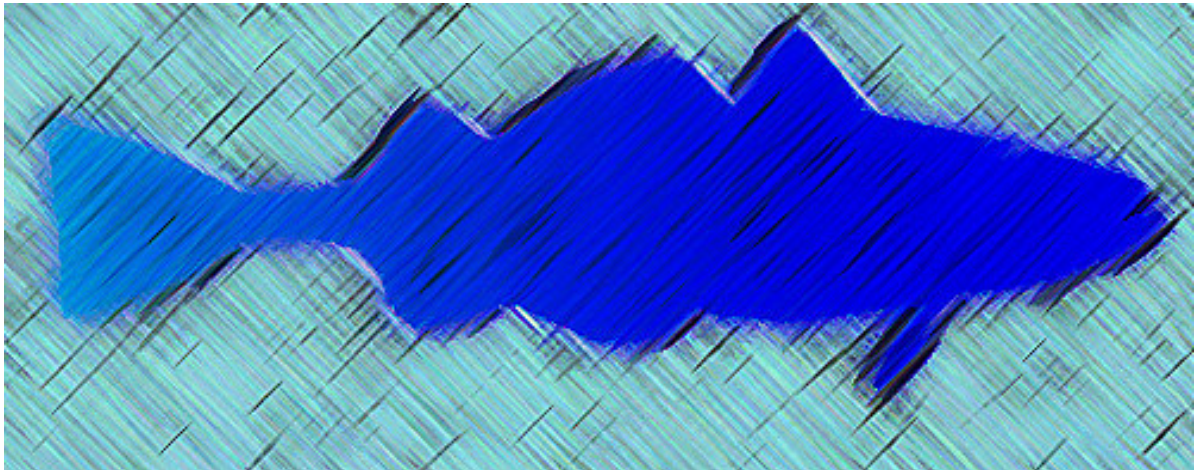


# FINAL REPORT FOR BCLME PROJECT LMR/SE/03/05

## An Analysis of Revenue Raising Instruments for the Important Commercial Fisheries in the BCLME Countries



**PRESENTED TO:**

**UNOPS** 

**United Nations Office for Project Services**

**and**



**BCLME Activity Centre for Living Marine Resources**

**PRESENTED BY:**



**on behalf of**



**THE CONSORTIUM**

**March 2007**

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## DISCLAIMER

This Report presents our findings for BCLME Project LMR/SE/03/05. It covers our findings in relation to the current system of accounting for user charges and company taxation in the Angolan, Namibian, and South African fishing industries plus analysis as to whether there would be benefits from creating biases in the user charge structures in each country.

The contents of this report and its conclusions are based on material that was made available to or gathered by the Project Team at the time of the assignment, and our interpretation of that material, the views expressed by officials in Marine and Coastal Management from the Department of Environmental Affairs and Tourism, South Africa, the Ministry of Fisheries & Marine Resources, Namibia, and members of the South African and Namibian fishing industries. We have not verified the accuracy or completeness of any such information. We have not carried out any form of due diligence or audit on the accounting or other records of Marine and Coastal Management, the Ministry of Fisheries & Marine Resources, or any of the members of the South African and Namibian fishing industries. We do not warrant that our enquiries have identified or revealed any matter which an audit, due diligence review or extensive examination might disclose.

## ACKNOWLEDGEMENTS

This report was prepared by Bruce Shallard and Associates, New Zealand, and Deloitte, New Zealand, on behalf of the Consortium. Advice and assistance was also obtained from other members of the Consortium during the preparation of this report.

We would like to thank members of the Namibian and South African fishing industries for their cooperation and assistance while undertaking this investigation into and the analysis of revenue raising instruments in the BCLME countries. Thanks also to Marine and Coastal Management from the Department of Environmental Affairs and Tourism, South Africa and to personnel from the Ministry of Fisheries & Marine Resources, Namibia, for provision of data on current fees, levies and other charges, and catch volumes.

## 1 INTRODUCTION

### 1.1 Purpose

The purpose of this Report is to provide a summary of our findings for BCLME Project LMR/SE/03/05 (the Project). This Report covers our findings in relation to the current system of accounting for user charges and company taxation in the Angolan, Namibian, and South African fishing industries plus analysis as to whether there would be benefits from creating biases in the user charge structures in each country.

As stated in the Terms of Reference (TOR) the output required from the management accounting component of this project is a report on:

- A comparison of the impact of the current system of user charge, and company taxation, on the operating environment of companies exploiting marine living resources in the BCLME countries.
- Policy recommendations, from an accounting point of view, with regard to the possibility of creating beneficial biases between the three countries.

The output required from the public finance economics study is a report that includes:

- Calculations of the total revenue collected per commercial fishery in each country, as well as the collections per kilogramme.
- An analysis on the effect of user charge systems on catch strategy, marketing strategy and exports.
- Policy alternatives and recommendations with regard to the harmonising, or biasing, of several revenue raising instruments that would ensure a balanced and sustainable development of the BCLME commercial fishing industry.

As stated in the Combined Inception Report for the BCLME projects dated 24 December 2003 (the Inception Report) an important activity undertaken in the information gathering phase of the Project was to confirm the current charging regimes imposed on the fishing industries of Angola, Namibia, and South Africa. An understanding of the purpose behind the use of the charging regimes and how the funds are utilised was also obtained where possible. This establishes the starting point for the development of a model to determine options for user charges to be considered for application in each country and enables us to consider the public finance economics components of the Project.

## 1.2 Report Structure

This report is structured around the following main headings:

### **Introduction**

An introduction to the purpose and objectives of this report and the report structure.

### **Background**

Discussion on BCLME, project LMR/SE/03/05, and the structure of the final report.

### **Our Approach**

A description of our approach in undertaking this project.

### **Current System of User Charges**

An explanation of the current system of user charges in the Angolan, Namibian and South African fishing industries including total revenue collected per commercial fishery in each country.

### **Points of View**

Discussion on the views expressed by fishing industry participants gained from the information gathering exercise.

### **Impact of Current Approaches**

A comparison of the current systems, and an assessment of their impact on the Angolan, Namibia, and South African fishing industries.

### **Policy Alternatives for Application of Revenue Raising**

Discussion on policy alternatives with regard to harmonisation (or biasing) of revenue raising instruments to ensure a balanced and sustainable development of the BCLME fishing industry.

### **Conclusions and Recommendations**

Conclusions drawn in this Report including discussion on best practice principles with respect to the utilisation of user charges to guide the sustainable management of an ecosystem such as the Benguela Current.

### **Appendices**

Records of interviews, fisheries sector data including Government Gazette notices, summary of the New Zealand experience with revenue raising instruments.

### **Glossary, References**

## 2 BACKGROUND

### 2.1 BCLME

The Benguela Current Large Marine Ecosystem (BCLME) Programme is a multi-national cross-sectoral initiative by Angola, Namibia, and South Africa to manage the living marine resources of the Benguela Current in an integrated and sustainable manner and to protect the marine environment. It is funded by the Global Environment Facility (GEF) under its International Waters portfolio and is implemented by the United Nations Development Programme (UNDP) with the United Nations Office of Programme Services (UNOPS) as an executing agency. The three member countries provide further financial and in-kind contributions.

The BCLME area encompasses the region extending from the northern border of Angola to the eastern part of the Western Cape Province in South Africa. The east-west boundary extends from the high water mark out to the edge of the 200 mile EEZ and further seaward in the region of the Angola-Benguela front.

Angola, Namibia, and South Africa share marine living resources stocks found within the BCLME. The commercially important straddling or shared stocks are understood to include the hake, horse mackerel, deep-sea red crab, tuna, pilchard (sardine) and anchovy, and rock lobster (from a synthesis presented by Hampton et al., commissioned by the UNDP as an information source for the BCLME Programme).

### 2.2 BCLME Project LMR/SE/03/05

#### 2.2.1 Objectives

As stated in the TOR, the objective of project LMR/SE/03/05 is to:

*Examine the impact of revenue raising instruments on the optimal (from the perspective of Angola, Namibia, and South Africa) and sustainable development of the fisheries sector in the BCLME region, with due respect to existing biases, and to suggest for consideration by the governments of the three countries revenue raising policy measures that enhance harmonisation or create economic biases for a balanced sustainable development of the fisheries sector.*



### 2.2.2 Outputs

The outputs required for the project are:

#### **Management Accounting Study**

- A comparison of the impact of the current system of user charges, and company taxation, on the operating environment of companies exploiting marine living resources in the BCLME countries.
- Policy recommendations, from an accounting point of view, with regard to the possibility of creating beneficial biases between the three countries.

#### **Public Finance Economics Study**

- Calculations of the total revenue collected per commercial fishery in each country as well as the collections per kilogram.
- An analysis of the effect of user charge systems on catch strategy, marketing strategy and exports.
- Policy alternatives and recommendations with regard to the harmonisation, or biasing, of several revenue raising instruments that would ensure a balanced and sustainable development of the BCLME commercial fishing industry.

### 2.2.3 Terminology and Definitions

A number of terms and concepts are addressed in the TOR and it is important that these are clearly defined to ensure a consistency of application and a common understanding of our findings is obtained. In particular the terms 'revenue raising instruments', 'user charges', 'company taxation', 'harmonisation', and 'biases' require considered definitions as these are concepts that will form the basis of the policy recommendations addressing the utilisation of user charging regimes as part of the management and sustainable development of the BCLME fisheries.

#### **Revenue Raising Instruments**

The TOR states that revenue raising instruments (which include 'user charges') are levied to assist in financing scientific research, fisheries management and administration, and compliance control. Revenue raising instruments may include resource rentals, royalty charges, user charges or other access fees. The important factor to note is that the term only relates to the raising of revenue to

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pay for the services to manage (partially or fully) a particular fishery. It does not include any general revenue raising that may be required for the benefit of the state as a whole.

