Cotonou ibid at art 2.

[363] Grill op cit n 298 at 156-158.

context of promoting increased coordination between development cooperation and fisheries development policies in the future.[364]

3.3 Economic aid: an instrument for maintaining Africa's dependence on Europe?

The second key component of the EU's development cooperation policy towards Africa is economic assistance (aid), which similarly originates in the past colonial relations between EU member states and various African nations. In the face of increasingly diminished trade preferences afforded to the ACP bloc by the EU, aid has arguably played a key role in sustaining relations between the parties. The benefits for the ACP states are obvious: aid is an important source of foreign income and international purchasing power, while for the EU, aid plays a valuable foreign policy role, serving as a symbol of Europe's commitment to Africa's development and a sign of the transition from bilateral to multilateral socio-economic relations between former African colonies and Europe.[365]

Community aid is frequently described as a 'new aid model' in light of its claims to 'additionality', political neutrality and joint management.[366] None of these claims are irrefutable in the context of ACP aid, however. Instead, Community aid to African states appears to be strongly rooted in, and indeed perpetuates, colonial patterns of dependency. Specifically, with regard to 'additionality', Community aid to the ACP states has not complemented that of bilateral member state aid over the years, but has instead diminished.[367]

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[364] Commission of the European Communities, 'Communication from the Commission on an Integrated Framework for Fisheries Partnership Agreements with Third Countries' (FPA Communication) COM (2002) 637 final. I discuss this policy at pp 151-157 below.
[365] Grilli op cit n 298 at 53, 55 and 126.
[366] Ibid at 91 and P Hoebink, 'European Development Aid in Transition' in Barbarinde and Faber op cit n 316 at 128.
[367] In terms of art 181a EC Treaty (op cit n 170) Community aid is required to complement that of the member states.

Bilateral aid is thus predominant, particularly between France and its ex-colonies.[368] The ACP states favour the centralisation (or 'Europeanisation') of EU aid as a means to reduce their political dependence on single donors, but member states are reluctant to relinquish the leverage that aid provides them in promoting their political and economic objectives.[369] Member states' political interests have also strongly influenced the distribution of Community aid as evidenced by the fact that francophone African countries have remained the preferred recipients of Community aid under the Lomé conventions, countering the EU's claims to political neutrality in its aid distribution.[370] This is strengthened by the strong regional focus of Community aid, which originates in the Treaty of Rome obligation on the Community to provide economic assistance to the (then) colonies of its member states.[371] Given the colonial ties of the member states, Community aid was thus initially channelled primarily to Africa, particularly West African states.[372] The Yaoundé agreements cemented this trend, which was subsequently entrenched by the Lomé agreements. While the EU has since expanded its aid net by extending financial assistance to some Latin American and Asian countries, it has not done so on a significant scale.[373] Finally, adherence to the principle of joint management of aid in terms of which beneficiary countries are encouraged to actively participate in controlling the implementation of the projects financed by the Community, has arguably diminished over time; the introduction of 'programming' of country aid in the 1980s had the effect of 'narrowing' recipients' ownership of their development strategies.[374]

In light of these characteristics, it can be argued that Community aid is simply a continuation of colonial patterns of socio-economic dependency in another guise, as opposed to a

[368] Grilli op cit n 298 at 96 – 98 and Hoebink op cit n 366 at 136.
[369] Grilli ibid at 75-79.
[370] Ibid at 102 –105.
[371] See art 131EC Treaty op cit n 170.
[372] Grilli op cit n 298 at 50, 51.
[373] The call has come in particular from countries such as Germany, the Netherlands and Denmark.
[374] Grilli op cit n 298 at 110, 111.

genuinely new form of cooperation with developing states.[375] This is supported by broader criticisms of EU aid (both Community and bilateral member state aid), namely that it creates unsustainable consumption habits, stifles local production of traditional food staples, and continually finances external payment imbalances in the recipient countries. This fosters a culture of 'entitlement' to aid within the recipient states and cements a relationship of dependency on the EU for financial assistance rather than fostering domestic self-reliance and self-sufficiency.[376]

The Cotonou package for financial aid does not differ significantly from the approach under the previous development cooperation agreements but it reflects some acknowledgement of the type of concerns highlighted above.[377] Most noticeably, it introduces a change in the way in which aid is distributed to individual ACP countries: while aid assignment remains result-oriented, delivery is now no longer dependent only on needs but also on performance. This is measured by states' progress in implementing institutional reforms and sustainable development measures and in reducing poverty, as well as their macro-economic and sectoral policy performance.[378] Aid is no longer locked into specific projects but is instead linked to various sectoral policies. In line with the agreement's new emphasis on civil society involvement, capacity-building is now also eligible to receive financial support.[379] The hope is that these (and other) changes to the aid component will result in more effective use of aid in the ACP states by fostering the development of policies that stimulate domestic economic growth and boost employment, thus contributing to poverty-reduction efforts.[380] Presumably,

[375] As highlighted by Grilli ibid and Hoebink op cit n 366.
[376] Grilli ibid at 123, 145, 146 and Edye and Linter op cit n 308 at 13, 14 and 21.
[377] K Arts, 'ACP-EU Relations in a New Era: The Cotonou Agreement' (2003) 40 Common Market Law Review 95-116 at 110.
[378] Cotonou op cit n 287 at arts 3(1)(a) and (b) and 5 of Annex IV.
[379] Ibid at art 7, read together with art 3(2) of Annex IV. See also Hoebink op cit n 366 at 148 and 150-153.
[380] Green Paper op cit n 249 at 60 and 61.

this will in turn foster self-sufficiency, although this is noticeably absent as an express objective.

3.4 Conclusion

The comparative advantages that the EU's development cooperation policy affords the ACP states over other developing countries are gradually being eroded. At the same time, the trade and aid concessions granted to the ACP bloc by the EU are increasingly becoming conditional, as reflected in Cotonou's emphasis on mutual obligations and accountability through political dialogue and reviews of aid performance.[381] Critics are sceptical as to whether the EU's new development cooperation approach towards the ACP states reflects a new perception of them as 'fully-sovereign' entities unbound by dependant ties to their former colonial powers or whether it simply mirrors a reality in which the ACP bloc has decreased in strategic importance to the EU.[382] While there is no easy answer to this question, it is clear that the Cotonou arrangement largely maintains the historically-rooted patterns of socio-economic relations between West African states and Europe (albeit in an amended form), which arguably sustains their relationship of unequal inter-dependency.

4. The impact of the colonial legacy on bilateral fisheries agreements

Marine fisheries in West African coastal states can make a significant contribution to local sustainable development if they are sustainably managed as their export potential guarantees foreign income, the industry provides significant job opportunities (on vessels and in land-based industries) and the artisanal sector contributes toward local food security.[383] Bilateral

[381] Babarinde and Faber op cit n 316 at 9.
[382] Ibid.
[383] This is discussed in detail in chap 7 in relation to Senegal.

fisheries agreements between these states and the EU have the potential to support and foster this objective, but they have historically failed to do so.[384] Instead, they have contributed to the unsustainable use of fisheries resources in West African coastal waters. While the reasons for this are complex, one such contributing factor is arguably the continuing socio-economic dependency of the West African states on the EU. This renders them inclined to grant the Community access to their waters on terms that favour the EU's short-term interests over the long-term sustainability of their coastal fisheries, as I discuss in detail in subsequent chapters.[385]

5. Conclusion

In this chapter I have outlined the broader context in which bilateral fisheries agreements between the EU and West African coastal states take place and have suggested that the historically-based social, political and economic relations between the parties provide a useful lens for examining these interactions. Colonial relations between European powers and their African territories gave way to initial inter-dependency between the parties and subsequently, to a relationship of increasingly unequal dependency in terms of which the African states became ever-more reliant on the trade and aid concessions granted them by Europe. Throughout, African states fulfilled the role of the suppliers of raw natural materials to Europe. This sets the background for the bilateral fisheries agreements concluded between the EU and many West African coastal states. In the remainder of my thesis I focus on these agreements in greater detail and interrogate their role with respect to sustainability. In the next chapter, I begin this process by introducing the EU's common fisheries policy with particular

[384] EC Treaty op cit n 170 at arts 177, 178, which require the EU to ensure coherence between development goals and fisheries relations with developing coastal third countries.
[385] In particular, in chaps 6-8.

attention to its contents regarding Community fleet activity in 'external' waters and bilateral fisheries agreements.

PART II

FISHERIES REGULATION IN THE EU

In Part II, I apply the theoretical narrative presented in Part I to a domestic policy context. Specifically, I narrow my focus to examine the manner in which sustainability objectives and broader socio-economic concerns inform the EU's common fisheries policy. My interest lies particularly in whether the operationalisation of the EU's policy concerning external bilateral fishing relations with developing coastal states accords with internal Community integration efforts in the fisheries sector, or whether, to the contrary, mere lip-service is paid in bilateral fisheries agreements to the promotion of sustainability in the pursuit of political and economic self-interests. I begin this investigation in chapter 5, by discussing the incorporation into and evolution of sustainability concerns within the Community's fisheries policy with reference to concurrent integration efforts in the environmental sphere. In the subsequent chapter, I transpose this examination into the realm of the Community's policy concerning EU fishing relations with developing third countries. This sets the scene for my work in Part III, where I draw on an illustrative case study to illuminate my theoretical deductions.

5

THE EU'S COMMON FISHERIES POLICY: SUSTAINABILITY AND INTEGRATION

1. Introduction

In the previous chapter I explained how the impact of the colonial legacy between Europe and West African coastal states affects their bilateral fisheries relations alongside, and frequently over and above, sustainability concerns. In this chapter I narrow my focus to examine the extent to which Community regulation of its fisheries is informed by the objective of sustainability. The EU's modern common fisheries policy (CFP) expressly obliges the Community fleet to engage in sustainable fishing. This duty originated in concern for the biological conservation of Europe's fish stocks. It subsequently evolved into a comprehensive obligation to ensure the sustainable exploitation of fisheries within and beyond Community waters towards sustainable development, in response to EC Treaty obligations to integrate environmental protection into all Community policies.[386] Regulatory methods incorporated into the CFP towards this end reflect similar trends towards 'new' modes of governance in the environmental sphere. The CFP, however, continues to be plagued by difficulties in operationalising its sustainability objectives. Together with its belated incorporation into the Community's fisheries policy, this partly explains why the objective of sustainable fishing has been poorly promoted by the Community to date most noticeably through its bilateral fisheries agreements with developing third countries.[387] In the next chapter I home in further to examine EU fishing in terms of these agreements with respect to sustainability.

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[386] The integration principle is contained in art 6 EC Treaty op cit n 170. It is discussed in detail below in pp 116-124.

[387] 'Third countries' is a term used in the Treaty Establishing the European Economic Community (Treaty of Rome) (adopted 24 March 1957, entered into force 1 January 1958) 298 UNTS 11 and in Community

2. The economic origins of the common fisheries policy

The Community's common fisheries policy (CFP) was established in 1970 on the basis of the treaty provisions creating a common agricultural policy.[388] Its goals, which reflected the predominant economic ambitions of the (then) European Economic Community (EEC) were to create a robust Community fishing industry, increase fisheries productivity and establish a common Community market in fish and fish products.[389] The founding pillars of the CFP were thus a common organisation of the market in fishery products and a common structural policy for the fishing industry.[390]

The common organisation of the market was established to stabilise the prices of fisheries products and to ensure coherence between supply and demand. To these ends, the CFP provided for the introduction of market organisation measures establishing common marketing standards for fresh fish products with regard to quality, packaging and labelling, introducing a price support system based on financial intervention mechanisms and regulating fisheries trade with non-Community countries.[391] The structural policy focused almost exclusively on increasing the catch levels of the Community fleet and provided for substantial

documents. It is not legally defined but simply put, refers to countries that are not member states of the European Union.

[388] Articles 32-38 EC Treaty (op cit n 170), ex arts 38-43 of the Treaty of Rome ibid. 'Agricultural products' are defined as '...the products of the soil, of stock-farming and of fisheries and products of first-stage processing directly related to these products' (art 32(1) ex art 38(1)). Article 3(1)(e) EC Treaty cites Community activities as including a common policy in fisheries.

[389] Article 33 (1) EC Treaty ibid (ex art 39(1)) and W Howarth, 'A Sustainable Common Fisheries Policy' (2003) Water Law 1 - 6 at 4. See also art 2 of the Treaty of Rome ibid regarding the purposes of the formation of the European Economic Community (EEC).

[390] Council Regulation (EEC) No 2142/70 of 20 October 1970 on the Common Organisation of the Market in Fishery Products [1970] OJ L236/5 and Council Regulation (EEC) No 2141/70 of 20 October 1970 Laying Down a Common Structural Policy for the Fishing Industry [1970] OJ L236/1. Over the years, various other aspects were added to the policy; the modern CFP comprises five 'pillars' namely: a conservation and management policy, a fisheries structural policy, the common organisation of fisheries markets, an external policy (international fisheries relations sphere), and a monitoring and inspection policy.

[391] See Council Regulation (EEC) No 100/76 of 19 January 1976 on the Common Organisation of the Market in Fishery Products [1976] OJ L20/1, which replaced Regulation 2142/70 ibid and its various amendments as a consolidated single text of the organisation of the market in fishery products (preamble).

investment to this end.[392] Neither policies paid particular attention to fisheries conservation at this early stage; the adverse impact of the structural policy in particular on the sustainability of Community fishing soon became evident, however. In terms of the policy, Community subsidisation was directed almost exclusively at fleet renewal and modernisation throughout the 1970s, resulting in a steady increase in Community fishing capacity.[393] As the structural policy did not regulate the relationship between fleet capacity and resource availability, however, over-capacity became a growing problem which threatened to adversely affect the long-term sustainability of Community fish stocks.[394] The Community responded in the early 1980s by imposing restrictions on the expansion of capacity; at around the same time, fisheries conservation measures were introduced into the CFP to supplement the structural policy.

3. The introduction of environmental measures into the common fisheries policy and the influence of the 'integration principle'

In 1983 the Community introduced a fisheries conservation and management system aimed at

[392] Article 9(1) of Council Regulation (EEC) No 101/76 of 19 January 1976 laying down a Common Structural Policy for the Fishing Industry [1976] OJ L20/9. The term 'Community fleet' is used regularly in Commission communications and proposals concerning fisheries and I have used it throughout my thesis. The term is not legally defined, but the meaning of 'Community fishing vessel' is identified as 'a fishing vessel flying the flag of a Member State and registered in the Community'. I use the term 'Community fleet' to refer collectively to fishing vessels operating under the flags of coastal Member States and registered in the Community.

[393] Funding was available through Community structural funds (specifically, from the European Agriculture Guidance and Guarantee Fund) until 1993, when the Financial Instrument of Fisheries Guidance (FIFG) was established to finance the fisheries sector. See Council Regulation (EC) No 1263/99 of 21 June 1999 on the Financial Instruments for Fisheries Guidance [1999] OJ L161/54 to be read together with Council Regulation (EC) No 1260/99 of 21 June 1999 Laying Down General Provisions on the Structural Funds [1999] OJ L161/1, which outlines all Community's Structural Funds. For a useful discussion on the development of structural funds in the EU, see D Allen, 'Cohesion and the Structural Funds: Transfers and Trade-offs' in H Wallace and W Wallace (eds), *Policy-Making in the European Union* (4th edn Oxford University Press, Oxford 2000) at 243-265.

[394] D Symes, 'The Future of Europe's Fisheries: Towards a 2020 Vision' (2001) Geography 86 (4) 318-328 at 320 and Coffey op cit n 215 at 53. Over-capacity is the excess potential fishing ability of a fleet above what is required to harvest the desired catch at the lowest cost (cross-reference to p 80 fn 124). It is a major contributing factor to over-fishing (Coffey at 53).

> '...ensur[ing]...the conservation of the biological resources of the sea and their balanced exploitation on a lasting basis and in appropriate economic and social conditions...'[395]

The policy suggested conservation measures to these ends including the restriction of fishing effort (particularly by limiting catches), the regulation of fishing gear and the establishment of minimum standards for fish size and weight.[396] The cornerstone of the new conservation policy was the Council's capacity to annually determine the total allowable catch (TAC) of commercially exploitable species in Community waters and to allocate portions (quotas) of the TAC to individual member states.[397] The introduction of these conservation measures coincided with broader developments in the Community towards environmental regulation.

While the founding treaties of the EEC made no mention of the environment, Community concern for environmental matters grew over the years. In 1987, the Single European Act introduced a legal basis for a Community environmental policy and simultaneously imposed an obligation on the Community to ensure that 'environmental protection requirements [were] a component of the Community's other policies'.[398] This 'integration' obligation was strengthened in the subsequent 1992 Treaty on European Union, which required Community institutions and member states to integrate environmental protection 'into the definition and

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[395] Article 1 of Council Regulation (EEC) No 170/83 of 25 January 1983 Establishing a Community System for the Conservation and Management of Fishery Resources [1983] OJ L24/1. It was introduced together with Council Regulation (EEC) No 171/83 of 25 January 1983 Laying Down Certain Technical Measures for the Conservation of Fishery Resources [1983] OJ L24/14 (which stipulated technical conservation measures) and Council Regulation (EEC) No 172/83 of 25 January 1983 Fixing for Certain Fish Stocks and Groups of Fish Stocks Occurring in the Community's Fishing Zone, Total Allowable Catches for 1982, the Share of these Catches Available to the Community, the Allocation of that Share between the Member States and the Conditions under which the Total Allowable Catches May be Fished [1983] O J L24 /30 (which fixed the TACs for certain stocks for the 1982 fishing season (in terms of art 2) and allocated portions of them to the member states (art 3)).

[396] Regulation 170/83 ibid at art 2.

[397] According to Karagiannakos op cit n 230 at 305. See ibid at art 3. 'Community waters' refer to the Community's exclusive economic zone established in terms of Council Resolution of 3 November 1976 op cit n 335.

[398] Single European Act (signed 28 February 1986, entered into force 1 July 1987) [1987] OJ L169/1. The integration principle is found in art 130(r).

implementation of other Community policies'.[399] At the same time, the Treaty located environmental protection within broader sustainability concerns (albeit with a strong development gloss), providing that

> '[t]he Community shall have as its task...to promote throughout the Community a harmonious and balanced development of economic activities, sustainable and non-inflationary growth respecting the environment'.[400]

Integration thus emerged in the EU as a guiding paradigm as well as a procedural tool. Rooted in the recognition of the interdependency of the social, economic and biological aspects of sustainability, it obliges the Community to devise and implement means to achieve an effective balance between these objectives in all spheres towards the overall goal of sustainable development.[401] The Community took various steps to foster integration including introducing institutional reforms and increasingly highlighting the importance of the principle in the Council's annual environmental action programmes.[402] A key outcome of the emphasis on integration was a fundamental shift in EU environmental regulation away from reliance on traditional direct command-and-control regulatory modes, such as binding legislation, towards new, more collaborative and procedurally-based 'soft' law methods of governance. This is

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[399] Treaty on European Union (Maastricht Treaty) (adopted 7 February 1992, entered into force 1 November 1993) [1992] OJ C191/1 at art 130(r)(2). M Hession and R Macrory, 'The Legal Duty of Environmental Integration: Commitment and Obligation or Enforceable Right?' in T O'Riordan and H Voisey *The Transition to Sustainability: The Politics of Agenda 21 in Europe* (Earthscan Publications Ltd, UK 1998) at 106 argue that Community bodies as well as member states, both when acting within the Council of Ministers and in their implementation of Community policies, are bound by the duty.

[400] Ibid at art 2.

[401] Cross-reference with p 63, where I discuss integration as an international law objective.

[402] In particular, integration was the main theme of the Council of the European Community's fifth environmental action program: Resolution of the Council and the Representatives of the Governments of the Member States, Meeting within the Council of 1 February 1993 on a Community Programme of Policy and Action in Relation to the Environment and Sustainable Development – A European Community Programme of Policy and Action in Relation to the Environment and Sustainable Development [1992] OJ C138/1. The programme identified five key Community spheres requiring integration: industry, energy, transport, agriculture and tourism (art 4). See also A Lenschow, 'New Regulatory Approaches in "Greening" EU Policies' (2002) 8 (1) European Law Journal 19-37 at 21, 22 and D Wilkinson, 'Steps Towards Integrating the Environment into Other EU Policy Sectors' in O'Riordon and Voisey op cit n 399 at 118. Institutional reforms included the creation of an integration unit in the Environment Directorate-General (D-G XI) and the requirement that each Directorate-General (D-G) designate an integration correspondent to liaise between their D-G and DG-XI and to ensure that environmental concerns are afforded due consideration within their respective DG.

particularly evident in the area of environmental assessment, where the framework regulatory rules are characterised by flexibility and emphasis on procedural instruments and means for continual evaluation and adaptation.[403]

In fisheries, integration efforts were fraught and progress towards the effective accommodation of environmental and sustainability concerns was slow. Despite the introduction of conservatory measures into the CFP in 1983, the 1992 review of the policy revealed that it had failed to stem the decline of key Community fish stocks and to prevent the growing over-capacity of the Community fleet.[404] The TAC system was identified as a particularly problematic element of the conservation policy. It was - and continues to be - criticised on a variety of grounds; some mirror earlier general criticisms of TACs (discussed in chapter 3), while others are more context-specific.[405] A fundamental weakness of the EU's TAC approach is that it is based on inadequate scientific data: the majority of the TACs set by the Council are 'precautionary', meaning that they are determined on the basis of limited scientific information. Despite the use of terminology, these TACs have traditionally not been determined using a precautionary approach.[406] Relatively few 'analytical' TACs are established, that is TACs derived from analyses of 'sufficient' scientific data.[407] A further problem is that TACs are determined for only a small percentage of the species harvested in Community waters, leaving the remaining stock unregulated, and are established on a single-

[403] See J Scott and J Holder, 'Law and New Environmental Governance in the European Union' in G de Burca and J Scott (eds), *Law and New Governance in the EU and the US* (Hart, Oxford 2006) at 217-219.
[404] Conservation measures were introduced by Regulation 170/83 op cit n 395. See also YH Song, 'The EC's Common Fisheries Policy in the 1990s' (1995) Ocean Development and International Law 26 (1) 31-55 at 40 and Foders op cit n 215 at 15. See also Proposal for a Council Regulation (EEC) Establishing a Community System for Fisheries and Aquaculture COM (1992) 387 final.
[405] Cross-reference with pp 75-79, where I discuss general criticisms of the TAC system from a sustainability perspective.
[406] Cross-reference with p 61 where I discuss the precautionary approach.
[407] Karagiannakos op cit n 215 at 236, Coffey op cit n 215 at 38, 39 and Foders op cit n 215 at 17. See Commission of the European Communities, 'Report from the Commission to the Council and the European Parliament on the Application of the Community System for Fisheries and Aquaculture in 1996-1998' COM (2000) 15 final at para 1.3 (fn 5) for a description of these different types of quotas. The need to improve scientific data was still a major concern come the 2002 CFP review – see Green Paper op cit n 249 at para 3.1.2 and Roadmap Communication op cit n 221 at para 3.1.

species basis, despite the fact that most targeted stocks occur in mixed fisheries.[408] Member states are also known to use their political influence to persuade the Council to set TACs in excess of scientific recommendations, which contributes to over-fishing.[409] The principle of 'relative stability', which guides the Council's allocation of portions of the TACs to individual member states, exacerbates this tendency. The principle, which was introduced to promote stability in member states' fishing industries and to avoid protracted annual negotiations on allocations, guarantees each member state a specific percentage of the TAC for each species based on their original 'reference allocation' in the 1983 quota distributions.[410] This approach is inflexible and is therefore arguably unconducive to promoting sustainable fishing as it is unable to respond effectively to changes in the status of fish stocks.[411]

Both under- and over-utilisation of member states' quotas indicate problems with the Community quota system. Quotas are underutilised either because the TAC is unrealistically high or because individual vessel owners choose to diversify their catches by including high-value, non-TAC species in order to maximise their profits.[412] More commonly, member states exceed their allocated quotas, which contributes to the over-exploitation of certain species. 'Quota-hopping' is also common in terms of which vessels registered in one member state re-register in another in order to utilise its quota. This occurs either because the original member state's quota has already been fulfilled or because the second state has a weaker fisheries

[408] Foders ibid at 18, Karagiannakos ibid at 243, Coffey ibid at 39 and Song op cit n 404 at 42.
[409] See for example CD Payne, 'Policy-making in Nested Institutions: Explaining the Conservation Failure of the EU's Common Fisheries Policy' (2000) 38 Journal of Common Market Studies 303-24 at 315 and 316, Karagiannakos ibid at 236, Foders ibid, Song ibid and Green Paper op cit n 249 at for example para 3.1, specifically para 3.1.2.
[410] For a brief discussion on the principle of 'relative stability', see for example Coffey op cit n 215 at 39 and Karagiannakos ibid.
[411] Coffey ibid, Payne op cit n 409 at 314, 315 and Karagiannakos ibid at 236 for a discussion of the technical problems associated with applying the 'relative stability' principle.
[412] Karagiannakos ibid at 244 and Song op cit n 404 at 42.

monitoring and enforcement system.[413] In terms of the CFP, member states have primary responsibility to ensure that their fleets comply with the policy; the Commission merely monitors the national authorities' enforcement of the rules.[414] This devolution of enforcement and monitoring powers makes the effective control of output measures (like quotas) particularly difficult because the discretion that it affords member states lends itself to 'the possibility and the perception' of unequal enforcement among states.[415] The TAC and quota system arguably also contributes to fleet over-capacity as it operates as an incentive for fishers to

> '...expand the fishing activity in order to utilise the catch possibilities in an accelerated way...[to] try to take their share before TACs are taken by other fishermen.'[416]

It is further criticised for contributing to high discard rates in Community waters, which adversely affect the marine environment and contribute towards inaccurate fish mortality figures.[417]

The review of the common fisheries policy exposed these and other weaknesses of the conservation system. A new guiding framework for Community fisheries management was consequently introduced. It was rooted in the principle of sustainability and pledged to promote the

> 'protect[ion] and conserv[ation of] available and accessible living marine aquatic resources, and to provide for rational and responsible exploitation on a sustainable

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[413] Holden op cit n 224 at 117, 118.

[414] Article 23(1) of Council Regulation (EC) No 2371/02 op cit n 221 stipulates that '[u]nless otherwise provided in Community law, Member States shall ensure effective control, inspection and enforcement of the rules of the Common Fishery Policy'. Control and enforcement rules contained in the regulation (arts 21-28) must be read together with Council Regulation (EEC) 2847/93 of 12 October 1993 Establishing a Control System Applicable to the Common Fisheries Policy [1993] O J L261/1, which lays out the CFP's control system in detail.

[415] Payne op cit n 218 at 317 and Coffey op cit n 215 at 42.

[416] Karagiannakos op cit n 215 at 244, Cunningham, Dunn and Whitmarsh op cit n 74 at 151, Foders op cit n 215 at 18 and Payne ibid at 316.

[417] Crean and Symes op cit n 224 (in particular at 427) argue that discarded biomass is one of the main sources of the failure of the CFP. See also Song op cit n 404 at 42, Coffey op cit n 215 at 39, Karagiannakos ibid at 427 and Foders ibid. Cross-reference with p 77, where I discuss the problem of discarding.

> basis, in appropriate economic and social conditions for the sector, taking account of its implications for the marine eco-system...'[418]

On the whole, the new policy stuck to traditional, familiar fisheries regulatory methods, however, relying largely on rigid control of technical matters.[419] From the start, the system was thus unlikely to result in significant improvement in European fisheries management. What was needed was a fresh approach to managing the sector. The impetus for this came from amendments to the EC Treaty in the late 1990s, together with the expanded integration efforts that they sparked.

In 1997, the Treaty of Amsterdam elevated environmental protection to a guiding objective of the EU alongside sustainable development, which was introduced into the Community's legal framework in response to international legal developments and rising internal pressure.[420] In terms of the revised EC Treaty, key tasks of the Community include

> 'promot[ing] throughout the Community a harmonious, balanced and sustainable development of economic activities...[and] a high level of protection and improvement of the quality of the environment.'[421]

Integration was identified as the means to achieve sustainable development -

> '[e]nvironmental protection requirements must be integrated into the definition and implementation of the Community policies and activities...in particular with a view to promoting sustainable development'.[422]

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[418] Article 2(1) of Council Regulation (EEC) No 3760/92 of 20 December 1992 Establishing a Community System for Fisheries and Aquaculture [1992] OJ L389/ 1.

[419] Including the use of total allowable catch and various technical conservation measures – see arts 8(4) and 4(2) ibid.

[420] Treaty of Amsterdam amending the Treaty on European Union, the Treaties establishing the European Communities and Certain Related Acts – Consolidated Version of the Treaty Establishing the European Community (Treaty of Amsterdam) [1997] OJ C 340/0173 10.11.1997 (signed 2 October 1997, entered into force 1 May 1999). N Haigh, 'Introducing the Concept of Sustainable Development into the Treaties of the European Union' in O'Riordon and Voisey op cit n 399 at 71 and Lenschow op cit n 401 at 26. The countries that sought increased reference to environmental concerns in the Treaty, particularly the inclusion of the concept of sustainable development, included Denmark, the Netherlands, Sweden, Finland and Austria (the latter three - incorporated in the 1995 enlargement - were the most vocal).

[421] Article 2 EC Treaty (op cit n 170) as amended by the Treaty of Amsterdam ibid.

In an attempt to drive the integration process forward, the Commission released an 'integration strategy' in 1998, which was subsequently adopted by the Council and served as a reference point for integration initiatives in the various Community sectors (including fisheries).[423] The EU's 2001 sustainable development strategy went a step further, obliging the Council to develop sectoral strategies to integrate environmental concerns into all Community policy areas with a view to implementation as soon as possible.[424] In fisheries, the strategy emphasised the need to improve fisheries management in order to reverse the decline in key stocks and to ensure sustainable fisheries and marine ecosystem management within Community waters and beyond. To achieve these goals, it recommended that during the next CFP review policies should be established eliminating fisheries subsidies that encourage over-fishing and facilitating the reduction of the size and activity of the Community fleet to levels compatible with sustainability.[425]

The 2002 review acknowledged the need for an overhaul of the CFP in order to actively promote integration towards the fostering of genuine sustainable fishing. A number of the earlier sustainable development strategy's suggestions were adopted in the 2002 restructuring of the environmental, structural and external fishing pillars of the CFP (as I discuss below).[426] Reflecting a move towards less traditional regulatory methods in the drive towards integration, environmental assessment was identified as the most appropriate procedural tool to realise the integration obligation within the Community in 2001.[427] A Community directive

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[422] Article 6 EC Treaty.
[423] It was adopted by the Council of Ministers at its 1998 Cardiff Summit. European Commission 'Commission Communication to the European Council: Partnership for Integration – A Strategy for Integrating the Environment into European Union Policies' COM (1998) 333, following the European Council Summit in Cardiff, 1998.
[424] Communication from the Commission, 'A Sustainable Europe for a Better World: A European Union Strategy for Sustainable Development (Commission's Proposal to the Gothenburg European Council)' COM (2001) 264 final.
[425] Ibid at 12.
[426] At para 4.
[427] Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the Assessment of the Effects of Certain Plans and Programmes on the Environment [2001] OJ L187/30. The regulation came into

outlined the circumstances under which environmental assessment of programmes and plans in sectors (including fisheries) should be conducted to this end.[428] A further important policy step was taken in 2005 when, in the context of promoting environmental sustainability, the EU endorsed the findings of the Europe 2005 Ecological Footprint Analysis report.[429] The report, which applies the 'ecological footprint' analysis to measure Europe's demand on nature by calculating the total area required to produce the food and fibre that it consumes, absorb its waste and provide space for its infrastructure, indicates that Europe is currently 'overshooting' its own biocapacity (the capacity of its natural resources to renew themselves) by more than double.[430] Policy and law as well as a change in public attitude thus need to urgently affect changes in European consumption and production patterns to benefit not only Europe but also the rest of the (largely developing) world on which Europe relies to make up its increasing ecological deficit.

The changes initiated in the fisheries sector in response to these various developments in Community law and policy became most apparent at the 2002 CFP review.

4. 'Sustainability' as an imperative of the common fisheries policy

The 2002 review of the CFP revealed the policy's continued failure to successfully accommodate environmental protection into Community fisheries and to address sustainability concerns, and highlighted the need to fundamentally re-shape its contents and

force in July 2004. Cross-reference with p 119 above where I discuss environmental assessment in the context of 'new' methods of governance.

[428] Ibid at art 2 includes fisheries in the cited sectors. Environmental assessment is a procedure for decision-making that requires environmental considerations to be taken into account in determining whether or not to proceed with proposed projects, plans or policies. It includes environmental impact assessment of plans polices and programs. Cross-reference with the requirement to conduct impact assessments of proposed fisheries partnership agreements (p 153).

[429] WWF 2005 op cit n 1.

[430] Ibid at 6. The ecological footprint was first conceived by WE Rees in 'Ecological Footprints and Appropriated Carrying Capacity: What Urban Economics Leaves Out' (1992) 4 (2) Environment and Urbanisation 121-130. I discuss it in greater detail below at pp 248-250.

regulatory methods.[431] Specifically, the Commission noted the 'alarming' state of Community fish stocks, the excessive fishing capacity of the Community fleet and the poor record of control and enforcement in EU fisheries, concluding that

> '...[t]he current poor sustainability performance of the CFP proves that many of the instruments applied over the last twenty years have reached their limits. In this state of crisis there is a need for major change. Reform of the objectives, principles, priorities and instruments of the CFP is more than ever necessary to deliver sustainable development...'[432]

Change was initiated through a number of key legislative and policy reforms including new regulations in the conservation and structural sphere and a new distant water fishing strategy.[433]

4.1 The new conservation policy

Regulation 2371/2002 on the conservation and sustainable exploitation of fisheries introduced the new objective of the CFP as follows:

> '...to provide for sustainable exploitation of living aquatic resources...in the context of sustainable development, taking account of the environmental, economic and social aspects in a balanced manner'.[434]

'Sustainable exploitation' is defined by the Regulation as

> '...the exploitation of a stock in such a way that the future exploitation of the stock will not be prejudiced and that it does not have a negative impact on the marine eco-system'.[435]

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[431] Green Paper op cit n 249 at para 3.1.1.
[432] Roadmap Communication op cit n 221 at Introduction and Conclusion.
[433] I discuss the new distant water fishing strategy, particularly with regard to bilateral fisheries agreements, in detail in chap 6.
[434] Regulation 2371/02 op cit n 221 at preamble at para 4.

The regulation retains some old methods to achieve these new objectives (such as Council-determined technical conservation measures), but also introduces potentially more innovative, holistic regulatory means. For example, it requires the Council to progressively promote the implementation of an ecosystems-based approach to fisheries management and to adopt new measures to achieve sustainable fisheries exploitation.[436] The Council is required to take available scientific, technical and economic advice into account in devising these measures.[437] In the absence of adequate scientific information, it must apply the precautionary approach.[438] This is in compliance with the EC Treaty, which endorses the precautionary principle towards promoting a 'high level' of environmental protection.[439] In particular, the Council must adopt measures that aim to limit fish mortality, minimise the environmental impact of fishing activities and reduce juvenile catches and discards.[440] Member states are bound to apply these measures but may also impose conservation and management measures in their own waters provided that they are no less stringent than Community rules and that they only apply to national vessels.[441] Under certain circumstances member states may also impose emergency conservation measures in their waters to protect living aquatic resources or the marine ecosystem.[442]

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[435] Ibid at art 3(e).
[436] Ibid at art 2(1) read together with art 4.
[437] Ibid at art 4(2). The Commission is required to make reference to reports from the Scientific, Technical and Economic Committee (STECF) and advice from the new Regional Advisory Councils. Article 33 provides for the establishment of the STECF; the Commission is required to consult the STECF 'at regular intervals' on living marine resource conservation and management matters, including 'biological, economic, environmental, social and technical considerations' (art 33(1)). Regional Advisory Councils are to be established by the Council for marine areas under the jurisdiction of at least two member states. It is envisaged that they will represent a variety of stakeholders' interests and will advise the Commission on fisheries management matters in the areas under their jurisdiction (arts 31, 32). Recommendations of the Commission for improving the quality and quantity of fisheries scientific information were outlined in the Roadmap Communication (op cit n 221 at para 1.1).
[438] Regulation 2371/02 ibid at preamble and arts 2(1), 5(3) and 6(3). Also see Roadmap Communication ibid at para 1.1 and Green Paper op cit n 249 at para 5.1.1.
[439] Article 174(2) EC Treaty (op cit n 170).
[440] Regulation 2371/02 op cit n 221 at art 4(2). These suggested conservation methods reflect recommendations in the Commission's Roadmap Communication (op cit n 221 at paras 1.1 and 1.2). These regulatory provisions must be read together with Council Regulation (EC) No 850/98 of 30 March 1998 for the Conservation of Fishery Resources through Technical Measures for the Protection of Juveniles of Marine Organisms [1998] O J L125/1.
[441] Regulation 2371/02 ibid at art 10.
[442] Ibid at art 8.