General corporate (indirect) or personal taxation is not included in our definition or use of the term revenue raising instruments. The TOR requires comparisons of current systems of user charges and company taxation between the countries and this is addressed in this report. In terms of outputs from the project the TOR requires only recommendations concerning options for revenue raising instruments. This is accordingly also addressed in the report.

### **User Charges**

For the purpose of this report, user charges are treated as a subset of revenue raising instruments. User charges are charges for services levied against the user of those services, in this case the participants in the fisheries sector. As stated above, the services of relevance are only those that relate to the management of a particular fishery.

### **Company Taxation**

Company taxation refers to general government revenue raising and the corporate taxes applied by each BCLME country to entities operating in the fisheries sector in each country. These taxes are not targeted specifically to pay for the management and administration of the relevant fisheries sector but rather form part of each country's general revenue raising.

### **Harmonisation**

The concept of harmonisation is raised in the TOR as a key factor to be addressed when making policy recommendations for the use of user charges as part of the management of the BCLME fisheries. As such we have considered the term harmonisation to mean consistency or alignment of approach to policy, process, and practice across the three countries with respect to fisheries when considering the appropriateness of particular approaches to user charges.

### **Biases**

To ensure harmonisation is obtained it may be necessary to adopt beneficial biases within or between the relevant countries to ensure that the most appropriate economic outcomes result from a harmonisation of principles and process. It will also be important to consider where unfavourable biases to achieve sustainable economic and environmental management of the fishery either currently exist or may be created by the policy recommendations. Any unfavourable biases that

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prevent or hinder harmonisation must be removed from the future management of the Benguela ecosystem.

### 2.3 Reporting

#### 2.3.1 Terms of Reference

Given the above outputs and the requirement in the TOR for individual reports prior to the final report it is important that our approach to structuring these deliverables is explained fully. The TOR for this project provided for the following deliverables:

- Management Accounting Report
- Public Finance Economics Report
- Final Report

The proposed reporting process in the TOR was cumulative, with two interim Reports building on each other and leading to the presentation of the Final Report. This approach allowed reporting to identify progress made and highlight additional work that would be reported on in subsequent reports.

It is clear from the TOR that the management accounting and public finance economics aspects of this project are inter-linked. Given this and the ongoing information gathering process, and after discussion with BCLME, the consortium agreed to combine the reporting into one Final Report. Further aspects of this interrelationship between the component parts of the Project and our reporting approach are commented on below.

#### 2.3.2 Final Report

As outlined in the introduction, this Final Report incorporates both the management accounting aspects and public finance economics analysis. Under the management accounting component an investigation into the current situation and impact of the current system of user charges and company taxation is required, plus the development of policy recommendations from an accounting point.

As stated in the Inception Report an important activity to be undertaken in the initial, information gathering phase, was to collect from all possible sources, as much information as possible to ensure an accurate picture was gained of the current situation.

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This information gathering phase consisted of a detailed data collection process utilising government and industry sources in South Africa, Namibia and Angola. It was supported by a series of interviews with government fisheries agencies, fishing industry organisations and fishing companies. The prime purpose of the interview process was to ensure that we gained an accurate appreciation of both the factual current user charges and company taxation situation, but also the effect of user charges and taxation on all those involved in the fishing sector.

Since the completion of the initial fact finding mission and subsequent information gathering through a range of channels in Namibia and Angola, it became apparent that the reporting process would be improved by combining the management accounting and public finance reports into one Report. This document reflects this approach and brings together all of the information gathered across the three countries to contribute to both the management accounting and public finance economics components. The TOR highlights the need for this consideration by noting that these accounting policy recommendations “*should be informed by the public finance economic findings*”.

Section 4 of this report provides the data obtained on the current fees and charges situation in the three countries, and includes the information required for the public finance economics analysis. This includes calculations of total revenue collected per commercial fishery as well as collections per kilogram. We have included this where it was made available to the Project Team in the tables prepared for this report for completeness. Further analysis and commentary on this data is contained in Section 6.

Initial interviews were undertaken in South Africa to refine a template for subsequent use in Namibia and Angola. The points of view from the interviews are reflected in Section 5 of this report and the details included as an appendix.

As additional information was gathered from Namibia, and Angola, it was included in the analysis. Our information gathering continued throughout the Project, and we targeted a number of channels that provided us with sufficient information to analyse the Angolan situation.

This Report also includes proposals for policy recommendations from a management accounting and a public finance economics point of view. These proposals are based on the analysis we have undertaken of the current situation and include comment on the potential for creation of beneficial biases between the three countries where possible. These policy recommendations are important as they allowed for consultation prior to the submission of the Final Report.



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We believe that it is important to indicate our thinking on the principles to be applied to future use of revenue raising instruments, and principles around the use of user charges in particular. These principles are accordingly outlined later in this report.

### *2.3.3 Capacity Building and Training*

An important aspect of the Final Report will be an analysis of training and capacity building needs in the three countries to assist with implementation of the recommendations to be made in the Final Report. Capacity building and training is a high priority for the BCLME Programme and as stated in our proposal we believe that capacity building and training can be incorporated into the project through a range of scenarios including:

- Utilising local personnel from each country on the Project Team. This will ensure sound knowledge and skills transfer during the course of the project.
- Development of a comprehensive communications strategy that includes project updates and briefings to the relevant organisations who have both an interest and the ability to benefit from such an approach.
- At the conclusion of the project, the Project Team will undertake briefings to the wider group and interested parties.

Local personnel have been utilised where appropriate to assist with the information gathering and provide input where required.

### 3 OUR APPROACH

#### 3.1 Introduction

Our approach to undertaking this Project was detailed in the Inception Report. The Inception Report described our methodology and the detailed work plan that was to be followed to ensure the completion of the Project within the agreed scope and timeframes. In this section we have repeated this work plan. We have also outlined the activities that the Project Team have undertaken in-country during the project.

#### 3.2 Work Plan

The key components of our work plan as set out in the Inception Report are detailed below. The preparation of this Report has drawn from aspects of each of these activities.

ACTIVITY	WORK PLAN
<b>Review Current User Charges</b>	Complete a desktop review for each country to determine all current user charges and company taxation imposed on entities in the fisheries sector.
	Review the accounting records of a sample of fishing entities to understand: <ul style="list-style-type: none"> <li>• How they impact on the entity</li> <li>• Resulting behaviours</li> </ul>
	Compare the results in each country and company.
<b>Determine Total Revenue Collected</b>	Analysis to be undertaken by: <ul style="list-style-type: none"> <li>• Commercial fishery</li> <li>• Country</li> <li>• Levy type</li> </ul>
<b>Analysis of Effect of User Charges</b>	Comparison of behaviours vs. optimal behaviours.
	Comparison of behaviours against optimal in relation to government policy and objectives. To be undertaken on a case study basis comparing representative samples of fishing entities and stakeholder groups.
<b>Accounting and Policy</b>	Facilitate working groups to:

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ACTIVITY	WORK PLAN
<b>Documentation</b>	<ul style="list-style-type: none"> <li>• Form agreement on the objectives that each country wishes to achieve to ensure sustainable management.</li> <li>• Formulate the optimal user charges regime to achieve the stated objectives determined above.</li> </ul>
<b>Analyse Policy Recommendations</b>	Facilitate working groups to: <ul style="list-style-type: none"> <li>• Map the optimal against the current system and identify gaps.</li> <li>• Formulate policy recommendations (achievable and implementable) that close the gaps identified.</li> </ul>
<b>Reporting</b>	Report
	Final Report

**3.3 Project Team Activity**

During the two week period beginning 19 April 2004, the Project Team was based in the BCLME Programme project offices in Cape Town, South Africa, to undertake a series of interviews with representative companies from the fisheries sector, relevant South African fisheries sector associations, and representatives from the South African Department of Environmental Affairs and Tourism, Marine and Coastal Management division.

The main purpose of these interviews was to gather information first hand on the current system of levies and charges adopted in South Africa, and, where it was known to these entities, Angola and Namibia also. To ensure an efficient collection of consistent data the Project Team prepared a interview template to assist with this process. This template, and a summary of the information gathered during this interview process is attached as an appendix to this report.

In the intervening period prior to the submission of this Report, further interviews have been completed with representatives from the Namibian Fisheries Sector. This information completes our information gathering for South Africa and Namibia. Information gathering in Angola was also undertaken through a range of published materials and local contacts .

All information gathered has been incorporated into this report.

## 4 CURRENT SYSTEM OF USER CHARGES

### 4.1 Introduction

In this section we summarise the fee structures that are imposed on fishers in the respective countries. To achieve this we have reviewed the existing legislation and regulations that are currently in force and summarised these charges as they would affect a fisher who either has a right, entitlement or permit to fish for the relevant species. We have also reviewed available information that applied to the European Union’s access agreements with Angola.

Each country’s fishery has a varying degree of importance given its contribution to the overall economy. The following is a summary of the approximate contribution to GDP.

COUNTRY	% of GDP
South Africa	0.5%
Namibia	9-11%
Angola	4%

As a result, government policy in each of these countries is governed by the importance of the fisheries sector to the wider economy and this leads to significant variations in approach to the revenue collection policies of each of the respective governments and fisheries ministries.

### 4.2 South Africa

#### 4.2.1 Introduction

The following is a summary of South Africa’s fee and levy structure as it pertains to the relevant fisheries.

Primarily the South African levies have been set based on historical practices and have been increasing recently at the rate of inflation. In 2002, the report on the Economic and Sectoral Study of the South African Fishing Industry<sup>1</sup> recommended that they adopt a proportional user charge (PUC) based on the fishing rights held supplemented by a penalty charge system for non compliance. This PUC system is similar to that adopted by Namibia. This was to replace the current pay-as-you-catch levy system. This has not, however, been implemented as yet.