An important feature of the new conservation policy is that while it retains the TAC and quota system, together with the 'relative stability' principle, it supplements them with a broader, more flexible multi-annual management approach which is expressly aimed at fostering sustainable fisheries exploitation.[443] In terms of this approach, the Council must adopt multi-annual 'management plans' based on recommended scientific reference points to maintain Community fish stocks within safe biological limits; for species that are over-fished, the Council is required to introduce multi-annual 'recovery plans' that facilitate their recovery.[444] The Council has relative freedom to devise these plans according to fish stocks' needs and is granted the capacity to extend these plans beyond single species to mixed fisheries - this responds to past criticisms of the policy's failure to manage Community fish stocks more holistically.[445]

A Community action plan to address environmental challenges in the fisheries sector was introduced in 2002 to complement these legislative reforms.[446] The plan presents key principles to guide environmental integration in Community fisheries, including precaution, prevention, and the progressive implementation of an ecosystem-based approach (reflecting the key drivers of the conservation regulation) and identifies measures requiring priority management action to this end.[447] It is target-driven and includes a timetable for implementation.[448] Progress has already been made towards various legislative and policy

[443] Roadmap Communication op cit n 221 at para 3. In terms of art 20(1) of Regulation 2371/02 ibid, quotas are to be allocated by the Council to Member States in '...such a way as to assure each Member State relative stability of fishing activities for each stock or fishery'.
[444] Regulation 2371/02 ibid at arts 5 and 6. See also Roadmap Communication ibid at para 1.1 and Green Paper op cit n 249 at para 5.1.1.
[445] Ibid at arts 5(3) and 6(3). The regulation does not elaborate on the possibility of adopting multi-species TACs, however. Cross-reference with earlier criticisms of the single-species management approach (at pp 119, 120).
[446] Commission of the European Communities, 'Communication from the Commission setting out a Community Action Plan to Integrate Environmental Protection Requirements into the Common Fisheries Policy' (Environmental Integration Communication) COM (2002) 186 final.
[447] The principles are outlined in art 3 ibid, while arts 4 and 5 prescribe 'priority' and 'complementary' management measures respectively. The Communication is based on an earlier Communication from the Commission to the Council and the European Parliament, 'Fisheries Management and Nature Conservation in the Marine Environment' COM (1999) 363 final.
[448] Annex to the Environmental Integration Communication ibid.

goals including the regulatory elimination of public funding for fleet modernisation (discussed below) and provision for the adoption of new technical conservation measures to reduce discards and by-catch.[449] With regard to fishing beyond Community waters, the action plan obliges the Community to demonstrate the same commitment to environmental integration in its external activities as internally and requires the Community to adopt a strategy that contributes towards global sustainable fishing.[450] A new strategy for the EC distant water fleet was introduced in 2002, the main components of which are being progressively implemented, as I discuss in greater detail in chapter 6.[451]

A further complementary instrument, the 2003 European Code of Sustainable and Responsible Fisheries Practices - a 'soft' law policy document - outlines guidelines to assist EU fishing operators in implementing sustainable fisheries practices.[452] The Code is based on the FAO's voluntary Code of Conduct for Responsible Fisheries and supplements the CFP.[453] It suggests, for example, that to avoid over-fishing, fishers should use only the amount of gear that is necessary and to reduce discards, operators should avoid fishing in areas that are densely populated by stocks unlikely to be retained on board (due to their size, nature or condition).[454]

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[449] See p 129 below on the new structural policy. Regulation 2371/02 op cit n 221 at arts 4(2)(g)(iv) and 4(2)(h) provides for the introduction of new technical conservation measures to these ends. See also Communication from the Commission to the Council and the European Parliament, 'Promoting More Environmentally-Friendly Fishing Methods: The Role of Technical Conservation Measures' COM (2004) 438 final.

[450] Environmental Integration Communication op cit n 446 at art 3 and Annex.

[451] Outlined in Roadmap Communication op cit n 221 at para 5. See pp 151-157 for a discussion on the new bilateral fisheries relations policy. Progressive implementation has begun through the release of the Commission of the European Communities, 'Communication from the Commission: Community Action Plan for the Eradication of Illegal, Unreported and Unregulated Fishing' COM (2002) 180 final and the FPA Communication op cit n 364 (together with Council Conclusions 11485/1/04 on the Commission Communication on an Integrated Framework for Fisheries Partnership Agreements with Third Countries (Brussels, 15 July 2004)).

[452] European Commission, *European Code of Sustainable and Responsible Fisheries Practices* (European Code of Conduct for Responsible Fisheries) (Luxembourg, Office for Official Publications of the European Communities 2004).

[453] It applies to Community fishing activities both in Community and external waters -ibid at 5. FAO Code of Conduct for Responsible Fisheries op cit n 126

[454] European Code of Conduct for Responsible Fisheries ibid at 8 (para 5) and 9 (para 7).

4.2 The impact on the structural policy

The focus on environmental concerns and sustainability during the 2002 CFP review also prompted major changes in the policy's structural sphere, as despite various Community efforts over the years to curtail subsidisation and prevent capacity expansion, there had been minimal positive results. Already in 1983, the Community introduced fleet reduction targets for member states to be implemented via multi-annual guidance plans (MAGPs). The MAGPs proved largely inefficient, however, as their reduction targets were arguably too low and they were poorly enforced.[455] Furthermore, while stricter funding conditions were imposed for fleet renewal and vessel modernisation, these activities nevertheless continued to receive substantial Community support and fleet capacity thus expanded.[456] Subsidies also fuelled an increasing asymmetry between the number of fishers entering the industry and those leaving it.[457] Over-capacity thus became and continues to be one of the leading causes of the continuous decline of fish stocks in Community waters.[458]

During the review the Community acknowledged the need to further reduce its fleet capacity to ensure the sustainability of its fisheries, noting that a reduction in fishing effort of up to 60 percent in several Community fisheries is required.[459] Reduced Community fleet capacity is also vital to promote sustainable fishing in third country waters because as long as the over-capacity problem persists, the Community is likely to continue to subsidise its vessels to fish

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[455] Coffey op cit n 215 at 29, Green Paper op cit n 249 at para 3.3 and Roadmap Communication op cit n 221 at para 2.2. Milazzo op cit n 232 at 66, 67 concurs that restructuring efforts to date have not resulted in a significant change in the profile of the EU fishing fleet.

[456] Cunningham, Dunn and Whitemarsh op cit n 74 at 72.

[457] Subsidisation enabled fishers to enter the industry with minimal personal investment and guaranteed them profits. Schrank op cit n 252 at 31, Surís-Regueiro,Varela-Lafuente and Garza-Gil op cit n 274, Cunningham, Dunn and Whitemarsh ibid at 98, Cunningham and Maguire op cit n 2045at 64, Symes and Crean op cit n 105 at 176, Coffey op cit n 215 at 26 and Milazzo op cit n 232 at 21.

[458] Sŏng op cit n 404 at 43, Foders op cit n 215 at 23 and Symes op cit n 394 at 327.

[459] Roadmap Communication op cit n 221 at paras 1 and 3.2. Fishing effort refers to the combination of fishing capacity and labour and time spent fishing. Cross-reference with p 80 at fn 241. See also Green Paper op cit n 249 at para 3.3, Song ibid, Symes ibid at 320, 327 and Coffey op cit n 215 at 53.

in foreign (largely developing country) waters; this compounds the over-exploitation problems which already exist in many of these countries.[460]

Following the review, the Community thus introduced a new fisheries structural policy with the express objective of achieving a balance between the Community fleet's capacity and available fishing opportunities; the policy's main thrust is to re-direct funding away from fleet modernisation towards structural measures that promote this goal.[461] Specifically, funds are available to member states for various actions designed to permanently stop or reduce the fishing activities of their fleets. This includes scrapping vessels, permanently transferring them to a third country (including as part of joint enterprises) or permanently re-assigning them for non-profitable purposes other than fishing; member states retain relative freedom in how they elect to reduce their fleet.[462] Funding is also available for various social measures designed to alleviate the adverse impacts of this restructuring, including retirement schemes for vessel owners and crew, compensatory lump sum payments for vessel crew who exit the industry permanently and assistance for fishers diversifying their work activities.[463] Subsidies to build and modernise vessels remain available but are subject to strict conditions -

[460] As I discuss below at pp 148, 149. See also VM Kaczynski and DL Fluharty, 'European Policies in West Africa: Who Benefits from Fisheries Agreements?' (2002) 26 Marine Policy 75-93 at 77 and 90, Foders op cit n 215 at 23 and Milazzo op cit n 232 at 78. I examine this phenomenon with reference to the case study of Senegal in chaps 7 and 8.

[461] Council Regulation (EC) No 2369/02 of 20 December 2002 amending Regulation (EC) No 2792/1999 Laying Down the Detailed Rules and Arrangements Regarding Community Structural Assistance in the Fisheries Sector [2002] OJ L358/49 (preamble) and Council Regulation (EC) No 2792/99 of 17 December 1999 Laying Down the Detailed Rules and Arrangements Regarding Community Structural Assistance in the Fisheries Sector [1999] OJ L337/10 (at art 1(1)). The 2002 regulation substantially alters the earlier regulation by (inter alia) inserting art 1(3), which stipulates that structural assistance measures must not increase fishing effort, and deleting art 6 which provided for 'fleet renewal and modernisation of fishing vessels' (see arts 1(1) and 1(6) of the 2002 regulation).

[462] Articles 7(1) and 7(3) of Regulation 2369/02 ibid read together with art 7of Regulation 2792/99 ibid. The legislative framework concerning joint enterprises is contained in art 8 of the regulations.

[463] Details of these measures and available funding can be found in the European Commission, *Financial Instruments for Fisheries Guidance: Instructions for Use* (European Communities Office for Official Publications of the European Communities, Luxembourg 2003) at 9, 31. See also the Commission's comments in this regard in its Green Paper op cit n 249 at para 5.7.1 and its Roadmap Communication op cit n 221 at para 2.1. Council Regulation (EC) No 1421/04 of 19 July 2004 Amending Regulation (EC) No 2792/1999 Laying Down the Detailed Rules and Arrangements Regarding Community Structural Assistance in the Fisheries Sector [2004] OJ L260/1 provides for the possibility of supplementary aid for scrapping when a recovery plan adopted by the Council or emergency measures adopted by the Commission or a member state forces crew members to give up fishing (see art 2, which amends art 12(3) of the 1999 regulation).

modernisation may not increase the capacity of the vessel in question or the effectiveness of its fishing gear and member states seeking to build new vessels must comply with their fleet reduction targets.[464]

Strict control of member states' fleet size was seen as remaining imperative; the 2002 conservation policy thus introduced new 'reference levels' for national fishing fleets which replaced the previous multi-annual guidance plans. Member States are obliged to adjust their fishing capacity to these levels (via the means described above) with a view to achieving '... a stable and enduring balance between ...fishing capacity and their fishing opportunities'.[465] Reference levels provide an 'overall ceiling' for national fishing capacity in terms of which any new entries into the fleet must be accompanied by an equivalent withdrawal of capacity.[466] Member states can ensure that their fleet capacity is kept within the specified limits through their vessel licensing schemes.[467] In an effort to aggressively foster sustainable fishing, the new structural policy provides that funding for fleet renewal and the transferral of Community vessels to third countries is only available until 31 December 2004.[468]

New institutional mechanisms have developed to facilitate the realisation of these structural policy goals. Most noticeably, a European Fisheries Fund is due to replace the Financial Instrument for Fisheries Guidance from 2007 with the specific objective of securing

[464] Article 9(1) of Regulation 2369/02 op cit n 459 and art 11 of Regulation 2371/02 op cit n 221.
[465] Article 11(1) of Regulation 2371/2002 ibid.
[466] Article 12 (1) ibid. The new 'reference levels' are based on the objectives of the last MAGP (MAGP IV, 1997-2002) and are expressed in terms of the vessel's tonnage (GT) and power (kW).
[467] This information is required in terms of Council Regulation (EC) 690/93 of 20 December 1993 Establishing a Community System Laying Down Rules of the Minimum Information to be Contained in Fishing Licences [1993] OJ L341/93. Article 11 of Regulation 2371/02 (ibid) requires all vessels in Community waters to be licenced; it should be read together with art 5 of Regulation 3760/92 (op cit n 418), which provides for the introduction of a general Community system of fishing licences.
[468] Articles 9(1) and 7(3) respectively of Regulation 2369/02 op cit n 461. Commission Regulation (EC) No 1438/03 of 12 August 2003 Laying Down Implementing Rules on the Community Fleet Policy as defined in Chapter III of Council Regulation (EC) No 2371/2002 [2003] OJ L204/21, sets out rules for implementing this decision. There have, however, been recent calls to reintroduce these subsidies through the European Fisheries Fund. See Committee on Fisheries (European Parliament), 'Report on the Proposal for Council Regulation on the European Fisheries Fund' COM (2004) 497 final.

sustainable fisheries.[469] It aims to achieve this by promoting the reduction of the Community fleet, the use of more environmentally-friendly gear and the diminished dependency of coastal communities on fishing.[470]

5. Progress towards sustainable Community fishing

Despite numerous revisions of the CFP over the years, including its comprehensive restructuring in 2002, over-fishing and the resultant decline of key fish stocks in Community waters remain two of the greatest problems within EU fisheries. This was highlighted in a 2004 Community evaluation of environmental integration efforts in the EU fishing sector.[471] The report focused on progress towards priority objectives such as the promotion of sustainable fisheries development, the reduction of fishing pressure to sustainable levels, the implementation of an ecosystems approach to fisheries management, and the elimination of public aid for fleet modernisation and renewal.[472] It acknowledged that while the 2002 CFP reforms had established the means to pursue these goals, many of the proposed reforms had yet to be effectively implemented; new and improved regulatory methods could only take the integration process so far. Most noticeably, a pressing need remains to further drastically reduce fishing effort in Community waters.[473]

To address the problematic state of Community fish stocks, the Commission recently proposed a fisheries management policy aimed at maintaining or restoring depleted

[469] European Commission, 'Proposal for a Council Regulation: European Fisheries Fund' COM (2004) 497 final. The current FIFG framework for the period of 2000 – 2006 is regulated by Regulation 1263/99 op cit n 393 as amended by Regulation 2369/02 (ibid).
[470] Ibid at art 4.
[471] Commission of the European Communities, 'Commission Working Document Integrating Environmental Considerations into other Policy Areas – A Stocktaking of the Cardiff Process' COM (2004) 394 final.
[472] Ibid at para 3.7.
[473] Ibid.

Community stocks to maximum sustainable yield (MSY) levels by 2015.[474] The policy advocates 'obtaining the best from the productive potential of Europe's living marine resources, without compromising its use for future generations'.[475] Within the framework of the stock plans envisaged by the CFP's 2002 conservation regulation, it proposes the short-term reduction of catch levels in Community waters (relying on the CFP's structural policy to alleviate associated financial hardships) followed by an incremental increase in capture rates 'in a sustainable manner' as stock rates become healthier.[476] To implement this approach, the Council must first adopt suitable stock targets (as a key component of its stock plans). It will then be up to individual member states to decide on their respective pace of change to reach these objectives and the way in which they will manage the transition (by reducing fleet capacity or reducing fishing efficiency).[477] The policy is presented as compatible with an integrated, ecosystem-based approach to Community fisheries and oceans management.[478] It envisages substantial stakeholder input into the Council's determination of long-term stock plans and grants member states significant freedom in realising the stock targets established in these plans.[479]

One of the main contributing factors to over-fishing in Community waters continues to be fleet over-capacity. While official Community reports cite progress towards reduced capacity, the EU nevertheless continues to generously subsidise capacity-expanding activities: for the period of 2002-2005, Euros 565 208 was spent on constructing new vessels, Euros 290 278 on

[474] In order to comply with commitments made at the World Summit on Sustainable Development. Communication from the Commission to the Council and the European Parliament, 'Implementing Sustainability in EU Fisheries Through Maximum Sustainable Yield' COM (2006) 360 final.
[475] Ibid at para 1.
[476] Ibid at paras 3.1 and 3.3.
[477] Ibid at paras 3.3 and 4.
[478] Ibid at paras 3.1 and 3.3
[479] Ibid at para 3.3 regarding input into the plans and para 4.

modernising existing vessels and a further Euros 1 333 406 on 'other' areas; in contrast, only Euros 482 504 was dedicated to scrapping vessels.[480]

The deteriorating status of the Community's broader marine environment - largely as a result of commercial fishing - is also particularly worrying.[481] In response to the failure of traditionally sectoral-based strategies to protect the Community's oceans, the Commission recently advocated an integrated approach aimed at achieving 'good environmental status' of the Community's marine environment in a proposed directive.[482] This will entail the establishment of marine management regions by member states in which they will be required to implement strategies towards securing 'good environmental status' - the term, which echoes policy goals in other spheres, is defined from an ecosystem perspective and is recognised as a goal which is necessarily dynamic.[483] Member states will be obliged to take fish populations into account in developing their strategies, but any fisheries management measures required in terms of them will have to be instituted under the CFP's 2002 conservation regulation.[484]

The promotion of sustainable Community fishing also requires increased compliance of member states' fleet with the CFP. Traditionally, compliance has been poor and enforcement by the member states has been weak and erratic.[485] A new regulatory framework aimed at

[480] European Commission, *Facts and Figures on the CFP: Basic Data on the Common Fisheries Policy* (Luxembourg Office for Official Publications of the European Communities, Luxembourg 2006) at 12, 13 and 25.
[481] Preamble (para 23) and art 2 of Commission of the European Communities, 'Proposal for a Directive for the European Parliament and the Council establishing a Framework for Community Action in the Field of Marine Environmental Policy (Marine Strategy Directive)' COM (2005) 505 final.
[482] Ibid at art1 and para 3 of 'Explanatory Memorandum'. The long-term goal is to establish an EU maritime policy, which will foster the development of a 'thriving maritime economy' and 'the full potential of sea-based activity in an environmentally sustainable manner' (para 1 of 'Explanatory Memorandum').
[483] Ibid at preamble (para 23) and art 2. In the EU's water policy, the concept of 'good' surface and groundwater status is employed – see Council Directive (EU) No 2000/60 of 23 October 2000 Establishing a Framework for Community Action in the Field of Water Policy OJ L327/1 at art 4(1)(l).
[484] Ibid at arts 7, 28 and table 1 of annex II. See Regulation 2371/02 op cit n 220.
[485] Roadmap Communication op cit n 221 at para 4.1 and Green Paper op cit n 249 at para 3.5.

improved monitoring and enforcement was thus introduced in 2002.[486] It responds in particular to the demand for greater harmonisation in member states' enforcement mechanisms and for an increased, more clearly-defined, role for the Community. The system clarifies the respective roles of the member states and the Community and provides detailed guidance on the fulfilment of their various duties. Specifically, member states retain responsibility for ensuring the 'effective control, inspection and enforcement of rules' of the CFP, including the obligation to take 'appropriate' follow-up measures on infringements; suggested inspection and enforcement measures are cited.[487] The Community's powers are enhanced, but it continues to play an overseeing role, evaluating and controlling the application of the rules by the member states and facilitating coordination and cooperation between them.[488] A proposal for the establishment of a joint fisheries inspection structure at Community level to assist the Community and member states in fulfilling their respective obligations was released in 2004.[489] The structure was established in 2005 and is currently in the process of being operationalised.[490]

On the whole it appears that the Community's progress towards sustainable fishing continues to be slow, as acknowledged both by the Community and outside critics.[491]

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[486] The Control and Enforcement system is contained in chapV (arts 21-28) of Regulation 2371/02 (op cit n 221). These provisions supplement the existing CFP control system contained in Regulation 2847/93 (op cit n 414).
[487] Articles 23(1), 24 and 25 of Regulation 2371/02 ibid. Member states are obliged to control fishing activities in waters subject to their sovereignty or jurisdiction and in Community waters as well as in external waters by Community vessels flying their flag (art 23(2)).
[488] Ibid at arts 27 and 28.
[489] European Commission, 'Proposal for a Council Regulation establishing a Common Fisheries Control Agency and amending Regulation (EC) No 2847/93 Establishing a Control System Applicable to the Common Fisheries Policy' COM (2004) 289 final. In response to suggestions in the Roadmap Communication op cit n 221 at para 4.4 and the earlier Green Paper op cit n 249 at para 5.6.
[490] Council Regulation (EC) No 768/05 of 26 April 2005 Establishing a Community Fisheries Control Agency and Amending Regulation (EEC) No 2847/93 Establishing a Control System Applicable to the Common Fishery Policy [2005] OJ L128/1.
[491] See for example Song op cit n 404 at 42, Payne op cit n 409 at 304, 306, Symes op cit n 394 and Foders op cit n 215 at 15. See also Roadmap Communication op cit n 221 and Green Paper op cit n 249 at 5.

6. Conclusion

The CFP has undergone a significant transformation since its inception, evolving from a policy that had little regard for the environmental impacts of Community fishing to one that emphatically advocates sustainable fishing within the context of protecting the marine ecosystem. Its policies, regulations and measures have been constantly re-shaped to actively promote these goals in response to increasing over-capacity and the decline of key fish stocks, with alternative methods of regulation introduced to complement traditional means. While some progress has been made, the CFP has nevertheless failed to date to prevent the continued deterioration of the Community's marine environment and to ensure the sustainable use of its fisheries. Renewed efforts are underway to pursue these imperatives within the framework of an integrated, ecosystems-based approach to marine management which embraces ever-more policy-oriented and procedurally-based means to achieve its goals; it remains to be seen how successful they will be. Faced with a severe decline in its own fish stocks and a persistent over-capacity problem, the Community has increasingly relied on access to fisheries in the exclusive economic zones of non-Community states (mainly developing countries), and continues to deploy its fleet to these waters. The Community's fishing activities in non-jurisdictional waters are (in theory) similarly guided by the objective of sustainability; specifically, the Community fleet is obliged to pursue

> '...sustainable and responsible fisheries outside Community waters with the same commitment as to in its own waters'.[492]

I discuss the extent to which this ideal is realised in the next chapter, where I examine the influence of sustainability in theory and practice regarding Community fishing activities in developing third country waters.

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[492] Ibid at 15.

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THE PROMOTION OF SUSTAINABILITY IN COMMUNITY FISHING IN DEVELOPING THIRD COUNTRY WATERS

1. Introduction

As we have seen in the previous chapters, fish stocks in the EU's waters are in a state of depletion.[493] As a result, the Community fleet relies heavily on access to fisheries in waters beyond its jurisdiction, either in the exclusive economic zones (EEZs) of third countries or in international waters.[494] In this chapter, I focus on the EC's fishing activities in third country coastal waters. These are regulated by bilateral fisheries agreements which are shaped by the principles and rules of the Community's Common Fisheries Policy (CFP) (discussed in detail in chapter 5). From the 1970s onwards, the overriding objective of these agreements was to ensure continued Community access to fishing resources in external coastal waters.[495] In the last ten years, however, it has become clear that these arrangements are more than merely commercially-based access transactions; they impact broadly on the sustainable (fisheries) development of the (mainly) developing coastal partner states. The Community's external fisheries policy has responded to this reality.[496] Its new 'partnership approach' to bilateral fisheries relations presents the theoretical means to regulate fisheries interactions with these states towards the sustainable use of their fisheries resources and the sustainable development of their fishing sectors while ensuring coherence with the Community's development initiatives in these countries. This shift in policy reflects similar developments in other areas

[493] Roadmap Communication op cit n 221 at 'Introduction'. See Annex 1 for a list of Community fish stocks that are outside safe biological limits.
[494] Cross-reference with fn 387 in chap 5 for an explanation of the term 'third countries'.
[495] As noted in the Green Paper op cit n 249 at para 5.8.
[496] I use the term 'partner' states or countries to refer generically to coastal third countries that are party to bilateral fisheries agreements with the EU. I also refer to that aspect of the Common Fisheries Policy (CFP) that regulates Community fishing beyond EU jurisdictional waters as the 'external' fisheries policy, in accordance with its description in Community policy and legislation.

of the Community's fishery policy arising from integration efforts, namely heightened concern for sustainability and environmental protection to be pursued by a combination of stricter legislative regulation of technical matters and a more flexible, holistic policy approach to other fisheries management concerns.[497] Against this background, I narrow my focus in this chapter to analyse the Community's policy regarding its external fishing activities in developing third country waters with a view to assessing the extent to which it is informed in theory and practice by sustainability objectives. In part III of my thesis, I focus exclusively on the practical operationalisation of this policy with reference to the case study of EU-Senegalese bilateral fisheries relations.

2. The influence of sustainability on the EU's bilateral fishing activities

2.1 The rise in status of sustainability concerns

The Community is involved in various external fisheries-related activities. These comprise the conclusion of bilateral fisheries agreements with third countries to access their coastal stocks, involvement in the progressive development of international fisheries law and participation in regional fisheries organisations.[498] The Community is guided in these actions by its Common Fisheries Policy (CFP), which, as I have already discussed, obliges it to promote the principle of sustainability and to comply with international conservation and sustainable development commitments.[499] In practice, however, the realisation of these objectives in (particularly) developing third country waters has been unsatisfactory. The Community has increasingly

[497] As described above in chap 5.
[498] The Community is empowered to engage in these activities by Council Resolution of 3 November 1976 op cit n 335 and in accordance with art 300 EC Treaty op cit n 170.
[499] For example, through its involvement in conventions like UNCLOS (op cit n 25) and the Straddling Stocks Convention (op cit n 124) and its commitment to the FAO Code of Conduct for Responsible Fisheries (op cit n 126). See chap 5 above for a discussion of the rise of the importance of sustainability in the CFP, and chap 3 for a general discussion on the concepts of sustainability and sustainable development in the context of international law.

sought to redress this in response to internal and external criticisms and in line with its international legal duties. Towards this end, it has expanded its traditional regulatory means to include 'new' more flexible procedure-based regulatory measures.[500] This reflects related regulatory developments in other Community policy spheres, most noticeably the environment, and is well-suited to the permissive framework approach of the United Nations Convention on the Law of the Sea (UNCLOS). The fisheries regime of UNCLOS grants coastal states significant freedom in managing their marine resources; while they are obliged to permit foreign fishers to access surplus stocks in their waters, many writers argue that the Convention's provisions are so liberal as to effectively nullify this duty. Access must be negotiated within the ambit of loosely-defined constraints which, inevitably, must be supplemented by the respective state parties' relevant domestic polices. UNCLOS imposes minimal constraints on the contents of these policies and it is thus ultimately up to the individual states to determine how they choose to regulate their bilateral fisheries interactions. The Community's policy in this regard is strongly influenced by the other spheres of the CFP which (as I described in chapter 5) have been inculcated with sustainability concerns; its response to ambiguities and 'gaps' in the international regime in this area has thus (at least in theory) been to increasingly promote sustainable fishing as the guiding objective.

2.2 The ambiguity of the international regime and the Community's response

As I have explained earlier, UNCLOS entitles coastal states to claim a 200 nautical mile zone adjacent to their coasts in which they enjoy exclusive jurisdiction over fishing resources - the exclusive economic zone, or EEZ.[501] Coastal states must promote the conservation and sustainable use of fish resources within these waters by (amongst other things) determining

[500] Cross-reference with pp 118 and 119 above.
[501] UNCLOS op cit n 25 in terms of art 57. Cross-reference with pp 45, 55 and 56 where I also discuss UNCLOS' provisions regarding the exclusive economic zone (EEZ).

their total allowable catch (TAC). UNCLOS ameliorates the adverse effect of extended coastal jurisdiction – the exclusion of distant water fishing fleets from their traditional fishing grounds – by obliging coastal parties that lack the capacity to fully harvest their TACs to grant other states reasonable, negotiated access to their surplus.[502] The parties must take 'all relevant factors' into account in determining terms and conditions of access.[503] Most importantly, this includes taking account of the economic significance of the fisheries to the coastal state's economy as well as its impact on the state's 'other national interests'.[504] This reflects the socio-economic and cultural importance of fisheries in many developing coastal states and the potential role that access agreements can play in fostering their sustainable development.[505] Other factors that must be considered include whether (other) developing states in the region require access to part of the surplus, the coastal state's obligations towards regional landlocked and geographically disadvantaged states, and the need to 'minimise economic dislocation' in states whose nationals have habitually fished in the coastal state's waters or made a substantial contribution to their fisheries research.[506] If coastal states permit foreign vessels into their waters they must ensure the latter's compliance with domestic fisheries conservation and regulatory measures in line with the Convention's obligations. Coastal states can employ various means towards this end such as requiring foreign fishers and vessels to apply for licences,[507] specifying permitted target species for foreign fishers, establishing catch quotas and age and size restrictions of permissible catch, imposing fishing season and area restrictions, regulating vessel and gear type, size and number, requiring all or part of foreign catches to be landed in local ports, and articulating enforcement procedures.[508]

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[502] UNCLOS ibid at art 62(2).
[503] Ibid at art 62(3).
[504] Ibid.
[505] B Kwiatkowska, *The 200 Mile Exclusive Economic Zone in the New Law of the Sea* (Martinus Nijhoff Publishers, The Netherlands 1989) at 64, 65.
[506] UNCLOS op cit n 245 at art 62(3).
[507] Ibid at art 62(4). A licence fee may be charged; developing states can request fisheries-related financial, educational or technological compensation in lieu of a fee.
[508] Ibid.

In light of the significant overall freedom that UNCLOS grants coastal states to regulate foreign access to their EEZs, it is argued that the article 62 obligation impacts minimally on coastal states' fisheries management sovereignty; coastal states in fact retain more or less complete discretion to manage their EEZ fisheries as they choose.[509] State practice seems to confirm this - the majority of coastal states assert full national jurisdiction over their coastal fisheries in their domestic legislation and articulate their discretion to permit or deny foreign access to these resources.[510] Thus, while

> '...jurisdiction is not absolute in theory... in practice there are no real constraints on the execution of coastal state authority'.[511]

It follows that if coastal states have complete freedom to set their TACs and to determine whether or not they have the capacity to fully harvest their allowable catches, they effectively have the choice to declare or deny the existence of a surplus; if they elect not to declare a surplus, they can eliminate the appearance of surplus stocks be establishing very low TACs. This interpretation is supported with reference to the fact that the Convention's compulsory dispute settlement provisions do not apply to coastal states' determination of their TACs, their domestic capacity to harvest these stocks or their allocation of any declared surplus.[512]

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[509] G Munro, 'Coastal States and Distant-Water Fishing Nation Relations: An Economist's Perspective' (1989) *Marine Fisheries Review* 51 (1) 3-10 at 4, with reference to WT Burke, 'Extended Fisheries Jurisdiction and the New Law of the Sea' in RJ Rothschild (ed), *Global Fisheries: Perspectives for the 1980s* (Springer-Verlag, New York 1983) 7-49 at 46. This view is also discussed in McRae and Munro op cit n 99 at 103, 104. See also FH Clarke and GR Munro, 'Coastal States, Distant Water Fishing Nations and Extended Jurisdiction: A Principal-Agent Analysis' (1987) 2 (1) Natural Resource Modeling 81-107, and FH Clarke and GR Munro, 'Coastal States and Distant Water Fishing Nations: Conflicting Views of the Future' (1991) 5 (3) Natural Resource Modeling 345-369. Cross-reference to pp 46, 55 and 56, where the discretion afforded coastal states in managing their EEZ fisheries is also discussed.

[510] McRae and Munro ibid at 104.

[511] S Garcia, JA Gulland and E Miles, 'The New Law of the Sea, and the Access to Surplus Fish Resources' (1986) 10 (3) Marine Policy 192-200 at 192.

[512] Article 297(3) of UNCLOS. The exception is in fact very broadly worded –' the coastal State shall not be obliged to accept the submission to such settlement of any dispute relating to its sovereign rights with respect to the living resources in the exclusive economic zone or their exercise'. See also Burke op cit n 509 at 29 and 30. Cross-reference with p 56.

The argument follows that even in the event that a coastal state does declare a surplus, it enjoys such leeway in determining the terms and conditions of foreign access to this surplus that it nevertheless ultimately retains the ability to effectively exclude foreign fleets from its waters; highly restrictive access terms and conditions would arguably discourage foreign states from seeking access.[513] The coastal state would have to ensure, however, that it does not violate the Convention's good faith obligation in doing so.[514] Based on this line of reasoning, it follows that if a coastal state does grant access to a foreign fleet, it does so purely out of choice in order to promote its own interests; it would thus seek to negotiate an access arrangement that maximises its potential long-term benefits.[515] Various theories suggest methods to determine the particular mix of terms and conditions best suited to this end, such as the economic principal-agent analysis.[516]

As we saw in chapter 2, however, not all writers endorse the view that coastal states enjoy full sovereignty within their EEZs. Rather, various authors regard coastal states as mere 'stewards' or 'custodians' of their EEZ resources and argue that the states' powers are limited to sovereign rights to explore, exploit, conserve and manage the natural resources in these waters.[517] Beyond these jurisdictional powers, coastal states are bound strictly by the

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[513] McRae and Munro op cit n 99 at 104.

[514] Ibid. Article 300 of UNCLOS (op cit n 25) requires that 'States Parties shall fulfil in good faith the obligations assumed under this Convention and shall exercise the rights, jurisdiction and freedoms recognized in this Convention in a manner which would not constitute an abuse of right'.

[515] Clarke and Munro (1987) op cit n 509 at 83.

[516] Advocated by, for example, Munro and Clarke. In particular, see ibid at 83-85 and 101 for a comprehensive explanation of the principal-agent paradigm in the distant water fishing context. The authors argue for the suitability of this model based on the fact that the coastal state enjoys property rights over the fishery resources within its EEZ and has the power to grant or deny access to this resource, but having granted access, lacks the power to exercise absolute control over the foreign fishing nation to maximise its socio-economic interests (see also Munro op cit n 509 at 9, 10). It must thus devise a suitable 'incentive scheme' via the terms and conditions of the access agreement to remedy these. Devising such schemes on the basis of economic models is the subject matter of a series of papers authored by Munro and Clarke.

[517] With reference to the wording in art 56(1)(a) – '[i]n the exclusive economic zone the coastal state has sovereign rights for the purpose of exploring and exploiting, conserving and managing the natural resources...' N Schrijver, *Sovereignty Over Natural Resources: Balancing Rights and Duties* (Cambridge University Press, UK 1997) at 212 and 213 supports this view. See also Birnie and Boyle op cit n 70 at 659 and Lowe op cit n 103 in particular at 9.

provisions of the Convention. It is thus not entirely up to the discretion of the coastal state to decide whether or not it will allow other states to fish in its EEZ.[518]

There is no definitive opinion on which of the above two theoretical approaches has greater merit. Regardless, the worrying practical effect of UNCLOS' EEZ provisions is that even if a (most likely developing) coastal state lacks the capacity or inclination to properly assess the appropriateness (from a sustainability perspective) of permitting foreign fleet access to its fisheries, it has the power to declare a surplus in order to procure short-term economic benefits; the foreign state has no obligation to independently assess the existence (or not) of a surplus or to query the validity of a declared surplus.[519] The Convention's simplistic portrayal of the determination of surplus, namely TAC minus domestic fishing capacity, compounds this problem; in practice, the calculation is far more complex and uncertain and is simply beyond the capacity of many developing states. It is dependent (inter alia) on the complex dynamics of fishing populations and is impacted by scientific uncertainties regarding the status of coastal stocks as well as a plethora of national interests that influence the government's determination of catch limits and national fishing capacity.[520] A coastal state's decision to declare a surplus is thus based on a variety of biological, social and economic factors which require the government to have access to adequate data about its stocks and the likely impact on them of changes in fishing patterns, as well as accurate socio-economic information about its fishing industry.[521]

There has been increasing concern about the fact that the EU has no obligation to ensure the accurate assessment of surplus stocks in developing coastal states' waters prior to concluding access agreements with them or during the operation of these agreements. This arises from the

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[518] Kwiatkowska op cit n 505 at 61.
[519] See p 240 below for a discussion on this in relation to the EU-Senegalese case study.
[520] Garcia, Gulland and Miles op cit n 511 at 192, 193.
[521] Ibid at 198.

(theoretical) potential for the Community to conclude agreements or to continue to fish in terms of agreements with such states even where no surplus in fact exits; this runs contrary to the Community's professed endorsement of sustainable fishing in all waters.[522] Already in 1997, the European Parliament's Committee on Fisheries suggested that the Community should respond to this legal lacuna by assisting developing coastal states to enhance their stock evaluation capacity; while this capacity remains weak, if necessary, the Community should undertake its own independent assessments.[523] The Committee also urged the Community to refrain from negotiating the highest possible catch opportunities with these countries to the potential detriment of long-term sustainable fishing.[524]

Prior to the 2002 CFP review, the Community did not commit itself to conducting assessments of third country fish stocks, although it increasingly acknowledged the importance of ensuring the accuracy of these assessments.[525] During the review, the Commission took the matter a step further by proposing that the Community should participate through regional fisheries organisations in stock evaluations of developing third countries before concluding access agreements with them. It also recommended that the Community should conduct sustainability impact assessments of proposed agreements on the basis of best available data.[526] What exactly this would entail, however, was not clear, as the concept was neither defined nor elaborated on in the Communication. It was nevertheless echoed in the Commission's subsequent Communication on Fisheries Partnership

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[522] Kaczynski and Fluharty op cit n 460 at 82 and ADE-PWC-EPU, 'Evaluation of the Relationship between Country Programmes and Fisheries Agreements' (Final Report to the European Commission) 21 November 2002 at 41.

[523] Committee on Fisheries (European Parliament), 'Report on International Fisheries Agreements' (Committee on Fisheries Report) (1997) A4-0149/07 of 22 April 1997 at 10 (points 24(i) and (ii)), 11 and 21 (point 24). See also ADE-PWC-EPU ibid at 42, 43.

[524] Committee on Fisheries Report ibid at 16.

[525] FPA Communication op cit n 364 at para 2.2 and Green Paper op cit n 249 at para 5.8.2.

[526] Roadmap Communication op cit n 221 at paras 5.2 and 5.3. This was proposed as part of an action plan to improve stock evaluations in external waters at regional levels, discussed below.

Agreements.[527] The importance of impact assessments was revisited and fleshed out in a later Council Conclusion, which I discuss in greater detail below.[528] A 2003 Communication further proposed that the Community and member states should jointly invest with third countries in developing their stock assessment capacity, in accordance with obligations imposed by the FAO Code of Conduct.[529] This has been operationalised in some recent bilateral fisheries arrangements with developing countries in terms of which Community funding has been dedicated to improved local stock assessment capacity.[530]

3. The evolution of the Community's regulation of bilateral fisheries agreements

3.1 The changing nature of bilateral fisheries agreements

The Community's regulation of its bilateral fisheries relations has shifted with time both in response to international law and state practice and internal policy influences, most noticeably the principle of integration. Most modern bilateral fisheries access arrangements can be classified as 'ordinary' international agreements as they are concluded between state parties and are available for public access.[531] While they are not a 'new' legal phenomenon, their

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[527] FPA Communication op cit n 364 at paras 3.1 and 4. This policy is discussed below at pp 151-157 in substantial detail.

[528] At p 152 below.

[529] Commission of the European Communities, 'Communication from the Commission Improving Scientific and Technical Advice for Community Fisheries Management' (Communication on Scientific and Technical Advice) [2003] OJ C47/5 at para 3.4.2. FAO Code of Conduct for Responsible Fisheries op cit n 126.

[530] Such as in the most recent agreement with Senegal, where a fixed amount of Community compensation is earmarked to support stock evaluation and monitoring by the Senegalese authorities. See art 4 of Council Regulation (EC) 2323/2002 of 16 December 2002 on the Conclusion of the Protocol Setting Out the Fishing Opportunities and the Financial Compensation Provided for by the Agreement between the European Economic Community and the Government of the Republic of Senegal on Fishing off the Coast of Senegal for the Period of 1 July 2002 to 30 June 2006 [2002] OJ L349/4 read together with Protocol Setting out the Fishing Opportunities and the Financial Contribution Provided for in the Agreement between the European Economic Community and the Government of the Republic of Senegal on Fishing off the Coast of Senegal for the Period from 1 July 2002 to 30 June 2006, OJ (2002) L349/46. Envisaged support includes research exchanges and regional initiatives. I revisit this below at p 201.

[531] The remaining minority are concluded between coastal state governments and foreign private enterprises and are private contractual agreements which are not published; they are thus 'closed' agreements. Inter-governmental multi-lateral fisheries agreements also exist, such as those concluded between the United States of America and the Pacific Island Countries - see M Mwikya, 'Fisheries Access Agreements: Trade and

contents and nature differ from early arrangements as they have evolved over the years largely to accommodate developments in international law, particularly the introduction of UNCLOS. Initially, prior to 1970, few coastal states claimed jurisdiction over living marine resources in zones beyond 12 nautical miles from their baselines and distant water fleets were thus free to fish in coastal waters from this boundary.[532] Distant water fishing nations nevertheless concluded numerous access arrangements with coastal states mainly to secure logistical support for their nearby fishing operations.[533]

Freedom to access coastal waters became increasingly restricted, however, from around 1976 onwards, when coastal states began to unilaterally declare jurisdictions over their respective marine resources beyond 12 nautical miles, with many claiming zones up to 200 nautical miles from their baselines. By 1981, very few coastal states had not claimed extended fishing jurisdictions. This tendency was fuelled by the convening of UNCLOS III in 1973 and its subsequent nine-year negotiation.[534] A key topic of the negotiations was the desire of developing states to claim ownership over their coastal marine resources in order to advance their economic development; the unilaterally-claimed fishing zones were thus largely modelled on the expected outcome of the EEZ provisions of the negotiations, and agreements operating during this period frequently made express reference to the coastal state's 'sovereignty' or 'jurisdiction' over its 200 nautical mile zone.[535] Barred from freely fishing in their traditional coastal fishing grounds, distant water fishing fleets thus sought to negotiate

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Development Issues' International Centre for Trade and Sustainable Development (ICTSD) Natural Resources, International Trade and Sustainable Development Series Issues Paper No 2 (ICTSD, Geneva Switzerland 2006) at para 2.3.

[532] Copes op cit n 3 at 223 and WL Black, 'Soviet Fishery Agreements with Developing Countries: Benefit or Burden?' (1983) 7 (3) Marine Policy 163-174 at 163, 164. The exceptions were various Latin American countries, which claimed extended fishing zones.

[533] For example, to secure storage for their catch and to obtain vessel supplies. Copes ibid at 223.

[534] The first United Nations Conference on the Law of the Sea took place in 1958 and resulted in four treaties in 1958 (Convention on the Territorial Sea and Contiguous Zone, Convention on the Continental Shelf, Convention on the High Seas, and Convention on Fishing and Conservation of Living Resources of the High Seas). The second United Nations Conference on the Law of the Sea took place in 1960 and did not result in any international agreements.

[535] Such as the original EEC-Senegal agreement, concluded in 1980 op cit n 336. See also Black op cit n 532 at 164.

with coastal states to gain access to their fish stocks; it was not a long-term economically viable option to instead simply restrict their fishing activities to waters beyond the 200 nautical miles zone because most of the ocean's commercially exploitable fish stocks are found within 200 nautical miles of at least one nation's baseline.[536] The nature of access agreements thus changed to focus increasingly on securing access to fisheries resources. The duty imposed on coastal states by article 62(2) of UNCLOS (discussed above) thus rendered an existing (albeit limited) common state practice obligatory and dictated a regulatory framework for its continuation. As we have seen, UNCLOS not only significantly extended the area of coastal waters in which distant water fleets required permission to fish but also imposed conservation obligations on coastal states and bound all fishing nations to promote sustainable fishing beyond their jurisdictional waters. Other international instruments lent weight to these duties and some expanded on them.[537] Bilateral fisheries agreements began to increasingly accommodate these new obligations, as exemplified by early access arrangements between individual EEC states and third countries (prior to the transfer of competency to negotiate agreements to the Community in November 1976) and subsequently, between the Community and these states.[538] Thus, while UNCLOS was only signed in 1982 and came into operation still later (in 1994), the influence of its EEZ provisions (the final draft did not differ significantly from the negotiation text) was already evident in state practice by the 1980s, as reflected both in coastal states' management of their adjacent marine waters and the contents of numerous bilateral fisheries agreements.

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[536] Ibid.

[537] As discussed above at pp 52-59.

[538] Carroz and Savini op cit n 335 at 84. As noted in chap 4 (p 101at n 335), the authors provide a detailed overview of the terms typically included in access agreements during the UNCLOS III negotiations, illustrating that most accorded with the provisions of the negotiation text. Competency was transferred to the Community via Council Resolution of 3 November 1976 (op cit n 335).

3.2 The response of the EU's common fisheries policy

Together with many other distant-water fishing nations, the EEC was compelled to negotiate bilateral fisheries agreements with coastal states from the mid-1970s onwards. The Community was driven to do so by its desire to ensure continued access to distant coastal fisheries resources, to secure employment opportunities for its citizens on fishing vessels and in land-based sectors and to alleviate its fleet over-capacity problem. This in turn diminished fishing pressure in the Community's waters while simultaneously meeting the European market's increasing demand for fish.[539] The Community's existing over-capacity problem was compounded in 1986 by the accession of Spain and Portugal and the importance of its external fishing relations accordingly increased. The EEC concluded its first bilateral fisheries agreement with the United States of America in 1977 and has since signed an increasing number of access arrangements with various coastal states to such an extent that these agreements are now viewed as an integral component of the CFP.[540]

Historically, the Community has entered into mainly 'first generation' agreements, that is arrangements where coastal states grant access to its fleet in exchange for financial compensation from the EC.[541] Traditionally, the Community has covered the bulk of this

[539] A Acheampong, 'Coherence between EU Fisheries Agreements and EU Development Cooperation: The Case of West Africa' ECDPM (European Centre for Development Policy Management) Working Paper No. 52 (ECDPM, Maastricht 1997) at 'EU Fisheries Agreements', and Kaczynski and Fluharty op cit n 460 at 77. The Committee on Fisheries Report (op cit n 523) emphasises that international fisheries agreements are 'vital' to maintain the EC fleet's activities and employment at sea and on shore (point 3 at 8). See also Commission of the European Communities, 'Communication from the Commission to the Council and the European Parliament: Fisheries and Poverty Reduction' (Poverty Reduction Communication) COM (2000) 724 final at para 2, where the Commission emphasises that the core purpose of the agreements is to advance the Community's socio-economic goals. See also Foders op cit n 215 at 23, Kaczynski and Fluharty op cit n 460 at 76, 77, and ADE-PWC-EPU op cit n 522 at 35. Cross-reference with p 129 above regarding the over-capacity problem.

[540] Committee on Fisheries Report ibid at 14.

[541] Other common types of access agreements include reciprocal agreements, involving the exchange of equivalent fishing rights between the EC fleet and the fleet of the third country (Norway, the Faroe Islands and Iceland and the Baltic States), and 'second generation' agreements in terms of which access to markets is secured through the establishment of joint ventures. For an explanation of the categories of fishing access agreements see, for example, the FPA Communication op cit n 364 at para 1, N Johnstone, 'Economics of Fisheries Access Agreements: Perspectives on the EU-Senegal Case' (Discussion Paper) DP 96-02 International

monetary compensation, subsidising up to 80 percent of access costs, with European ship-owners paying the remaining amount, comprising licence fees.[542] These types of fisheries agreements are concluded almost exclusively with developing coastal states and all of the EU's bilateral fisheries agreements with African states fall into this category.[543] The incentive for such states to permit the Community fleet to access their stocks is thus largely self-evident: the financial benefits. Direct financial advantages accrue from the foreign currency that is generated by the agreements while numerous indirect pecuniary benefits also follow, including domestic job opportunities in fisheries-related activities, the acquisition of scientific and technological fisheries-related information and expertise, and the development of the domestic fishing industry through, for example, the construction and upgrade of ports and fish processing facilities.[544]

The EU assigns a significant portion of the CFP budget to bilateral fisheries agreements. Many of the species targeted by the Community fleet in third country waters are already over-exploited, however, fuelling an increasing debate about the extent to which the value of the Community catch justifies the ever-rising costs of these agreements, especially as they primarily benefit only select fishing sectors in a small number of member states.[545] In

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Institute for Environment and Development, Environmental Economics Programme (International Institute for Environment and Development, London 1996) at 1 and C Lequesne, 'The Common Fisheries Policy: Letting the Little Ones Go?' in Wallace and Wallace op cit n 393 at 366, 367. The various authors make use of different systems of categorisation. See also Deere op cit n 203 at 4, IFREMER (Institut Français de Recherche pour L'exploitation de la Mer), 'Evaluation of the Fisheries Agreements Concluded by the European Community' (Summary Report) Community Contract No 97/S 240-152919 of 10 December 1997 (1999) at para 1and Acheampong op cit n 539 at 'EU Fisheries Agreements'.

[542] ADE-PWC-EPU op cit n 520 at 36, Acheampong ibid, and Kaczynski and Fluharty op cit n 460 at 79, 90. Also IFREMER Study ibid at para 3.7: during the five year period covered by the study (January 1993-December 1997), the EC financed 82,8% of the total cost of agreements with eight African coastal states (amounting to an average of Euro 155 million per year). In chap 3 of this thesis the negative impact of subsidisation on the sustainability of the third countries' fisheries was discussed (pp 82-90). Below at p 155, I revisit the EU's efforts to reduce Community subsidisation of its distant water fleet.

[543] Committee on Fisheries Report op cit n 531 at 14, IFREMER Study ibid at para 1.1 and ADE-PWC-EPU ibid at 36. The EC is currently a party to twenty-two bilateral fisheries agreements, of which approximately half are with coastal African states or island states off the African coast.

[544] Black op cit n 532 at 171, 172. Cross-reference with pp 194-196 for a discussion of Senegal's reasons for concluding access agreements with the EU.

[545] Committee on Fisheries Report op cit n 523. See also ADE-PWC-EPU op cit n 522 at 13, 36. Fishers from the deep-sea sector in Spain, Portugal and France enjoy the primary benefits from bilateral fisheries agreements

addition, critics argue that Community payments in terms of these agreements would benefit both parties more in the long-term if they were directed at specific local projects aimed at promoting the sustainable development of the coastal states' fisheries.[546] The Community's new policy regarding bilateral fisheries agreements with developing countries reflects elements of this suggestion, as discussed below in greater detail.[547] In contrast, the past policy did not expressly promote the need to advance sustainable fisheries development in these countries. In fact in practice, there was no comprehensive policy and the Community simply negotiated agreements with coastal states on an ad-hoc, case-by-case basis. It was, however, guided by the general CFP rules and the EC Treaty obligations to ensure coherence with the Community's development cooperation objectives, as well as relevant international legal obligations and fisheries management principles.[548] Member states were required to exercise flag-state jurisdiction over their vessels to ensure compliance with CFP rules in third country waters. As the objective of sustainable fishing became increasingly core to the CFP, the need to introduce dedicated regulatory means to ensure that the Community fleet promoted this goal in (particularly) developing coastal states became more apparent.

Early efforts to incorporate sustainability concerns into the Community's bilateral fisheries agreements were (by its own admission) largely unsuccessful and, as critics pointed out, highlighted the apparent discrepancy between the Community's commitment to sustainable fishing in its own waters and that in waters beyond its jurisdiction.[549] In the 2002 CFP review, the Community thus acknowledged the need to re-shape its policy regulating its fishing

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(ADE-PWC-EPU at 36 and Lequesne op cit n 541 at 367). In terms of the agreements with Senegal, vessels from Spain, Portugal, France, Italy and Greece benefited.

[546] Kaczynski and Fluharty op cit n 460 at 90.

[547] FPA Communication op cit n 364. I discuss the policy below at para 3.3.

[548] See art 178 EC Treaty (op cit n 170). Cross-reference with p 98 regarding the Community's development cooperation policy.

[549] Kaczynski and Fluharty op cit n 460 and Johnstone op cit n 541. Also noted in United Nations Environment Programme (UNEP), 'Integrated Assessment of Trade Liberalisation and Trade-related Policies: A Country Study on the Fisheries Sector in Senegal' (UNEP Senegalese Fisheries Report) (United Nations, New York and Geneva, 2002) at para 5, and in various Commission communications, such as the Poverty Reduction Communication op cit n 539 at para 3 and the Green Paper op cit n 249 at para 5.8.2.

activities in developing third country waters towards ensuring that fisheries agreements better promoted the establishment and development of sustainable fisheries policies and practices in these countries. The Commission subsequently proposed a new framework 'cooperative partnership' approach to guide future agreements towards these ends.[550]

3.3 Promoting sustainable fishing through a new fisheries partnership approach

While the new framework for fisheries partnership agreements is still concerned foremost with protecting the Community's fisheries interests, it expressly aims to do so in the context of promoting sustainable fishing activities in these countries in accordance with the CFP's principles.[551] It is thus committed to ensuring the conservation and sustainable exploitation of fish stocks via the use of effective catch controls, vessel and fishing effort limitation, and the implementation of technical conservation measures based on sound scientific advice and in accordance with a precautionary approach.[552] More broadly, the new approach is rooted in the ideals of enhanced coherence between access agreements and internal policies such as development cooperation, environment and trade.[553] In particular, the Community's express

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[550] FPA Communitation op cit n 364. See also Green Paper ibid and Roadmap Communication op cit n 221 at para 5.

[551] FPA Communication ibid at para 2.1, 2.2 and Directorate-General for Fisheries and Maritime Affairs, European Community, 'The European Community External Fisheries Policy' (European External Fisheries Policy) (2005) at 5 <http://www.ec.europa.eu/fisheries/publications/other_publications_en.htm> accessed 30 October 2006.

[552] Council Regulation 2371/02 op cit n 221.

[553] European External Fisheries Policy op cit n 551 at 5. The development cooperation policy is discussed at pp 98-110; aspects of the trade policy in particular are discussed at pp 102-107. I discuss the Community's environmental policy at p 117. The particular need for synergy between bilateral fisheries agreements with developing states and the development cooperation policy was first noted by the Committee on Fisheries in 1997 (op cit n 523 see in particular point 10 (at 9), and 15 – 20, specifically at 20), where a call was made for broader, more development-orientated agreements; it was reiterated in the subsequent Poverty Reduction Communication (op cit n 538). See also European Parliament, 'Resolution on the Communication on Fisheries and Poverty Reduction' 25 October 2001 (A5-0334/2001) at para 3. Coherence refers to the coordination of policies within a given framework to ensure that they are complementary and that at minimum, their objectives do not conflict. It is most frequently referred to in the context of development, where the aim is to ensure that policies in a range of areas contribute towards the objective of poverty reduction - synthesised from IDDRA (Institut du Developpement Durable et des Resources Aquatiques), 'Policy Coherence in Fisheries: A Scoping Study. A report for the Organisation for Economic Cooperation and Development (OECD)' April 2004 at para 4, where a number of potential definitions of 'policy coherence' are presented. See also A Weston and D Pierre-Anton,

aim is to ensure that the agreements accord with its development policy and act as a 'development vector' in the fisheries sectors of the third countries by, for example, providing technical support to strengthen local fisheries management capacities, promoting cooperation in research, stock assessment, monitoring and surveillance, encouraging the rehabilitation of marine ecosystems and minimising wasteful fisheries practices.[554] The instruments to translate this into practice are the proposed new cooperative fisheries 'partnership' agreements (FPAs).[555] These are to be negotiated between the Community and developing third countries as part of an enhanced policy dialogue between the parties geared towards promoting sustainable fishing; the dialogue is thus intended to be much broader than past inter-party interactions, which narrowly focused on access.[556] The 2002 Roadmap Communication was specific about the core aim of the dialogue – overall, it must be geared towards developing a sound fisheries policy for the third country that enhances its capacity for sustainable fisheries and contributes toward other local development objectives (such as food security, poverty-alleviation and sustainable development).[557] The FPA will (if successfully negotiated) serve as the means to ensure the progressive development and implementation of this policy with the EU providing the necessary financial, technological and scientific assistance towards this end in return for access to domestic coastal fish stocks.

The broad policy ideals articulated in 2002 were subsequently refined in 2004 in a suite of proposed Council Conclusions.[558] The Conclusions outline procedural mechanisms to guide the Commission in its fisheries partnership interactions. Most importantly, they suggest that impact assessments of the potential environmental, economic and social consequences of

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Poverty and Policy Coherence: A Case Study of Canada's Relations with Developing Countries (The North-South Institute, Canada 2003) at 17.

[554] Green Paper op cit n 249 at para 5.8 in particular at para 5.8.1.

[555] Roadmap Communication op cit n 221 at para 5.

[556] Roadmap Communication ibid at para 5.3. Cross-reference with p 106 where I discuss a similar new emphasis on policy dialogue in the EU-ACP states development cooperation agreement (the Cotonou agreement – op cit n 287).

[557] Ibid.

[558] Council Conclusions 11485/1/04 op cit n 451.

FPAs and assessments of (inter alia) sustainable fisheries development opportunities in the partner coastal state, should be conducted prior to negotiating the partnership agreements so as to enable the Commission to prepare negotiating guidelines and to obtain a negotiating brief from the Council; for this purpose, the essentials of the assessments must be made available to the member states 'in good time'.[559] This 'borrowing' of procedural tools from the environmental sphere confirms the Community's increasing tendency to incorporate broader, more flexible and participatory tools into the fisheries field, including in the regulation of the Community's external fishing activities.[560] The Community recently began conducting impact assessments for proposed fisheries arrangements with specific West African coastal states.[561]

The Council Conclusions further recommend that the Commission proposes establishing a bilateral fisheries committee with the partner state to advise on sustainable fishing opportunities during negotiations and that it implements initiatives to ensure that the Community fleet promotes responsible fishing in the third country's waters. Information exchange is emphasised: the Commission is required to ensure that the agreement is monitored and its implementation is periodically reported in light of pre-defined performance indicators.[562] In addition, the negotiations 'proper' must be guided by CFP-based sustainability objectives as outlined in the Council's Conclusions. These include promoting the rational and sustainable exploitation of surplus stocks in the third country's waters taking due account of the needs and interests of the domestic fishing industry, improving scientific and technological knowledge of the fisheries in question (including the likely impact of

[559] Ibid at paras 6, 7. Such assessment appears to be akin to strategic impact assessment, which is employed in the Community's environmental sphere. Strategic environmental assessment is a particular method of environmental assessment; it refers to pre-emptive research to determine the potential economic, social and environmental impacts of a proposed plans, polices and programs. Strategic environmental assessment is regulated by Directive 2001/42/EC (op cit n 427). Cross-reference with pp 123, 124 above .
[560] Cross-reference with p 119.
[561] For example, the Community prepared an impact assessment for the proposed new fisheries access agreement with Senegal, as I discuss at p 239 (the negotiations failed, however, and no new agreement was signed).
[562] Ibid at para 6. It is not specified to which Community body these reports should be made.

fishing on the environment), combating illegal, unreported and unregulated fishing - in particular by strengthening the monitoring and control of Community fishing operations - and contributing towards domestic sustainable fisheries management efforts while ensuring coherence with Community development cooperation activities in the coastal state.[563] The Conclusions include more rigid guidelines with regard to the content of the agreement: they require that the agreements define the fishing opportunities available to the EU (together with detailed arrangements about the issuing of Community vessel fishing licences and the control and monitoring of their fishing activities), make adequate provision to ensure the funding and development of local fisheries (including regular supervision and follow-up) and outline procedures for the implementation, monitoring and review of the agreement.[564] In terms of the Conclusions, a fisheries partnership agreement will come into being once it has been adopted by Council regulation on a proposal from the Commission.[565]

A distinguishing feature of the new partnership approach is the justification for and scope of the financial compensation to be paid by the Community in terms of the agreement to the partner coastal state.[566] As outlined in the FPA Communication and the subsequent Council Conclusions, the financial contribution will correspond with the fishing opportunities available to the EU (to be topped up by access fess paid by vessel owners) together with the monetary support necessary to realise operationalisation of the coastal state's sustainable fisheries management policy.[567] The latter portion will be dedicated to specified local 'partnership activities' as an 'investment' by the Community in the coastal state's sustainable fisheries development. Examples of partnership activities include conducting scientific stock

[563] Ibid.
[564] Ibid at para 4.
[565] European External Fisheries Policy op cit n 551 at 6.
[566] FPA Communication op cit n 364 at para 2.2
[567] European External Fisheries Policy op cit n 551 at 6 and FPA Communication ibid at para 3.2.

assessments and improving fisheries control and monitoring.[568] Community funding will ideally cover the initial set-up costs of these activities and provide for their follow-up and evaluation; mechanisms will be put in place to control the use to which the funds are put.[569]

In response to criticism that the Community's continual heavy subsidisation of its distant water fleet impedes progress towards sustainable fishing in developing third country waters, the new policy emphasises the need for Community vessel owners to increasingly bear the burden of access costs by paying higher portions of the vessel licensing fees in foreign coastal waters.[570] While the Community has expressly acknowledged that 'exporting' vessels is not a viable long-term solution to its over-capacity problem, it has identified fisheries partnership agreements as an appropriate mechanism to facilitate the 'permanent transfer' of vessels to third countries in the context of 'joint enterprises'.[571] Joint enterprises refer to commercial fishing ventures between the Community and a coastal third country operating in the latter's waters using locally-registered vessels; they are promoted as a method of reducing EU fishing capacity while simultaneously contributing to sustainable socio-economic development in the respective coastal states.[572] Scepticism remains, however, as to the extent to which joint ventures are genuinely conducive to promoting sustainable fisheries objectives.[573]

In light of the historically poor compliance of the Community fleet with bilateral fisheries agreement terms in developing third country waters, the new policy emphasises the need to

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[568] Ibid.
[569] FPA Communication ibid at para 2.3 and Roadmap Communication op cit n 221 at para 5.3.
[570] Kaczynski and Fluharty op cit n 460 at 90, and Acheampong op cit n 539 at 'EU Fisheries Agreements'. For a discussion on fisheries subsidies and their potential adverse impact on sustainable fishing, see pp 82-90 above.
[571] Committee on Fisheries Report op cit n 523 at 16. See, for example, art 8 of Council Regulation 2792/99 op cit n 461 read together with art 8 of Council Regulation 2369/02 op cit n 461 and FPA Communication op cit n 364 at para 2.2.
[572] The Community holds a significant proportion of the share capital and one or more of the partners are nationals of the third country. They may only be concluded if certain criteria are met, including 'appropriate guarantees' (it is not specified from which party) that international marine management law is 'not likely' to be infringed, nor any of the CFP's objectives. See arts 8(1) and (2) of Regulation 2792/99 ibid and 8(3)(b)(i) and (iv) of Regulation 2369/02 ibid.
[573] I discuss the advantages and potential problems with joint ventures in my conclusions from p 236.

'step up' the EU's management, control and follow-up of its fleets' foreign fishing activities.[574] This is to be achieved by including comprehensive measures towards these ends in fisheries partnership agreements and by entering into 'partnership' fisheries control activities with the respective coastal states. Specifically, the FPA Communication suggests that the Community should fund the establishment of joint control, monitoring and surveillance activities with developing third countries.[575] The Commission re-iterated the need for the Community to actively cooperate with third countries to ensure improved implementation of CFP conservation measures in 2003 and suggested that responsibility for control and enforcement of these measures should be jointly assumed by the flag states and the coastal state in question.[576] One of the tasks of the newly-formed Joint Community Fisheries Control Agency (discussed above in chapter 5) is to assist member states in complying with their control and inspection obligations in terms of their fisheries partnership agreements. This will require cooperation between the Community (as part of the joint inspection structure) and the third countries concerned.[577]

It is clear from what I have described above that the Community's new fisheries partnership approach is based primarily on flexible, procedurally-based regulatory mechanisms and is strongly rooted in broad policy ideals; the Community (via the Commission) is granted significant scope in implementing the approach while there is relatively little room for input

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[574] As acknowledged in the FPA Communication op cit n 364 at para 2.2 and Green Paper op cit n 249 at para 5.8.2, Community IUU Action Plan op cit n 451 and Committee on Fisheries Report op cit n 523 at 17, 21. See also criticism by Kwiatkowska op cit n 505 at 25, Kaczynksi and Fluharty op cit n 460 at 78 and 83 and Acheampong op cit n 539 at 'Incoherence between Fisheries Agreements and Development Cooperation'. The need to improve in this regard is noted in the Council Conclusions 11485/1/04 (op cit n 451) at paras 3 and 4. Common violations include over-harvesting, the use of illegal gear, poor adherence to catch-landing provisions, and failure to employ local crew in accordance with the terms of agreements (Committee on Fisheries Report at 17).

[575] Council Conclusions 11485/1/04 ibid at para 4, FPA Communication ibid at paras 2.2 and 2.3 and Community IUU Action Plan ibid at para 5.1.

[576] European Commission, 'Communication From the Commission to the Council and the European Parliament: Towards Uniform and Effective Implementation of the Common Fisheries Policy' COM (2003) 130 final at para 3.2.1.

[577] Ibid at para 3.2. See also Council Regulation 768/05 op cit n 490. Cross-reference with pp 135 for more on the new Community Fisheries Control Agency.

from the member states through the Council. It is therefore not synonymous with the collaborative, multi-level regulatory trend noticeable in, for example, the Community's environmental field, as although binding legislation does not dictate the mechanics of agreement negotiations, clear divisions of competency remain.[578] Nevertheless, as with much of the rest of the common fisheries policy, regulations rather than directives govern the Community's external fishing activities and while Council measures are passed under them to regulate technical matters such as gear restrictions and permitted vessel tonnage, member states retain significant leeway in key areas such as monitoring and control. The regulatory methods employed to govern the Community fleet's fishing activities in third country waters thus follow a similar approach to that favoured in the rest of the CFP, comprising an amalgamation of traditional centralised, command-and-control mechanisms with less rigid, largely procedural means. Currently, the new fisheries partnership approach is being progressively implemented, guided by the development of 'clear rules' at Community level. The legal bases for negotiating and concluding the agreements remain the same as in the past, but the Community is adjusting its policies and actions as necessary to accommodate the new strategy.[579]

4. Conclusion

The Community's regulation of its fleet's fishing activities in developing third country waters embraces the mixed-methods approach employed in other spheres of the CFP. Influenced by similar trends in the EU's environmental policy and necessitated by the lack of guidance from international law in this area, its fisheries partnership approach to bilateral fisheries agreements attempts to harness this new regulatory inclination to better promote sustainable

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[578] As discussed above in chap 5.

[579] The legal bases remain article 300 EC Treaty (op cit n 170) read together with Council Resolution of 3 November 1976 (op cit n 335). See FPA Communication op cit n 364 at para 3.2.

fishing objectives. In the next section I examine the extent to which it has been successful in pursuing this goal with reference to the illustrative case study of EU-Senegalese fisheries relations.

PART III

CASE STUDY: AGREEMENTS IN PRACTICE

Part III comprises an analysis of the practical operationlisation of the EU's bilateral fisheries policy with reference to the case study of EU-Senegalese fisheries relations. Here, I pay particular attention to the most recent bilateral fisheries agreement between the parties, which operated from July 2002 until June 2006. I examine its content and impact in detail with a view to ascertaining whether it operated overall as a conservatory legal instrument designed to foster the sustainability of Senegalese fisheries, or not. In order to provide a background for my discussion of the recent agreement I first introduce Senegalese fisheries in chapter 7, highlighting the important socio-economic role of the sector and the worrying biological status of various coastal fish stocks. In chapter 8, I critically analyse the (legal) nature of the recent fisheries agreement and its impact on sustainable fishing and sustainable fisheries development in Senegal. My findings strongly evidence my earlier theoretical deductions as I explain further in the concluding section of my thesis.

7

SENEGAL'S MARINE FISHERIES

1. Introduction

In this chapter I discuss key aspects of Senegal's marine fisheries as a prelude to examining Senegal's most recent bilateral fisheries agreement with the EU in chapter 8. With reference to my research in Senegal, I focus on the biological and socio-economic aspects of Senegalese fisheries and discuss the domestic regulatory framework within which they operate, exploring its efficacy from a sustainability perspective. Various fish stocks in Senegal's coastal waters are over-exploited and domestic sustainable fisheries management is presently weak. Senegal's fisheries are thus currently suffering from both a biological and a management crisis, which in turn impacts on the country's bilateral fisheries relations with the EU. I draw on my empirical research in addressing why this is so and how these crises shape Senegalese-EU interactions. Based on interviews and observational research, my fieldwork offers a unique insight into Senegalese fisheries including the effects of the EU's influence in this sector. The observations that I present in this chapter are intended to enhance the reader's understanding of EU-Senegalese fisheries relations and to inform my subsequent analysis of the most recent Senegalese-EU fisheries agreement.

2. Senegal's marine fisheries

2.1 The socio-economic and geophysical background to Senegalese fisheries

The West African coast is rich in fish resources as a result of oceanographical conditions such as currents, areas of up-welling and wide continental shelves.[580] Fish is key to the West African diet and culture, particularly processed fish (smoked, dried, or salted) and artisanal fishers and fish processors play a central role in sustaining traditional lifestyles in this region. The domestic fishing sector contributes significantly to regional food security and national employment, while fisheries exports provide a valuable source of foreign exchange earnings.[581] The importance of fisheries is reinforced by the fact that most countries in the region have lower-middle or low income status.[582] Food security is a great concern and is easily impacted by activities in the fisheries sector including the patterns and extent of fishing as well as the state of regional fisheries resources and marine ecosystems, which affect the quantities and type of fish available as well as their accessibility and affordability.[583] Catch-landing obligations and by-catch restrictions imposed on foreign fishing are particularly influential, while the nature and extent of fish trade has a more complex, indirect impact.[584] These issues are all revisited in greater detail below.

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[580] MacAlister Elliott and Partners Ltd, 'West Africa Sub-regional Fisheries Review: States of Mauritania, Senegal, Gambia, Guinea Bissau, Guinea, Sierra Leone, and Liberia' (Report for the World Bank) (May 1995) (MacAlister Report) at para 1.2. See also fig 2.

[581] UNEP Senegalese Fisheries Report op cit n 549 at para 1.1 and MacAlister Report ibid at para 1.2 and fig 3.

[582] As defined by the World Bank see <http://www.worldbank.org/data/countryclass/classgroups.htm> accessed 3 August 2005.

[583] According to United Nations Food and Agricultural Organision (FAO) statistics. FAO, *FAO Statistical Yearbook 2004* (Issue 1 Rome, FAO Statistical Division 2004).

[584] CTA (Technical Centre for Agriculture and Rural Cooperation ACP-EU) and CFFA (Coalition for Fair Fisheries Arrangements), 'E-consultation on ACP-EU Fisheries Relations' (Report of electronic discussion) December 2004 <http://www.cape-cffa.org/issues.php> accessed November 2005.

Fisheries production was fairly constant along the West African coast until the mid-1960s, conducted mainly by local artisanal fishers who targeted small pelagic species.[585] Industrial operations took over in the 1970s, dominated by foreign fleets - initially, those from the former Soviet bloc, and later (from the 1980s onwards) Southern European and East Asian vessels. The Soviet fleet (supported by substantial state subsidies) primarily targeted small pelagics destined for the satellite states of Eastern Europe, while other foreign and domestic industrial vessels favoured demersals.[586] In the 1990s, following the collapse of the Soviet Union, most of its vessels withdrew, accompanied by a significant drop in the quantity of pelagics harvested. Industrial fleets subsequently heightened their targeting of high-value demersals, crustacea and cephalopods.[587]

Senegal gained independence from France on 4 April 1960. A period of relative political and social stability followed until the 1980s, when conflict arose between the central government and the south (Casamance), which sought autonomy. Cease-fire agreements between the government and the pro-independence movement (Mouvement des Forces Démocratiques de Casamance (MFDC)) were signed during the 1990s but were not respected. A comprehensive peace accord was concluded in 2001, but relations between the parties nevertheless remain fractious. With a population of around 10.5 million and a gross national product (GDP) of US$ 6.5 billion, Senegal is classified by the World Bank as having a low-income economy.[588] Poverty is pervasive and unemployment is high (estimated at 48 percent in

[585] Pelagics are migratory species, broadly divided into small pelagics (such as mackerel, herring and sardines) with low value, and large pelagics (such as tuna). MacAlister Report op cit n 580 at fn 1 and para 2.1.2.
[586] Demersals are located near the bottom of the ocean within fairly confined areas and generally have a high commercial value (MacAlister Report ibid).
[587] MacAlister Report ibid at para 1.1. Cephalopods are soft-bodies, tentacled marine species, including octopus, squid and cuttlefish, with high market values. Crustacea include species such as shrimp, crab and lobster. They too tend to have a high market value. MacAlister Report at fn 1 and para 2.1.2. For more on the species fished off Senegal's coast, see p 185-192 below.
[588] In 2003. World Bank, 'World Bank Development Indicators Database' <http://devdata.worldbank.org/data-query> accessed 3 August 2005.