<sup>1</sup> An Economic and Sectoral Study of the South African Fishing Industry, Vols 1 & 2, Department of Economics and Economic History and Department of Ichthyology & Fisheries science, Rhodes University, September 2003



#### 4.2.2 Background

In the annual report to the year ending 31 March 2003<sup>2</sup> the objectives of the Department of Environmental Affairs and Tourism for the fishing sector are to:

- Promote the sustainable use of marine and coastal resources;
- Promote investment; and
- Accelerate transformation in the industry.

The Marine Living Resources Act (18 of 1998) (the MLRA) sets out the broad policy for fishery management, access rights, and transformation and empowerment issues. The allocation of long-term fishing rights was completed over the 2001/2002 year and this has introduced “stability, transparency and fairness into the industry”.

The Marine Living Resources Fund (MLRF) was established under the MLRA for the purpose of the “conservation, sustainable utilisation, orderly access to, and protection of marine resources”. The aim of the MLRF is to finance activities in relation to the management of the sustainable use and conservation of marine living resources, the preservation of marine biodiversity, and the minimisation of marine pollution. Most of the key functions of Marine and Coastal Management (MCM) are funded out of the MLRF.

It is interesting to note that the MLRF is financed from both its own revenue and by central government. Income is derived from fish levies, fishing permits, harbour fees and the proceeds of the sale of confiscated fish products. In the year ending 31 March 2003 the MLRF received a Government grant of R155m, which included R147m for the purchase of new vessels.

The South African fishing industry is diverse in the size of the companies operating in it; species taken; methods utilised and methods of control applied to the components of the fishery. A number of species (the ones relevant to this study), are controlled by Total Allowable Catches (TACs), others by effort controls, and a third group of subsistence fisheries.

To put use of revenue raising instruments in context, and to give some background to the user charges information set out below, attached as Appendix II is a series of tables showing catch levels of a number of the species that are relevant to this study.<sup>3</sup>

<sup>2</sup> Department of Environmental Affairs and Tourism, South Africa, Annual Report, 31 March 2003

<sup>3</sup> South African Department of Environmental Affairs & Tourism, Marine and Coastal Management Branch

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### 4.2.3 Application Fees

The following is a summary of the application fees for the 2003/2004 fishing year. The relevant Government Gazette Notice is attached in Appendix III:<sup>4</sup>

<b>FEE PAYABLE FOR AN APPLICATION FOR:</b>	<b>APPLICATION FEE (R)</b>
Right to undertake commercial fishing (including the harvesting of seaweed)	6,700
Right to operate a fish processing establishment	6,700
Right to undertake commercial fishing of 1.5 tonnes or less of rock lobster	560
Permit to exercise a right granted to operate a fish processing establishment	115
Permit by a foreigner to undertake fishing or related activities	8,900
Permit from a holder of a commercial fishing permit to transfer fish from any landing point	115
Permit to have any gear, net etc. on board of a fishing vessel or a vessel	115
Local fishing vessel licence	115
High seas fishing vessel licence	115
Foreign fishing vessel licence to be used in a joint venture with a South African person	890
Foreign fishing vessel licence to be used in respect of a vessel to be utilised by a foreign company	8,900

### 4.2.4 Permit Fees

The following is a summary of the permit fees that came into force on 1 August 2003.<sup>5</sup>

<b>FEE PAYABLE IN RESPECT OF THE ISSUING OF A PERMIT TO:</b>	<b>PERMIT FEE (R)</b>
Undertake commercial fishing	615
Exercise a right to operate a processing establishment	1,230
Undertake high seas fishing	615

<sup>4</sup> Government Notice No. 1074, Department of Environment Affairs and Tourism, 1 August 2003

<sup>5</sup> Government Notice No. 1074, Department of Environment Affairs and Tourism, 1 August 2003

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Authorising a foreign person to undertake fishing in South African waters	22,260
A holder of a commercial fishing permit to transfer any fish from a landing point	140
Have any gear, nets etc. on board of a fishing vessel or a vessel	140

### 4.2.5 Annual Levies

The following are the annual levies that came into force on 1 April 2004<sup>6</sup> and for comparative purposes the levies for the previous year:

<b>FISH STOCK</b>	<b>LEVIES PER TONNE (R) 1 April 2003</b>	<b>LEVIES PER TONNE (R) 1 April 2004</b>	<b>CATCH ALLOCATIONS Tonnes / 2002</b>
Anchovy	11	12	256,686
Deep-sea Crab	–	–	–
Hake Hand-line	123	130	–
Hake Long-line	165	174	9,825
Hake Inshore Trawl	156	164	9,656
Hake Offshore Trawl	165	174	136,877
Horse Mackerel	13	14	–
Pilchard	42	44	256,686
Rock Lobster – West Coast	3,409	3,539	1,962.78
Tuna – Pole and Line	107	113	–

The annual levies are based on recorded catch and are payable monthly. It is understood that for the 2002 fishing year the catch allocations were very close to the reported catches.

<sup>6</sup> Government Gazette No. 26195 Volume 465 Pretoria, 31 March 2004

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### 4.2.6 South African Vessels Licence Fees

The following is the schedule of the annual rates for local fishing vessels:<sup>7</sup>

<b>VESSEL DESCRIPTION</b>	<b>LICENCE FEE (R)</b>
5 metres and less	195
< 5 metres to > 8 metres	280
< 8 metres to > 12 metres	445
< 12 metres to > 20 metres	840
> 20 meters	1,340

The following are the annual rates for other vessels:<sup>8</sup>

<b>FEE PAYABLE IN RESPECT OF THE ISSUING OF:</b>	<b>LICENCE FEE (R)</b>
High Seas Fishing Vessel Licence	1,450
Foreign Fishing Vessel Licence	10,600

### 4.2.7 Other Fees

The following is a summary of other fees as they impact fishers in the relevant fisheries:<sup>9</sup>

<b>FEE PAYABLE IN RESPECT OF:</b>	<b>LICENCE FEE (R)</b>
The transfer of a right or Licence	140
The issuing of a new right, licence or permit due to an amendment	140
The issuing of a permit to import fish on a commercial basis	140
Issuing of a permit to export fish	140
The issuing of a duplicate licence or permit	30

<sup>7</sup> Government Notice No. 1074, Department of Environment Affairs and Tourism, 1 August 2003

<sup>8</sup> Government Notice No. 1074, Department of Environment Affairs and Tourism, 1 August 2003

<sup>9</sup> Government Notice No. 1074, Department of Environment Affairs and Tourism, 1 August 2003

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### 4.2.8 Observer Fees

Approximately 15% of South African vessels carry observers. The companies are responsible for provisions and accommodation while they are on board, and are not charged specifically by MCM for this service.

### 4.2.9 Corporate Taxation

The following is a summary of the company taxation with respect to a fishing company operating in South Africa for the period 1 April 2003 to 31 March 2004:<sup>10</sup>

DESCRIPTION	RATE
Basis corporate income tax rate	30%
Local branch of a foreign company	35%
Value Add Tax	14%

South African residents are taxable on their worldwide income and a foreign tax credit is available against South Africa tax payable on foreign income in respect of which the South African resident has paid foreign tax. Non-residents are taxed on South African source income only.

<sup>10</sup> Deloitte & Touche, Guide to Key Fiscal Information, Southern Africa 2003/2004

## 4.3 Namibia

### 4.3.1 Introduction

The following is a summary of Namibia's fee and levy structure as it pertains to the relevant fisheries. Note Namibia, unlike South Africa, does not charge application fees in addition to the annual licence fee.

### 4.3.2 Background

The Ministry of Fisheries and Marine Resources (MFMR) was established in 1991 to manage the sustainable utilisation of Namibia's fisheries resources. The Ministry's mission is to strengthen Namibia's position as a leading fishing nation and contribute towards the achievement of economic, social and conservation goals for the benefit of all Namibians. The Ministry's objectives are to:<sup>11</sup>

- Promote and regulate the optimal sustainable utilization of living marine resources within the context of conserving marine ecosystems.
- Establish a conducive environment in which the fishing industry can prosper and derive optimal income from marine resources.
- Further Namibia's interest within the international fishing sector.
- Provide professional, responsive and customer focused services.
- Deliver services efficiently and effectively providing best value for money.
- Continuously invest in human resource development.

The marine fisheries sector is one of the most important contributors to the Namibian economy, second only to the mining sector in terms of export value<sup>12</sup>. Approximately 90% of Namibian fish is exported. The fishing industry has grown to the extent that it is currently Namibia's second biggest export earner of foreign currency after mining (90% of national output is marketed for export). It is also the third largest economic sector in terms of contribution to the Gross Domestic Product (GDP).

<sup>11</sup> Namibian Fishing Industry Website, [www.nfi.com.na](http://www.nfi.com.na)

<sup>12</sup> Ministry of Fisheries and Marine Resources, Namibia, Annual Report, 2003

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Globally, Namibia ranks among the top ten fishing countries in terms of the value of production, and in terms of its 400 kg per capita annual production (which is set to double in 10 years), Namibia ranks second in the world.

Namibia is also the top African fisheries country by production value and exports and the estimated national fish reserves are the biggest in Southern Africa. The industry employs about 14,000 workers, of which about 43% are sea – going personnel and 57% are involved in onshore processing.

The industry involves catching, processing and marketing of fish and fish products. Approximately 85% of the fish landed is processed in Namibia and then exported.

To put the use of revenue raising instruments in context and to give some background to the user charges information set out below, attached as Appendix II is a series of tables showing a range of indicators of the size and complexity of the Namibian fishery. These tables include the number of harvesting rights issued, TACs, catch levels of a number of the species that are relevant to this study, value of catches, revenue to the Government and investment by right holders.<sup>13</sup>

Harvesting rights for Namibia's marine resources are issued by the Minister under the Marine Resources Act 2000. From 2001, the rights were granted for a period of seven, ten, fifteen and twenty years providing much greater certainty for planning and investment in the sector.