2001).[589] Most people therefore look to the sea as a source of food and income, engaging in subsistence or small-scale (artisanal) fishing – over 80 percent of fishing is artisanal, with the industrial catch comprising only 13 percent of the global harvest.[590] In contrast, Senegal's maritime infrastructure (passed down by the French) is relatively modern and Dakar has one of the largest deepwater seaports on the West African coast. I was told that ports are maintained and (where necessary) new ones are built primarily with foreign funding either from development cooperation projects or bilateral fisheries agreements with the EU.[591] Senegal did not inherit a sound fisheries management administration, however, and to date, it remains beset by fisheries management difficulties, which I discuss in detail below.

Senegal's coastline is approximately 518 kilometres long. From its baseline, the state has claimed various maritime zones in accordance with international law, including a territorial sea of 12 nautical miles and a 200 nautical mile exclusive economic zone (EEZ). In terms of domestic law, industrial vessels are prohibited from fishing within six nautical miles from the coast, establishing an area which is commonly referred to by local fishers as an exclusive 'artisanal fishing zone'.[592] Five marine protected areas (MPAs) were recently established to preserve Senegal's coastal biodiversity and to protect its fisheries as part of a regional strategy for coherent MPA development.[593] They vary in size but are all located within the six nautical mile zone. No fishing is permitted within these areas, but an official from the national marine fisheries department (Direction des Pêches Maritimes (DPM)) told me that artisanal fishers do not always respect this prohibition and as enforcement is lax, fishing continues in various

[589] CIA, 'World Factbook' <http://www.cia.gov/cia/publications/factbook/geos/sg.html> accessed 26 April 2006.
[590] This is discussed further below in pp 183-185.
[591] Interviews DPM officials (Dakar February 2006).
[592] Ibid.
[593] Five MPAs were created in 2004 at St Louis, Kayar, Joal-Fadiouth, Abéné, and Bamboung. MPAs are established jointly by the Ministers of Maritime Economy and International Maritime Transport (previously Fisheries) and of the Environment and Nature Protection (previously Environment). Previously, the Minister of Fisheries was empowered to declare 'protected areas' along the coast in which fishing could be prohibited for defined periods (interview DPM official Dakar 6 February 2006). The Ministries were restructured in February 2006, during my visit to Dakar. I thus refer to both the old and the current Ministries in order to prevent confusion.

MPAs unabated.[594] Coastal environmental problems include habitat loss, most noticeably the destruction of mangroves (which function as nursery grounds for fish and shellfish) and the over-exploitation of certain fish species, particularly coastal demersals (discussed below).[595]

Fish is discernibly an important food source in Senegal and provides around 75 percent of the rural population's animal protein needs.[596] It is supplied mainly by the local artisanal fishers and comprises primarily coastal pelagics. During the past twenty years, however, artisanal fishers have increasingly joined the industrial sector in targeting high-value coastal demersals, often favouring them over coastal pelagics in order to meet the increasing international demand.[597] This has contributed to the over-exploitation of various coastal demersal species, jeopardising long-term export yields.[598] This is highly problematic as fisheries exports are an important source of foreign income for Senegal,[599] and make a valuable contribution to national economic growth.[600] Various DPM officials that I interviewed expressly acknowledged the poor state of coastal demersals and emphasised the need for urgent government action to prevent their further decline and to assist with their recovery in order to avoid future adverse trade and access agreement ramifications.[601] The current poor state of demersal stocks is partially an outcome of the state's nurturing of the fisheries export industry during the 1970s and 1980s. The result was that from 1986 onwards, fisheries became the

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[594] Interview DPM official ibid.

[595] The Parc National Delta du Saloum was created specifically to protect mangroves in Senegal. S Wells and C Bleakley, 'Marine Region 8: West Africa' in G Kelleher, C Bleakley and S Wells (eds), *A Global Representative System of Marine Protected Areas, Vol. II. Wider Caribbean, West Africa and South Atlantic* (World Bank, Washington DC 1995).

[596] UNEP Senegalese Fisheries Report op cit n 549 at 1. See also ICSF (International Collective in Support of Fishworkers), 'Report of the Study on Problems and Prospects of Artisanal Fish Trade in West Africa' (Report, ICSF 2002) (Artisanal Fish Trade Report) at 6 and interviews DPM officials (Dakar February 2006).

[597] UNEP Senegalese Fisheries Report ibid at para 1.2.

[598] Ibid.

[599] Approximately 35 percent of Senegal's foreign exchange earnings are from the export of fish and fish products (ibid at xvii).

[600] Ibid at para 1.1 and O Ndiaye, 'International Fish Trade and Food Security – Case of Senegal' (Report of the Expert Consultation on International Fish Trade and Food Security, Casablanca Morocco 27-30 January 2003) FAO Fisheries Report No 708 (FAO, Rome 2003). For the period of 1990-2000, the contribution of the fisheries sector to the total GNP was on average two to two and a half percent.

[601] Interviews DPM officials (Dakar February 2006).

primary domestic export (ahead of combined groundnut and phosphate production), accounting for just over a third of the value of all foreign trade.[602] Both over-fishing and the erosion of EU tariff advantages under the Cotonou agreement (discussed below) now threaten this role.[603]

The fisheries sector also contributes significantly to domestic employment, generating around 600 000 jobs. In total, between 15 to 17 percent of the working national population are employed in the fishing industry, (as noted above) primarily in the artisanal sector.[604] Overall, the fishing sector accounts for around 11 percent of the primary sector GNP and between two to two and a half percent of the total GNP.[605] Direct government revenue is generated through vessel licences, compensation for foreign access, fines for fishing violations and fisheries taxes.[606]

Domestic fishing in Senegal grew steadily from the 1960s, with landings totalling 50 000 tons in 1965 and rising to just under 428 000 tons in 2003.[607] As noted above, the industry was characterised by an increasing bias towards commercial, export-oriented fisheries, encouraged

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[602] UNEP Senegalese Fisheries Report op cit n 549 at para 1.1.

[603] Ibid at para 1.3 and art 37 of Cotonou Agreement op cit n 287. See also B Olufemi and G Faber, 'From Lomé to Cotonou: Business as Usual?' (2004) 9 European Foreign Affairs Review 1, 26. The erosion of trade preferences under Cotonou is discussed further below as well as in greater detail in pp 104 and 105 below.

[604] Directly, on board fishing vessels, and indirectly, in land-based employment (such as in the processing industry). UNEP Senegalese Fisheries Report ibid at para 1.1. See also – 'Contribution to the Workshop on Fisheries Tax Reform: Report of the Ministry of Fisheries, Republic of Senegal' in S Cunningham and T Bostock (eds), *Papers Presented at the 'Workshop on Exchange of View on Fiscal Reforms on Fisheries – to Promote Growth, Poverty Eradication and Sustainable Management' Rome, 13-15 October 2003* FAO Fisheries Report No 732 Supplement (FAO, Rome 2004) (Senegalese Ministry of Fisheries Report) at para 1.2.1, where it is suggested that around 100 000 direct jobs are generated and approximately 600 000 related jobs. Ndiaye op cit n 597 at para 1 and N Gueye, 'The Senegalese Experience in Negotiations of Fisheries Agreements with the European Union and the Impact of the Senegalese Populations' (paper presented at International Seminar (CTA/CW) on ACP/EU Fisheries Relations: towards a greater sustainability 7-9 April 2003 Brussels) < http://www.cta.int/events2003/fisheries/documents.htm> accessed February 2006 at 2, place the figures lower, at 600 000 jobs in total. See also Johnstone op cit n 541 at 5.

[605] Gueye ibid at 2 and Senegalese Ministry of Fisheries Report ibid at para 1.2.1. Fisheries is in third position for sectoral contributions after agriculture and farming.

[606] UNEP Senegalese Fisheries Report op cit n 549 at para 1.1.

[607] Direction des Pêches Maritimes (DPM), 'Resultats Generaux des Pêches Maritimes 2003'(Report) (Ministère de L'economie Maritime, Dakar 2005 (DPM Report) at 6. The 2003 figure was a 19.36 percent increase for the catch in 2002 (just under 358 000 tons) and had an estimated value of CFA 109 245 189 million. See also Senegalese Ministry of Fisheries Report op cit 604 at para 1.2.1.

by the state and compounded by external factors. State support included numerous government export support mechanisms for domestic fish-export companies, such as tax exemptions, tax reductions on imported equipment and repatriated profits, and export subsidies. In addition, companies benefited from exemptions on value added tax (VAT), customs tax, and registering tax.[608] Tax benefits were also extended to the artisanal sector (discussed below). Over time, these export incentives created over-capacity in the fish processing industry, stimulating the establishment of numerous new export-oriented companies, which in turn heightened the demand for fish. Fishers strove to meet this demand, resulting in the eventual over-exploitation of numerous coastal demersal stocks and a decreasing supply of fish to local markets.[609] The export advantages offered under the Lomé conventions (duty free entry into the EU market) compounded this trend.

A second impetus for the industry's export focus was the mid-1990s devaluation of the Communauté Financière Africaine (CFA) franc, the common currency of francophone Africa.[610] In 1994, the CFA was devalued by 50 percent on the initiative of the International Monetary Fund (IMF) and the World Bank in order to stave off economic crises, revive exports in the region, restore credibility in the currency and protect French interests.[611] The effect in Senegalese fisheries was to enhance trade competitiveness and significantly increase exports.[612] Finally, governmental support policies for artisanal fisheries encouraged this traditionally subsistence sector to focus on the external market, as discussed below in greater detail.

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[608] Ibid. Export subsidies were initially 15 percent and then 25 percent on canned tuna exports, and later extended to all fish products until devaluation.
[609] Ndiaye op cit n 600 at paras 2.1 and 2.2.
[610] The CFA is the common currency of the supranational financial system introduced by France in 1945 in its former West and Central African colonies, pegged to the French franc (now euro). Cross-reference to pp 96 and 97, where the CFA is discussed in the context of the policy of associationism.
[611] PJ Schraeder, 'African International Relations' in Gordon and Gordon op cit n 296 at 165, 226, 227.
[612] See UNEP Senegalese Fisheries Report op cit n 549 at para 4 and Ndiaye op cit n 600 at para 2.3.

2.2 The impact of subsidies

Fisheries subsidies are common in West African coastal states, including Senegal. Their main aim is to enhance fisheries output. Secondary benefits include national income growth (due to increased fisheries output), increased employment in the fisheries capture and processing sectors, enhanced business for fishing industries, heightened purchasing power of employees in the sector and improved national nutrition through greater domestic access to fish.[613] The core objective of fisheries subsidies in Senegal are to foster food self-sufficiency and adequate nutrition. Additional goals include modernising the domestic fleet, creating local employment opportunities, and generating foreign income through increased international exports.[614] To date, the bulk of the government's fisheries subsidies have been directed at artisanal fisheries with a view to developing this sector. They were introduced in two successive phases, with the first beginning at independence and ending in the 1970s. During this period, the government sought to transform small-scale fisheries into 'intermediary stage', semi-industrial fisheries and (later) into industrial operations. The strategy failed, however, as it was not supported by the small-scale fishers and government funds were inadequate.

The second phase began in the early 1980s. It followed a period of drought and accompanying crises in the agricultural sector during which fisheries rose to become the new leading sector in the Senegalese economy. It was hoped that fishing would foster sustainable national growth by reducing balance of payment deficits and unemployment rates and securing domestic food security. During this period the government shifted its approach from direct interventionalism to export-stimulating mechanisms, offering export subsidies throughout the sector and providing tax-free fuel, engines and fishing gear. Modernising the artisanal fleet was

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[613] AF Mabawonku, 'The Role and Effect of Subsidies on Fisheries Development in West Africa (Nigeria, Côte d'Ivoire, The Gambia and Senegal)' Fishery Committee for the Eastern Central Atlantic (CECAF) Series 90/53 (Food and Agriculture Organisation of the United Nations, Rome 1990) at paras 1.2 and 1.4.
[614] Ibid at para 2.3.1.

prioritised and aid was provided for pirogue motorisation (with significant impact) and purchasing new fishing gear, such as purse seines.[615] The outcome was profound: catch-landings rose rapidly from 130 000 tons in the early 1980s, to 250 000 in 1990 and around 300 000 in 2002.[616] The ability of fishers to harvest further from the shore for longer time periods enabled them to target off-shore high-value export species and encouraged them to become more profit-oriented.[617]

By 2002, approximately 60 percent of artisanal catches were destined for export.[618] Short-term economic benefits were evident, but broader, long-term implications were worrying: heightened coastal demersal fishing was causing over-exploitation of certain species and simultaneously resulting in a dearth in supply to the local market.[619] Local fish prices were rising due also to an increase in input costs such as fuel, spare parts and timber to build fishing vessels (all of which are imported and were thus adversely impacted by the CFA devaluation), which caused the inflation of production costs beyond the purchasing power of most locals.[620] Diminished supply to local markets was exacerbated by the inability of the newer, more sophisticated artisanal vessels to land on the open beach as they had done in the past. Most now require harbours, which raises landing costs and necessitates landing closer to urban cities. This compounds food security issues and by-passes the traditional role of rural women in artisanal fish processing, marketing and trading.[621] The DPM officials and NGO representatives that I interviewed in Dakar were not, however, of the opinion that artisanal

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[615] Johnstone op cit n 541 at 12. In Senegal, the rate of motorisation of pirogues was higher than average in the West Africa region.

[616] According to UNEP (Senegalese Fisheries Report op cit n 549 at para 3.1), almost 350 000 tons were landed in 2002, but the DPM Report (op cit n 607 at 3) states that 311 536 tons were landed in 2002, increasing to 385 766 tons in 2003.

[617] UNEP Senegalese Fisheries Report ibid at paras 3.1, 3.2.1, 3.2.2 and 6 and Ndiaye op cit n 600 at para 4.

[618] UNEP Senegalese Fisheries Report ibid.

[619] Export agents continue to finance the artisanal sector to supply the export market (Artisanal Fish Trade Report op cit n 596 at 18). Cross-reference with p 189 below, where I discuss examples of over-exploited demersals.

[620] Even timber is imported because large scale domestic forestry exploitation has resulted in a dearth of the local timber traditionally used to build pirogues. Artisanal Fish Trade Report ibid at 18, 19.

[621] Ibid.

fishing subsidies have resulted in significantly diminished domestic pelagic catches to the extent that local food security is threatened. In the words of one DPM official, there are 'enough artisanal fishers catching pelagics for food'.[622] The interviewees did, however, emphasise the urgent need for proper regulation of artisanal fisheries on the grounds that the number of boats and fishers engaged in the sector is 'getting out of control'.[623] I revisit this issue of food security below in paragraph 4, where I focus on artisanal fisheries.

Overall, Senegal's emphasis on export-oriented fishing fostered by governmental subsidies, combined with its dependency on the EU market, appears to be a cause for concern from a long-term biological and socio-economic perspective. The way forward is difficult. Increased international trade liberalisation, required by the WTO regime and echoed in Cotonou, will likely see Senegal lose its comparative trade advantage in fisheries exports to the EU in the near future.[624] In response, Senegal could refocus its harvesting efforts on pelagics, the route favoured by the regionally-based NGO representative I interviewed.[625] This would boost food security, but would result in a significant loss of foreign revenue. I was told that this could be offset by developing a viable regional export market for pelagics. But in previous e-mail discussions with an FAO-based fisheries planning officer I was informed that lucrative large-scale harvesting of pelagics along the West African coast is particularly difficult as these stocks are migratory species, moving between the EEZs of regional coastal states, and are highly susceptible to fluctuations in abundance.[626] Harvesting pelagics under production conditions that are anything other than optimum is accordingly unlikely to be commercially

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[622] Interviews DPM officials (Dakar February 2006) and NGO representatives (Dakar 6 and 7 February 2006).
[623] Interviews ibid.
[624] The envisaged new liberalised, WTO-compliant trade arrangements under Cotonou due to be operationalised from January 2008 are discussed in detail in pp 104 and 105 above.
[625] Interview Mr Ndiaye Socio-Economist, Programme Officer on Fisheries Policy of Enda Prospectives Dialogues Politiques (Enda Diapol) (Dakar 7 February 2006).
[626] Informal interviews (e-mail correspondence September 2005).

profitable.[627] In addition, generating profitable regional fisheries trade will prove challenging (as I discuss below). The national economy will thus likely be (at least temporarily) adversely affected if this path is taken.[628]

On the other hand, if exports continue in a similar vein during the transitional negotiation phase of Cotonou (until the end of 2007) as well as under its new trade arrangements, and/or are boosted by existing or new measures, the over-fishing of coastal demersals will likely continue with potentially disastrous consequences.[629] The former option is thus arguably better from a long-term biological and socio-economic perspective. Ideally, it should be part of a multi-faceted approach that combines a focus on sound, sustainable resource management with an emphasis on increased product value-added (rather than simply focusing on expanding trade volume) and on capturing new markets, particularly regionally.[630] This view, expressed in the literature, was echoed by the NGO representatives that I interviewed in the context of advocating the development of the domestic fleet in favour of diminished reliance on bilateral fisheries arrangements with the EU. They also suggested that in light of the poor state of the domestic industrial fleet, Senegal should consider entering joint fishing ventures with the EU in terms of which EU vessels would be re-registered in Senegal and required to land the majority of their catch domestically.[631] Arguably, the elimination (or reduction) of current governmental fishing subsidies is also needed, particularly in light of the potentially more stringent regulation of fishing subsidies at an international level under the WTO framework.[632]

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[627] Optimal conditions would include abundant stocks, good onshore services to the catching fleets, and proximity to markets. MacAlister Report op cit n 580 at para 3.2.
[628] UNEP Senegalese Fisheries Report op cit n 549 at para 1.4.
[629] As I explained at pp 104 and 105, non-reciprocal free trade arrangements between least developed ACP states (of which Senegal is one) and the EU will be maintained under the EU's preference programme.
[630] UNEP Senegalese Fisheries Report op cit n 549 at para 1.4.
[631] Interviews NGO representatives (Dakar 6 and 7 February 2006).
[632] UNEP Senegalese Fisheries Report op cit n 549 at para 2.1.2.

As I explained in chapter 3, various WTO member states are calling for stricter regulation of fishing subsidies in light of their contribution to fleet over-capacity and over-fishing.[633] While the matter is still under discussion, the possible future imposition of prohibitions on fisheries subsidies raises various questions, the answers to which impact particularly on fishing relations between the EU and African coastal states, including Senegal. These include whether the EU's financial payments under its future bilateral fisheries agreements might be classified as fisheries subsidies and thus subject to new future WTO rules and whether the current preferential access enjoyed by Senegalese fisheries products to the EU market in terms of Cotonou and EU fisheries development cooperation projects in Senegal might suffer a similar fate.[634] In Senegal, government measures to foster domestic fisheries development (discussed above) also run the risk of future classification as fisheries subsidies and consequential challenge within the WTO, particularly the direct financial support to the artisanal sector.[635] The implications of such an outcome for Senegal (and African coastal states generally) would be far-reaching and thus warrants further attention.[636] Anticipating change, the EU has already initiated the phasing-out of fleet subsidisation – as we saw earlier, in December 2004 it officially discontinued vessel transfer subsidies to third countries.[637] It is also in the process of reconstituting its bilateral fisheries agreements with developing countries into fisheries partnership agreements in terms of which its financial contribution will comprise compensation for fishing opportunities and targeted payments for identified

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[633] For more on fisheries subsidies and their effects, see para 4.3 of ch 3. See also Cunningham and Maguire op cit n 205 at 72, Schrank op cit n 252 at 1, Milazzo op cit n 232 at 77 and World Wide Fund for Nature (WWF), 'Turning the tide on fishing subsidies: Can the World Trade Organisation play a positive role?' (WWF, Gland 2002).

[634] The potential effect of tighter WTO regulation of fisheries subsidies is discussed in detail at pp 87-90; the Cotonou agreement and its future trade ramifications are discussed in chap 4 at p 104 and 105.

[635] R Grynberg, 'Fisheries Subsidies: Casting a Net too Small' (2002) 6 Bridges (paper) (International Centre for Trade and Sustainable Development (ICTSD), Geneva 2002) <http://www.ictsd.org/monthly/bridges/BRIDGES6-7.pdf> accessed March 2006.

[636] It is beyond the scope of this thesis to examine the issue of fisheries subsidy regulation further.

[637] In terms of art 8 of Regulation 2369/02 op cit n 461. Cross-reference with pp 129-132 where I discuss the structural pillar of the common fisheries policy in substantial detail.

domestic fisheries development activities.[638] Arguably, the financial compensation measures might nevertheless still be construed as a fisheries subsidies, although as I noted earlier, the EU officials that I interviewed were adamant that this would not occur.[639]

2.3 The key role of fisheries trade

As I have indicated above, fisheries trade is important to Senegal. It constitutes an estimated 40 percent of total exports with over 50 percent of the total domestic catch in volume being exported.[640] The main destination is the EU. This is largely due to the trade preferences enjoyed by Senegal under the past Lomé agreements and the current Cotonou arrangement, which permit customs free entry of piscatorial products into the EU market provided that the rules of origin are satisfied.[641] Between 1982 and 1991, Senegalese fisheries exports to the EU increased from 90 000 to 120 000 tons, rising again to 125 000 in 1999.[642] They have since dropped to around 50 000 in 2003.[643] Exports to Asian and North American markets were historically marginal, but increased somewhat following the CFA devaluation (particularly for frozen fish products).[644] Regional exports have traditionally been low, hindered by structural and institutional constraints, but are on the rise.[645] Although the volume of fisheries exports to Europe have dropped, it nevertheless remains the main destination for Senegalese fisheries, absorbing around 52 percent of total fish exports; this is far more significant from a value

[638] FPA Communication op cit n 364 at para 2.2.
[639] Interviews EU representatives (telephone interview 21 September 2005 and interview Dakar 2 February 2006). Cross- reference with p 89 at n 289. For a more sceptical view, see Gorez and O'Riordan op cit n 286 at para 3.4.
[640] MacAlister Report op cit n 580 at para 1.2 and fig 3. In 2003, total fisheries exports were around 95 675 tons, amounting to around CFA 164 016 968 million (DPM Report op cit n 607 at 102).
[641] Cross-reference with pp 102-107.
[642] UNEP Senegalese Fisheries Report op cit n 549 at para 2.1
[643] DPM Report op cit n 607 at 89, 90. The majority of these exports are frozen products (34 613. 30 tons).
[644] In Asia, the main markets are Japan, China and South Korea (DPM Report ibid at ch 4).
[645] UNEP Senegalese Fisheries Report op cit n 549 at para 2.2 and ibid. In 1999, only around 37 000 tons of fish were exported to African destinations. This amounted to less than 30 percent of Senegalese fisheries exports and constituted low-value products. In 2003, this figure rose to 38 649 tons, amounting to 40 percent of all fisheries exports. From a value perspective, however, this amounted to only eight percent of total fisheries exports (DPM Report ibid at 91-93 and annex at 103).

perspective, with exports to the EU accounting for a massive 81 percent of the value of all Senegalese fisheries trade.[646] Dependency on the EU market is thus still extremely high. This is perpetuated by European investment in African fish processing industries and the conclusion of bilateral fisheries agreements with coastal African states.[647] As I noted above, this is problematic in light of the new reciprocal trade arrangements envisaged by Cotonou, which may bring an end to the competitive trade preferences currently enjoyed by Senegalese fish and fisheries products in the EU.[648] Incremental preference erosion is likely to be felt even during the transitory period, compounded by the effects of the EU's recently concluded free trade agreements with Mexico (in 2000) and Chile (2002), which envisage the eventual full liberalisation of trade in fisheries products between the EU and these states respectively.[649] In 2005, the EU extended tariff exemptions on an extensive range of products to all least developed countries (LDCs), further weakening the comparative trade advantages enjoyed by Senegalese piscatorial products and thus their competitiveness.[650]

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[646] UNEP Senegalese Fisheries Report ibid at para 2.1 and DPM Report ibid at 103. The value of fisheries exports to Europe amounts to around CFA 133 million.
[647] UNEP Senegalese Fisheries Report ibid.
[648] Ibid and see Cotonou Agreement (op cit n 287) at, for example, art 37.
[649] Cross-reference with p 103 at n 344.
[650] In terms of the EU's 'Everything But Arms' (EBA) arrangement under its General System of Preferences (GSP), revised in Council Regulation No 980/2005. Cross-reference with p 105 at n 354. See also UNEP Senegalese Fisheries Report op cit n 549 at para 2.3.

3. The importance of sustainability in Senegalese fisheries regulation

Fisheries management in coastal West African states has traditionally been poor due to weak domestic fisheries policies and the dominating influence of external commercial concerns.[651] My empirical research confirmed the former point in relation to Senegal: reflecting the literature, my interviews revealed that fisheries administration is accorded relatively low governmental priority in Senegal and is regarded as being inadequately funded. This frustrates fisheries data collection and analysis and effective fisheries monitoring and control.[652] While some coastal states in the region have instituted national fisheries policies, many are said to be insufficiently detailed to ensure proper regulation of the industry and are poorly implemented. The common result is thus ineffective fisheries management.[653] This is exacerbated by the tendency of foreign investors to discourage tighter domestic regulation and control.[654] Senegal was in a worse position for a number of years as it had no national fisheries management policy in place at all. Political will seemed to be the stumbling block to this end, as a comprehensive draft national management policy existed at the time of my research (I was shown a copy of this document on two occasions while in Dakar) but had simply not yet been implemented.[655] While this changed in December 2006, when a fisheries management policy was finally adopted, it was at the time symptomatic of a broader failure to effectively operationalise fisheries policy and law domestically, as I discuss below in greater detail.

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[651] MacAlister Report op cit n 580 at para 4.1.3.
[652] Interviews DPM officials (Dakar February 2006).
[653] MacAlister Report op cit n 580 at para 4.1.3
[654] Ibid.
[655] A draft national fisheries management policy has been drawn up, but it has yet to be implemented. It is acknowledged that this must occur soon. Interviews DPM officials (Dakar February 2006).

3.1 Regulating domestic fishing

Senegal's fisheries sector is primarily governed by the 1998 Marine Fisheries Code.[656] The Code is ambitious in its conservation and management objectives and includes measures to regulate fishing effort and control the expansion of national fishing capacity as well as detailed provisions to guide the establishment of fisheries management plans.[657] It also includes institutional management mechanisms, which provide for the establishment of a national fisheries consultative council and local fisheries councils, and create an advisory commission to assist with the issuing of fishing licences.[658] The Code regulates industrial fisheries through vessel licences and size and volume catch limits.[659] It also seeks to manage artisanal fisheries, outlining guiding principles to this end.[660] This is an innovative move as the artisanal sector has historically been unregulated. These provisions have not been implemented, however, and the artisanal sector remains unregulated.[661] This is problematic in light of the sheer number of fishers engaged in this sector (noted above) in relation to the diminishing coastal stocks. I was told that regulatory measures are unlikely to be implemented until after the next elections (February 2007), however, as artisanal fishers comprise a large percentage of the electorate and many of them do not favour the envisaged regulation.[662] Comprehensive provisions for improved monitoring, control and surveillance of fishing operations are also included.[663]

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[656] Marine Fisheries Code 98-32 of 14 April 1998 available at <http://www.gouv.sn/textes/PECHE.cfm> accessed February 2006 (which repealed and replaced the earlier 1987 Marine Fisheries Code (87-27 of 18 August 1987)), together with its implementing Decree (No 98-498 of 14 April 1998) and Decree No 2000-833 of 16 October 2000.
[657] Ibid at art 10.
[658] Ibid at arts 11, 12 and 22.
[659] Ibid at arts 20, 21.
[660] The principles are outlined in art 13 ibid. See also art 36.
[661] This was valid at February 2006. It was confirmed by interviews with DPM officials (Dakar February 2006).
[662] Interviews DPM officials (Dakar February 2006).
[663] Code op cit n 656 at Title VI.

In addition, the Code tightens the regulation of foreign fishing in Senegalese waters and stipulates minimum bilateral fisheries agreement terms. These include specification of the number and type of permitted foreign vessels, reporting requirements and details regarding compensation and monitoring and enforcement. Agreement provisions must also accord with domestic fisheries management plans (if and when they are implemented).[664]

The government was slow to implement the Code despite the pressing need for more effective domestic fisheries regulation. In December 2000, a national multi-stakeholder gathering was thus held aimed at launching the legislation and crafting a long-term sustainable fisheries management plan. A comprehensive national development strategy was devised and subsequently published in 2001.[665] Its objectives included ensuring sustainable fisheries management while maintaining economic viability, modernising the artisanal fishery, increasing the added value of fishery products, and strengthening regional and international bilateral cooperation in fisheries matters. Priority future legal reforms were identified to these ends, the most urgent being the establishment of a sound national fisheries management policy. This would entail implementing fisheries management plans in the industrial and artisanal sectors (originally due to have been introduced in terms of the 1998 Code) aimed primarily at reducing fleet capacity in the industrial sector and introducing vessel licensing in artisanal fisheries. The objectives of matching fish processing capacity with capture potential and maximising value-added were also identified, as was the need for institutional reform towards greater transparency in fisheries administration.[666] The strategy further highlighted

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[664] Ibid at Title VII, arts 16-19. See also Senegalese Ministry of Fisheries Report op cit n 604 at para 1.3.2.

[665] Referred to cumulatively as the development strategy, it comprised four documents namely, a summary and three 'Tomes': Ministere de la Pêche et des Transportes Maritimes, 'Diagnostic, Stratégie et Plan d'Action de Développement Durable de la Pêche et de l'Aquaculture' Note de Synthèse, 'Pêche Maritime et Continentale, Aquaculture; Analyse Descriptive et Diagnostic, Tome I', 'Stratégie de Développement Durable de la Pêche et de l'Aquaculture, Tome II', and 'Plan d'Action à Moyen Terme de Développement Durable de la Pêche et de l'Aquaculture, 2001-2007, Tome III' (Ministere de la Pêche et des Transportes Maritimes, Dakar 2001). See also Senegalese Ministry of Fisheries Report ibid.

[666] Senegalese Ministry of Fisheries Report ibid.

the importance of effectively communicating its proposed new policies to all stakeholders so as to maximise its chance of success.

The envisaged re-ordering of the industry would require strong financial backing. To this end, the strategy recommended establishing a fisheries restructuring fund to compensate fishers for capacity-reduction and the introduction of selective gear requirements and to assist processing industries in upgrading their operations.[667] Financial compensation under subsequent bilateral fisheries agreements with the EU (and other states) could arguably also contribute towards these ends. I was informed by the EU representatives that I interviewed that the Community intends to support the core element of the strategy, namely the development and implementation of a sustainable domestic fisheries management policy, by channelling all financial payments under future fisheries agreements with Senegal towards this end.[668] At the time that I conducted my empirical research it was not known whether this would be translated into a firm negotiation offer for the next agreement, and if so, whether it would be accepted by Senegal (the end of the (then) current agreement was imminent - June 2006). Negotiations subsequently commenced in October 2005 but soon failed, however.[669]

The realisation of the development strategy lacked momentum and poor governance continues to prevail in the fisheries sector.[670] DPM interviewees bemoaned the fact that the strategy's suggestions have either not been operationalised or have been only partially implemented, in many cases, on paper only.[671] This includes recommendations regarding the fisheries

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[667] Ibid at para 1.3.3.
[668] Interview EU representative (telephone interview 21 September 2005).
[669] The first official round was in April 2006 with the second in June of that year. I was informed that the primary reasons for their collapse was that while there was agreement on reduced fishing opportunities, there was no consensus on financial compensation. The parties also held differing views regarding the urgency of the need for Senegalese fisheries management reform. Personal e-mail correspondence with EU representatives (June and July 2006).
[670] Senegalese Ministry of Fisheries Report op cit n 604 at para 1.2.2 and interviews DPM officials (Dakar February 2006) and NGO representatives (Dakar 6 and 7 February 2006).
[671] Interviews DPM officials (Dakar February 2006).

institutional structure, which is headed by the national marine fisheries department (the DPM),[672] assisted by the Centre for Oceanographic Research (CRODT), which provides the necessary scientific data and assessments.[673] The structure remains unchanged from the 2000 institutional revision despite the fact that, according to one DPM official, certain institutions have not been effectively fulfilling their mandates, most noticeably, CRODT.[674]

Equally concerning is that at the time of my empirical research, a national fisheries management policy had still not been implemented even though key coastal demersal stocks were continuing to decline. As I suggested above, the reason for this seems to be political. My interviewees revealed a keen awareness that effective domestic fisheries management is urgently required to halt the alarming decline in coastal demersal stocks, ensure the sustainable fishing of other species and enforce the long-overdue regulation of the artisanal sector.[675] The domestic fisheries regime facilitates these goals but interviewees were of the view that they will remain unrealised until there is a change in mindset at top government levels towards a more pro-active stance.[676] While Senegal has a relatively well-defined policy regarding fisheries access by foreign countries (particularly the EU), it is difficult to imagine

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[672] The DPM plays the lead role in establishing fisheries resource management and exploitation policies. It comprises an industrial and an artisanal fishery division, a fishery products control bureau, and regional services within each of the seven Senegalese maritime regions.

[673] Centre de recherches océanographiques de Dakar Thiaroye. It is helped by three bodies created under the 2000 Decree, namely a fishery protection and surveillance department (Direction de la Protection et de la Surveillance des Pêches (DPSP)), which is concerned with compliance with national fisheries regulations and with protection and surveillance of the EEZ, a planning and study group focusing on sustainable fisheries development (Cellule d'Études et de Planification (CEP)), and a continental fisheries and aquaculture department (Direction de la Pêche Continentale et de l'Aquaculture (DPCA)), which focuses on fisheries such as crustacean, molluscs and seaweeds. There is also a centre dedicated to artisanal fisheries improvement and experimentation (Centre de Perfectionnement et d'Expérimentation pour la Pêche Artisanale (CPEP)). Also important is the National marine fishery training centre (Centre National de Formation des Techniciens des Pêches Maritimes (CNFTPM)), established by Decree No 91-1349 of December 1991, which trains marine fisheries technicians. For a discussion of these institutions and their respective roles, see Senegalese Ministry of Fisheries Report op cit n 604 at para 1.3.1.

[674] Interview with Mr Samb Former Technical Advisor to the Minister of Fisheries (Dakar 1 February 2006). The institutional structure was last revised in terms of the 2000 Decree (op cit n 653).

[675] Interviews with DPM officials (Dakar February 2006) and NGO representatives (Dakar 6 and 7 February 2006).

[676] Interview with Mr Samb op cit n 674.

how it hopes to promote sustainable fishing in its coastal waters without strong fisheries management plans and practice to underpin and guide it. Below, I briefly outline this policy.