The relative size of the Namibian fisheries sector means that it plays a key role in generating revenue for the Government. Revenues are generated through various fees and levies as set out in the following tables.

### 4.3.3 Quota Fees

Quota fees are the most significant of all the fees and are payable regardless of whether the fish is caught. The fees are payable by those who had quota allocated after 1 July 2001 under Section 16 of the Sea Fisheries Act, 1992 (Act 29 of 1992). There is a process during the season for fishers to return quota that they do not expect to catch. The fees also provide incentives to use Namibian labour, Namibian owned boats and landing catch. Fees go directly to the consolidated fund and are not specifically available for use by the Ministry of Fisheries & Marine Resources.

Every person to whom a quota is allocated after 1 July 2001 under Section 16 of the Sea Fisheries Act, 1992 (Act 29 of 1992), must pay in respect of every tonne of the species of fish so allocated after 1 July 2001 the appropriate fee specified as set out below:

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<sup>13</sup> Annual Report, Ministry of Fisheries and Marine Resources 2001

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FISH STOCK	LEVIES PER TONNE (N\$)	LANDED TONNES (2002)
<b>Anchovy</b>		
No details available	–	41,203
<b>Deep-sea Crab</b>		
Allocated to Namibian vessels	400.00	2,471
Allocated to Namibian-based vessels	650.00	
Allocated to foreign flagged vessels	1,100.00	
A rebate of N\$ 165.00 per tonne is applicable if the fish is landed in Namibia, irrespective of the category of vessel by means of which the fish was caught.		
<b>Hake – Wet</b>		
Allocated to Namibian vessels	300.00	
Allocated to Namibian-based vessels	600.00	
Allocated to foreign flagged vessels	1,200.00	
<b>Hake – Frozen</b>		
Allocated to Namibian vessels	550.00	
Allocated to Namibian-based vessels	850.00	
Allocated to foreign flagged vessels	1,450.00	
A rebate equal to N\$ 220 per tonne of wet fish is applicable if the fish is landed in Namibia, irrespective of the category of vessel by means of which the hake was caught.		
<b>Hake – Total</b>		<b>154,588</b>
<b>Horse Mackerel (excluding caught by purse seine) – Processed at Sea</b>		
Allocated to Namibian vessels	80.00	
Allocated to Namibian-based vessels	120.00	
Allocated to foreign flagged vessels	180.00	



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FISH STOCK	LEVIES PER TONNE (N\$)	LANDED TONNES (2002)
<b>Horse Mackerel (excluding caught by purse seine) – Processed on Land</b>		
Allocated to Namibian vessels	40.00	
Allocated to Namibian-based vessels	60.00	
Allocated to foreign flagged vessels	100.00	
A rebate equal to the full quota fee per tonne is applicable in respect of each tonne of horse mackerel landed in Namibia under the quota, irrespective of the category of vessel used.		
<b>Horse Mackerel – Total</b>		<b>359,183</b>
<b>Pilchard</b>		
Allocated to Namibian vessels	110.00	4,160
Allocated to Namibian-based vessels	165.00	
Provided that in respect of quota allocated for catching of pilchard for the purpose of processing fish-meal.	27.50	
<b>Rock Lobster</b>		
Allocated to Namibian vessels	5,000.00	361
Allocated to Namibian-based vessels	8,500.00	
Allocated to foreign flagged vessels	14,000.00	
A rebate equal to the full quota fee per tonne is applicable in respect of the first eight (8) tonnes of rock lobster quota for Namibian vessels.		
<b>Tuna – Pole and Line</b>		
Allocated to Namibian vessels	350.00	2,837
Allocated to Namibian-based vessels	550.00	
Allocated to foreign flagged vessels	950.00	

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### 4.3.4 By-catch Fees

By-catch attracts a fee when it is landed and is a deterrent to right holders to target the species that they do not have a quota for. The system does acknowledge that some by-catch will occur. The following is the annual by-catch fee:

FISH STOCK	FEE PER TONNE (N\$)
Hake	1,200.00
Kingklip	2,400.00
Monk	5,300.00
Steenbras	2,400.00
Kob	2,400.00
Orange Roughy	6,500.00
Alfonsino	300.00

It should be noted that the by catch fees for hake is subject to a 1.5% for wet fish vessels and 4% for freezer vessels allowance before the above fees are applicable.

### 4.3.5 Local Fishing Vessels Licence Fees

Licence fees are charged for vessel and processing factories. There are approximately 300 to 350 vessels licensed every year. The following are the annual fees for fishing vessels:

FOR EACH FISHING VESSEL WITH A GROSS TONNAGE OF:	LICENCE FEE (N\$)
Less than 10 tonnes	20.00
10 tonnes and more but less than 50 tonnes	50.00
50 tonnes and more but less than 100 tonnes	100.00
100 tonnes and more but less than 2,500 tonnes	200.00
2,500 tonnes and more but less than 4,500 tonnes	500.00
4,500 tonnes and more but less than 9,000 tonnes	1,000.00
9,000 tonnes and more	1,500.00

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### 4.3.6 Premises and Vessels Used as Factories

The following licence fees are payable annually in respect of premises, vehicles or vessels used as factories:

DESCRIPTION	ANNUAL FEE (N\$)
For any premises or vehicle registered or liable for registration in terms of the Factories, Machinery and Building Work Ordinance, 1952 (Ordinance 34 of 1952)	500.00
For any vehicle or vessel, excluding a fishing vessel	100.00
<b>For each fishing vessel, used as a factory, with a gross tonnage of:</b>	
Less than 4,499 tonnes	20.00
4,500 up to 8,999 tonnes	500.00
9,000 tonnes and more	1,000.00

### 4.3.7 Marine Resource Levy

The Marine Resource levy funds the research and training activities of the Ministry. The fee is charged at the time of landing and the fund is administered by the Ministry. The relevant Government Gazette Notice is attached as Appendix III.<sup>14</sup> The following is a summary of other fees for every tonne that is landed as they impact fishers in the relevant fisheries.

SPECIES OF MARINE RESOURCES	LEVY PER TONNE (N\$)
Pilchard – intended for human consumption	62.50
Pilchard – intended for use as bait or to be processed into fish meal	25.00
Hake – Whole Fish	45.00
Hake – Headed and Guttled	62.50
Hake – Fillets	112.50
Hake – Broken Sour	62.50

<sup>14</sup> Government Notice No. 2746, Ministry of Fisheries and Marine Resources, 20 May 2002

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<b>SPECIES OF MARINE RESOURCES</b>	<b>LEVY PER TONNE (N\$)</b>
Rock Lobster	312.50
Horse Mackerel	25.00
Tuna – Intended for Sashimi	125.00
Tuna – Caught by Pole and Line	62.50
Crab	125.00

*4.3.8 Observer Fees*

It is understood that the Namibian Government requires 100% of vessels in Namibian waters to carry observers. They predominantly have a scientific role, to collect information for the management of the fishery. The rate for an observer is N\$23.87 per hour based on a 12 hour sea day. No VAT is charged on observer fees.

*4.3.9 Corporate Taxation*

The following is a summary of the company taxation with respect to a fishing company operating in Namibia commencing 1 January 2003.<sup>15</sup>

<b>DESCRIPTION</b>	<b>RATE</b>
Corporate income tax basis rate	35%
Value Add Tax	15%

<sup>15</sup> Deloitte & Touche, Guide to Key Fiscal Information, Southern Africa 2003/2004

## 4.4 Angola

### 4.4.1 Introduction

The following is a summary of Angola's fee and levy structure as it pertains to the relevant fisheries. Law No. 20/92 is the fisheries law in Angola and provides provision for licences and other revenue raising instruments. However, we understand that no comprehensive set of regulations have been developed and implemented at this time.

### 4.4.2 Background

The fishing resources of Angola<sup>16</sup> are distributed along the entire coast, with a larger predominance of:

- Horse mackerel, in the south zone.
- Sardine, in the centre and north zones.
- Shrimp, from the centre (Lobito) up to the north.
- Crab, in the centre and south zones.
- Demersal species, along the whole coast.

Management of marine fishing activities in Angola is undertaken by the Ministry of Fisheries. Operationally, the Ministry of Fisheries is structured around a number of divisions (Legal, Planning, International Exchange, Secretariat General, and the Inspection Office) and the National Directorates:

- Directorate of Fisheries – Responsible for the licenses for industrial fishing vessels, processing, industry, commercialisation and the ports and maintenance infrastructures; and
- Directorate of Surveillance – Responsible for compliance functions.

The main goal of fisheries policy in Angola is to “optimise the benefit for the Angolan population of the long term sustainable exploitation of marine resources in the EEZ”.<sup>17</sup>

For a description of the fisheries management situation in Angola we have utilised FAO documentation through the Country Profile series. This has given us very useful background to the

<sup>16</sup> FAO Country Profiles, Information on Fisheries Management in the Republic of Angola, April 1999

<sup>17</sup> FAO Country Profiles, Information on Fisheries Management in the Republic of Angola, April 1999

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fisheries management policy situation applying in Angola. While the FAO material is not current, we have been able to verify from other sources that the descriptions given by FAO are still largely accurate.

We consider this important to give the context for the arrangements for fees and charges, and for the agreement with the EU that was in place in Angola. The following extract from the FAO Country Profile for Angola is included in this background section to give as complete a picture as we are able to at present for the fisheries situation in Angola. The FAO reports the following objectives, strategies and management measures applying in Angola:

### **Sector-based Objectives**

- *Rational exploitation of marine resources within the biological sustainable limits;*
- *Improvement in supplying the population with fishing products;*
- *Improvement of the living conditions for fishermen and communities dependent on fishing activities; and*
- *To increase the income from the fishing activity in order to, at least, cover the financing needs of this sector.*

### **Strategies**

*Three types of strategies are applied:*

- *those for the sector in general (General strategies);*
- *those for the semi-industrial and industrial sub-sectors (Industrial strategies); and*
- *those for the artisanal sub-sector (Artisanal strategies).*

### **General Strategies**

- *To develop the appropriate mechanisms in order to manage resources, taking into account, not only the fleet components, but also the fishing methods;*
- *To improve and develop systems for fishing licensing, monitoring, control and surveillance;*
- *To organize a data base which will constitute the basis for an information management system;*

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- *To increase exports of fishing products, mainly the most valuable ones;*
- *To create an organization to support the export in the industrial and artisanal sub-sectors.*

### **Industrial Strategies**

- *To strengthen the institutions including the development of a better relationship between the industrial and artisanal sub-sectors;*
- *To maximize catches within the biological sustainable limits, encouraging a greater participation of the national fleet and dividing the remaining surplus of the biological production by the operators of mixed and foreign enterprises; and*
- *To establish a rehabilitation program for fish processing and distribution giving priority to the following areas :*
  1. *Freezing, refrigeration, salting and drying, and production of salt;*
  2. *Fishmeal for national consumption;*
  3. *Improvement of distribution channels;*
  4. *Improvement of food safeguards for domestic consumption; and*
  5. *Improvement of quality control of the export products.*

### **Artisanal Strategies**

- *To introduce monitoring, control and surveillance;*
- *To strengthen the institutions;*
- *To initiate training programs in the areas of fish handling, processing and marketing;*
- *To improve techniques in order to increase production and productivity in the area of catches, processing and commercialization;*
- *To introduce measures in order to reduce catching losses;*
- *To create centers to support fishermen and communities dependent on fishing activities;*

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- *To develop an extension service in order to increase the knowledge and the access to information;*
- *To improve the access to credit; and*
- *To give technical assistance in order to improve quality.*

### **Management Measures**

*The Institute of Fishery Research of the Fisheries Ministry has, among other functions, to evaluate marine resources. Every year, the Institute, through data from scientific cruises and with the statistical support, assesses the biomass of the main commercial species and proposes, to the Fisheries Minister, TACs and other appropriate conservation measures.*

*The advisory body of the Fisheries Minister that deals with matters related with coastal planning and management of fishing resources is the Technical Council (Conselho Técnico). This Council is composed by the National Directors of the main areas of the Ministry and of the Institutes and by the representatives of the Fishing Associations. The Council's main functions are "to advise on the adequacy of the fishing capacity and fishing effort to the exploitable potentials" and "to analyse technical measures for the conservation of species". Based on the advice of the Council, the Fisheries Minister determines the quotas for the different fishing species, committing the National Directorate of Fisheries (Direcção Nacional das Pescas) to license the industrial and semi-industrial fishing vessels and committing the Institute of Artisanal Fisheries (Instituto da Pesca Artesanal) to license the artisanal fishing vessels.*

*Priority in licensing is given to the national vessels. The remaining licenses are negotiated with the mixed and foreign fleets.*

*The industrial and semi-industrial fishing vessels have to supply data and statistical information about their catches, filling in the appropriate forms within the established deadlines. The Office of Studies and Planning (Gabinete de Estudos e Planeamento) is responsible for the data processing.*

*The artisanal fleet data, collected in different beaches under a defined sampling system is processed by the Institute of Artisanal Fisheries (Instituto da Pesca Artesanal), which uses the ARTFISH software, supplied by FAO.*

*The National Directorate of Surveillance (Direcção Nacional de Fiscalização) has the duty to enforce fishing legislation, to control the fishing vessels and gears and the transshipment, using*



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naval and communication means. Presently, a satellite surveillance system is being installed. Export values, particularly of crustaceans, have been gradually increasing. Exports systematically need agreement of the Fisheries Minister, before going through the usual procedures adopted by the Minister of Commerce.

Angola also had for a number of years an agreement with the European Community (EC) that gave European Union (EU) vessels access rights to Angolan fisheries in return for financial compensation. The EU has a number of these agreements predominantly with African countries. Angola has now reviewed this agreement and cancelled it

Since their inception in the late 1970s these agreements attracted much criticism in the way that they have impacted on the countries concerned. In December 2002, the European Commission published a Communication, *On an Integrated Framework for Fisheries Partnership Agreements with Third Countries (COM(2002)637)*.

This advocates a new approach to fisheries agreements based on moving beyond the “cash for access” agreements negotiated to date. In the Communication, the Commission stated that “these partnership agreements will ensure both that the interests of the EU distant water fleet are protected and that the conditions to achieve sustainable fisheries in the waters of the partner country are strengthened”.

The EU agreement with Angola which covered the two-year period from 3 August 2002 to 2 August 2004 required the EU to pay €31m, of which 36% is targeted at supporting measures. In return, the EU obtained access for approximately 85 vessels, mainly targeting tuna, shrimp, demersal fish and pelagic fisheries. The vessels operating under this agreement come from Spain, France, Portugal, Italy, Greece, the Netherlands and the Republic of Ireland<sup>18</sup>.

No catch limits were set under the agreement (except for shrimp) and all fishing by EU vessels was to take place outside the 12 mile territorial sea boundary. Angolan authorities were responsible for the inspection and monitoring of fishing activities and may board EU vessels.

It is also interesting to note that while there were no catch limits, there was a suggestion to land some of the tuna catch to supply Angolan tuna-canning factories at agreed prices.

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<sup>18</sup> Institute for European Environmental Policy, Fisheries Agreements with Third Countries – Is the EU Moving Towards Sustainable Development?, November 2002

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To put use of revenue raising instruments in context and to give some background to the information set out below, attached as Appendix II is a table showing catch levels in Angola since 1950.<sup>19</sup>

### 4.4.3 Corporate Taxation

The following is a summary of the company taxation with respect to a fishing company operating in Angola commencing 1 January 2003.<sup>20</sup>

DESCRIPTION	RATE
Corporate income tax basis rate	35%
Consumption tax (imported goods and local production)	2% – 30%

Angolan residents are taxable on their worldwide income. Non residents that derive income from activities in Angola are subject to the same rules as residents. No relief is available to an Angolan taxpayer who has paid any foreign tax.

### 4.4.4 Catch Volumes

Fishing takes place along the 1,650 km Angolan coastline and involves some 21,131 fishers. Total catch during 2002/2003 fishing year is estimated to be 121,600 tonnes.<sup>21</sup>

REGION	FISHERS	SMALL VESSELS	TONNES
North	10,888	3,406	36,556
Centre	7,979	1,485	48,466
South	2,264	316	36,619
<b>Total</b>	<b>21,131</b>	<b>5,207</b>	<b>121,641</b>

<sup>19</sup> The EU-Angola Fisheries Agreement and Fisheries in Angola, Kees Lankester, 2002

<sup>20</sup> Deloitte & Touche, Guide to Key Fiscal Information, Southern Africa 2003/2004

<sup>21</sup> Special Report, FAO/WFP Crop & Food Supply Assessment Mission to Angola, 25 July 2003

#### 4.5 Summary and Comparisons between Countries

Each country has a different approach as to how they raise revenue from the fishing industry. There are however, a number of similarities and a consistency of approach in particular between South Africa and Namibia. These points can be summarised as follows:

1. All countries have specific revenue raising regimes that are an additional cost to the fishers over and above their standard operational costs (e.g. fuel, labour). In principle the fishing industries expect to pay an amount for both the right to fish and to contribute in some way towards the cost of administering the fishery.
2. The process of calculation of the fees and levies lacks a quantitative basis. Neither South Africa nor Namibia have adopted a full cost recovery regime or implemented the accepted international principles of user pays.
3. Both Namibia and South Africa aspire to the principles of charging the fishing industry. However, they recognise that in order to achieve this they would have to develop the appropriate policies, invest in new systems and processes in preparation for the transparency and consultation that a full cost recovery regime requires.
4. Equally, the fishing industry acknowledged in both Namibia and South Africa that it is not “organised” sufficiently to participate fully in a cost recovery process. From our interviews it appears clear that they would however welcome the ability to participate in determining the services that needed to be provided by the respective Ministries in order to ensure sustainable fisheries management.
5. In principle, each Ministry acknowledges that it is important to take into account the economic viability of the fishing industry and its international competitiveness when setting charges.
6. A number of the charges are transaction based, requiring a high level of manual input to raise an invoice and collect the charges, particularly as the number of fishers has increased in both South Africa and Namibia.
7. It was acknowledged by some in both Namibia and South Africa that fees and levies imposition caused cash flow difficulties and bad debts which are a problem and that this results in uncertainty of revenue generation for the state.

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8. It should also be noted that in Namibia, the fees and levies charged are largely used as a selective tax for general revenue raising by the Namibian Government. They are however specifically charged in relation to the size and type of the fishing organisation. Whereas in South Africa, fees and levies, although set in a non generic manner, are paid into the fund for the ongoing management and administration of the fisheries sector and are, at least in principle, based on cost recovery notions.

## 5 POINTS OF VIEW

### 5.1 Introduction

As discussed above, the Project Team conducted a series of interviews with fishing organisations and companies in the South African fisheries sector, along with discussions with senior officials of Marine and Coastal Management from the Department of Environmental Affairs and Tourism, South Africa.

This was supported by separate discussions with a Partner of Deloitte & Touche in Cape Town, drawing on his firm's experience in the fisheries sector in both South Africa and Namibia. This experience covered both government and industry interactions so was a valuable insight for the Consortium. A full list of persons consulted is provided in the appendices.

In the intervening period a number of Namibian fishing companies have also now been interviewed and completed the questionnaire, and further information has been supplied by the Ministry of Fisheries and Marine Resources.

As a result of these discussions and extensive use of resource material, we have been able to identify a range of industry views relevant to the analysis required in the TOR for this project. The views expressed covered both the existing situation and some views on the potential for future revenue raising processes to be introduced. These views are presented below.

The interviews conducted in South Africa also gave some insights into the industry points of view in Namibia and Angola from South African companies actively involved in those countries. To the extent they are relevant, these are also recorded below.