3.2 Regulating fisheries access relations with the EU

Beginning in the early 1970s, Senegal concluded various bilateral fisheries agreements with individual European states.[677] These were long-term contracts which allowed an unspecified number of vessels to fish in terms of ill-defined harvesting conditions. Essentially, they amounted to financial loans for virtually unrestricted access.[678] In 1979, prior to concluding its first bilateral fisheries agreement with the EU, the Senegalese government released guidelines regulating foreign fleet access. The guidelines required foreign vessel numbers to be limited to match domestic resource capacity, financial compensation to be paid for access rights (to support national fisheries development), foreign fishing licence fees to be charged, and a percentage of foreign catches to be landed and processed locally. Priority access and processing rights were to be guaranteed to national fishers.[679]

Two basic principles emerged from these guidelines to inform future bilateral fisheries agreement negotiations with the EU: access rights granted to the EU would be non-reciprocal and the Community would be required to pay financial compensation in exchange for these rights (together with vessel license fees).[680] In 1990, following the adoption of the 1987 Maritime Fishing Code, these principles were remoulded into a new set of guidelines that required negotiations to take account of national fishing capacity in relation to declining domestic stocks and the need to foster local sustainable fisheries development. They

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[677] With France in 1974, Italy in January 1975 and Spain in May 1975. Cross-reference to pp 100 and 101 at n 335 and p 148 at n 538.
[678] Gueye op cit n 604 at 4 and Senegalese Ministry of Fisheries Report op cit n 604 at para 2.2.1.
[679] Senegalese Ministry of Fisheries Report ibid at para 2.2.1.
[680] Ibid at para 2.2.1.

highlighted the importance of reducing fishing pressure in Senegal's EEZ while acknowledging the country's reliance on foreign income from bilateral fisheries agreements. This was reflected in subsequent agreements, which saw a reduction in EU fishing opportunities but an increase in the Community's financial compensation package.[681]

Senegal's first fisheries agreement with the EU coincided with the re-launching of its domestic efforts to develop the local artisanal sector (discussed above).[682] Artisanal fishers thus found themselves competing for species and fishing grounds with not only domestic industrial vessels but now also the EU fleet. Adverse biological and socio-economic consequences followed (as outlined above).[683] The EU's fishing off the Senegalese coast thus contributed to declining domestic fisheries resources and simultaneously diminished the availability of fish stocks for local fishers.[684]

Senegal has nevertheless enjoyed significant socio-economic benefits from bilateral fisheries agreements with the EU. An internal governmental analysis of the 1997-2001 agreement found that (in compliance with compulsory landing provisions) average annual Community landings in Senegal during this period totalled 349 tons of demersals and 17 042 tons of tuna. These were processed locally, generating direct and indirect added value totalling CFA 5 579 and 4 881 million respectively. In addition, locals employed on EU vessels exceeded the minimum fisheries agreement quota.[685] Compensation for fishing opportunities was CFA 32 billion, averaging CFA 8 billion annually, together with trawler licence taxes of CFA 689

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[681] Ibid. The EU has become increasingly resistant to this trend - interviews EU representatives (telephone interview 21 September 2005 and interview Dakar 2 February 2006).
[682] The agreement was signed in 1980 - op cit n 336.
[683] Senegalese Ministry of Fisheries Report op cit n 604 at para 1.2.2.
[684] Ibid and Ndiaye op cit n 600 at para 3.
[685] Senegalese Ministry of Fisheries Report ibid at para 2.2.2.2. For figures on economic impacts, see tables 5 and 6.

million and tuna tax of CFA 5.5 million. In sum, the total economic benefit to Senegal was an estimated CFA 19.2 billion , representing 9.6 percent of national added value.[686]

The Senegalese government acknowledges that the bilateral fisheries agreements with the EU have had both positive and negative socio-economic and environmental impacts.[687] Their adverse contribution to continual stock decline in Senegalese waters nevertheless remains a particular cause for concern which for critics, overshadows the positive effects of the agreements. Senegalese government officials, to the contrary, tend to emphasise the (financial) benefits of the agreements.

This bifurcated view came to the fore strongly in my empirical research – the DPM officials that I interviewed highlighted the valuable foreign currency generated by the agreements, arguing that it was used to develop the domestic fishing industry and that it ultimately benefited the country as a whole; the fisheries agreements were 'in the interests of the people'.[688] I was told by one senior official that any opposition to the agreements from local fishers that I might encounter was largely the result of NGO instigation and was fuelled by the fishers' desire to see more immediate, direct financial benefits from the agreements coming their way.[689] The NGO representatives, on the other hand, were indeed highly critical of the agreements. As noted above, they advocated phasing out agreements with the EU in favour of developing the local fishing industry. Both NGO representatives that I interviewed explained in detail how careful, strategic development and management of domestic fisheries could result in long-term financial benefits capable of matching those which future bilateral

[686] Ibid at paras 2.2.2.3 and 2.2.2.4.
[687] Gueye op cit n 604 at, for example, 8 and 13.
[688] Interviews DPM officials (Dakar February 2006).
[689] Ibid.

fisheries agreements might generate (although each had different ideas about how exactly this should be realised).[690]

The EU representatives that were interviewed confirmed that the EU's main motive for seeking to continue fisheries arrangements with Senegal is to meet Europe's socio-economic needs, but emphasised that the Community would not pursue its own short-term interests at the expense of the long-term sustainability of Senegal's fisheries.[691] The interviewees assured me that the EU genuinely hopes to promote sustainable fisheries development in Senegal.[692] They pointed to various terms of the (then) current agreement as proof of this intent, referring particularly to the targeted actions, and told me of plans to channel compensation under future fisheries agreements to promote the implementation of an effective domestic fisheries management plan. One of the NGO representative expressed considerable scepticism of the EU's intentions, however, emphasising that if the EU had any genuine interest in fostering sustainable fisheries development in Senegal, it would not do so obliquely via bilateral fisheries agreements but would directly assist Senegal in developing its domestic fisheries and help it to improve the quality and quantity of its fisheries exports to other countries. He emphatically asserted that the (then) current fisheries agreement with the EU was nothing more than a business agreement securing direct Community access to Senegal's fish stocks; it was not genuinely concerned with fostering the long-term sustainable development of Senegalese fisheries.[693]

In conclusion, at the time of my research the long-term sustainability of Senegal's fisheries did not appear to be sufficiently highly-ranked by the government bodies of either the EU or

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[690] Interviews NGO representatives (Dakar 6 and 7 February 2006).
[691] Interviews EU representatives (telephone interview 21 September 2005 and interview Dakar 2 February 2006).
[692] Ibid.
[693] Interview Nr Ndiaye op cit n 625.

Senegal. This was despite the fact that both parties' bilateral fisheries agreement policies have evolved in the last few years to better reflect this goal. The failed recent negotiations for a new fisheries agreement between the parties is indicative of the parties' inability to agree on 'sustainable fishing' as the ultimate objective of such arrangements as well as their diverging views on what this goal should comprise and how it should be achieved.

4. Senegalese artisanal fisheries and sustainability

The term 'artisanal fishers' is generally accepted as referring to small-scale fishers involved in a diverse range of fishing activities from non-advanced, non-differentiated subsistence fishing to highly differentiated and specialised semi-formal sector harvesting.[694] This aptly describes the Senegalese artisanal fishing sector. As I have already indicated, artisanal fishers play a very important role in Senegalese fisheries; the overwhelming majority of Senegalese fishers are artisanal, with their catches cumulatively amounting to about 87 percent of total domestic landings.[695] A large percentage of these fishers originate from outside the country and have either settled in Senegal (such as the Guineans) or are migratory (for example, the Nyominka). These groups strongly influence the processing market (particularly the Guineans) and thus also largely dictate the capture industry.[696]

Despite the fact that the artisanal sector now also increasingly targets coastal demersals (in contrast to their traditional fishing practices), pelagics still constitute around 70 percent of artisanal captures, most of which are kept for local consumption with the remainder traded

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[694] For a succinct review of the meaning and nature of artisanal and subsistence fishing see M Hauck, 'Subsistence Fisheries Task Group (SFTG) Draft Report 6: Review of Literature on Artisanal and Subsistence Fishers' (Report) Institute of Criminology Social Justice Resource Project, University of Cape Town (2000). See also R Lawson and M Robinson, 'Artisanal Fisheries in West Africa: Problems of Management Implementation' (1983) 7 Marine Policy 279, 290 at 280.

[695] DPM Report op cit n 607 at 101.

[696] Samudra, 'A New Space: Excerpts from the Report on the Workshop on Problems and Prospects for Developing Artisanal Fish Trade in West Africa' (August 2001) <http://www.icsf.net/jsp/publication/samudra/pdf/english/issue_29/art05.pdf> accessed Febuary 2007.

regionally.[697] These official figures, together with the views expressed by interviewees in Senegal, do not accord with some of the literature on the topic which suggests that the artisanal trend towards targeting export species (fostered by government export aids, as discussed above) is increasingly at the expense of the local supply of pelagics and is thus threatening regional food security (as I have already noted above in paragraph 2.3).[698] Further research on this matter is needed to provide clarity, although arguably the mere potential of such a threat is worrying and should elicit pro-active governmental responses.

The most common pelagic species landed by the artisanal sector are bonga (ethmalosa) and sardinella, which have minimal commercial value and are sold locally at relatively low prices, comprising a central component of the Senegalese diet.[699] Both fresh and processed fish is consumed locally but the latter is favoured as it is more easily preserved, an important factor in Senegal's hot climate and given the scarcity of refrigeration facilities. EU fishing has the potential to interfere with artisanal fishing, particularly its trawler activity, as it produces significant by-catch that is generally high in pelagics. Under past access agreements, fishing opportunities granted to the EU for pelagic species were particularly problematic as they generated competition with local fishers for stocks and fishing grounds. As a result of profound discontent expressed by the artisanal fishers and critics, EU rights to pelagics were accordingly excluded from the most recent bilateral fisheries agreement; by-catch limits remain problematic however.[700]

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[697] Senegalese Ministry of Fisheries Report op cit n 604 at para 2.2.2.1 and Gueye op cit n 604 at 14.
[698] See for example Ndiaye op cit n 600, who suggests that the threat is already significantly worrying.
[699] UNEP Senegalese Fisheries Report op cit n 549 at para 1.1, MacAlister op cit n 580 at para 1.2 and A Sall,'Case Study of the Fish Processing Sector in Joal: A Dynamic Reality' in International Collective in Support of Fishworkers (ICSF), *Report of the Study on Problems and Prospects of Artisanal Fish Trade in West Africa* (Report, ICSF 2002) at 29.
[700] For more on this, see p 214 below.

In brief, the key components of the local artisanal fisheries sector are capture, processing and trade. Artisanal fish processing and trade have particular social, cultural and economic significance, generating employment opportunities, particularly for women, and contributing towards food security by ensuring the distribution of fish.[701] Regional fish trade is conducted primarily on an informal basis in response to demand; exports are mainly to Burkino Faso, Mali and Guinea Conakry. Various problems hamper regional trade, however, including cross-border transport difficulties (particularly inadequate transport infrastructure), border problems (such as customs and police harassment of fish vendors), tariff barriers and poor market facilities.[702] Expanded regional fish trade could have numerous benefits for Senegal such as providing an alternative and/or supplement to current exports to Europe, securing diversified and sustainable livelihoods in the artisanal fisheries sector, and contributing towards improved regional food security.[703] Domestic and regional efforts to eliminate obstacles to this end should thus arguably be increased.[704] My empirical research confirmed the importance of regional fisheries trade to Senegal and a number of my interviewees (most noticeably, the NGO representatives) expressed the view that the national government should make a greater effort to promote such trade.[705] Development opportunities in the local fresh fish market brought about by the increasing availability of electricity and ice should also be investigated.[706]

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[701] While artisanal fishers are almost exclusively male, the artisanal processing sector is traditionally dominated by women. Samudra op cit 696 at 30. See also Samudra at 23 and N Nayak, 'Case Studies of Women Fish Processors and Traders' in ICSF, *Report of the Study on Problems and Prospects of Artisanal Fish Trade in West Africa* (Report, ICSF 2002) at 60.
[702] Ibid and see Sall op cit n 699.
[703] Sumudra op cit n 696 at 24.
[704] Gorez and O'Riordan op cit n 286 at para 2.3.
[705] Interviews DPM officials (Dakar February 2006) and NGO representatives (Dakar 6 and 7 February 2006).
[706] Nyak op cit n 701 at 42.

5. The exploitation and state of Senegalese fisheries

Senegal's diverse coastal fisheries are targeted by domestic fisheries as well as various foreign fleets from neighbouring countries and distant-water fishing nations. In response to the over-fishing of valuable coastal demersal species, the Senegalese government is concerned with balancing the need for their urgent effective management with permitting continual access to them by foreign fleets in return for generous financial compensation. At the same time, it must protect its national fisheries.[707] My fieldwork highlighted the importance of pursuing these goals and the likely difficulties in doing so.

As noted earlier, the global Senegalese catch grew dramatically from the 1960s until present times.[708] The industrial catch is currently around 41 800,[709] while artisanal landings are a massive 385 776 tons, amounting to just over 80 percent of the total domestic catch (compared to 68.2 percent of the total catch in 1992).[710] The most common species targeted by industrial fishers include octopus, shrimp, cuttlefish, white carp and ombrina, as well as tuna. I was told that the industrial fleet, which comprises trawlers (around 70 percent of the total fleet), seiners and 'three or four' tuna vessels, is old and requires urgent modernisation.[711] As noted above, artisanal fishers traditionally favour small coastal pelagics and while they are increasingly targeting higher value coastal demersal species for export, pelagics continue to dominate their catch. Pirogues (dugout canoes) remain the main artisanal fishing vessels, although the overwhelming majority are now motorised (around 75.8

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[707] Interview DPM official (Dakar February 2006) and reflected in various government reports, such as Gueye op cit n 604 and Senegalese Ministry of Fisheries Report op cit n 604 at para 2.2.1 and 'General conclusion'.
[708] DPM Fisheries Report op cit n 607 at 6.
[709] See Johnstone op cit n 541 at 6 for figures regarding the industrial catch for 1981-1993. For current figures, DPM Report ibid at 6.
[710] Ndiaye op cit n 600 at para 3, read together with DPM Report ibid at 3. As noted above, the figures for 2003 are somewhat inconsistent. See also Johnstone ibid at 5 for earlier figures.
[711] Interviews DPM officials (Dakar February 2006) and DPM Report op cit n 607 at ch 3 and at 101.

percent). Purse seines, ring nets and encircling nets are the favoured gear.[712] In total, the Senegalese domestic fleet officially currently comprises 139 industrial vessels and 14 900 artisanal pirogues. As there is no obligation on artisanal fishers to licence their vessels, however (as noted above), it is likely that the number of pirogues in use is significantly higher.[713]

In 2003, foreign ships in Senegal's EEZ accounted for about 32 percent of all industrial vessels in these waters, harvesting around 11 987 tons (about two percent of the total EEZ catch).[714] Distant-water fishing nations traditionally fishing in Senegalese waters in terms of agreements include the former Soviet Union, various Eastern European fleets, East Asian vessels and the EU.[715] In 2003, licences were issued for 28 trawlers and 30 tuna vessels in Senegal's coastal waters (comprising ships from Spain, France, Portugal and Italy); their total catch was 10 839 tons.[716] In addition, tuna vessels from Netherlands Antilles (two), Cap Vert (two), St-Vincent and Grenadine (one) and Venezuela (also one) and a Gabonese trawler were fishing off Senegal's coast.[717] The EU harvest comprised the overwhelming majority of the total foreign catch in line with its comparatively favourable fishing opportunities.

There are four main groups of exploitable stocks in Senegal's EEZ: pelagics, demersals, cephalopods and crustaceans.[718] Pelagics are migratory species, broadly divided into small pelagics (such as mackerel, herring and sardines), which have a low value, and large pelagics

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[712] Seine nets are the most commonly used. Most artisanal catches were taken in the Thiès region, followed by Dakar (DPM Report ibid at 100). See also Johnstone op cit n 541 at 5.
[713] The current available data relates to 2003 figures. In 2003, the industrial fleet comprised 132 trawlers, three seiners and four tuna vessels (interviews DPM officials Dakar Febraruy 2006 and DPM Report ibid at ch 3 and at 101). According to ICCAT statistics, however, there are currently nine tuna vessels.
[714] See Johnstone op cit n 541 at 6 for figures for 1982-1993 and DPM Report ibid at 101, as well as interviews DPM officials (Dakar February 2006) for current figures.
[715] Ibid.
[716] DPM Report ibid at 64.
[717] Ibid. Their combined catch was relatively small.
[718] Senegalese Ministry of Fisheries Report op cit n 604 at para 1.1, based on information from CRODT.

with a high commercial value (such as tuna).[719] Small coastal pelagics dominate fish stocks off the West African coast (primarily sardinellas, which comprise over 70 percent of the resource). Their distribution corresponds with geographical coastal features, with a concentration of stocks in areas of oceanic up welling: Senegalese and Gambian waters together support around 2.2 million tons of these pelagic species.[720] In Senegal, small pelagics have a relatively moderate harvest level, having traditionally only been fished by the artisanal sector (although catches temporarily rose to around one million tons in 1989 when they were also targeted by former Soviet-bloc fleets). As noted above, there is potential for enhanced regional trade in these species; if obstacles to this end are reduced, the Senegalese small pelagic industry could well expand.

Large pelagics are highly migratory high seas species, moving down from the north with a migration pattern that is difficult to predict. The stocks move between and through the EEZs of various coastal states in the West Africa region, as well as further off-shore. Their catch potential is accordingly difficult to evaluate. The main commercial species in the Atlantic include yellowfin tuna, skipjack, bigeye tuna, swordfish, and sailfish. Tuna and tuna products are highly valuable on the world market, but as tuna vessels are inhibitively expensive to purchase and operate, Senegal relies primarily on revenues from foreign fleet access to its tuna resources to redeem some of their value. Senegal has three tuna processing industries but due to low domestic catches and insufficient foreign landings, only two of the industries are currently operating, and they are not working to their full capacity.[721] While the most recent bilateral fisheries agreement with the EU imposed higher catch-landing requirements for tuna vessels than previous agreements, both the DPM officials and the NGO representatives that I interviewed were strongly of the view that they should be further increased in the future to

[719] MacAlister Report op cit n 580 at fn 1.
[720] Ibid at para 3.1.
[721] Interview Mr Samb op cit n 674. I was informed by the EU representatives (e-mail exchange January 2007) that there is now only one tuna processing industry in operation.

generate greater domestic revenue from Senegal's tuna resources.[722] Various DPM officials also expressed the view that increased access rights could be granted to tuna to compensate for the need to reduce (or eliminate) fishing opportunities to coastal demersals in future agreements.[723] Scientific assessment of tuna stocks would first need to confirm this as a viable option, however.

The second major species found off the Senegalese coast are demersals, which are prolific in this region due to the rich nutrients provided by seasonal up-wellings.[724] Coastal demersals are largely fully- to over-exploited.[725] Severely over-exploited stocks include grouper, sea bream, lesser African threadfin, and blue spotted sea bream.[726] Deep demersals (such as Senegalese hake and deep-sea shrimp), however, are not over-exploited.[727] As noted above, coastal demersals form a major component of Senegal's fisheries exports to the international market and bring in valuable foreign revenue from access rights sold through bilateral fisheries agreements with (primarily) the EU. Their over-exploited status is thus a major concern and there is increasing pressure on the Senegalese government to devise and implement a scientifically-sound, sustainable management plan for these species as a matter of urgency.

The final two major stocks are cephalopods and crustaceans. Like coastal demersals, cephalopods are harvested off Senegal's coast by fleets of trawlers and many species are

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[722] Interviews DPM officials (Dakar February 2006) and NGO representatives (Dakar 6 and 7 February 2006). See pp 205, 206, 208 and 220 below for a discussion on this aspect of the most recent bilateral fisheries agreement. Cross-reference also pp 103 and 104 above, where the rules of origin for trade preferences pertaining to tuna are discussed.

[723] Interviews with DPM officials ibid.

[724] MacAlister Report op cit n 580 at para 2.1.1.

[725] Ndiaye op cit n 600 at para 3, Gueye op cit n 604 at 14, Senegalese Ministry of Fisheries Report op cit n 604 at para 1.1 and MacAlister Report ibid.

[726] Senegalese Ministry of Fisheries Report ibid.

[727] Ibid.

heavily or over-exploited (an exception is octopus).[728] Crustacean fisheries are also fully exploited, if not over-exploited. Shrimp (especially southern pink shrimp and deep-water rose shrimp) has a particularly high export value and is heavily fished in Senegalese and Gambian waters, predominantly by foreign industrial vessels.[729] Shrimp trawling results in significant by-catch of juvenile fin fish in shallow waters, which is discarded as it has a low value compared to shrimp. In 1994, it was estimated that for every ton of shrimp landed from the Senegal shrimp trawl fishery, 2.72 tons of fish was discarded, amounting to an annual value of around US$ 20 million.[730]

The Senegalese government is aware of the full- to over-exploitation of key domestic fisheries stocks, particularly coastal demersals, and recognises the likely adverse biological and socio-economic implications of this. It regards domestic over-capacity, the continued targeting of over-exploited resources, and decreased productivity as key causes of this crisis. The Ministry of Fisheries is aware that drastic action is needed and has expressly advocated a 'break with old attitudes and behaviour' in order to actively foster sustainable national fisheries development.[731] It recognises that this will come at a high socio-political cost, however.[732]

6. Conclusion

In terms of what I have described as a 'sustainable fishery' in chapter 3, it is clear that many Senegalese fisheries are currently unsustainable from particularly an institutional, ecological and socio-economic perspective.[733] However, based on available relevant literature and

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[728] MacAlister Report op cit n 580 at para 2.1.2.
[729] Almost half of the total annual production in the region originates from Senegalese and Gambian waters (McAlister Report ibid at para 2.1.3).
[730] Ibid.
[731] Senegalese Ministry of Fisheries Report op cit n 604 at para 2.2.2.4.
[732] Ibid.
[733] Cross-reference with pp 73 and 74 above, where I discuss the various elements of a sustainable fishery in detail.

empirical research, it is arguable that sustainability remains an attainable goal. Most importantly, the current domestic legal framework is conducive to pursuing this objective and policies have already been drafted to this end. What is now urgently required is the domestic political will to implement these policies and the support of foreign fishing nations, particularly the EU, in realising them. Securing institutional sustainability is thus the first step.[734] This requires commitment from both Senegal and the EU to actively promote sustainable fisheries development in Senegal. It is particularly important that any future bilateral fisheries agreements (or any other kind of bilateral fisheries relations) are carefully shaped to foster this goal and to support and complement national initiatives taken to this end. I examine the extent to which this has already begun in my next chapter, where I discuss the most recent EU-Senegal agreement in detail, highlighting its impact on sustainable domestic fisheries management.

[734] As noted above at p 73, institutional sustainability is the key-pin to securing a sustainable fishery.

8

EU-SENEGALESE FISHERIES RELATIONS

1. Introduction

The most recent bilateral fisheries agreement between the EU and Senegal is an important illustrative case study of how such arrangements between the EU and developing coastal states can play out in practice and gives us an idea of how they might impact on the sustainability of the coastal states' domestic fisheries. In the previous chapter I introduced Senegal's fishing sector, highlighting its important domestic role and the consequential need to ensure its effective long-term management. With reference to my empirical research I revealed, however, that sustainable fisheries management is presently weak in Senegal, giving rise to various biological and socio-economic problems which are compounded by EU fishing activities in Senegalese waters. In this chapter I focus on the most recent EU-Senegalese bilateral fisheries agreement legitimising Community fishing in Senegal's coastal waters. I examine its contents in detail, referring to relevant provisions of the previous agreement for comparative purposes and drawing on my empirical research to analyse its impact on the sustainability of Senegal's fisheries.

2. Background to EU-Senegalese fisheries relations

The EU has enjoyed access to Senegalese fisheries for over 25 years in terms of a series of bilateral fisheries agreements. The first agreement was concluded in 1980.[735] Seven new agreements have since been negotiated revising the original arrangement in response to domestic and international law developments and changes in the status of coastal fish

[735] Op cit n 336.

stocks.[736] As I have illustrated in my thesis, bilateral fisheries agreements between the EU and developing coastal states have a multi-faceted character. At core they are rooted in, and are the product of, broader political relations between the two parties, reflecting the parties' shared colonial history and subsequent related socio-economic ties.[737] They are also strongly commercial: access is granted in exchange for hard foreign currency and the agreements give rise to numerous direct and indirect economic benefits, including broader trade implications.[738] The agreements also perceptibly impact upon Senegalese society, especially local artisanal fishers and coastal communities and have a significant effect on the domestic marine and coastal environment, particularly the sustainable use and development of Senegalese fisheries resources.[739]

As we saw in the previous chapter, both parties' policies concerning bilateral fisheries agreements have evolved over time - access arrangements were initially treated as purely commercial bilateral exchanges but are now recognised as comprehensive inter-governmental arrangements that reflect the complexity of fisheries relations between the parties and the urgent need to promote sustainable fishing. From the Senegalese side, my research revealed that bilateral fisheries agreements nevertheless remain largely driven by commercial interests. I was told by a senior national marine fisheries department (Directions des Pêches Maritimes (DPM)) official that although the (then) current agreement is in theory a 'partnership' arrangement that aims to promote Senegalese fisheries development, it is in practice nothing more than a contract selling a right to fish; a business arrangement.[740] This opinion was echoed by the NGO representatives that I interviewed.[741] The EU representatives were more

[736] The agreement was re-negotiated in 1982, 1985, 1990, 1992, 1994, 1997 and 2002. Sixteen protocols have been negotiated in total.
[737] For a discussion on the role of the colonial legacy and its influence on bilateral fisheries relations between the EU and (particularly) West African states, including Senegal, see chap 4 above.
[738] I outline examples of indirect benefits at p 149.
[739] Gueye op cit n 604.
[740] Interview DPM official (Dakar February 2006).
[741] Interviews NGO representatives (Dakar 6 and 7 February 2006).

reluctant to characterise the agreements, emphasising that they defy easy classification and must be seen as unique arrangements influenced by a broad range of issues including development cooperation relations. They noted, however, that any such future agreements will be fisheries partnership agreements 'proper'.[742]

While it has been increasingly difficult for the parties to reach consensus on key issues in recent agreement negotiations, they nevertheless expressed their desire to continue their tradition of bilateral fisheries agreements. Although negotiations for a new agreement failed in June 2006, it remains feasible that the parties will attempt to re-negotiate another agreement in the not too distant future as their respective incentives for concluding agreements remain valid.[743] From the Senegalese perspective, the two main impetuses are the financial benefits that the agreements secure and Senegal's broader socio-economic dependency on the EU as a result of political history. As noted in chapter 7, my research suggests that economic considerations are paramount. All of my interviewees in Dakar cited Community compensation as the primary domestic benefit of the agreements; specifically, many emphasised how badly Senegal needed the foreign currency to service national debts, 'run the country' and administer the fisheries sector.[744] One DPM official informed me that the government 'wants the money [from the agreements] at all costs'. He illustrated this point with reference to the conclusion of the 1990 bilateral fisheries agreement: apparently, following the Minister of Fisheries' refusal to sign the agreement on the ground that it did not serve domestic fishing interests, his authority was by-passed by national government and the

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[742] In accordance with the implementation of the EU's new fisheries partnership approach, which I discuss in detail at pp 151-157 above. Interviews EU representatives (telephone interview 21 September 2005 and interview Dakar 2 February 2006).

[743] Cross-reference with p 230 and 231, where I discuss this in greater detail.

[744] Interviews DPM officials (Dakar February 2006), NGO representatives (6 and 7 Dakar February 2006) and EU representatives (telephone interview 21 September 2005 and interview Dakar 2 February 2006). See also Johnstone op cit n 541 at 23.

Minister of Finance was sent in his stead to Brussels to close the arrangement.[745] In the words of another DPM official, to grant the EU access in exchange for generous financial compensation is an 'easy' way for Senegal to realise some of the economic value of the fishing sector given that the government is currently reluctant to invest time and money in developing the domestic industry.[746] Ultimately, it has traditionally simply been easier and more profitable for Senegal to 'sell [its] fish in the water' rather than to do so from processing plants after value has been added.[747]

In addition to the financial attraction, Senegal also continues to conclude agreements in order to maintain positive broader development cooperation (trade and aid) relations with the EU. Bilateral fisheries agreements theoretically fall outside the ambit of Cotonou as they are sector-specific bilateral contractual arrangements, but their negotiations are nevertheless shaped by and have broader repercussions on the trade and aid arrangements between the parties under the Cotonou agreement.[748] As noted earlier, Cotonou expressly promotes coherence between arrangements made in terms of its provisions and fisheries agreements concluded between the EU and individual ACP countries, highlighting the close relationship between the policy dialogues in these two spheres in practice.[749] The NGO representatives that I interviewed in Senegal acknowledged this link; in contrast, EU officials were less inclined to recognise it. In one interview I was told that the EU regards bilateral fisheries agreements as 'completely' separate from the new economic partnership agreements (EPAs) to be negotiated under Cotonou: EPAs are about trade in fish and fisheries products whereas bilateral fisheries agreements are about access to fish stocks. Another official, however,

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[745] Interview Mr Samb op cit n 674. I was not able to verify this account, but its possible validity makes a telling point.
[746] Interviews DPM officials (Dakar February 2006).
[747] Johnstone op cit n 541 at 29.
[748] Johnstone ibid at 23 and 24. Cotonou Agreement op cit n 287. For a more detailed discussion of the impact of Cotonou on bilateral fisheries agreements between the EU and developing countries, see pp 100 and 101.
[749] For more detail on this, see p 106 above.

explained their relationship as follows: '[e]conomic partnership agreements will simply complement bilateral fisheries agreements with regard to those regional issues that are not covered by the fisheries agreements. Those aspects of fisheries relations between the EU and the ACP states that are bilateral i.e. access to coastal waters and payment for such access, will remain covered by bilateral fisheries agreements; those aspects of fisheries relations that are regional, such as trade, and strengthening control and enforcement, will be covered by economic partnership agreements'.[750] Furthermore, in the area of development aid some critics suggest that those ACP countries that offer the EU 'favourable' terms in bilateral fisheries agreements receive more development aid for their fisheries sectors than those that do not.[751]

The EU's historic incentives for directly accessing Senegalese fish stocks via bilateral fisheries agreements have been rooted in meeting its own socio-economic needs and contributing to alleviating its fleet over-capacity problem, as I outlined earlier in chapter 5.[752] The EU's economic analysis of the 1997-2001 agreement indicated, however, that while the Community paid Euros 16 million in terms of the contract, it was in fact worth only Euros 14 million largely due to the depleted state of Senegal's high-value coastal demersal species.[753] Accordingly, the EU's interest in and dependence on accessing Senegal's waters is

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[750] Interviews EU representatives (telephone interview 21 September 2005 and interview 2 Dakar February 2006).

[751] Johnstone op cit n 541 at 26 and Mwikya op cit n 531 at para 3.4, where the author asserts that failure to conclude a bilateral fisheries agreement with the EU can adversely affect the level of development aid received by the country in question. It remains to be seen if this is the case in Senegal, as my research could not confirm this. Furthermore, the EU representatives adamently deny this to be the case, stating that the Community's development budget and fisheries agreements are 'completely disconnected' from one another (e-mail exchange January 2007).

[752] Cross-reference with p 130 with regard to alleviating over-capacity and p 148 for further discussion on the general reasons. See also Committee on Fisheries Report op cit n 523 at 15, Poverty Reduction Communication op cit n 539 at para 2, Acheampong op cit n 539 Kaczynski and Fluharty op cit n 460 at 76, 77, Foders op cit n 215 at 23, and ADE-PWC-EPUop cit n 522 at 35. These reasons were openly acknowledged during my interviews with EU representatives - interviews EU representatives (telephone interview 21 September 2005 and interview Dakar 2 February 2006).

[753] Cross-reference to chap 7 where I discuss the over-fished status of coastal demersal species in Senegal; see p 189 in particular.

diminishing.[754] Senegal's tendency to nevertheless demand increasing financial compensation for access to its waters (reflected in negotiations for the 2002 agreement and the recent June 2006 negotiations), is likely to further diminish its comparative strategic importance to EU in fisheries.[755] As the EU enjoys access to almost the entire West African coast in terms of various bilateral fisheries agreements, Senegal's tendency to demand high compensation may simply encourage the Community to look instead to neighbouring West African states to satisfy its future fishing needs. The recent failed agreement negotiations may indicate the beginning of such a tendency. However, as I have noted above, various factors suggest that an attempt to re-negotiate an agreement in the near future remains a possibility.

Under past agreements, the EU had access rights to demersal, pelagic and celphalopod stocks in Senegal's coastal waters. The main species targeted by the Community fleet were shrimps, prawns, squid, octopi, hakes, herrings, sardines, groupers, seabass and tuna.[756] In exchange for fishing opportunities, the EU paid financial compensation to the Senegalese government. The agreements suggested the broad ends to which the money should be used, but it was in essence a lump sum compensatory payment for access. This changed in the 1997-2001 agreement, when payments for specified 'targeted actions' were included for the first time (discussed further below). Prior to this, the overwhelming majority of the money went to the Senegalese Treasury (between 77 and over 90 percent of total payments under the various agreements).[757] The remainder of the money was generally divided between support for the

[754] Interviews EU representatives (telephone interview 21 September 2005 and interview Dakar 2 February 2006).
[755] Interview Ms Adriaen, European Commission Delegate in Senegal for Fisheries Agreements in West Africa, (Dakar 2 February 2006).
[756] Johnstone op cit n 541 at 7,8 and FAO, *Statistical Bulletin for the Fishery Committee for the Eastern Central Atlantic: Nominal Catches 1979-1991* (FAO, Rome 1994).
[757] Under the 1992-1994 Agreement (Council Regulation (EEC) No 2296/93 of 22 July 1993 on the Conclusion of the Protocol Defining, for the Period 2 October 1992 to 1 October 1994, the Fishing Rights and Financial Compensation Provided for in the Agreement between the European Economic Community and the Government of the Republic of Senegal on Fishing off the Coast of Senegal [1993] OJ L212/2) a total of ECU 31 200 000 was paid to the Senegalese Treasurer General, with an additional ECU 800 000 set aside for the development actions described above (arts 2, 4, 5). The full financial compensation of the 1997-2001 Agreement (Council

Senegalese Ministry of Fisheries, the monitoring agency, scientific research institutes and programmes, bursaries for students in various fisheries-related disciplines and assistance to the artisanal sector.[758] In addition, the Community fleet paid vessel license fees (amounting to a comparatively insignificant amount).[759] The member states that benefited the most under these agreements were Spain, Italy, Portugal, France, Greece and Germany.

The Community fleet comprised in-shore demersal trawlers (freezer and non-freezer), off-shore demersal fish and shrimp trawlers and numerous types of tuna vessels (bottom long-liners, canner/pole and line vessels, freezer seiners and surface long-liners). It was considerably more heterogeneous than other distant water fleets in the region because of the variety of species to which it enjoyed access in terms of the fisheries agreements. The agreements required the compulsory landing of specific portions of the Community fleets' catch of coastal demersals and tuna in order to secure some local socio-economic benefits for land-based domestic fishing-related operations. For coastal demersals, these increased from 130 to 200 kilograms per gross registered tonnage (GRT) per half year under the 1992-1994 and 1997-2001 agreements respectively, but for tuna, landing obligations remained constant.[760] Under the most recent agreement, compulsory landings are higher in both categories (as I discuss below).

Regulation (EC) No 542/98 of 9 March 1998 on Conclusion of the Protocol Establishing the Fishing Rights and Financial Compensation Provided for in the Agreement between the European Economic Community and the Government of the Republic of Senegal on Fishing off the Coast of Senegal for the Period of 1 May 1997 to 30 April 2001 [1997] OJ L302/1) - ECU 48 000 000 - was paid to Senegalese authorities, along with full responsibility for determining its use. The authorities were required to notify the Community of the use to which the money was put, using 'as a basis the aims of sustainable development of fishing' listed under previous protocols (art 3.1).

[758] See for example arts 2-5 of Annex 1 of the 1992-1994 Agreement Protocol ibid and art 3 of the 1997-2001 Agreement Protocol ibid.

[759] Johnstone op cit n 541 at 8.

[760] Para C Annex 1 of 1992-1994 Agreement Protocol (op cit n 757) and 1997-2001 Agreement Protocol (op cit n 757) respectively.

The earlier agreements reflected some efforts - at least theoretically - to promote sustainable fishing, such as the inclusion of various technical conservation measures (for example, minimum authorised net size) and the demarcation of permitted EU fishing zones. In addition, EU vessel owners were required to employ a certain percentage of local crew members on board.[761] Combined, these measures indicate that the earlier bilateral fisheries agreements between the EU and Senegal aimed (to varying degrees) to promote rational resource use and (to some extent) also domestic socio-economic development. The present poor biological state of coastal demersal species and the socio-economic under-development of the Senegalese fisheries sector, however, indicate that these measures were either inadequate or their implementation was deficient. Most likely, it was a combination of both factors arising from insufficiently committed policies, attitudes and actions on both the EU and the Senegalese side.[762] With this background in mind, below I examine the content and potential impacts of the most recent EU-Senegalese agreement with respect to sustainability in greater detail.