The insights gained are significant and worthy of reporting at this stage with additional comment and analysis in a subsequent section of this report.

### 5.2 South Africa

#### 5.2.1 *Fishing Industry*

For South Africa, the fishing industry presented the Project Team a more uniform view than had been expected. The key points raised in the interviews were as follows:

- The current South African fees and charges regime provided for under the Levies on Fish and Fish Products Notice 2004 is a fair level of imposition on the South African fishing industry. It

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was noted however that the fees and charges were a more significant percentage of the costs to a company in a year of lower returns from fishing operations.

- The current fees and charges are regarded as a general levy on the industry, rather than being specific to recovery of MCM's costs. It was pointed out that the industry does not know what costs or services the fees and charges are meant to cover.
- There was some concern expressed about the efficiency of the services provided by MCM given that industry 'partially funded' these activities, and lack of consultation between industry and MCM. This seems to be compounded by the lack of firm long term access to the fishery, given the short term nature of the quotas currently allocated and the inability to transfer such allocations within the industry. It was acknowledged that the longer term rights, indicated by MCM as a future possibility, would go some way to resolving this issue.
- Specific concerns were expressed about the ability of the Government to provide the research rigour needed to effectively set a TAC for a fishery. The industry is reluctant to fund poor or inappropriate research, with industry in some cases undertaking their own research to enhance surety of resource sustainability.
- The overall view on the future application of revenue raising instruments in the South African context was positive, particularly if this was an efficiently run cost recovery process based on the economic and ecological sustainability of the fisheries with:
  - Transparency of MCM costs, and explicit charges related to those costs
  - Full consultation between Government and the fishing industry
  - Firm, long-term access rights
  - Determination that the charges are a recovery of Government costs, not a selective tax
- Some concern was expressed about the overall imposition of any specific charging regime on the fishing industry given that fishing companies already contribute to the cost of fisheries management through general taxation. This was however, not an overriding view.

### 5.2.2 *Marine & Coastal Management*

As part of the interview process followed by the Project Team, as outlined above, interviews were also conducted with senior officials of MCM. The primary purpose of these interviews was to understand as clearly as possible the current regime of fees and charges applied to the South

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African fishing industry, seek clarification of the rationale applied to the setting of current fees and charges, and gain some initial feedback from MCM on the Government's intentions for their future approach to such charging.

As a result of our discussions the following points should be noted:

- The current levies and charges are designed to recover part of the cost of MCM operations from the fishing industry, although this is not specifically calculated on particular MCM costs or cost structures.
- MCM acknowledge the need for an open transparent approach to the fishing industry and the need to provide services efficiently.
- Levies and charges are currently applied annually and adjusted for the effect of inflation, i.e. CPI linked.
- MCM are actively investigating the range of cost recovery processes applied by other governments to their fishing industries. To aid this investigation MCM has recently sent a delegation to Australia and New Zealand to study the approaches taken in those countries.
- MCM has not yet taken any firm decision to move to a full cost recovery regime, although there is keen interest in adopting this approach.
- From the discussions held, there is an understanding within MCM that a full cost recovery approach would require significant work, lead to a requirement for extensive consultation with the fishing industry, and provision for the fishing industry to analyse the cost of the provision of services by MCM.

### **5.3 Namibia**

#### *5.3.1 South African Fishing Industry in Namibia*

For Namibia, the members of the South African fishing industry involved with the Namibian fishery, in addition to the range of general views expressed above, gave the Project Team the following views:

- The Namibian Government approach to the setting of fees and charges, as provided for under Section 16 of the Sea Fisheries Act, 1992 (Act 29 of 1992), is seen as selective taxation rather than only the recovery of costs.

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- The charges provided for are fixed at a higher level than for South Africa, although there was some comment about the relative level of overall cost imposition given the Namibian product has duty free access to the European Union, marketed under agreements between the Namibian Government and the EU, whereas South African product does not.

### 5.3.2 *Namibian Fishing Industry*

We also received direct commentary from interviews with a number of Namibian fishing companies. Their views covered the following:

- Some concern about the cost imposition that the range of Government fees and charges makes on fishing companies leading to a negative view of the current charging regime.
- Charges are regarded as a significant component of company costs, particularly given profit decreases over the last two to three years of 20 – 30%, and cost increases of 15 – 20%.
- Companies described a mixture of charging frequencies with some fees and levies applied monthly, others quarterly and the remainder on an annual basis.
- Monthly charging was seen as a problem with commercial payment timelines operating on a 60 day basis, thus causing cash flow difficulties.
- Some companies interviewed saw little value from the current charges, whilst others saw value from “research, biomass and TAC management”.

In summary the Namibian current charging regime is considered by Namibian fishing companies to be a significant cost impost, much more so than their South African counterparts. They also reflected varied views on the value gained from the Ministry as a result of the payment of such fees and charges.

In addition there was concern expressed about the level of consultation between Ministry and industry, it being described as “ad hoc” and infrequent. Consultation was reported as not always occurring when changes of fees or levy rates were proposed.

### 5.3.3 *Ministry of Fisheries and Marine Resources*

The Ministry of Fisheries and Marine Resources acknowledges that the fishing industry “plays a key role in generating revenue for the State”.<sup>22</sup> The Ministry also notes that the revenue collected in

<sup>22</sup> Ministry of Fisheries and Marine Resources, Annual Report 2003



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2002 was “by far the largest collected during he last five years”.<sup>23</sup> This increase was attributed to increases in quota fees and Marine Resources Fund levies.

The Ministry comments that the Namibian fishing industry being the second largest contributor to the Namibian economy is important to the Government and supports the industry in its drive to focus on value added products. The Government is also aware of exchange rate pressures on the industry in the key international markets and reviews its approach to fees and charges accordingly.

### 5.4 Angola

For Angola, the Project Team have had the opportunity to discuss these issues with a representative of one South African fishing company actively involved with the Angolan fishery.

The views expressed by this company may be summarised as uncertainty on the nature and extent of the charges currently charged and some difficulty in determining the exact basis for the charges.

It was pointed out to the Project Team that the mid-water trawl fishery was at that time closed to all fishing activity by the Angolan Government, and that in a similar manner the bottom trawl fishery was subject to restrictions on catch. This situation made it difficult for the company to comment further on the existing charging situation.

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<sup>23</sup> Ministry of Fisheries and Marine Resources, Annual Report 2003

## 6 IMPACT OF CURRENT APPROACHES

### 6.1 Introduction

The following analysis is based on the information that has been collected to date. It is clear from our initial assessments that each fishery is at a different stage of development both in terms of detailed fisheries management practices and processes, the sophistication of the local fishing industry to harvest the local entitled catch, and to the extent of domestication. This relative stage of development is also reflected in the diversity of charging regimes. However each country’s revenue raising systems are generally compatible with the level of development of their fisheries. That is, the more sophisticated and developed the fishery the more developed the revenue raising system.

### 6.2 Revenue Raising Instruments

The revenue raising instruments for each of the countries varies widely and in principle have no underlying quantitative basis for the charges set. In order to demonstrate the possible impact each system would have on a fisher we have developed a simple model, based on the information that we have gathered to date.

For comparative purposes we have assumed the following:

1. Rights to catch 1,000 tonnes of hake trawling in deep water
2. One local vessel over 20 metres
3. By catch of 8%
4. Observer on board

Below is a summary by country (South Africa and Namibia only) of the cost to the vessel of revenue raising instruments base on the assumptions above. Note that the South African Rand and the Namibian Dollar are pegged at approximately the same rate.

<b>DESCRIPTION</b>	<b>SOUTH AFRICA (R)</b>	<b>NAMIBIA (N\$)</b>
Application for a vessel licence	115	0
Permit to undertake commercial fishing	615	0
Annual levy fishing licence	1,340	200

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<b>DESCRIPTION</b>	<b>SOUTH AFRICA (R)</b>	<b>NAMIBIA (N\$)</b>
Hake 1,000 mt	164,000	300,000
By catch of 8% (Kingklip)	0	192,000
Observer fees (assume 200 sea days)	0	57,288
Research levy	0	50,000
<b>Total</b>	<b>166,070</b>	<b>599,488</b>

Based on this initial analysis the South African levies appear to be substantially lower than that of Namibia. This reflects the underlying policy frameworks that each country has towards the recovery of costs and how revenue is raised.

We understand that the gap would be even greater if foreign vessels were modelled. We have noted that the South African fisheries are predominately fished by their own trawlers, where for Namibia and to a greater extent Angola, they have an increasingly larger number of foreign vessels fishing within their waters. All countries have a policy of domestication of the fishery and adopt practices to encourage this. This is evidenced by Namibia's systems where the levies bias the local owned and operated vessels with charges that are substantially less.

### 6.3 Company Taxation

The following is a summary of the corporate taxation rates for the respective countries.

<b>DESCRIPTION</b>	<b>SOUTH AFRICA 2003/2004</b>	<b>NAMIBIA 2003</b>	<b>ANGOLA 2003</b>
Corporate tax rate	30%	35%	35%
Local branch of a foreign company (non resident)	35%	N/A	35%
Consumption Tax or Value added Tax	14%	15%	2%-30%

Although there is not complete consistency across the countries, the differences are not significant, with South Africa having the most advantageous corporate tax rates. However this analysis cannot be undertaken in isolation of the significant costs bias that exist between the countries which are a charge on income. If that is taken into account the impacts could be material.



Further, an important observation to make is that corporate taxation is not the only single economic determinate for the international competitiveness of a fishing company. Other factors including the cost for labour and fuel which represent about 60% of the costs of operating a fishing vessel can also have significant impacts on competitiveness. Also, the size of fishing companies, the degree of integration (catching, processing and marketing) and their overall efficiency can also have material impacts when undertaking an analysis.

#### 6.4 Comparison of Vessel Operating Costs

To help put the cost impact of revenue raising measures and taxation in perspective, we have had the opportunity to consider reports prepared on both the South African<sup>24</sup> and Namibian<sup>25</sup> hake fisheries for respectively MCM and MFMR (in conjunction with the Hake Association of Namibia). We have specifically looked at the reported operating costs and revenue attributed to vessels operating in the hake fisheries of both countries.

The reports referred to take a slightly different approach to presentation of this information, but do give a helpful summary picture.

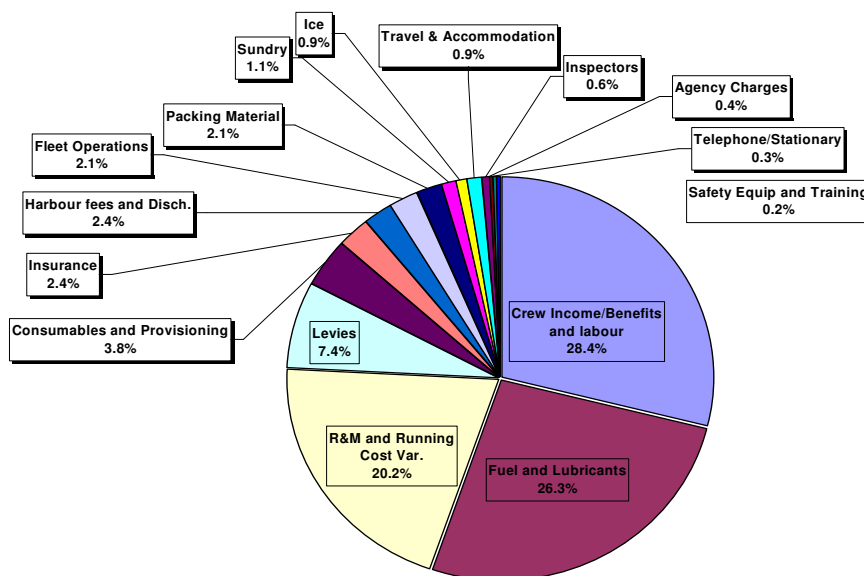
The Namibian hake trawl vessel summary is represented in the following diagram, showing a generic budget for Namibian hake trawl vessels in 2003 (wetfish and freezer vessels):

<sup>24</sup> An Economic and Sectoral Study of the South African Fishing Industry, Vol. 3 Representative Costs of Fishing Vessels, 2003

<sup>25</sup> Optimum Proportioning of the Hake TAC between Wetfish and Freezer Fish Operators in Namibia, April 2004

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Namibian Hake Trawler Budget - Generic (All Vessels)



This is supported by the following table which sets out the detailed generic budget for wetfish and freezer vessels in Namibia (Hake trawl) for the 2003 fishing season.

Category	Freezer	WetFish	Freezer (%)	WetFish (%)	Comments
Total Hake Catch (t) for Boat	61,060	66,237	48%	52%	Imbalance in 60:40 ratio
Total bycatch (t) per vessel type	3316 t	8366 t	28.4%	71.6%	Wetfish much higher bycatch and optimisation of bycatch. Freezers more value added whitefish directed
Total Catch (2003)	64376 t	74602 t	46.3%	53.7%	
Bycatch as a % of hake catch	5.43	12.63			
Average catch per Day (nominal mass)	12.75 t	5.02 t	WetFish vessels underutilised - excess capacity in sector		
Fishing Days for Boat :	282	188			
Steaming Days to fishing Grounds :	15	35	WetFish vessels spend more time steaming too and from grounds, have more port days.		
Lay-up days (maintenance)	44	33			
Days boat inactive (no allocation)	25	36			
Avg. Utilisation of Vessels	366	292	WetFish fishery oversubscribed and vessel operations not optimised (too much capacity)		
Mean Age of Fleet	29	23	Freezer sector = older vessels – replacement implications?		
Average length of Vessel	60	37	Freezers are larger and have significantly more catching power		
Displacement (GRT)	1480 t	451 t			
Hold Capacity	1160 t	285 t	Freezers much higher catching capacity		
Average Crew on Vessel	58	20	Freezers employ larger crews		
Average No. of Trips in a year	5	25	Freezers spend longer at sea – optimised effort		

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(submitted)					
Average Length of a trip	40	6			
Foreign Crew % (MFMR Stats)	21.6%	15.8%	More foreign Crew on Freezers paid higher		
	<b>Freezer</b>	<b>WetFish</b>	<b>% Freezer</b>	<b>% WetFish</b>	<b>Comments</b>
Salaries and Benefits per vessel type	\$8,814,398	\$1,703,358	33.19	25.55	Freezer higher crew income on average
Fuel and Lubricants	\$5,997,632	\$2,094,462	22.58	31.42	WetFish Higher fuel costs
R&M and Running Cost Var.	\$4,638,208	\$1,179,548	17.46	17.69	Running costs similar
Levies and uncaught levies	\$2,531,739	\$400,848	9.53	6.01	Freezers higher levies
Consumables and Provisioning	\$1,219,598	\$222,878	4.59	3.34	Freezers higher consumable costs
Insurance	\$720,754	\$177,142	2.71	2.66	Similar
Harbour fees and Disch.	\$407,072	\$225,438	1.53	3.38	WetFish much higher (more port time)
Fleet Operations	\$84,185	\$216,641	0.32	3.25	
Packing Material	\$994,675	\$31,434	3.75	0.47	Greater sea-based packing materials used?
Sundry	\$191,589	\$75,427	0.72	1.13	
Ice (Wet)	\$0	\$156,259	0.00	2.34	WetFish cost only
Travel & Accommodation	\$380,609	\$55,570	1.43	0.83	
Inspectors	\$132,178	\$72,466	0.50	1.09	More Observers on WetFish
Agency Charges	\$303,646	\$17,685	1.14	0.27	
Telephone/Stationary	\$141,835	\$20,388	0.53	0.31	
Safety Equip and Training	\$32,281	\$17,123	0.12	0.26	
<b>Generic Operational Cost Vessel pa</b>	<b>\$26.6 Million</b>	<b>\$6.67 Million</b>			

By comparison the South African report<sup>26</sup> presents the cost of fishing operations in the following table.

### Costs of Fishing Operations

Item	Small Fresh (Rand)	Large Fresh (Rand)	Small Freezer (Rand)	Large Freezer (Rand)
Fuel / lubricants	1,427,073	2,329,849	2,776,114	3,176,281
Harbour fees / Charges	28,809	81,287	83,465	269,106
Insurance	433,419	773,436	679,630	1,500,714
Licence fees	1,851	13,905	13,905	27,802
Taxes – levies *	223,559	367,518	308,290	486,388
Repair and maintenance	466,421	488,333	1,636,546	2,073,942
Biannual slipping / refit	539,993	739,995	700,002	864,763
Replacement of fishing gear	315,453	321,644	370,876	357,229

<sup>26</sup> An Economic and Sectoral Study of the South African Fishing Industry, Vol. 3 Representative Costs of Fishing Vessels, 2003

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Item	Small Fresh (Rand)	Large Fresh (Rand)	Small Freezer (Rand)	Large Freezer (Rand)
Provisions / stores	189,291	163,874	204,591	397,145
Wages / crew expenditure	1,605,524	2,007,068	1,905,600	3,887,148

\* Levies accrue to the levies imposed on fish caught and a training levy

Characteristics of the deep-sea and inshore trawling fleets operational in 2000 are also detailed as follows:

Characteristics	Deep-Sea	Inshore
Number of vessels operational in 2000	61	29
Freezer (Fr), Combined (Com) and Ice Vessels (Ice)	21 Fr, 4 Com, 36 Ice	29 Ice
Average age in years	24.5	23.8
Total GRT (tons)	47,978	2390
Average (range) length in m	49 (20.7 – 90.6)	20.5 (14 – 31.2)
Average (range) power in kW (range)	1464 (582 – 3600)	351 (140 – 920)
Total onboard storage capacity (tons)	29,480	710
Total market value	R754.1 million	R54.7 million
Replacement value	R2380.5 millions	R182.7 million
Average (range) number of sea days	191.2 (11 – 291)	187 (3 – 290)
Average (range) catch per sea day (nominal tons)	13.3 (4.2 – 25.4)	2.1 (0.9 – 6.9)

In summary the Namibian average cost of levies per vessel in the hake fishery is 7.4% of total operating costs, whilst in South Africa for the large freezer trawler it is 3.7%.

### 6.5 Summary

The analysis has reviewed (based on the information available) the two components of the revenue raising process, the setting of the unit cost of the fee, levy or charge and the process or instruments by which they are collected e.g. per transaction, on rights held or on a per catch basis.

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In summary, it appears that the policies of each country on user charges have evolved over a number of years and no country has a robust, logical basis on which charges are set. Therefore there is no demonstrable quantitative basis on which charges are based. Further we have seen little evidence of recovering costs from the fishing industry using cost recovery or user charger principles. An example of an exception to this statement is the observer charges in Namibia.

The revenue collected is used to fund a portion of the total fishery services provided by the country. Some countries have allowed their respective government agencies to determine how that was spent either through specialist funds (e.g. research), to pay the Ministry operating costs, while in other cases the income is returned to the consolidated fund and used for the benefit of the country as a whole.

The methods used for collecting revenue included pay-as-you-catch, levies on the catch entitlements held, or transaction charges for services performed that included processing applications for fishing vessel licences and penalties.