3. The most recent EU-Senegalese bilateral fisheries agreement

3.1 The negotiation and content of the agreement

The negotiation of the most recent EU-Senegalese fisheries agreement was protracted and difficult and the parties struggled to reach consensus. To give themselves more negotiation time, they first extended the (then) existing agreement by three and then five months

[761] For more information on the specifics of these provisions, see for example Johnstone op cit n 541 at 9 regarding the 1992-1994 agreement.

[762] In earlier chapters, I have discussed the policies and practices of both parties regarding their commitment to sustainable fishing through bilateral fisheries agreements; in particular see chaps 5, 6 and 7.

following its expiry in April 2001.[763] Eight rounds of negotiations took place before agreement was reached in June 2002. Senegalese negotiations were led by a multi-party national task force, which comprised representatives from the industrial and artisanal sectors and from fisheries administration and research. An independent evaluation of the 1997-2001 protocol was commissioned by the state to inform the task force's work, mandated to assess the potential contribution of a new agreement to the sustainable development of domestic fisheries and the national economy.[764] The EU and Senegal mutually identified three core issues to be satisfactorily accommodated in the new agreement, namely ensuring the long-term sustainable exploitation of Senegalese fisheries, fostering the development of the domestic fishing industry, and protecting the interests of the European fleet. From the Senegalese perspective, there were a number of additional matters that were considered key to the negotiations. These included the method for limiting the EU's catch possibilities (which I revisit later below), the determination of by-catch rates and EU fishing zones, the declaration of biological rest periods, the means for establishing tuna vessel licence fees, agreement on financial compensation, and implementation conditions for 'targeted actions'.[765] I was told by EU representatives that particular concerns for the EU included the high level of financial compensation requested by the Senegalese delegation and the possibility of securing access rights for coastal demersals.[766] Consensus was finally reached in mid-2002 and the agreement was signed on 25 June 2002.

The agreement covered the four year period of 1 July 2002 – 30 June 2006 at a total cost to the EU of Euros 64 million, with 19 percent (Euros 12 million) earmarked for dedicated

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[763] Council Regulation (EC) No 2303/2001 of 15 November 2001 on the Conclusion of Two Agreements in the Form of Exchanges of Letters Concerning the Extension of the Protocol Establishing the Fishing Opportunities and Financial Compensation Provided for in the Agreement between the European Economic Community and the Government of the Republic of Senegal on Fishing off the Coast of Senegal for the Periods 1 May 2001 to 31 July 2001 and 1 August 2001 to 31 December 2001 [2001] OJ L310/6.

[764] Gueye op cit n 604 at 8 and 9.

[765] Ibid at 10.

[766] Interviews EU representatives (telephone interview 21 September 2005 and interview 2 Dakar February 2006).

'partnership' measures.[767] In return, approximately 125 EU vessels were granted access to Senegalese coastal waters, originating from Spain, Portugal, France, Italy and Greece. Specifically, the agreement granted access to 77 tuna vessels (16 pole-and-line tuna vessels, 39 freezer seiners and 23 surface longliners), with the remaining figure of 48 vessels based on an estimate of the amount of ships fishing under categories limited by GRT only.[768] Interestingly (as noted in chapter 7), in 2003 Senegal recorded only 28 trawlers and 30 tuna vessels from the EU fishing in its EEZ during that year. I was told by the EU interviewees that this reflects an increasing trend among Community vessel owners to under-use the fishing rights granted to them in terms of the agreements due to the poor state of Senegalese stocks.[769] This confirms the dire status of several of Senegal's coastal demersal fisheries.

The cost provisions of the agreement reflected the proposed financial arrangements of fisheries partnership agreements (discussed in chapter 5) as they clearly distinguished between financial compensation in return for Community fishing opportunities and 'partnership' activity payments.[770] The EU was bound to pay Euros 16 million to the Senegalese government annually, of which Euros 13 million was to be paid to the Public Treasury and Euros 3 million was for 'partnership' activities.[771] With regard to the latter, the agreement obliged the parties to establish a 'partnership' to support various fisheries development activities in Senegal towards the 'development of sustainable and responsible fishing in their mutual interest'. The various activities were listed together with the EU's annual contributions towards each: Euros 500 000 a year was to be channelled into 'resource monitoring and evaluation of stocks' comprising research, participation in exchange of

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[767] Op cit n 529.
[768] Institute for European Environmental Policy (IEEP), 'Fisheries Agreements with Third Countries – is the EU Moving Towards Sustainable Development?' November 2002 (IEEP, London 2002) at 9, fn 4.
[769] Interviews EU representatives (telephone interview 21 September 2005 and interview 2 Dakar February 2006).
[770] FPA Communication op cit n 364. See pp 151-157 for a detailed discussion of this Communication.
[771] Agreement Protocol op cit n 530 at art 2.

information, and regional coordination networks, Euros 700 000 annually was earmarked to improve fisheries inspection and monitoring (including the installation of vessel monitoring systems (VMS) in Senegalese fishing vessels), Euros 500 000 was to be paid annually to improve the safety of local small-scale fisheries, a further Euros 500 000 a year was dedicated to institutional support 'for establishing sustainable fishing', and finally, Euros 700 000 was to be paid annually towards 'improving skills'. The agreement provided that these partnership schemes would be evaluated and audited annually - Euros 100 000 was set aside for this purpose.[772] It was expressly agreed that should the EU fail to make these payments, the agreement could be suspended.[773]

In terms of the agreement the Senegalese Minister of Fisheries had significant scope in deciding how to distribute the finances to measures aimed at realising the partnership activities. The Minister was required to devise an 'action programme' to this end and to notify the EU of its contents, and was obliged to deliver a detailed annual report to the EU delegation in Senegal on its implementation.[774] This would be considered by the joint committee established to oversee the implementation of the agreement. The agreement entitled the EU to 'review' its payments to Senegal in light of 'actual implementation' of the measures.[775] The benchmark for determining 'actual implementation' was not outlined, however.

My interviews with EU representatives revealed that the parties had struggled to reach consensus on the partnership activities provisions. In particular, the final wording of the 'review' provisions (referred to above) had been a reluctant compromise. In practice, they had proven to be extremely difficult to implement as the EU could only investigate the use to

[772] Ibid at art 4.
[773] Ibid at art 5.
[774] Ibid at art 4.
[775] Ibid.

which the money was put up to a point before it risked encroaching on Senegal's sovereignty. The Community had thus relied on the information contained in the Senegalese Ministry of Fisheries' reports as proof of 'actual implementation'; they had not been able to 'test' the validity of these reports further via audits or site visits. Ultimately, they could only carry out an 'administrative accountability check'.[776] These provisions had accordingly became a 'huge source of tension' between the parties and were, in the end, 'counterproductive, consisting of a lot of questions and paperwork'.[777] The Senegalese DPM officials that I interviewed were generally less critical of the way that the provisions had operated. In response to my question of whether the allocated money had been spent on realising the listed activities, interviewees responded in the affirmative. One official, however, together with the NGO representatives, was considerably more sceptical about where the money had actually gone - he lamented that 'a lot' of the money had not been spent as stipulated in the agreement despite the fact that the records showed its appropriate use. Instead, it had been spent in various other ways, including to corrupt ends.[778]

The agreement granted the EU fleet fishing opportunities for tuna, in-shore demersal fish and cephalopods, and deep sea demersal fish and crustaceans. The annual average cost of the agreement per vessel was Euros 128,000.[779] Benefiting vessel owners covered only a fraction of this cost. Trawlers paid an annual licence fee of between Euros 157 and Euros 246 per GRT in the first year,[780] which increased over the four-year period to Euros 169 and Euros 285 respectively.[781]

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[776] Interviews EU representatives (telephone interview 21 September 2005 and interview Dakar 2 February 2006).
[777] Ibid.
[778] Interview with Mr Samb (op cit n 674) and NGO representatives (Dakar 6 and 7 February 2006).
[779] IEEP op cit n 768 at para 4.1.
[780] See art 1.4 (a) para A of Annex to the Protocol op cit n 530.
[781] For the exact amounts to be paid each year for these three groups of fishing vessels, see the table ibid.

Under the agreement, pole-and-line tuna vessels paid no fee, but were charged Euros 15 per ton of fish caught in the Senegalese fishing zone, while freezer tuna seiners and surface longliners paid a flat rate of Euros 3 000 and 2 000 respectively, equivalent to fees for 120 and 42 tons of fish per vessel annually.[782] Final fees of Euros 25 per ton for tuna seiners and Euros 48 per ton for surface longliners were calculated at the end of each calendar year by the Commission based on ship owners' catch statements, confirmed by the Centre for Oceanographic Research (CRODT).[783] Ship-owners were required to make any additional payment within 30 days of submitting their final statement and were not reimbursed if the final fee was lower than the flat rate.[784] These charges are particularly noteworthy as they are comparatively low in relation to tuna's potentially high commercial value. The commercial value of tuna on the open market is between Euros 500 to 1 500 per ton (depending on the species).[785] The fees charged per ton of tuna caught were thus only a fraction of the average commercial value.[786] The West African coast has considerable tuna stocks but I was informed that the coastal states lack the capacity to profitably exploit them as the costs of equipping tuna vessels are inhibitively high and advanced technological skills are required to conduct commercially successful tuna operations.[787] These states, including Senegal, are therefore generally unable to profitably harvest tuna on a commercial scale. They thus try to reap the economic benefits of tuna resources by selling direct access rights to tuna to the EU (and others). This means of natural resource extraction echoes earlier colonial patterns in terms of which West African states supplied cheap raw materials to their (then) European colonisers.[788]

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[782] Article 1.4 (b) para A of Annex to the Protocol op cit n 530.
[783] Centre de Recherches Océanographiques de Dakar Thiaroye (CRODT). Ibid. The catch statement is to be forwarded simultaneously to the Senegalese authorities and the ship-owners.
[784] Article 1.4 (b) para A of Annex to the Protocol op cit n 530.
[785] Analysis in IEEP Report op cit n 768 at para 4.1.
[786] Ibid and Kazynski and Fluharty op cit n 460 at 89. Cross-reference generally with the authors' discussion on the inequities of benefit-sharing between the EU and West African coastal states from tuna resources (86-89).
[787] Informal e-mail exchange FAO representatives (September 2005) and interviews DPM officials (Dakar February 2006). See also CFFA op cit n 349.
[788] For more on the shared colonial legacy between Europe and the West African states and the impact of this legacy on their bilateral fisheries relations, see chap 4.

As noted in chapter 7, my research indicated a preference on both sides for the EU to be granted increased access rights to tuna under future fisheries agreements. This was a widely-held view, expressed by DPM officials, NGO representatives and EU representatives alike. Senegalese DPM officials and NGO representatives are acutely aware of the potential value of such rights and were indignant that Senegal had not (in their view) to date benefited sufficiently from granting the EU tuna access rights. They intimated that if more extensive access rights were granted to the EU in the future, catch-landing requirements for these species should also be significantly raised and catch limits should be more tightly regulated. This would enable Senegal's (currently under-utilised) domestic tuna processing industries to contribute towards a potentially highly lucrative tuna export business.[789] As tuna is a highly migratory species and both the EU and Senegal are parties to the UN Straddling Stocks Convention, they must ensure that any future fisheries agreement provisions are conducive to promoting the tuna's 'optimal utilisation'.[790]

There were various resource management measures in the agreement that (at least theoretically) promoted sustainable fishing and sustainable local fisheries development. My interviews revealed, however, that many of these provisions were included largely for reasons of political diplomacy, with little expectation of their effective realisation. This is evidenced by their problematic implementation, as I discuss below.

Firstly, the agreement provided for the declaration of a biological rest-period, an important fisheries management tool. The relevant provision empowered the Senegalese government to

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[789] Interviews DPM officials (Dakar February 2006) and NGO representatives (Dakar 6 and 7 February 2006). Cross-reference with p 188 where I also discuss Senegal's tuna processing industries as well as with pp 103 and 104 where I discuss the rules of origin for tuna. According to the EU representatives, catch landing requirements have been complied with by pole and line vessels but less so by seiners as local canning factories have either paid them prices that are lower than market value, paid one to two months late or have failed to pay them for their catch at all (e-mail exchange January 2007).

[790] Articles 7 and 8(1) of the Straddling Stocks Convention op cit n 124. Senegal acceded to the Convention in October 1984, and in December 2003 it was ratified by the EU.

ban EU demersal trawlers from fishing for certain species for a specified period in the interest of sustainable fishing (in-shore trawlers and ocean-going freezer trawlers for two months, and ocean-going fish trawlers and bottom liners for four months).[791] Senegalese authorities were also empowered to adopt 'emergency measures' for particular species if necessary in relation to both domestic and foreign vessels. The joint committee was to evaluate the impact of these measures on the EU fleet and 'where appropriate' would adjust the level of financial contribution accordingly. Arguably, this financial rider was likely to discourage the Senegalese authorities from instituting such measures, contrary to fostering biological sustainability. The joint stock monitoring provisions (discussed below) suffered from a similar weakness. This is clearly highly problematic - if parties are serious about promoting sustainable fisheries, Senegal should arguably not be financially 'penalised' for introducing stock-management measures that effectively reduce the EU's fishing opportunities. I revisit this issue below when I present my analysis of the agreement.

Secondly, the agreement also specified Community by-catch limitations for various species, ranging from two to ten percent of permitted catches.[792] Noteworthy was that in-shore trawlers fishing for demersal fish and cephalopods were allowed a by-catch of seven and a half percent crustaceans but no by-catch limits were imposed for fish.[793] This is relevant to my discussions in chapter 7 and below about the need to limit pelagic by-catch as they are targeted by the local artisanal fishers. By-catch was to be calculated at the end of each voyage with reference to the total catch weight, in accordance with Senegalese law. If by-catch percentages exceeded the authorised amount, vessel owners would be penalised in accordance

[791] Article H of Annex in Protocol op cit n 530. The annual closure period for in-shore trawlers is from 1 October to 30 November, and for ocean-going freezer trawlers from 1 September to 31 October. For ocean-going fish trawlers, the period is from 1 March to 30 June.
[792] See article K of Annex ibid. For an explanation of by-catch and its effect on sustainable fishing, see p 77.
[793] Article K of Annex ibid, at para 1. Limits for ocean-going trawlers are also specified (paras 2 and 3).

with domestic law, which could entail the permanent banning of the relevant vessels from all fishing activities in Senegalese waters.[794]

As I noted earlier, detailed provisions were also included requiring the compulsory landing of parts of the Community catch in Senegalese ports. The amounts differed according to the type of vessel and the species targeted, ranging from 150 to 250 kilograms of fish and shrimp per GRT bi-annually.[795] Failure to comply with the landing requirements attracted a fine from the Senegalese authorities of Euros 900 per ton not landed and could result in the withdrawal of the vessel concerned (or of another vessel belonging to the same owner) from Senegalese waters.[796] Landing requirements for tuna vessels were listed separately: pole-and-line tuna vessels had to land at least 5000 tons of tuna a year, while freezer tuna seiners were required to land 12 5000 tons of tuna annually at the prevailing international price.[797] The obligation of direct landing for freezer tuna seiners was required to comprise 44 percent by French registered vessels and the remaining 56 percent by vessels flying the Spanish flag.[798] My interviews in Dakar revealed that both the DPM officials and the NGO representatives felt that not only were the landing requirements for EU tuna catches too low, but that the Community also failed to sufficiently comply with these landing obligations.[799] I was not given statistics or figures to verify deviance from the catch-landing requirements, however.

The stock evaluation provisions contained in article 3 were particularly interesting. At first glance, they appeared to be far-reaching in their efforts to promote sustainable fishing. On closer examination, however, the measures were problematic and ultimately weak, as was

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[794] Ibid at para 4. In accordance with ICCAT and FAO recommendations, catching basking shark, white shark, sand tiger shark, and tope shark is prohibited.
[795] Article C of Annex ibid at para (a).
[796] Ibid.
[797] Ibid at para (b)).
[798] Ibid at art 3.
[799] Interviews DPM officials (Dakar February 2006) and NGO representatives (Dakar 6 and 7 February 2006).

confirmed by my research. The article bound the EC and Senegal to 'make every effort' to jointly monitor the state of Senegalese resources throughout the operation of the agreement, and to take appropriate measures to ensure their sustainable management. To this end, a joint annual scientific meeting was established. Management measures could be taken by common agreement after consultation in the joint committee, based on the findings of the meeting and the 'best available scientific advice'.[800] The agreement recognised that these measures might require a reduction of the EC's fishing opportunities and stated that this would in turn attract an 'adjustment' in financial compensation. As I have noted above, this surely operated as a poor incentive for Senegalese authorities to agree to implement measures that might result in a reduction of EU fishing opportunities. Its inclusion makes more sense, however, when viewed in light of its negotiation history. I was informed by an EU representative that (as with various other cardinal provisions in the agreement) the inclusion and wording of this measure was a political compromise: the EU had agreed to the compensation requested by Senegal despite doubts that the agreement's value was worth this high figure on the grounds that if Community fishing opportunities were reduced for any reason whatsoever the EU retained the right to reduce the payment accordingly. The parties did not expect that the payment-reduction provision would ever be utilised (and it has not been).

Overall, the stock monitoring provision proved to be ineffective. The main reason for this was that it was limited to regulating stocks affected by EU fleet activities only; it did not include stocks fished by the domestic fleet or other foreign vessels within its scope. As Community fishing only comprised a small percentage of the global harvesting activities in Senegal's EEZ during the operation of the agreement, it contributed proportionally 'insignificantly' to

[800] Article 3 of Agreement Protocol op cit n 530.

domestic stock depletion. The provision therefore failed to address the overall stock diminution problem in any real way.[801]

This leads on to a further problematic aspect of the agreement, namely that it failed to limit the amount of catch that the Community could take from Senegalese waters. Instead, it restricted the Community's catch possibilities by reference to vessel numbers and tonnage. Specifically, the agreement granted access to 78 tuna vessels (39 freezer tuna seiners, 23 surface longliners and 16 pole-and-line tuna vessels), 1 500 GRT per quarter of the year of in-shore demersal trawlers catching fish and cephalopods, an average of 3 000 GRT per month of fish trawlers fishing for deep-water demersal species and bottom longliners, and 3 500 GRT per month of freezer trawlers fishing crustaceans.[802] From a biological sustainability perspective this method of restricting EU catch is questionable, as I discuss below in my analysis of the agreement.

The agreement also specified the fishing zones in which the various types of EU vessels were permitted to operate. These had been reduced from past agreements to ensure greater protection of the Senegalese artisanal fleet and the regulation of the various zones was far more detailed than previously.[803] In-shore trawling was still permitted, however - smaller trawlers targeting fish and cephalopods (up to 250 GRT) were able to harvest from just six nautical miles off the coast.[804] Larger in-shore trawlers targeting the same species were required to fish further afield – either from 12 or 15 nautical miles off the coast, depending on

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[801] Interviews EU representatives (telephone interview 21 September 2005 and interview 2 Dakar February 2006).

[802] Article 1 of the Agreement Protocol op cit n 530. The allocation of opportunities according to member states is as follows: demersal fishing – coastal demersal: Spain 704 GRT per quarter, Italy 563 GRT per quarter, and Greece 233 GRT per quarter; deep water demersal fish trawlers and bottom long-liners: Spain 3000 GRT per month, averaged yearly; and deep water demersal freezer trawlers fishing for crustaceans: Spain 3,186 GRT per month, averaged yearly, and Portugal 314 GRT per month, averaged yearly. Tuna fishing – tuna seiners: France 18 vessels, Spain 21 vessels; pole-and-line vessels: France 6 vessels, Spain 10 vessels; surface long-liners: Portugal 3 vessels and Spain 20 vessels. See article 2 of the Protocol.

[803] Article G of the Annex to the Protocol ibid.

[804] Ibid at art G, para 2.

their GRT.[805] The fishing grounds for ocean-going trawlers (demersal fishing for deep-water shrimp and hake) had increased;[806] this could arguably have resulted in increased catches given that catch limits were not specified.[807] There were no zonal limits for pole-and-line tuna vessels and tuna seiners, entitling them to harvest tuna anywhere in Senegalese waters.[808]

In addition, gear restrictions were included in the agreement, setting minimum authorised mesh sizes at 16mm for purse seines with live bait, 70mm for standard otter trawls (for in-shore demersal fishing for fish or cephalopods and deep-sea demersal fishing) and 40mm for deep-sea demersal trawls for crustaceans except lobster. Methods of obstructing the selective effect of the mesh sizes were expressly prohibited.[809] For tuna vessels, the international standards recommended by the International Commission for the Conservation of Atlantic Tunas (ICCAT) applied.

The agreement included various obligations on vessel owners regarding monitoring and control, technical inspections, and the constitution of their crew. EU vessels were required to notify the Senegalese authorities each time they entered or departed from Senegalese waters, specifying their position, course, speed and tonnage of catches on board, and at the conclusion of every fishing trip, vessel owners were obliged to forward their catch statements to the Senegalese authorities.[810] Non-compliance entitled the Senegalese government to suspend the licence of the offending vessel and to apply the relevant penalty in terms of Senegalese law.

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[805] Ibid at paras 3- 5.
[806] Ibid at para 6.
[807] IEEP Report op cit n 768 at para 4.2.
[808] Article G, para 7 of Annex to the Protocol op cit n 530.
[809] Ibid at art L. Protective aprons of netting or other material on the underside of the cod-end of bottom trawlers is, however, permitted in the interest of reducing wear and damage.
[810] Ibid at arts I and B. A copy of the catch statement must also be forwarded to the Delegation of the Commission in Dakar.

Community vessels were entitled to tranship their catches in Senegalese waters but only in accordance with the specified procedure.[811] This required vessels to tranship their catch within Senegalese ports and obliged vessel owners to report specified information regarding the transhipment to the Senegalese authorities at least 24 hours in advance.[812] As transhipment was considered an exit from Senegalese waters, those EU vessels wanting to tranship their catches were also required to comply with the catch statement requirements.[813] Transhipments that did not comply with these provisions were strictly prohibited and attracted penalties in accordance with Senegalese law.[814] Interestingly, my research revealed that illegal transhipment by the Community fleet has not been nearly as problematic as domestic transhipment between artisanal fishing vessels and other foreign fleets: I was told that it is becoming increasingly common practice for Senegalese artisanal fishers to tranship their catch to (for example) Korean vessels waiting just beyond the Senegalese EEZ in international waters.[815]

EU vessel owners were obliged to take observers on board in order to promote compliance with the agreement and with domestic fisheries law. Observers were required to report on fishing activities on-board the vessels (the agreement does not elaborate further on this duty). EU trawlers and bottom longliners of 150 GRT or more and other vessels of 100 GRT or more were required to accept observers that had been designated by the Senegalese authorities; surface longliners could also be requested by Senegal to take an observer on board for the duration of their voyage. On freezer tuna seiners or tuna pole-and-line vessels, the observer was elected from among the Senegalese crew members.[816] This put the observer in a

[811] Transhipping refers to the transferal of catch from one fishing vessel to another.
[812] These include the names of the transhipping fishing vessels, the names of the cargo vessels, the tonnage by species to be transhipped, and the day of transhipment. Annex to the Protocol op cit n 530 at arts I and B.
[813] Ibid at art M.
[814] Ibid.
[815] Interviews with DPM officials (Dakar February 2006).
[816] Art J at paras 1(a), (b) and (e) respectively of Annex to the Protocol (op cit n 530).

potentially more impressionable position than the independent observers on other Community vessels. This was especially problematic in light of the high value of tuna catches (which in turn increases the potential of under-reporting) and the allegations of non-compliance with landing requirements (highlighted above). During my interviews with DPM officials, concern was raised about the impartiality of observers on EU vessels in general. Various officials were worried that even the 'independent' observers were not doing their jobs satisfactorily, succumbing instead to bribes from vessel owners to under-report catches or to turn a blind eye to violations of catch-landing obligations.[817] Senegalese authorities were entitled to board EU vessels fishing under the agreement where necessary in accordance with domestic law. The EC Commission delegation in Senegal was to be informed of this within 48 hours of the boarding and had to be provided with specified related information, including the reasons for boarding and the security required for the provisional release of the vessel.[818]

The agreement required Community trawlers to undergo technical inspections annually as well as in the event of a change in their tonnage or fishing category.[819] The inspections were not concerned with issues of safety; these were the concern of the flag-state. Their purpose was rather to ensure that the vessels' technical characteristics and fishing gear were in order and that there was compliance with the required quota of Senegalese crew - owners of Community trawlers, bottom longliners and surface longliners fishing were required to employ a crew comprising 50 percent Senegalese nationals.[820] For freezer tuna seiners and pole-and-line tuna vessels, the number of local seamen to be taken on board was to be

[817] Interviews DPM officials (Dakar February 2006). The EU representatives disputed this, however (e-mail exchange January 2007).
[818] This is to be at least equal to the maximum fine and the value of the catches confiscated – see art N of Annex to the Protocol op cit n 529. The subsequent procedure to be followed is laid out in this article.
[819] Ibid at art F, specifically at para 1.
[820] Ibid at para 3 and for the crew composition, see art D. This is to be confirmed by a certificate issued by the merchant navy.

established globally on the basis of the scale of activity of the vessels in the Senegalese waters.

3.2 Analysis of the agreement

In its 2004 Report, the Senegalese Ministry of Fisheries expressed mixed views on the 1997-2001 bilateral fisheries agreement with the EU. It conceded that while the agreement had promoted artisanal fishery development, scientific research, and surveillance and institutional support, it had nevertheless followed an overall 'commercial logic' and supported a fishery strategy that was 'unsustainable and irresponsible', thereby contributing to pressure on local food security and aggravating the decline of certain stocks.[821]

The government's official view on the 2002-2006 agreement has not yet been articulated, but I was able to gauge the opinions of various DPM officials and the two Senegalese-based NGO representatives from my interviews. They varied widely, indicative of their mixed views about the success (or lack of it) of the agreement. My research elicited a clearer response from the EU representatives, who painted an overall picture of dissatisfaction with the way in which the recent agreement had been operationalised. They expressed particular frustration at the Senegalese government's continuing failure to institute an effective fisheries management policy; I was told that the EU's willingness to continue bilateral fisheries arrangements with Senegal was becoming increasingly dependent on Senegal's willingness to implement such a strategy.[822] It is possible that the failure of the recent agreement negotiations was partially in response to Senegal's continued inaction in this regard. Drawing on my interviews, I analyse the impact of the recent bilateral fisheries agreement on the sustainability of Senegal's fisheries below.

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[821] Senegalese Ministry of Fisheries Report op cit n 641 at para 2.2.1.

[822] Interviews EU representatives (telephone interview 21 September 2005 and interview 2 Dakar February 2006).

Overall, the resource management measures of the agreement were an improvement on those under the previous agreement. Firstly, the biological rest-period provision was potentially more effective than that under the previous agreement. It had been extended to cover coastal species (under the last agreement only deep-water species were protected) and permitted a ban for up to three months in a year (as opposed to two months previously).[823] The changes introduced by the agreement were important as it is coastal species (demersals) that are over-fished and thus the most in need of protection. I was told by the EU representatives, however, that the implementation of these provisions had caused difficulties for the EU. As an illustrative example, I was informed that the Senegalese authorities had extended their declared biological rest period for shrimps and cephalopods during 2005 without due notice to the EU on the grounds that the stocks were low. Without warning, they had then subsequently shortened the declared extended period to enable their disgruntled artisanal fishers to re-access these stocks.[824]

A second positive development under the agreement was the considerable reduction of the EU's fishing possibilities in coastal demersal stocks (around 30 percent) and the exclusion of the pelagic sector from EU fishing opportunities.[825] DPM officials and NGO representatives alike expressed particular satisfaction with the change regarding access to pelagics on the grounds that the artisanal sector was no longer required to compete with the EU for its traditionally-targeted species.[826] Permitted by-catch percentages were also reduced under the agreement. This similarly benefited both the biological and socio-economic sustainability of

[823] Article H of the Annex to the Protocol op cit n 529 (as discussed above) and 1997-2001 Agreement Protocol (op cit n 757) at art H of Annex 1.
[824] Interviews EU representatives (telephone interview 21 September 2005 and interview 2 Dakar February 2006).
[825] It should be noted that the EU did not fully utilise its pelagic quota under the previous agreement due to the poor state of the stocks.
[826] Interviews DPM officials (Dakar February 2006) and NGO representatives (Dakar 6 and 7 February 2006).

artisanal fisheries. Mesh size restrictions remained the same as under the previous agreement, however.[827] The opinion of a number of DPM interviewees was that these should have been reduced and that additional selective gear restrictions should be included in the future to further restrict by-catch and discards. This would further minimise the Community fleet's interference with local artisanal fisheries.[828]

A major resource management weakness of the agreement was that it failed to rectify the deficiency of the past agreement by establishing maximum EU catch or effort limits.[829] Instead, it continued to regulate the Community's permitted output via gross registered tonnage (GRT). This method is common in access agreements with West African coastal states but has become an increasingly contentious issue. Critics argue that it is a weak method of ensuring the biological sustainability of targeted stocks and that it contrasts sharply with the total allowable catch (TAC) method used by the EU in its own waters.[830] While TACs alone do not guarantee sustainable fishing as we saw in chapter 3, they nevertheless establish fixed catch limits and if they are effectively enforced and used in combination with other resource management measures (like input controls and technical conservation measures) they can make a positive contribution towards this goal.[831]

I was interested in the EU representatives' views on this matter. My interviewees were somewhat defensive when discussing this topic and although they provided justifications for the use of the GRT method, I did not find their explanations convincing. Both interviewees acknowledged that using a GRT approach in the fisheries agreements was controversial; one expressly stated that 'objectively, limiting catch [in Senegal] via GRT is slightly problematic'.

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[827] Ibid. See 1997-2001 Agreement Protocol (op cit n 757) at art L of Annex 1 for mesh size restrictions.
[828] Interviews DPM officials (Dakar February 2006).
[829] 1997-2001 Agreement op cit n 754 7t art 1.
[830] Highlighted in IEEP Report op cit n 768 at 15, 16. See also Johnstone op cit n 541 at 17, 18. Cross-reference with p 117.
[831] See p 75- 79 for more on output controls and their relationship with sustainable fishing.

They nevertheless defended it as a method of regulating catch with reference to the fact that the EU *does* use GRT in its own waters – it is used in combination with quotas to control the output of Community mixed species fisheries; in contrast, quotas are used alone to control single species fishing. But this begs the question of why the EU continues to use only the GRT system in Senegalese waters where it primarily targets single species (as acknowledged by the EU representatives). A slightly better explanation was offered by one of the EU representatives, namely that it would be difficult to limit the Community catch using TACs in Senegalese waters when a TAC system is not employed domestically by Senegalese authorities.[832] Critics also concede that the lack of reliable stock statistics for Senegalese fisheries and the absence of accessible information on actual catches taken under past agreements, makes it difficult to judge the appropriateness or not of using GRT to control the EU catch.[833] Ultimately, however, it is problematic that the EU continues to use a method of catch control in Senegalese waters that it cannot satisfactorily justify on sustainability grounds. The precautionary approach (endorsed by the EU) surely dictates that at minimum a mixed quota and GRT system should be used until there is greater clarity on the matter.

This issue compounds a difficulty that I introduced earlier, namely problems with the measures regulating possible decreased EU fishing opportunities during the operation of the agreement. The joint monitoring obligation imposed by the recent agreement was a positive step. However, the failure to indicate what is considered a 'sustainable level' of a fish stock and accordingly, when EU fishing opportunities could justifiably be reduced, detracted from the provision's effectiveness. Also (to reiterate my earlier point), by providing that Community compensation will be 'adjusted' if EU fishing opportunities are reduced, the agreement did little to encourage Senegalese authorities to respond to stock depletion by

[832] Interviews EU representatives (telephone interview 21 September 2005 and interview 2 Dakar February 2006).
[833] Johnstone op cit n 541 at 18.

agreeing to reduce catch opportunities.[834] As I noted earlier, the EU representatives explained the provision's contradictory nature with reference to its inclusion as a political compromise. I was told that under any future arrangements the EU will agree to not reduce payments for diminished catch rights provided that the stock depletion that necessitates this move has not arisen simply as a result of irresponsible domestic management strategies. An example of this would be if Senegalese authorities granted too many fishing licences to its waters (or as one official put it, 's[old]their resources two times'). Rather, the decline in stock must have resulted from genuine sustainable management difficulties. They acknowledged that it will be difficult to determine the 'true reasons' for stock reductions, but stated that the EU would simply have to make this determination 'as best as it can' should the need arise.[835]

The recent agreement appears to better promote sustainable Senegalese fisheries development than the previous agreement. For the first time, relatively substantial amounts were earmarked for targeted measures to this end although the amounts were arguably comparatively low as a percentage of the total financial package.[836] However, as under past agreements, movement towards realising sustainable fisheries development goals remains difficult to assess - progress is poorly monitored and reported which makes it hard to determine whether there has been a significant improvement in practice in this sphere or not.[837] My empirical research confirmed this difficulty – in particular, interviewees were unable (or unwilling) to provide me with hard evidence of progress in the partnership activities and proof that the money allocated for them had indeed been spent on their realisation (as noted above). Overall, the 'targeted action' (or 'partnership' measures) provisions appear to have proven highly problematic for both parties

[834] IEEP Report op cit n 768 at 11.
[835] Interviews EU representatives (telephone interview 21 September 2005 and interview 2 Dakar February 2006).
[836] Agreement Protocol op cit n 530 at arts 4 and 2: Euros 3 000 000 per year is set aside for targeted partnership actions, while Euros 13 000 000 annually is paid as financial compensation.
[837] IEEP Report op cit n 768 at 11.

and their inclusion in the agreement has not noticeably resulted in enhanced domestic sustainable fisheries development.

A noticeable feature of the agreement was the high percentage of local crew that it required EU vessel owners to employ and the increased local catch-landing obligations on the Community fleet. Both these measures had the potential to contribute towards local socio-economic development in the fishing sector. Senegalese DPM interviewees were generally of the view, however, that even greater catch-landing obligations should have been imposed, while NGO representatives emphasised that in order to maximise the benefits of heightened compulsory EU landings, the Senegalese government and the EU should also channel increased funds into value-added activities in local processing plants. This would enhance the value of fisheries products exported to foreign markets.[838] The cost of the agreement had risen for the EU: an increase of 33 percent from the previous bilateral fisheries agreement (with part of the increase due to the rise in the cost of vessel licences). In theory, this too should have contributed towards sustainable development in the local fisheries sector provided that the Senegalese government channelled the compensation into this sphere.

Ensuring the effective enforcement of EU-Senegalese access arrangements is important. The monitoring and surveillance provisions in the recent agreement, however, arguably remained inadequate to ensure this goal. In terms of the agreement, funds dedicated to 'partnership' activities were set aside to improve domestic monitoring and control capacity and EU vessels were obliged to take Senegalese-designated observers on board. But the asymmetry between the sophistication of the foreign fleet and the Senegalese monitoring and enforcement capacity, together with the problems with observers (noted above), weakened the efficacy of

[838] Interviews NGO representatives (Dakar 6 and 7 February 2006).

these provisions.[839] This was confirmed by DPM officials who emphasised that the national authorities are under-equipped to effectively control all fishing activities in the Senegalese EEZ.[840] Furthermore, while it is potentially advantageous that all EU vessels in Senegalese waters have vessel monitoring systems (VMS) and that efforts are underway to ensure that all Senegalese industrial vessels are soon similarly equipped (currently, around 60 percent have VMS), this is countered by the fact that the Senegalese capacity to track VMS is currently less than ideal.[841]

According to past studies, EU fleet infractions in Senegal's waters have not been particularly high; violations by the domestic fleet are far more common. Common violations include zone and gear infringements and fishing without authorisation or a licence.[842] The adverse socio-economic effects of EU violations are, however, more far-reaching than those of domestic infractions. With the latter, the illegal fish is usually still landed locally and therefore still generates numerous economic spin-offs; the main economic loss is the value of the licence fee (if fishing without one) and /or the costs resulting from the specific transgression.[843] In contrast, illegally caught EU fish will likely not be landed in Senegalese ports and sold to domestic processors but instead, shipped directly to Europe. As a result, there will be no benefit to Senegal at all. This was stressed by both DPM officials and NGO representatives.[844] As noted above, a common complaint was that landing provisions (especially for tuna) are violated. DPM officials as well as the NGO representatives accordingly highlighted the need for subsequent fisheries agreements to better regulate enforcement.[845]

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[839] Johnstone op cit n 541 at 19.
[840] Interview DPM officials (Dakar February 2006).
[841] Ibid.
[842] Johnstone op cit n 541 at 19, 21.
[843] Ibid at 20.
[844] Interviews DPM officials (Dakar February 2006) and NGO representatives (Dakar 6 and 7 February 2006).
[845] Ibid.

3.3 Reflections on the implementation of the agreement

As the most recent agreement has only just ended, it is too early to definitively comment on whether or not it has impacted more positively on the sustainability of Senegalese fisheries than past arrangements. During interviews, representatives of both parties were reluctant to judge the success (or failure) of the agreement at the given point in time (it was still operational at this time). They were, however, quick to expose particular problems with the agreement's implementation and to make suggestions for improvement. Their opinions appeared to be largely informed by the extent to which they believed that their respective national interests had or had not been realised via the operation of the agreement. A common discernible theme, however, was concern over the poor biological status of Senegal's coastal resources and recognition of the need to urgently promote their sustainable management through (inter alia) the terms and conditions of any future fisheries agreements. There was less consensus on how this should be achieved, however. [846]

Overall, my conclusion is that the most recent agreement took EU-Senegalese fisheries relations a further step towards promoting the long-term sustainable use and development of Senegal's fisheries but in the end, failed (in a similar manner to that of its predecessors) to make adequate strides towards these ends. The EU was arguably the main instigator of the renewed emphasis on sustainable fishing (at least theoretically) in this agreement, driven by the desire to realise its socio-economic interests and political goals. That said, Senegal appears to be similarly keen that bilateral fisheries agreements with the EU better promote sustainable fisheries and fisheries development domestically; its view of what these goals entail, however, seems to differ from that of the EU. Senegal wants to control the destiny of its fishing sector, moving towards greater autonomy in this sphere. I was told of the desire to

[846] Interviews DPM officials (Dakar February 2006) and EU representatives (telephone interview 21 September 2005 and interview 2 Dakar February 2006).

see the local capture and processing industry develop, value-added Senegalese fisheries products entering new lucrative markets, and interaction with new foreign partners in access and other types of fishing arrangements (including joint ventures).[847] The EU, on the other hand, appears to want to steer Senegalese fisheries development in a direction that continues to serve EU interests.[848] While these two sets of goals have to date remained largely compatible, the failed agreement negotiations in June indicate that they have perhaps reached a point (at least for now) of divergence.

4. Conclusion

The most recent fisheries agreement between Senegal and the EU continued the tradition of bilateral fisheries relations between the parties, granting the Community access to various species in Senegal's EEZ in return for significant financial benefits. In various important ways, however, the agreement differed from past arrangements, most noticeably in its express emphasis (at least on paper) on sustainable fishing and sustainable fisheries development in Senegal. The financial compensation provisions reflected this renewed emphasis on long-term sustainability. The agreement accorded with the Community's obligations under its common fisheries policy and responded to Senegal's need to address the decline of key coastal stocks and to protect the socio-economic well-being of its local population. Its provisions to these ends were on the whole an improvement from past agreements and have generated some positive outcomes. My research revealed, however, that many of these measures were nevertheless inherently weak; frequently the result of political compromise. Their implementation was thus often plagued by inefficiency. Compounded by poor domestic

[847] Interviews with DPM officials (Dakar February 2006) and NGO representatives (Dakar 6 and 7 February 2006).
[848] This is derived from my overall impression of the interviews with EU representatives (telephone interview 21 September 2005 and interview 2 Dakar February 2006) as well as official EU policy documents on the topic. This view is not based on any specific comment(s) made by my interviewees.

fisheries management, they therefore seem to have resulted in little real progress towards ensuring the sustainability of Senegal's fisheries.

In the concluding chapter of my thesis I draw on my analysis of the agreement to make suggestions regarding how any future fisheries relations between the parties could better promote sustainable fishing in Senegalese waters. As I have indicated in this chapter, a number of critics, particularly NGOs, advocate Senegal's decreased reliance on bilateral fisheries agreements with the EU. Some would like to see their imminent discontinuation. For reasons that I explain in the following chapter, I too argue that in order to promote sustainable fishing in Senegal and other developing coastal states' waters, the EU should engage in alternative ways of conducting its bilateral fisheries relations. I nevertheless accept that bilateral fisheries agreements with developing coastal third states are likely to continue to be employed in the imminent future; this may even include a re-negotiated agreement with Senegal at some point. Accordingly, I present some ideas as to how these arrangements might be reconstituted in the future to better promote sustainable fishing alongside my other, preferred, alternative suggestions towards this end in chapter 9.

PART IV

CONCLUSIONS

In this final section I employ my thematic lenses to present the core findings of my thesis. I conclude, with reference to the EU-Senegalese case study, that the EU's bilateral fisheries agreements with developing coastal states do not operate as instruments of conservancy in accordance with the international fisheries regime. The pursuit of the sustainable use of fisheries is neither the primary nor a key impetus for concluding these agreements; rather, these legal instruments are employed to satisfy the parties' respective self-interests under the guise of international environmental agreements. Given the respective socio-economic status of the parties entering them, these agreements perpetuate colonial-like patterns of natural resource exploitation, exposing the continuing relationship of unequal dependency that dominates relations between the EU and particularly West African coastal states. That bilateral fisheries agreements can legitimately serve these goals indicates an inherent weakness of the international regime in terms of which they are concluded. I suggest that the way forward does not lie in the reform of the international fisheries regime, however, but rather in the adoption of a more ethically-based approach to bilateral fisheries relations (and all fishing activities).

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CONCLUSIONS

1. Analysis of bilateral fisheries agreements as regulatory instruments

Traditionally, legal instruments serve one or more of various regulatory functions with regard to natural living resources. They can be distributive, determining who is to have ownership of and access to the resource, conservatory, in that they preserve the resource or conserve it at levels that can sustain exploitation, or proscriptive, prohibiting forms of exploitation or any exploitation of the resource for conservation or ethical purposes.[849] Instruments comprising the international fisheries regime fall largely into the latter two categories, although UNCLOS is also strongly distributory. All, however, serve to promote a strong conservatory message. UNCLOS is no exception; its conservancy thrust is particularly evident in the provisions dealing with the management of living marine resources in the exclusive economic zone, as we have seen in earlier chapters. While these provisions do not dictate the manner in which states should operationalise the goal of 'sustainable' fishing (as I have discussed in chapters 3 and 6), when interpreted in the context of other international fisheries instruments, they arguably promote biological, social and economic sustainability in marine fisheries as a necessary step towards the ideal of sustainable development.[850]

What I have shown in this thesis, in particular in chapter 8 with reference to the EU-Senegalese case study, is that bilateral fisheries agreements concluded between the EU and developing coastal states are not on the whole instruments that foster these sustainability objectives. They do not operate as restrictive, conservatory instruments that strive towards a mutually-conceived understanding of the goal of sustainable fishing but instead function as

[849] Birnie and Boyle op cit n 70 at 554.
[850] Cross-reference with pp 55, 56 and p 140.

framework regulatory tools within which the parties' potentially quite different, self-interested understandings of sustainability and sustainable development can co-exist and be fostered. As we have seen, each component of the multi-faceted goal of sustainability must be satisfactorily realised in order for the natural resource in question to be used in a manner that promotes sustainable use and development. The freedom that is granted states to operationalise 'sustainability' in the context of bilateral fisheries relations can potentially result in excessive emphasis on the economic facets of sustainability to the exclusion or at least marginalisation of the biological and environmental components. Taken to the extreme, short-term economic and political concerns can dominate bilateral fisheries agreements to the active detriment of long-term sustainable fishing. Such agreements operate as legal instruments concluded under the guise of international fisheries law with the core intention of promoting the respective socio-economic self-interests of the parties involved.

Compounding the tainted nature of these agreements is the likelihood that the parties' respective interests will be unequally met as the political and economic status of the parties is skewed in favour of the EU in terms of global economics arising from colonial history.[851] In particular, the parties' colonial legacy (as I have discussed earlier in this thesis) is manifested in the role that developing coastal states play in these agreements as suppliers of 'cheap' unprocessed natural resources to Europe. This mimics early trade interactions between the parties and the dominant theme of their subsequent development cooperation relations and entrenches the socio-economic inequities between them. Accordingly, the EU wields the strongest bargaining power in fisheries agreement negotiations and is thus likely to secure conditions and terms of access that overwhelmingly serves its own interests rather than the domestic sustainability needs of the targeted fisheries.

[851] The impact of this legacy is described in detail in chap 4.

On one level, my thesis thus shows that bilateral fisheries agreements between the EU and developing coastal states, far from being the intended regulatory instruments of conservancy envisaged by UNCLOS, are predominantly self-interested, commercially-driven resource-access mechanisms. As they stand, they are ill-suited means to facilitate the integration of environmental protection with economic development towards sustainable fisheries development at a domestic (coastal state) and international level. Undeniably, in recent times the respective parties, most noticeably the EU, have amended their domestic policies on bilateral fisheries agreements in an effort to (at least theoretically) remedy this parody. But as the case study of EU-Senegalese fisheries relations demonstrates, it may well be a case of too little too late, at least in this specific case.[852]

On a broader scale, this thesis demonstrates the disparity between the theoretical pursuit of sustainable fisheries and sustainable fisheries development (as promoted by law and policy) and the 'on the ground' effects of operationalising these legal principles in a specific area of fishing activities, namely bilateral fisheries relations. This stems from the more generic assertion that international law and its associated regulatory mechanisms are inadequate to ensure the promotion of sustainable fishing through bilateral fisheries agreements. Put in another way, bilateral fisheries agreements are inappropriate mechanisms to promote sustainable fishing for the very reason that the current international fisheries regime - in particular UNCLOS - is ill-suited to affect the sustainable management of this common natural resource.

[852] Given that a number of Senegal's coastal demersal species are already over-fished and the objective of domestic fisheries development remains unattained, as I discuss in chaps 7 and 8 above.

2. Weaknesses of international fisheries law in promoting sustainability

I suggest that there are two core reasons why the fisheries management regime advocated by UNCLOS, specifically in relation to coastal fish stocks in the 200 nautical mile zone, is deficient. The first becomes clear when examining the operation of the regime through my 'sustainable use' lens. It is evident that the zonal, jurisdictional approach introduced by UNCLOS in terms of which coastal states are legally obliged and (theoretically) empowered to manage their EEZ fisheries sustainably has not proven to be the management solution to the commons problem that was hoped for. Its failure is rooted in its disregard for the migratory nature of fish stocks and the complexity of the marine environment of which they are a part, which necessitate sound ecologically-based management not property rights-based solutions that rely on artificially-drawn political boundaries. Viewed in this light, coastal states have little hope of ever ensuring the long-term sustainable management of their fisheries: even if a coastal state implements the 'perfect' fisheries management system in its adjacent waters, it can do little to prevent other states from over-fishing those stocks that move beyond its waters into either the high seas or neighbouring coastal states' waters, nor can it wholly prevent foreign states accessing its coastal fisheries from over-harvesting targeted species as a result of consistent violation of domestic fisheries management regulations and measures. While UNCLOS promotes inter-state 'cooperation' as the panacea to counter these dilemmas, obligatory cooperation arguably 'yields no substantial advance over the opportunities for such cooperation in the past' and is thus unlikely to readily procure sustainable fishing.[853]

The enduring legacy of the impact of colonisation provides the backdrop to the second ground for UNCLOS' weakness, namely that it arguably takes inadequate account of the socio-

[853] Copes op cit n 3 at 222.

economic context within which fisheries management decisions are made and bilateral fisheries relations play out.[854] Firstly, as we have seen in previous chapters, its exclusive economic zone provisions grant states significant freedom in interpreting key concepts like 'optimal utilisation' and 'conservation' and coastal states in particular enjoy considerable latitude in how they choose to operationalise these objectives. While they are obliged to employ certain management means towards these ends, such as determining the maximum sustainable yield, setting total allowable catches and determining their domestic harvesting capacity, the Convention respects their sovereign rights to implement these measures as they choose. Of course, this has the advantage of enabling coastal states to tailor their respective fisheries management policies and practices to their unique environmental needs and socio-economic abilities. The downside, however, is that coastal states can potentially implement these provisions in a way that does little to promote genuine progress towards sustainable fisheries management. Developing states in particular may favour fisheries management options that maximise short-term economic benefits even though such actions may be to the potential long-term detriment of biological and socio-economic sustainability.

As I have already highlighted, the extent of the data about coastal fish stocks, the marine environment and the domestic fishing industry that must be assimilated and analysed in order to even hope to effectively implement the EEZ provisions of UNCLOS is vast. The Convention affords little attention to this, down-playing the complexity of accurately determining domestic allowable catches and harvesting capacities and portraying them instead as simple calculations. In particular, it ignores the scientific uncertainty involved in these calculations and the fact that frequently, the necessary relevant data is simply lacking.[855] UNCLOS further fails to acknowledge the disputed credibility of the maximum sustainable yield concept in which it strongly roots its conservation provisions. Its emphasis on the

[854] This legacy is discussed in detail in chap 4 above.
[855] Cross-reference with p 143 above.

management of marine living resources to the exclusion of the rest of the ecosystem of which they are a part is clearly also fatally flawed from a biological perspective and does little to promote a comprehensive, multi-dimensional understanding of sustainability. Accordingly, it is not surprising that even comparatively well-off coastal states with advanced scientific and technological capacities struggle to effectively implement the Convention's exclusive economic zone provisions towards their intended objectives. For developing coastal states, it is almost impossible to do so – their diminished economic and scientific capacities, combined with their need to balance investment in fisheries management with other pressing socio-economic priorities, frequently result in stunted progress towards domestic sustainable fisheries management. The overall outcome is that to date, the majority of the world's coastal states have failed to ensure the sustainable management of their marine fisheries.

The troubled socio-economic status of developing coastal states also provides a strong incentive for them to declare the existence of a surplus and to conclude agreements with wealthy foreign states to access these stocks despite their ignorance of the true biological status of their fisheries; promised short-term economic benefits and the maintenance of 'friendly' political relations with powerful foreign states have the capacity to outweigh long-term sustainability concerns. UNCLOS' provisions concerning bilateral fisheries agreements (article 62) are thus particularly weak.[856] Not only do they fail to account for the socio-economic interests that will likely drive coastal states to declare the existence of a surplus and to conclude agreements permitting access to these stocks, but they also fail to recognise the extent to which the negotiation of such agreements will be shaped by the capitalist global market forces, thereby transposing instruments intended to promote the sustainable, 'optimal' use of coastal fish stocks into self-serving, politically-defined and commercially-oriented contractual arrangements. The significant latitude that UNCLOS grants the parties in

[856] Article 62 of UNCLOS is discussed in detail at pp 140-143.

negotiating terms and conditions of access in practice rarely operates in overall favour of developing coastal states from a long-term biological and socio-economic perspective. Instead, the skewed bargaining power between the parties largely finds the more politically and economically powerful foreign fishing nations urging for agreement on terms and conditions of access that predominantly best serve their own interests.[857]

That the provisions of UNCLOS permit exploitative bilateral fisheries agreements (at least from a natural resource perspective) does not prevent individual contracting states from cooperating to negotiate and conclude agreements that foster sustainable fishing practices and sustainable fisheries development in the coastal state. Traditionally, however, this has not been the manner in which the EU's agreements with developing third countries have played out, as I have discussed in this thesis.

Recently, however, the urgent need to counter the continual decline of key fish stocks with renewed efforts to foster sustainable fishing practices has prompted the EU to take advantage of the interpretative freedom afforded to it by UNCLOS and introduce a new sustainability-driven bilateral fisheries policy. Against the background of the international regime's increasing emphasis on integration, the EU has drawn on its integration efforts in other domestic spheres (particularly the environment) in harnessing various 'new' regulatory mechanisms to these ends (such as environmental assessment and enhanced dialogue) in its new fisheries partnership approach, which theoretically promotes a more responsible and precautionary-oriented way forwards. The EU intends in turn to employ these agreements as sustainable fisheries development vectors in developing third countries and to expand the number of bilateral fisheries agreements (now in the form of fisheries partnership agreements) concluded with these states as part of its commitment to the pursuit of the Millennium

[857] Cross-reference with chap 6 ibid.

Development goals.[858] It is through these new agreements that it proposes extending its integration efforts beyond the domestic realm to the fishing sectors of its developing partner states. As I have stated earlier, it is therefore arguable that the recent cessation of EU-Senegalese fisheries relations as a result of failed agreement negotiations is only temporary; it is possible that a new agreement will be negotiated in the not too distant future.[859] As I discuss below, however, the extent to which such an approach is the best or even an appropriate way to foster sustainable fisheries development, is debatable.

In sum, it is clear that in order to pursue 'sustainable' fishing as advocated in this thesis – namely, biological, economic and social sustainability towards the progressive pursuit of sustainable development – states need to drastically alter their attitudes towards and conducting of bilateral fisheries interactions. Specifically, they need to harness different, more policy-oriented mechanisms to engage with one another along the lines of that which the EU has (at least theoretically) attempted towards this end through its integration efforts. While the concept of sustainability that is promoted by the international fisheries regime and the means that it suggests to pursue this goal do not fully accord with such an approach, neither are they incompatible; as I have explained above, the ability of particularly UNCLOS to promote sustainability is simply weak due to its inappropriate, zonal response to the common resource management complexities of marine fisheries. Accordingly, it would thus be possible for states to comply with international law while at the same time supplementing their actions with reference to an 'alternative' ethical policy text in order to find means to better facilitate the pursuit of sustainable fishing. Such an approach would likely also contribute towards

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[858] Commission of the European Communities, 'Communication from the Commission to the Council, the European Parliament and the European Economic and Social Committee Policy Coherence for Development: Accelerating Progress Towards Attaining the Millennium Development Goals' COM (2005) 134 final at para 3.5.

[859] This is also premised on the fact that failed negotiations with Morocco after the 1995-1999 EU-Moroccan bilateral fisheries agreement gave way to a re-negotiated fisheries partnership agreement in 2006: Council Regulation (EC) No 764/06 of 22 May 2006 on the Conclusion of the Fisheries Partnership Agreement between the European Community and the Kingdom of Morocco'. It operates until 2010.

countering the negative impact of the colonial legacy on EU-developing coastal state fisheries interactions, the effects of which are well illustrated by the EU-Senegalese case study.

At this stage, it appears that future bilateral fisheries relations will likely follow one of two main directions. The first, and most probable, is that bilateral fisheries agreements, in the form of fisheries partnership agreements, will continue to play a dominant role in fisheries interactions between the EU and developing coastal states. If this is the case, the parties should make a concerted effort to ensure that future agreements better foster sustainable fishing; I discuss examples of ways in which this could be achieved below.

The second – and from my perspective, ideal - direction would see bilateral fisheries agreements phased out. Future bilateral fisheries relations between the EU and developing coastal states would still be conducted within the framework of the existing international regime, but would additionally be guided in their content and objectives by 'ethically'-based international codes, principles and resource management mechanisms such as the Earth Charter, the Millennium Development goals, and ecological footprint analysis. As a result, alternative, more cooperative regulatory instruments would be used to promote the objective of sustainable fishing. I present this as my 'ideal' way forward as while I assert that the international fisheries regime is an inappropriate framework within which to pursue sustainable fishing worldwide, I acknowledge that it - particularly UNCLOS – is unlikely to be amended to the fundamental extent that is necessary in order to address its deficiencies. Accordingly, it is realistic to assume that UNCLOS will remain the dominant (legal) framework within which bilateral fisheries relations will be conducted in the future. The most that one can thus hope for is thus that states' actions will additionally be shaped by a supplementary 'ethical text'.

3. The way forward

3.1 Improving bilateral fisheries agreements to better promote sustainable fishing

Arising from my analyses of the EU-Senegalese agreement, there are a number of ways in which I believe that future bilateral fisheries relations between these parties could better promote sustainable fishing. These suggestions are largely based on my empirical research, but I have also drawn on critical literature concerning the EU's fisheries relations with developing states in compiling them. They are directly applicable to any future fisheries arrangement that may be negotiated between the EU and Senegal. Some, however, are also pertinent to potential alternative means of conducting future bilateral fisheries relations between these parties, while others may additionally have relevance to bilateral fisheries relations between the EU and other West African coastal states. All are rooted in the necessary pursuit of a more comprehensive approach to sustainability in terms of which the importance of realising all facets of sustainable fishing is acknowledged. In addition, they are aimed at improving integration efforts towards sustainable development. As I have already emphasised, however, I do not regard bilateral fisheries agreements of any nature as ideally-suited mechanisms to promote sustainable fishing or sustainable fisheries development and do not sanction the exploitative natural resource extraction patterns that they perpetuate.

Firstly, it is of paramount importance that developing states take responsibility for attempting to promote sustainable fisheries management in their own coastal waters, in accordance with international law. As noted above, there are severe socio-economic constraints in doing so, but as a starting point, these states must make efforts to develop and implement a sustainable domestic fisheries management policy. As we saw in the case of Senegal, the greatest

stumbling block may be implementation.[860] But even if this can be overcome, implementing the policy is not the end to ensuring sustainable fisheries management: developing coastal states must also improve their knowledge of the state of their key fish stocks and act appropriately to ensure their long-term sustainability.[861] Funding will likely be required to improve the capacity of these states to collect and analyse necessary scientific data and to compile accurate catch statistics; technology transfer and training may also be necessary.[862] The EU could arguably provide such funding either as part of its future fisheries partnership agreement payments or as a separate investment in fostering the sustainable fisheries development of the coastal state(s) in question. The governments of these coastal states will need to take steps to ensure that financial benefits accrued to this end are used to foster development in this sphere rather than to satisfy other national needs.[863] This is particularly the case in Senegal: during my interviews allegations were levelled at the government regarding the money allocated under the most recent fisheries agreement for improving stock monitoring and evaluation – while it had theoretically gone into researching the status of various local fish stocks, the tangible results of this research had been negligible to date; in the words of my interviewee '[r]esearch in fisheries in Senegal has been *very* slow'.[864]

Developing coastal states would also benefit significantly from EU investment in on-shore fisheries-related activities and industries either as part of the financial package under future fisheries partnership agreements or arising from independent Community financing. This is exemplified by the case of Senegal. As I highlighted in chapter 8, both the DPM officials and

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[860] Cross-reference with p 178. DPM officials acknowledged the importance of such a policy and the urgent need for its implementation (interviews DPM officials Dakar February 2006).
[861] B Gorez, 'ACP EU Fisheries Relations: Towards Greater Sustainability' (Summary Report) Joint Meeting organised by CTA (Technical Centre for Agriculture and Rural Cooperation ACP-EU) and the Commonwealth Secretariat Held at ACP Secretariat, Brussels, 7-9 April 2003 <http://www.cta.int/events2003/fisheries/General%20report-EN.pdf> accessed August 2005 at para 2.3 at 18, 19.
[862] Gorez ibid at para 4.2 at 29.
[863] Kazynski and Fulharty op cit n 460 at 89, 90.
[864] Interview with Mr Samb (op cit n 674).

NGO representatives that I interviewed favour increased catch-landing requirements for Community vessels in Senegal as most of the fish harvested by the EU is still frozen at sea and transhipped, which generates few local on-shore benefits. If increased catch-landing requirements were combined with more effective local processing, including value-added measures, Senegalese fisheries exports could potentially demand higher prices and be more competitive on the international market.[865] Investment should thus be ideally channelled into on-shore infrastructure development such as ice production, processing, freezing, packaging and storage.[866] This could be coupled with the training of local fish processors to enable them to better comply with and maintain the strict product standards of external markets, including health standards and quality control requirements.[867] This would likely require an increased focus on food safety, product identification, traceability (from catch to consumption) and eco-labelling.[868] Investment would also be beneficial to assist Senegal in diversifying its fisheries exports and developing innovative marketing strategies in order to retain its status in the European market and to penetrate new markets (as discussed in chapter 7).[869]

Developing coastal states may also consider entering into (further) joint fisheries ventures with the EU as a means to develop their respective local fishing industries. These could be pursued either in combination with any future fisheries partnership agreements with the EU or, as I would suggest, as a way of decreasing reliance on these agreements; various commentators advocate joint enterprises as a means for developing coastal states to expand their domestic fishing capacity with a view to eventually 'replacing' the foreign fleets in their

[865] See CFFA op cit n 349 for a discussion of problems regarding by-catch in ACP coastal states. Also McAlister Report op cit n 580 at para 4.2.
[866] In particular, this was emphasised in interviews with NGO representatives (Dakar 6 and 7 February 2006).
[867] McAlister Report op cit n 580 at para 4.2.
[868] Gorez and O'Riordan op cit n 286 at para 4.1. 'Value-added' refers to the increase in value or price of a product due to a modification of the product or its marketing in some way. For example, making fish into fish products increases the value or price beyond that of the unprocessed fish.
[869] MacAlister Report op cit n 580 at para 4.4.

waters.[870] While the Community no longer subsidises joint ventures (for reasons that I have explained in chapter 5), it nevertheless still promotes the 'permanent transfer' of its vessels to third countries in the context of 'joint enterprises'.[871] If they were carefully structured, such joint ventures could potentially promote sustainable local fisheries development in the relevant developing coastal states.

In the capture sector, if joint ventures operated within the framework of a domestic sustainable management policy they could generate significant long-term catches of high-value species. Within the processing sector, joint ventures could make a valuable contribution to creating local added value to fisheries products and to meeting export market hygiene and other standards. The transfer of capital as well as know-how and skills from EU operators would be particularly beneficial in both sectors.[872]

As the flag state, the coastal state would bear full responsibility for monitoring and controlling the activities of joint venture fishing vessels; the EU would no longer have any role to play in this regard. The coastal states would thus need to be sure that their monitoring and enforcement capacities were capable of satisfactorily coping with this additional responsibility. Writers have identified various other domestic matters that developing coastal states will likely need to address in order to attract joint ventures. These include high

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[870] See UN Wijkström, 'Does African Participation in Industrial Fishing off West Africa Make Economic Sense?' (Report) FAO Library Fiche AN: 345417 (FAO, Rome 1992). In 1992, the author concluded that it made economic sense for most West African coastal states to replace industrial distant water fleets with their own provided that certain steps were taken by the government (outlined at 19, 20, 33). See also MacAlister Report ibid at para 4.7.

[871] As discussed at p 155. See, for example, art 8 of Regulation 2369/02 op cit n 461 and FPA Communication op cit n 364 at para 2.2. Joint enterprises refer to commercial fishing ventures between the Community and a coastal third country established in terms of the domestic law of the third country and using locally registered vessels to engage in fishing activities in its waters, in which the Community holds a significant proportion of the share capital and one or more of the partners are nationals of the third country.

[872] B Gorez, 'E-consultation on ACP-EU Fisheries Relations: Maximising Social and Economic Benefits for ACP Fishing Communities' (report of the preparatory electronic discussion for a meeting on ACP-EU fisheries relations, to be held in Brussels on December 13-14, 2004) prepared for Coalition for Fair Fisheries Arrangements (CFFA) <http://www.cape-cffa.org/issues/E-report%20ACP-EU%20Fisheries%20Relations%20-%20social%20and%20economic%20benefits%20(December%202004).doc> accessed August 2005 at theme 3.

operating costs in both the capture and processing sectors (particularly in relation to fuel and transport), restrictive investment conditions, adverse trade and banking systems and regulations, and (perceived) bureaucratic ineffectiveness and corruption.[873] As noted earlier, however, critics remain sceptical as to the genuine potential of joint enterprises to promote sustainable fishing in developing coastal states. The matter clearly requires considerable further research in the context of the specific coastal state(s) concerned.

Enhanced regional cooperation among West African coastal states is strongly advocated by various commentators and NGOs as a means to better foster sustainable fisheries management both domestically and in the region. Specifically, they advocate increased regional cooperation (primarily through regional fisheries organisations) towards objectives such as improved generation and flow of fisheries stock and capture data and enhanced monitoring, control and surveillance. They argue that this would in turn strengthen individual states' bargaining positions vis-à-vis the EU in bilateral fisheries agreement negotiations as countries would have more accurate knowledge about the state of their stocks and would be more confident of their capabilities to monitor and control the EU's fishing activities in their waters.[874] Some writers go further, encouraging West African coastal states to negotiate fisheries agreements on a regional basis in order to enhance their combined bargaining power. This is premised on the fact that the EU has historically concluded fisheries agreements with coastal states in the regional on an individual, bilateral basis; as most of the species that its fleet targets are found along the entire West African coast, it has been spoilt for choice when deciding with which countries to conclude agreements. This has left individual coastal states with minimal leverage at the negotiation table.[875] Coastal states are reluctant, however, to give

[873] Kazynski and Fluharty op cit n 460 at 90 and Gorez ibid at theme 3.
[874] See for example Johnstone op cit n 541 at 13, 14 and CFFA (op cit n 349).
[875] Such as, for example, the CFFA and WWF.

up their autonomy in this area due to the exclusive financial benefits that bilateral arrangements with the EU afford them.[876]

Assuming that future fisheries agreements will thus continue to be concluded with the EU on a bilateral basis, other possible areas for increased regional cooperation could include determining minimal conditions of EU access for trans-boundary and highly-migratory species (such as tuna), devising a core code of conduct and compliance for EU fleets (to be tailored to each individual coastal states' domestic policy) and establishing a register of all EU vessels operating in West African coastal waters in order to assist with more effective fisheries monitoring and control and to combat illegal, unregulated and unreported fishing in the region.[877]

The EU's extensive subsidisation of its fleet's fishing operations in Senegalese and other developing country waters remains a fundamental stumbling block to advancing sustainable fishing in these waters.[878] As I have discussed earlier, the adverse effects of these subsidies on the domestic fishing industry include unfair advantages for Community operators over local fishers and the exacerbation of over-fishing. If the parties continue to conclude their bilateral fisheries relations through fisheries agreements, the Community must phase out subsidisation and replace it with private funding from ship owners. This would force unprofitable EU fishing operations to exit the industry, thereby reducing fishing capacity in the Senegalese exclusive economic zone and decreasing competition for resources. It may also prompt an increase in the establishment of joint ventures between European private fishing enterprises and Senegal, which could potentially contribute to sustainable local fisheries development (as I have discussed above). While the EU professes to be reducing its subsidisation, Community

[876] As confirmed by interviews DPM officials (Dakar February 2006) and EU representatives (telephone interview 21 September 2005 and interview 2 Dakar February 2006).
[877] Gorez op cit n 861 at para 4.4.
[878] Gorez ibid and Kazynski and Fulharty op cit n 460 at 90. See also pp 82-90 above.

funding still comprises the overwhelming bulk of compensation paid to Senegal under the most recent bilateral fisheries agreement; there has been only a comparatively marginal increase in licence fees for vessel owners. The NGO representatives that I interviewed in Dakar confirmed the negative impact of the EU's fleet subsidisation on the domestic fishing industry, emphasising in particular the adverse effects on the livelihoods of local fishers.[879]

In order to foster integration towards sustainable fisheries development in developing coastal states' waters it is necessary for the EU to carefully tailor its future fisheries agreements with such countries to their specific fisheries development needs. This requires an upfront, in-depth socio-economic, environmental and sectoral analysis of the potential impact of the Community's proposed fishing activities prior to agreement negotiations (possibly conducted jointly by the parties). The EU's 2004 Council Conclusions on fisheries partnership agreements proposed such an assessment.[880] I was informed by an EU representative that the Community had conducted a strategic impact assessment in preparation for agreement re-negotiations with Senegal and that this would become 'standard practice' for all future fisheries partnership agreements.[881]

The parties will also need to decide how best to assess the existence (or not) of surplus stocks in the coastal state's waters. As we have seen, foreign states are only legally entitled to access coastal states' excess fish stocks. The burden is on the coastal state to accurately determine the existence and extent of its surplus stocks; foreign states may legitimately rely unquestioningly on this declaration, as the EU has traditionally done in relation to the

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[879] Interviews NGO representatives (Dakar 6 and 7 February 2006).

[880] Council Conclusions 11485/1/04 op cit n 451 at paras 6 and 7. Strategic impact assessments were proposed in the earlier Roadmap Communication (op cit n 221) at para 5.3 and the FPA Communication op cit n 364 at paras 3.1 and 4. For a discussion on environmental assessment as part of the new fisheries partnership approach, see p 152 and 153 above. See also Gorez op cit n 872.

[881] Interviews EU representatives (telephone interview 21 September 2005 and interview 2 Dakar February 2006).

developing third countries with which it has concluded fisheries agreements.[882] In the particular case of Senegal, it did so despite the fact that it was aware of the 'possibility' that the Senegalese stock assessments were not scientifically sound.[883] In fact, evidence suggests that the Senegalese domestic fleet was and remains capable of fully exploiting the total allowable catch in the Senegalese exclusive economic zone: this was confirmed by DPM officials that I interviewed, who informed me that the only reason why pelagics are not fully exploited by the domestic fleet is because of the rise in input costs and the increased attraction of higher-value export species as opposed to capacity problems.[884] According to independent scientific data, only high-seas species (deep-sea, off-shore demersals) should 'in theory' be available for future bilateral fisheries agreements.[885]

Ideally, a joint scientific stock assessment should be carried out by the parties before negotiations begin and part of the payments under future agreements should be directed at developing the coastal states' scientific and human resource capacity to eventually conduct these assessments independently. Clear scientific benchmarks for maintaining fish stocks within safe biological limits during the operation of the agreement should be noted in future arrangements, deviation from which should entitle parties to jointly implement whatever measures are necessary to restore stocks' stability, including instituting biological rest periods or reducing fishing opportunities. Any necessary decrease in the EU's fishing opportunities should not attract a commensurate reduction in financial compensation as this acts as a disincentive for the coastal state to agree to implement sustainable management measures, as I discussed earlier in the context of the EU-Senegalese agreement.[886] Accurate, joint stock

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[882] Cross-reference with, for example, pp 143 and 144.
[883] Interviews EU representatives (telephone interview 21 September 2005 and interview 2 Dakar February 2006).
[884] Interviews DPM officials (Dakar February 2006).
[885] Senegalese Ministry of Fisheries Report op cit n 604 at para 2.2.1.
[886] Cross-reference with pp 206, 208 and 216. Gorez and O'Riordan op cit n 286 and Gorez op cit n 861 at para 4.2 at 30 ardently argue that reduced payments in such events should 'under no circumstances' be permitted.

assessments should also be conducted throughout the operation of agreements to ensure that stocks are maintained within the specified biological limits.

I was told that the EU plans to establish a joint scientific committee with Senegal in future fisheries partnership agreements. It will be tasked with conducting both stock assessments prior to negotiations and continual stock assessments throughout the operation of the agreement and will have the power to recommend necessary sustainable management measures, including the adjustment of fishing opportunities.[887] Given the failure of the recent agreement negotiations, this is of course no longer immediately relevant. It remains potentially germane, however, to any future agreements that may be concluded between the parties. It also has potential bearing on the EU's agreements with other West African coastal states.

A key resource management question that will have to be addressed in any future fisheries agreements is how best to regulate the Community fleet's output to better promote biological sustainability.[888] As I discussed in chapter 8, the effectiveness of the current vessel tonnage method is debatable from a sustainability perspective.[889] While alternative output control mechanisms, such as total allowable catches (TACs) and quotas, are not necessarily the solution to ensuring sustainable fishing from a biological, social and economic perspective, they are generally accepted as suitable catch control methods (subject to certain conditions). In particular, they are used by the EU in its own waters; it thus appears contradictory for the EU to apply different control methods for its fleets' activities in developing third country waters. Ideally, thorough independent research should be conducted to determine whether

[887] EU representatives (telephone interview 21 September 2005 and interview 2 Dakar February 2006). The EU will not respond to reduced access rights with a decrease in compensation unless it is clear that the stock decline is due wholly to overtly poor fisheries management by the Senegalese authorities – cross-reference for a more detailed discussion on this at pp 217.

[888] For a discussion of output controls and their contribution to sustainable fishing, see pp 75-79.

[889] Cross-reference with pp 215 and 216.

gross registered tonnage, harvest quotas or a combination of both methods is best suited to ensure the sustainably of the EU's fishing activities in developing coastal states' waters. The findings should guide future catch possibility negotiations and should be reflected in the management measures of subsequent agreements.

The parties will also need to consider further reducing the by-catch limits of those categories of Community vessels that incidentally catch species that are targeted by local artisanal fishers. With regard to Senegal, my research further indicated that the by-catch provisions should be more strictly enforced.[890] To this end, reporting of by-catch should remain compulsory but it should be complemented by improved monitoring of compliance. Ideally, future agreements should impose more selective fishing gear restrictions on EU vessels and institute training of fishers to ensure that selective fishing methods are used in an attempt to prevent by-catch in the first place.[891] Another possibility would be to introduce compulsory land requirements of by-catch, as pelagic species included in these catches could then be processed locally and either sold for consumption or traded regionally.

The EU and Senegal will further need to jointly address the overlap of species and fishing grounds between the Community fleet and domestic fishers (particularly the artisanal sector) should an agreement be re-negotiated between them in the future.[892] While the zoning under the recent bilateral fisheries agreement insulated domestic artisanal fishers from competition with foreign fleets in the area up to six nautical miles from the coast (both EU and Senegalese interviewees confirmed that Community vessels generally respect this zone), local fishers commonly harvest beyond this area in waters where they enjoy no special protection under

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[890] Interview with DPM officials (Dakar February 2006) and NGO representatives (Dakar 6 and 7 February 2006).

[891] Kaczynski and Fluharty op cit n 460 at 89, Gorez op cit n 861 at para 4.2 at 30 and Gorez and O'Riordan op cit n 286 at para 3.1 at 16.

[892] Johnstone op cit n 541 at 12. Species targeted include as cuttle fish, sole, lobsters, and shrimp. See also UNEP Senegalese Fisheries Report op cit n 549 at paras 3.1, 3.2.1, 3.2.2 and 6 and Ndiaye op cit n 600 at para 4.

the agreement. This includes both industrial vessels, which are only permitted to harvest from the six nautical mile boundary onwards in terms of national law, and increasingly also artisanal fishers. The result is that physical collisions sometimes occur between Senegalese and EU vessels (particularly involving local industrial vessels as they are old and unable to move quickly) and local fishing gear is frequently destroyed.[893] It may be possible to address this by reducing the EU's coastal fishing zone, shifting its starting point further away from the coast than the current six nautical mile mark. This would protect domestic fishing vessels in the region between six nautical miles and the new boundary. Such a solution is possibly also relevant to agreements between the EU and other West African coastal states.

Finally, monitoring and control of EU fishing activities in Senegalese waters under any future bilateral fisheries agreements will require improvement in order to better foster sustainable fishing. The EU representatives that I interviewed informed me that all EU vessels fishing in Senegalese waters have vessel monitoring systems (VMS). This potentially makes tracking Community vessel activities easy provided that future agreements oblige all EU vessels to use VMS in Senegalese waters. But as I have already noted in chapter 8, Senegal does not necessarily have the capacity to effectively monitor VMS.[894] Funding and training should thus be directed through future agreements to development Senegal's capacity in this regard. This should be combined with a more effective system of on-board observance to promote catch limit compliance. Problems with the lack of independence of observers under the past agreement should be addressed: for example, observers should be paid from public funds rather than directly by vessel owners, all observers should be 'outsiders' (none should be designated from among the crew, as was the case in the recent agreement regarding tuna

[893] Interviews DPM officials (Dakar February 2006).
[894] As noted at p 219.

vessels), observers should be qualified to a certain level of competence and agreements should clearly outline their reporting duties.[895]

3.2 Alternative ways forward towards sustainable fishing

As I have already noted, the ideal that bilateral fisheries agreements will be phased out is unlikely to materialise in the near future. I nevertheless argue that a fundamental shift in thinking on the part of both the EU and developing coastal states (indeed, of all fishing nations) is required in order for there to be any possibility that future bilateral fisheries relations (of any form) are capable of better effecting sustainable fishing. It is not enough to merely call for a 'renewed, genuine commitment to sustainability'; something more drastic and at the same time more practical in its efforts to foster the integration of environmental concerns and development is required. If this were to occur, the likelihood of the demise of bilateral fisheries agreements (as we currently know them) would be greatly enhanced.

I suggest that this shift in approach should be grounded in and guided by a framework of ethical principles that facilitates the achievement of sustainable development, such as those contained in the Earth Charter, and driven by concrete goals and yardsticks like those found in the Millennium Assessment and advocated in the Europe 2005 Ecological Footprint Analysis.[896] Parties should continue to conduct their bilateral fisheries relations in compliance with the international fisheries regime, but should at the same time be driven to pursue sustainable fishing by a sense of universal responsibility in a manner that extends beyond the legal cooperation obligations imposed by traditional regulatory instruments like UNCLOS. The call for such a move is not as idealistic as it might sound; it is necessitated by the

[895] Gorez op cit n 861 at para 4.2 at 29. Cross-reference with pp 211 and 212, where I discuss observers.
[896] For an earlier introduction to the Millennium Development goals cross-reference with p 99 at n 325, to the 2005 Europe Ecological Footprint Analysis cross-reference to pp 14 (at n 1) and 124 and to the Earth Charter, cross-reference to p 64.

weakness of the current international fisheries regime and the traditional regulatory and management mechanisms employed under it (as outlined earlier in this chapter), and is articulated in the three international documents mentioned above.

As introduced in chapter 3, the Earth Charter originated in the World Commission on Environment and Development's 1987 call for a universal declaration of a new set of norms to guide the pursuit of sustainable development. It comprises a declaration of fundamental principles, values and aspirations for creating a worldwide 'partnership' to build a just and sustainable global society. Endorsed by the United Nations Education, Scientific and Cultural Organisation (UNESCO) and the World Conservation Union (IUCN), together with over a thousand other international organisations and national bodies, it is increasingly recognised as a global consensus statement on the meaning of sustainability, the challenge and ideal of sustainable development and the principles by which sustainable development can be achieved.[897] It is thus an international instrument that offers guidance in operationalising sustainability towards the realisation of sustainable development.

While the Earth Charter's legal status currently falls short of classification as a 'soft law' instrument, it is nevertheless a highly influential policy document as many of its principles reflect international law and the ethics that it promotes have received support at numerous key international fora.[898] The Charter introduces the environmental ethic that has arguably been missing in states' discourse on sustainable development to date, namely that the planetary ecosystem (or 'community of life') should be the centre of sustainable development concerns rather than humans.[899] It does so by suggesting that in addition to the distributive justice

[897] <http://www.earthcharter.org/innerpg.cfm?id_page=106>accessed 22 October 2006. The Earth Charter is available at <http://www.earthcharter.org/files/charter/charter.pdf> accessed 22 October 2006.
[898] Most recently, for example, at the World Summit on Sustainable Development (op cit n 123). See Bosselmann op cit n 183 at para 3.
[899] Bosselmann ibid at para 2.

elements of sustainable development articulated by the Brundtland Report, namely intra-generational equity and inter-generational equity, a third should be added: inter-species equity.[900] It is arguably only by accepting this as an additional, necessary ethical aspect of sustainable development that states will be engendered with the sense of moral responsibility towards the earth and its future that is required in order to truly realise this ideal.

Specifically, the Earth Charter is rooted in four broad commitments. For our purposes, most relevant are the undertakings to respect earth and life in all of its diversity and to care for the community of life with understanding, compassion and love. The latter emphasises that together with the right to own, use and manage natural resources comes a duty to prevent environmental harm.[901] The Charter presents twelve principles to assist and guide parties in realising these commitments. The protection and restoration of the earth's ecological systems is one such principle. This can be pursued through various means including managing renewable resources in ways that do not exceed rates of regeneration and that protect the health of ecosystems, applying a precautionary approach, adopting patterns of consumption that safeguard the earth's regenerative capacity, human rights and community well-being, and promoting the open exchange and application of knowledge about ecological sustainability through international scientific and technical cooperation, particularly in relation to developing countries.[902]

The principles draw on existing international law as well as contemporary science and insights of philosophy. Cumulatively, they assert strong support for a specific ethical and environmental vision of the world, yet they are deliberately loosely-framed, inviting

[900] As noted above op cit n 183, this is particularly evident in principles 1-4 and 5-8 of the Earth Charter.
[901] Principles 1-2 of the Earth Charter ibid. The other two are to build democratic societies that are just, participatory, sustainable, and peaceful and to secure earth's bounty and beauty for present and future generations
[902] Ibid at principles 5 – 8.

interpretation and realisation according to the respective needs, capacities and responsibilities of those who endorse them. If future bilateral fisheries relations between the EU and developing coastal states were guided by the Charter they would arguably promote a more progressive, responsible and responsive pursuit of the sustainable use of fisheries in the coastal states' waters and would likely give rise to less self-serving, exploitative instruments than bilateral fisheries agreements to advance this goal.[903]

That the EU needs to change its resource use habits to facilitate integration and to foster sustainable development both domestically and in the rest of the world (particularly in developing nations) was highlighted by the Europe 2005 Ecological Footprint Analysis.[904] The report, as noted earlier in the thesis, employs ecological footprint analysis. This is a resource management and accounting tool that approximates the amount of ecologically productive land and sea area that is required to sustain a population (its 'ecological footprint').[905] By measuring a population's ecological footprint one is able to assess the extent of the population's 'ecological overshoot', that is, the extent to which its ecological resource demands exceed that which natural resources are able to supply through regeneration. [906] The disparity between a population's ecological footprint and nature's regenerative capacity indicates the extent to which the particular population is unsustainably using its natural resources; the imbalance can only be redressed by either reducing the ecological footprint (through smaller population size, less consumption per person and higher resource efficiency), or an increase in the earth's biologically-productive area.[907]

[903] Examples of which I discuss below in this paragraph.
[904] WWF op cit n 1. Cross-reference with pp 14 and 124, where I introduce this report.
[905] WE Rees, 'Ecological Footprints and Bio-Capacity: Essential Elements in Sustainability Assessment' in J Dewulf and H Van Langenhove (eds), *Renewables-Based Technology: Sustainability Assessment* (John Wiley and Sons, UK 2006) at para 9.2.
[906] <http://www.footprintnetwork.org/gfn_sub.php?content=footprint_overview>accessed October 2006.
[907] WWF op cit n 1at 4 and M Lensen and SA Murray, 'The Ecological Footprint – Issues and Trends' Integrated Sustainable Analysis Research Paper 01-03 (The University of Sydney, Australia 2003). The authors provide a comprehensive discussion on the ecological footprint including various criticisms of the original concept.

According to the Europe 2005 Ecological Footprint Analysis report, the EU's ecological footprint is currently more than twice its area size: EU inhabitants use 4.9 global hectares per person in order to support their lifestyle while the continent is only able to supply 2.2 global hectares per person.[908] Specifically, the EU, which is home to seven percent of the world's population, uses 17 percent of the world's natural resources supply. The report pertinently notes that as a result of the EU's growing human demands and declining ecological wealth, it increasingly relies for its continual well-being on garnering its ecological capacity from elsewhere, thereby expanding its consumption while avoiding further depletion of its own natural capital. Overwhelmingly, it imports natural resources from developing countries, echoing past colonial extraction patterns of individual member states. It also relies heavily on use of the global commons.[909] It does so at the expense of the potential degradation of both the global commons and the ecosystems of supplier developing states.[910] In the context of marine fisheries, the report confirms that the majority of the fishing grounds in the Southern hemisphere that supply the EU are located off the African coast.[911]

Suggested ways in which the EU could eliminate its overshoot include reducing the consumption of goods and services per person and increasing (or at least maintaining) its biocapacity, which would include restoring and maintaining healthy fisheries. One potential mechanism to this end would be the introduction of an ecosystem-based approach to fisheries management that provides for both a sustainable fisheries sector and protects vulnerable species and habitats.[912] This responds to the fact that the majority of the EU's ecosystems services have been degraded in the last 15 years, including marine fisheries; this was noted in

[908] The earth has only 1.8 global hectares per person available.
[909] WWF op cit n 1 at 3. Note that while the report refers to 'Europe's' ecological footprint, it calculates the *EU*'s ecological footprint.
[910] Ibid at 6.
[911] Ibid at fig 7.
[912] Ibid at 10.

the 2005 review of the EU's environmental policy, which took particular note of the findings of the Europe 2005 Ecological Footprint Analysis.[913]

In sum, as noted in the (then) President of the European Commission's forward to the report, the ecological footprint analysis provides clear information on the challenges ahead for the EU in its pursuit of sustainable development.[914] Embracing these challenges will require fundamental re-thinking in the ways in which (inter alia) the EU acquires and consumes natural resources, particularly its current pattern of extraction from developing states, including marine fisheries.

The EU's continued failure to pay adequate attention to the linkages between ecological sustainability and (economic) development threatens the achievement of the Millennium Development goals.[915] In the context of marine fisheries, the Community's endorsement of these goals provides both an incentive and an avenue for the EU to employ means other than bilateral fisheries agreements to promote sustainable fishing in developing third country waters.

The Millennium Development goals (as introduced in chapter 4) comprise eight comprehensive action targets to be achieved worldwide in response to core world development challenges. Originating in a 2000 United Nations General Assembly resolution in which UN members adopted a 'new ethic of conservation and stewardship' to pursue the protection of the common environment and the realisation of worldwide sustainable development (particularly in Africa), the goals were subsequently affirmed and fleshed out at

[913] Commission of the European Communities, 'Communication from the Council and the Commission to the European Parliament: 2005 Environment Policy' (Environmental Policy Communication) COM (2006) 70 final at para 2.4 dealing with resource use.
[914] WWF op cit n 1 at forward.
[915] Environmental Policy Communication op cit n 913 at para 2.2.

various international gatherings, such as the 2002 Johannesburg World Summit on Sustainable Development.[916] They now include eighteen further quantifiable target objectives, progress towards which is to be measured by specified indicators. Annual reports on progress have been released by the UN Secretary-General since 2002, in accordance with the UN resolution.[917] One of the Millennium Development goals is the achievement of environmental sustainability, which requires the integration of sustainable development principles into all country policies and programmes; another is the reversal of the loss of environmental resources.[918]

The European Commission released three communications in 2005 containing suggestions as to how to accelerate the EU's progress towards meeting the Millennium Development goals and acknowledging the particular need for the EU to assist African states towards realising these goals.[919] With regard to marine fisheries, the Commission advocated enhanced use of fisheries partnership agreements to promote sustainable fishing and sustainable fisheries development in African coastal states and urged for stronger coherence between the agreements and the EU's development policy in these countries. It further recommended that the EU should channel increased funds into those countries indicating willingness and ability

[916] UN General Assembly Resolution 55/2 of 8 September 2000 'United Nations Millenium Declaration' (see in particular arts 22, 23 27 and 28) and the United Nations Plan of Implementation of the World Summit on Sustainable Development (op cit n 123), which reiterates international commitment to achieving these and related development-oriented goals. Cross-reference with p 99, where I introduce the Millenium Development goals.

[917] Ibid at art 31.

[918] The other goals are: to eradicate extreme poverty and hunger, achieve universal primary education, promote gender equality and empower women, reduce child mortality, improve maternal health, combat HIV/AIDS, malaria and other diseases and develop a global partnership for development. For a summary of the Millenium Development goals and their targets and indicators, see <http://www.undp.org/mdg> accessed October 2006.

[919] Commission of the European Communities, 'Communication from the Commission to the Council, the European Parliament and the European Economic and Social Committee, Accelerating Progress Towards Achieving the Millenium Development Goals – The European Union's Contribution' COM (2005) 132 final, Commission of the European Communities, 'Communication from the Commission to the Council, the European Parliament and the European Economic and Social Committee, Accelerating Progress Towards Achieving the Millenium Development Goals –Financing for Development and Aid Effectiveness' COM (2005) 133 final, and Commission of the European Communities, 'Communication from the Commission to the Council, the European Parliament and the European Economic and Social Committee, Policy Coherence for Development : Accelerating Progress Towards Achieving the Millenium Development Goals' (Policy Coherence communication) COM (2005) 134 final.

to improve domestic environmental stability, and that it should employ the new economic partnership agreements introduced by the Cotonou agreement to foster regional trade and integration towards development in Africa.[920]

If these communications are translated into policy, it thus seems that the EU will pursue the Millennium Development goals in relation to African fisheries through means that are already employed in this sector (fisheries agreements and economic partnership arrangements). While this would not be surprising, it would be disappointing given the opportunity that the EU has to address its current self-serving pattern of over-consumption (as exposed by the 2005 Europe Ecological Footprint Analysis) by drawing on the Earth Charter to devise mechanisms and implement policies that are better suited to promoting collaborative, international efforts to realise sustainability. In fisheries relations, this would entail phasing out bilateral fisheries agreements and the associated export of Community over-capacity to developing coastal states to appropriate their fisheries resources and introducing alternative means to conduct bilateral fisheries relations. These need not be 'new' mechanisms but must first and foremost be driven by ethical imperatives and a sense of global responsibility towards achieving sustainable development rather than economic, self-interested and commercial logic. The flip-side will of course be that the Community will need to find alternative ways to supply its market and to secure the socio-economic future of its fishing industry.

A key mechanism of the EU's new bilateral fisheries interactions could be investment: Community finances that were previously spent on purchasing access to developing states' marine resources could instead be invested in these coastal states, in coherence with existing EU and domestic development goals and projects, with the aim of assisting the coastal states in the sustainable development of their fisheries. Investment would be well-directed at both

[920] European Commission Policy Coherence communication ibid at paras 3.5 4.2(b) and 4.3.

the capture industry and the on-shore processing and marketing sectors, with a view to increasing value-added and expanding markets (particularly regionally) for export.[921] In particular, investment should be channelled into the sustainable development of artisanal fisheries given this sector's key contribution to the socio-economic and nutritional well-being of the majority of developing coastal states, particularly in West Africa.[922] In doing this, the EU would go some way towards addressing its ecological 'overshoot' in the area of marine resource use; instead of extracting resources from developing states' waters as it has historically done, the Community would contribute towards the 'normalisation' of local small-scale fishing in these regions in the wake of severe disruptions caused by (among other things) fisheries subsidies and the adverse impact of foreign fishing.

Given the diversified livelihood strategies of many artisanal fishers, in terms of which they engage in fishing on a seasonal and often migratory basis supplemented by employment in other sectors (such as agriculture), Community investment in projects and management policies that are sector-specific and top-down may be inappropriate.[923] Alternatively, the EU could consider investing in and/or collaborating with local authorities and coastal communities to encourage the continuation of traditional 'part-time' patterns of fishing and the diversification of income, and to foster technological developments in the artisanal sector geared towards reducing by-catch, promoting more efficient fisheries storage and processing and improving the safety of fishing vessels.[924]

[921] I explain this in greater detail above in the context of suggesting how future bilateral fisheries agreements might better promote sustainable fishing. These suggestions are equally applicable whether the finances channelled into the coastal state for these purposes originate in a fisheries agreement or are simply direct EU investment.
[922] As outlined in detail at pp 184-186 above.
[923] As expressed by EH Allison and F Ellis, 'The Livelihoods Approach and Management of Small-Scale Fisheries' (2001) 25 Marine Policy 377-388 at 383- 386.
[924] Ibid at 387.

Efforts should also be made to operationalise the United Nations Food and Agriculture Organisation's (FAO) Code of Conduct for Responsible Fishing, which recognises the importance of artisanal fisheries and the need to protect their rights to a secure livelihood and urges fisheries management policies to provide artisanal fishers with preferential access to traditional fishing grounds and resources.[925] The type of projects promoted by the FAO's Sustainable Fisheries Livelihoods Programme in West Africa might provide inspirational examples to the EU for investment. The programme, which represents a partnership of the Department for International Development of the UK and Northern Ireland, the FAO and 25 participating West African states, is a regional development project aimed at reducing poverty in coastal fisheries communities through the sustainable improvement of their livelihoods by creating enabling institutional and policy frameworks and building on social capacity in the communities to this end.[926] It draws on the FAO Code of Conduct for Responsible Fishing, seeking to incorporate its relevant provisions into domestic fisheries policies and plans, and employs the sustainable livelihoods approach as an analytical framework for establishing guideline principles in which to root poverty-reduction initiatives.[927] Clearly, however, before the EU considers investing in any such an undertaking, further comprehensive research would need to be carried out to determine the suitability of continuing or expanding this or a similar approach in West African coastal states.

In summary, in this section I have presented a number of largely practical, policy-oriented suggestions in response to the failings of bilateral fisheries relations between the EU and

[925] Op cit n 126 at para 6.18. The Code suggests that these rights could be secured by imposing technical conservation measures such as closed areas and seasons, restrictions on by-catch and minimum fish sizes (para 7.6.9).

[926] For information on the Sustainable Fisheries Livelihoods Programme, see <http://www.sflp.org/eng/001/zindex.html> accessed October 2006. See also <http://www.fao.org/docrep/005/y4281e/y4281e00.htm> accessed October 2006 for case studies of artisanal fisheries management arising from the Programme.

[927] A wealth of literature exists on the topic of sustainable livelihoods analysis, some of which is cited in Allison and Ellis (op cit n 923). It is not my intention, however, to even begin to address this approach and its potential suitability to EU efforts to promote sustainable artisanal fisheries in West Africa. I thus cite this as an area that requires further future research at p 255 below.

developing coastal states and the enabling legal regime from a sustainability perspective. On a more theoretical level, there is arguably little need for further development of the paradigms associated with key concepts such as sustainability and sustainable development in this context. Even though they remain comparatively less well-traversed in the marine fisheries domain, this is rapidly changing. What is required, however, is further discussion on how best to operationalise these concepts both generally and more specifically, in relation to fisheries. The crux of the issue is the need to flesh out the realisation of 'integration'.

At an abstract level, this will entail determining how best environmental protection can be assimilated into all aspects of human activity at every level in a way that goes beyond traditional thinking to date. As I have indicated, this will necessarily entail introducing a new, ethical dimension to states' discourse on sustainable development – actions towards sustainable development must be geared towards achieving not only environmental justice within and between human generations, but also between species (inter-species equity) in recognition of the need to preserve the entire planetary ecosystem or in this context, the marine ecosystem. Extending sustainability and sustainable development dialogue beyond its traditional human-centred boundaries in this manner will arguably also facilitate less state-centred responses to the pursuit of sustainable development and instead encourage the development of paradigms (and subsequently, actions) which reflect a sense of universal responsibility towards ensuring the sustainable use of all natural resources (even though this will frequently involve short-term socio-economic sacrifices for individual states). For this to become an acceptable option for states, many will first need to acknowledge the pervasive, detrimental influence of past colonial relations on their current interactions. To move beyond self-interest and embrace a global response to the sustainable development challenge they will need to engage with the effects of this colonial legacy and find ways to step outside of their

historically-determined roles. At a practical level, this will of course prove difficult, as my thesis evidences.

4. Future policy and regulatory challenges: particular areas where further research is required

The conclusions that I have drawn and the potential ways forward towards improved sustainable fishing and fisheries management bring to the fore a number of areas which clearly require further in-depth research. Exploring them in greater detail is beyond the scope of my thesis, but they arguably provide potentially rich subject-areas for further examination. In addition to the adoption of a sustainable livelihood approach to promoting sustainable development in West Africa artisanal fisheries (as noted above), I briefly mention two further domains which would benefit from further research.

The first is the potential contribution that enhanced regional fisheries trade in West Africa could make to sustainable fisheries development in the region. Additional research into this matter is required as the literature on the topic is comparatively sparse. Together with my empirical research, it nevertheless supports the need for investment in this sphere, particularly with regard to pelagic fish species, and highlights the importance of regional cooperation towards eliminating current physical and administrative obstacles to expanded regional fish trade.[928] The extent to which this is viable invites further examination and discussion. Research in this area could potentially over-lap with an examination of suitable methods to promote sustainable artisanal fisheries development given that the small coastal pelagics targeted by artisanal fishers in West Africa are the most common fish species that are traded

[928] Cross-reference to pp 172-174 where I discuss regional fisheries trade in the context of Senegalese fisheries.

regionally; they are also currently under-fished and there is thus potential to sustainably expand their catch levels.[929]

A further issue that requires additional research is the capacity of joint fishing enterprises between developing coastal states and the EU (and other powerful fishing nations) to foster the sustainable use of the coastal states' fish stocks and to promote domestic sustainable fisheries development. As I highlighted in chapter 8, joint ventures can potentially secure economically and biologically-sustainable fishing in developing coastal states' waters, enhance local added value to fisheries products processed in local land-based industries and facilitate the transfer of valuable scientific and technological fisheries skills from the EU to the coastal state in question. These positive results will be nullified, however, if the coastal state does not have sufficient conservation measures in place as part of a sound domestic fisheries management policy and if the state's monitoring and enforcement capability are weak.[930]

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5. Conclusion

Bilateral fisheries agreements between the EU and developing coastal states, particularly in West Africa, have to date failed to operate as conservatory regulatory instruments. They have accordingly done little to promote sustainable fishing and advance sustainable fisheries development in these coastal states. This partly stems from the weakness of the relevant international legal framework, which permits the conclusion of these agreements and legitimates their operation; in part, it is also due to the underlying socio-economic factors that drive parties to enter into these arrangements to the frequent detriment of long-term sustainability concerns. The way forward is to employ alternative, more ethically-motivated

[929] As I noted above in pp 187 and 188.
[930] As discussed above at p 237 above.

means to engage in bilateral fisheries relations that are underscored by a sense of universal responsibility towards redressing the current worldwide marine fisheries crises.

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APPENDICES

1

INTERVIEW QUESTIONNAIRES

1.1 European Union representatives' questionnaire on the most recent EU-Senegalese Bilateral Fisheries Agreement [931]

Question 1: The nature of bilateral fisheries agreements with Senegal

How does the EU regard the current bilateral fisheries agreement with Senegal? As a purely business arrangement, or more as a development cooperation arrangement?

Question 2: The relationship between bilateral fisheries agreements and the Cotonou Agreement

How does the EU see bilateral fisheries agreements with Senegal as 'fitting in' with the Cotonou Agreement between the EU and the ACP states?

Question 3: The goal of 'sustainable fishing'

Is the 'sustainable fishing' of Senegalese stocks an important aspect of the bilateral fisheries agreements with Senegal?

[931] Note that at the time it was the 'current' agreement.

Question 4: Determining 'surplus'

In terms of article 62(2) of UNCLOS, foreign fleets are only entitled to access declared surplus stocks of other coastal states. Who determines the Senegalese surplus to which the EU has access? Senegalese scientists alone or jointly together with EU scientists?

Question 5: Financial compensation for targeted 'partnership activities'

Are the provisions of the current bilateral fisheries agreement providing financial compensation for targeted 'partnership activities' satisfactory? Specifically, is the compensation effectively utilised towards the stated ends?

Question 6: Fishing opportunities

Is the EU of the view that the current bilateral fisheries agreement with Senegal sufficiently limits the amount of catch that the Community fleet can take from Senegalese waters?

Question 7: Bilateral fisheries agreements and WTO concerns with fisheries subsidies

Is the EU of the opinion that the World Trade Organisation (WTO) developments towards stricter regulation (or banning) of fishing subsidies might affect EU bilateral fisheries agreements with Senegal? i.e. does the EU think that there is a possibility that financial compensation might be seen as a fishing subsidy and accordingly be banned?

Question 8: Artisanal fisheries

Is the Senegalese artisanal sector adequately protected by the provisions of the current EU-Senegal bilateral fisheries agreement?

Question 9: Joint ventures

How would the establishment of 'joint enterprises' (or joint companies/ventures) between EU fishing vessel owners and Senegal likely impact on sustainable fishing in Senegalese waters and on development of the domestic fishing industry?

Question 10: Regional initiatives

How might increased regional cooperation in West Africa impact on future EU-Senegalese bilateral fisheries agreement negotiations?

1.2 Senegalese representatives' questionnaire on the most recent EU-Senegalese Bilateral Fisheries Agreement [932]

A: The current EU-Senegalese bilateral fisheries agreement:

Question 1: The nature of bilateral fisheries agreements with the EU

How does Senegal regard the current bilateral fisheries agreement with the EU? As a purely business arrangement, or more as a development cooperation arrangement?

Question 2: The relationship between bilateral fisheries agreements and the Cotonou Agreement

How does Senegal see bilateral fisheries agreements with the EU as 'fitting in' with the Cotonou Agreement between the EU and the ACP states?

Question 3: The goal of 'sustainable fishing'

Is 'sustainable fishing' of Senegalese stocks an important aspect of the bilateral fisheries agreements with the EU?

[932] Note that at the time it was the 'current' agreement.

Question 4: Determining 'surplus'

In terms of article 62(2) of UNCLOS, foreign fleets are only entitled to access declared surplus stocks of other coastal states. Who determines the Senegalese surplus to which the EU has access? Senegalese scientists alone or jointly together with EU scientists?

Question 5: Financial compensation for targeted 'partnership activities'

Are the provisions of the current bilateral fisheries agreement providing financial compensation for targeted 'partnership activities' satisfactory (from a financial perspective and the list of activities cited)?

Question 6: Fishing opportunities

Is Senegal of the opinion that the current bilateral fisheries agreement with the EU sufficiently limits the amount of catch that can be taken from Senegalese waters?

Question 7: Bilateral fisheries agreements and WTO concerns with fisheries subsidies

How does Senegal think the World Trade Organisation (WTO) developments towards stricter regulation (or banning) of fishing subsidies might affect its future bilateral fisheries agreements with the EU? i.e. is it possible that financial compensation might be seen as a fishing subsidy in the future and accordingly be banned?

Question 8: General provisions of the current EU-Senegalese bilateral fisheries agreement

Is Senegal satisfied with the content of the current bilateral fisheries agreement with the EU or are there any provisions that it would have preferred to have seen structured differently?

Question 9: Artisanal fisheries

Is the domestic artisanal sector adequately protected by the provisions of the current EU-fisheries agreement?

Question 10: Joint ventures

What is Senegal's view on the establishment of 'joint enterprises' (or joint companies/ventures) between EU fishing vessel owners and local Senegalese interests? Is it likely to be good for Senegalese fisheries?

Question 11: Regional initiatives

Is it possible that Senegal might benefit from increased regional cooperation regarding fisheries management? How might this affect Senegal's negotiations of future bilateral fisheries agreements with the EU?

B: The state of Senegalese fisheries

Question 12: The state of the industrial Senegalese fleet

What is the size of the local industrial fleet, the state of it (modern or old), the common gear used, the species targeted, the catch size and the percentage of these catches of the total catch taken domestically?

Question 13: The state of the artisanal Senegalese fleet

What is the size of the local artisanal fleet, the state of it (modern or old), the common gear used, the species targeted, the catch size and the percentage of these catches of the total catch taken domestically?

Question 14: Foreign fleet catches in Senegalese waters

What percentage of all vessels fishing in domestic waters are foreign? What percentage of the annual catch is taken by foreign fishers? And what are the primary foreign countries fishing in Senegalese waters?

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LIST OF PEOPLE INTERVIEWED AND CONSULTED

Ms Charlotte Adriaen	Chargé de Programmes Accords de Pêche Afrique de l'Ouest Délégation de la Commission Européenne en République du Sénégal
Mr Bojan	Directions des Pêches Maritimes (DPM) Senegal
Mr Diop	Directions des Pêches Maritimes (DPM) Senegal
Ms Tiké Diop	(then) Director Directions des Pêches Maritimes (DPM) Senegal
Dr Dominique Gréboval	Senior Fishery Planning Officer, Fishery Policy and Planning Division, Department of Fisheries, United Nations Food and Agriculture Organisation
Dr N'diaga Gueye	Service Chief, Fisheries International Institutions and Liason Service (FIPL), United Nations Food and Agriculture Organisation
Mr du Kolie	Directions des Pêches Maritimes (DPM) Senegal
Dr Harm Koster	(then) Head of the Bilateral Agreements Unit, Directorate B: External Policy and Markets, Directorate-General Fisheries and Maritime Affairs, European Union Commission (as of June 2006, Executive Director of the EU Fisheries Control Agency)
Mr Sidi Ndaw	Directions des Pêches Maritimes (DPM) Senegal
Mr Papa Gora Ndiaya	Socio-economist, Programme Officer on Fisheries Policy of Enda Prospectives Dialogues Politiques (Enda Diapol)
Dr Ibrahima Niamadio	Chargé de Programme Pêche Durable, World Wide Fund for Nature (WWF) Western African Marine Ecosystem Region (WAMER)

Mr Aly Samb	Former Technical Advisor to Senegalese Minister of Fisheries, Fisheries Law Consultant and Maritime Law lecturer University of Dakar

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MAP OF THE THESIS

Introduction: including to 'thematic lenses'	**Common Resource Management in Fisheries: Sustainability Challenges and Legal Responses**	**The Regulation of Fisheries Towards Sustainability**	**The Colonial Legacy: Political, Social and Economic Ties Between West African States and the EU**	**The EU's Common Fisheries Policy (CFP): Sustainability and Integration**	**The Promotion of Sustainability in Community Fishing in Developing Third Country Waters**	**Senegal's Marine Fisheries**	**EU-Senegalese Fisheries Relations**	**Conclusions**
(Chapter 1)	**(Chapter 2)**	**(Chapter 3)**	**(Chapter 4)**	**(Chapter 5)**	**(Chapter 6)**	**(Chapter 7)**	**(Chapter 8)**	**(Chapter 9)**
Thematic Lenses: **Common resource management: the goal of sustainable fisheries**	Complexities of managing marine fisheries due to common resource nature and legislative and policy responses	Relationship between sustainability and sustainable development in law and practice. Nature and evolution of regulatory and management mechanisms used to realise sustainability in fisheries	Socio-economic impact of European colonisation of West African states on their bilateral fisheries relations	Progressive incorporation of sustainability concerns into CFP and evolution of regulatory mechanisms to this end	Evolution of EU policy regarding fishing in developing third country waters reflecting sustainability developments in rest of CFP; culmination in new 'fisheries partnership approach'	Evidence of unsustainable fishing, (particularly of coastal demersals) due to domestic polices and harvesting; exacerbated by foreign (EU) fishing	Increasing emphasis on promotion of sustainable fishing and sustainable local fisheries development in terms and conditions of fisheries agreements	Weakness of EU-developing third country bilateral fisheries agreements and legal regime legitimating them to foster sustainable fishing; agreements do not operate as legal instruments of conservacy
Integration towards sustainable development in fisheries	Theoretical background to integration challenge of promoting sustainability towards sustainable development in more specific contexts	Centrality of integrating environmental protection and development to achieve sustainable development at all levels; emphasised in legal regime	Integration efforts towards sustainable development in EU-Africa development cooperation relations; minor focus on fisheries	Domestic (EU) example of attempted operationalisation of integration as both objective and procedural tool; emergence of 'new' regulatory mechanisms to this end	Increased emphasis on integration in relation to external Community fishing via fisheries partnership approach; 'new' regulatory mechanisms employed include policy dialogue and environmental assessment	Traditionally, poor domestic integration efforts in fisheries sector: preferred focus on short-term economic development	Overall, bilateral fisheries agreements have fostered negligible advancement towards sustainable fisheries development in Senegal	Integration towards sustainable fisheries development requires states to move beyond self-serving bilateral fisheries relations towards actions driven by a sense of universal responsibility; best guided by 'ethical' framework

Introduction: including to 'thematic lenses'	**Common Resource Management in Fisheries: Sustainability Challenges and Legal Responses**	**The Regulation of Fisheries Towards Sustainability**	**The Colonial Legacy: Political, Social and Economic Ties Between West African States and the EU**	**The EU's Common Fisheries Policy (CFP): Sustainability and Integration**	**The Promotion of Sustainability in Community Fishing in Developing Third Country Waters**	**Senegal's Marine Fisheries**	**EU-Senegalese Fisheries Relations**	**Conclusions**
(Chapter 1)	**(Chapter 2)**	**(Chapter 3)**	**(Chapter 4)**	**(Chapter 5)**	**(Chapter 6)**	**(Chapter 7)**	**(Chapter 8)**	**(Chapter 9)**
Impact of colonial legacy on EU-developing coastal state fisheries relations	Initial unilateral extension of coastal states' fishing jurisdictions sparked by developing countries' desire for greater socio-economic benefits from their coastal resources	International legal instruments increasingly emphasise the need for special assistance to developing states in pursuit of sustainable fishing	Evolution of historic social, economic and political ties between EU and West African states through to current development cooperation relations (trade and aid)	Aspects of policy reflect colonial-like tendencies towards developing third states (structural policy: export of over-capacity; external policy: extraction of raw natural materials)	Policy historically reflected colonial extraction patterns; remnants still remain	Excessive emphasis on the export of raw fish primarily to European market	Fisheries agreements remain largely instruments to inequitably meet respective short-term socio-economic needs of parties; amount to contracts for supply of raw materials to Europe in return for economic gratfication	Current fisheries regime and access agreements concluded under it facilitate and legitimate bilateral fisheries arrangements that perpetuate the adverse impacts of the colonial legacy