Our analysis identified some evidence of bias that may impact the competitive nature of a fishery. This occurred in three key areas:

1. The variation of the level of charges between the countries was significant. Namibia is significantly higher than South Africa, as an example. A fishing company in one country has an economic advantage over the other with respect to its cost structure, assuming that both companies have the same level of operational efficiency. To arrive at this conclusion we have assumed that the fishing companies liable for the payment operate in the same internationally competitive market and cannot pass this additional cost on. This assumption may not be true as in some cases the fishing company exclusively supplies the domestic market and can therefore influence prices in that market.
2. There was a bias in all countries to the domestication of the fishery. The local fishing companies paid significantly less than the foreign vessel and/or processors. This bias also extends to a local rights holder utilising foreign owned vessels, but not by the same degree.
3. Market access is also an important differentiator. We are advised that Namibia and Angola have more favourable duty free access to the EU as a result of Government agreements with the EU. South Africa however has no such advantage and has to pay a premium for EU access.



## 7 POLICY ALTERNATIVES FOR APPLICATION OF REVENUE RAISING INSTRUMENTS

### 7.1 Introduction

This report has summarised our investigation of the use of revenue raising instruments in the BCLME countries, and to the extent possible, the impacts of the use of fees, charges and taxation on the fishing sectors in these countries from a management accounting perspective. We are now looking more closely at the public finance aspects of these processes.

It is important to understand the linkages between fisheries management and revenue raising. In order to achieve effective and practical revenue raising an effective fisheries management regime is necessary. We will therefore consider the fisheries management context in which we will be considering options for revenue raising instruments. This context will also include the wider international use of such revenue raising processes.

At the conclusion of this analysis we will look at options for application of revenue raising instruments in the BCLME countries.

This section of the report will therefore consist of the following:<sup>27</sup>

- **The Context of Fisheries Management:** This sets out the reasons for fisheries management and how the degree of sophistication and development is linked to revenue raising.
- **Charges versus Taxation:** Describing the theoretical rationale for revenue raising.
- **Options for Revenue Raising Instruments:** This section outlines the range of options available for revenue raising.
- **International Use of Revenue Raising Instruments:** This provides a brief description of the application of such processes internationally.
- **Implementation of Revenue Raising Instruments:** Discusses the implementation of the preferred revenue raising instruments in the BCLME countries and some of the likely implementation issues.

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<sup>27</sup> This section is in part based on materials prepared by Bruce Shallard & Associates and Deloitte for the New Zealand fishing industry, by Bruce Shallard & Associates as part of World Bank investigations in Argentina, and by Bruce Shallard & Associates and Deloitte in Papua New Guinea.

## 7.2 The Context of Fisheries Management

### 7.2.1 Need for Fisheries Management

A World Bank Country Study, prepared in connection with a review of Pacific Island Economies identified the following features of global fisheries:

- Fish is the largest single source of animal protein and the fastest growing food commodity in international trade.
- Fishing provides direct and indirect employment to over 100 million people globally.
- Over 1 billion people rely on fish and shellfish as their main protein source.
- Of the top 40 countries ranked by share of animal protein derived from fish, 39 are developing.
- Over the past 50 years global fish catches have grown from about 50 million tonnes to about 90 million tonnes in 1989.
- The increase in global fishing effort both in terms of the number of vessels and technology available has seen a huge overall increase in capacity.
- The total world gross registered tonnes of fishing vessels more than doubled between 1970 and 1989.
- All but two of the world's major fishing areas have experienced declines in productivity and entire fisheries have disappeared.
- The global fishing fleet is excessively large and heavily subsidised, with operating costs estimated to exceed revenues by about \$US54 billion annually.
- Generally the lack of property rights in fisheries is considered to be a major contributor to over investment and over exploitation of fisheries.

The Organisation for Economic Co-operation and Development, (OECD) has also identified as part of a review of the cost of managing fisheries that:<sup>28</sup>

<sup>28</sup> OECD, *The Costs of Managing Fisheries*, 2003. This publication provides an informative summary of a range of the theoretical and practical issues related to costs on the fisheries sector along with a number of OECD country reports.

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*“The overarching objective of government intervention in the fishing sector is to ensure the optimum use of marine resources and of the capital and human resources applied to the catching of fish. This requires that management should provide for long term sustainable yields and for the allocation of fishery resources among competing uses in the way that is most valuable to society. From an economic perspective, a primary objective of fisheries management is therefore to generate resource rent from the exploitation of available fish resources, subject to sustainability considerations.*

*In analysing how fisheries services contribute to this objective, two fundamental principles are particularly relevant. First, management of fisheries should seek to improve the performance of the sector, both in economic, environmental and social terms. Not only should the benefits of management resulting from the provision of fisheries services outweigh the costs of the fisheries services, but management should also be aimed at generating resource rent in the sector. Second, fisheries services should be delivered as cost effectively as possible. The structure of incentives facing public agents and private actors in the pursuit of cost-effectiveness will be altered according to the extent of user participation in decision-making, service delivery and payment.”*

Given this environment, much emphasis has been focused on developing effective management regimes for fisheries as a prerequisite for sustainable revenue raising.

### 7.2.2 Nature of Fisheries Management

Fisheries management is undertaken for a variety of purposes. Unmanaged fisheries tend to be wasteful of economic resources which could be profitably employed in other productive activities. Fisheries management’s objective is to attain optimum use of the marine environment, fish stocks in it and man-made resources applied to catching and use of the fisheries. Therefore the management regime should provide for long-term (indefinite) sustainability of yield and allocation of the fisheries resource amongst competing uses in a way that is most valuable to the community, and within this allocation for a particular activity. This requires the best possible use of the marine environment considering all values and uses to which it can be put from fishing of all kinds:

- Commercial;
- Recreational; and
- Traditional.

To non-capture activities such as:

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- Conservation; and
- Tourism.

The principle benefit of fisheries management is achieving an optimal utilisation of the living marine resource. This requires:

- Resolving the resource management question;
- Improved efficiency in the use of fishing resources in the short and long term; and
- Efficient and effective management of the resource, industry, recreationalists, traditional and other uses.

Essentially there are two components of fisheries management relevant to this study, the first being the management of the overall resource, and the second being management of the commercial fishing sector or fishing industry.

### 7.2.3 Resource Management

At the highest level, resource management involves the determination of the appropriate rate and type of exploitation and the allocation of the rights to use the resource amongst various, often competing users. The management of fisheries extends beyond the efficiency of the commercial fishing industry to include the interests of lifestyle, traditional fishermen, recreational fishermen, the tourist industry as well as social impacts and the protection of the nation's resources. Management of the resource includes:

- Research into the biology and population dynamics of target species and the ecosystem as a whole; and
- Translation of findings into operational management objectives.

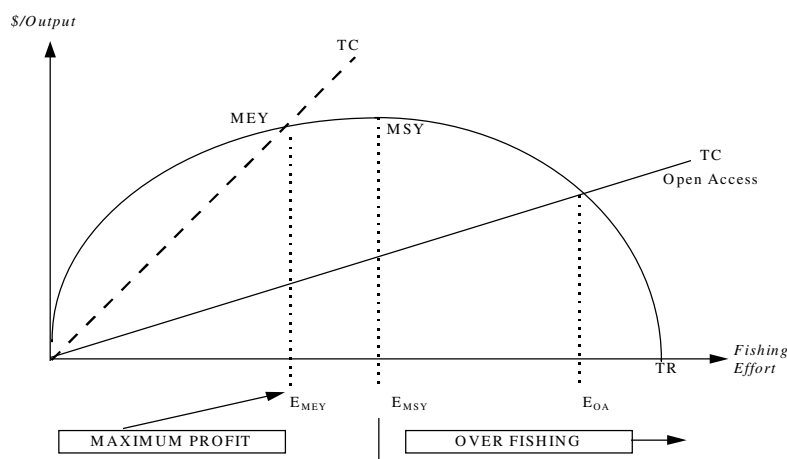
The economics of fisheries requires management of resources to include capacity for legislation and regulation, surveillance and enforcement. Therefore resource management is fundamentally a function of government because it deals with all levels of fisheries, i.e. commercial, recreational, traditional and non capture activities. Resource management requires a thorough understanding of how ecological systems function and how various users affect the function of the system. The long term sustainability of these systems, including the long term utilisation of the fishing resource is the objective of resource management.

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Resource management involves determination of levels of exploitation and allocation of marine resources amongst users. The overall objective is the sustainability of a fish stock, and within that overall constraint the exploitation of that fish stock by the highest value users.

The ideal biological position is generally regarded as the Maximum Sustainable Yield or MSY (this is a range not a single point). This essentially establishes the biological constraint on the effort devoted to a fishery and provides the basis for setting a TAC. The objective of management then is to address the problem of open access and to restrict the level of effort to that consistent with the level of the Maximum Economic Yield or MEY. At MEY the level of effort is the difference between the total return (the value of product caught) and the aggregate cost to the fishermen (cost of capital in the form of boats etc. and various costs such as labour, fuel, management is the greatest). This compares with an open access situation where aggregate returns and costs are just equal.<sup>29</sup>

Maximizing Economic Returns from a Fishery



MEY = Maximum Economic Yield

MSY = Maximum Sustainable Yield (the point beyond which biological regeneration of the fish cannot keep up with depletion)

TC = Total Costs

TR = Total Revenue

EOA = Open Access Equilibrium

<sup>29</sup> World Bank: Pacific Island Economies, *Building a Resilient Economic Base for the Twenty First Century*



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Sustainability of yields is complex because for many fish stocks there is not necessarily one level which can be sustained through time but several. Whether MEY is lower than MSY depends on (a) the biological characteristics of a fishery; (b) the time or horizons of those involved.

Differing time horizons are at the heart of the debate over sustainability of fish stocks. Sustainability requires maintenance of the ecological relationships in a fishing ground. This means or requires management to sustain catches indefinitely. In turn this focuses on equity between generations. If a zero discount rate exists the objective is clearly perpetual sustainability. Similarly in fisheries utilising short lived species there is little practical difference whether a zero or a high discount rate is applied. However, for longer lived species the differences may be significant. Hence one of the functions of resource management is to implement management measures to ensure that where differences in time horizons are so great as to threaten the long term sustainability of a fishery, society values take precedence wherever fishermen have incentives to favour the present over the future.

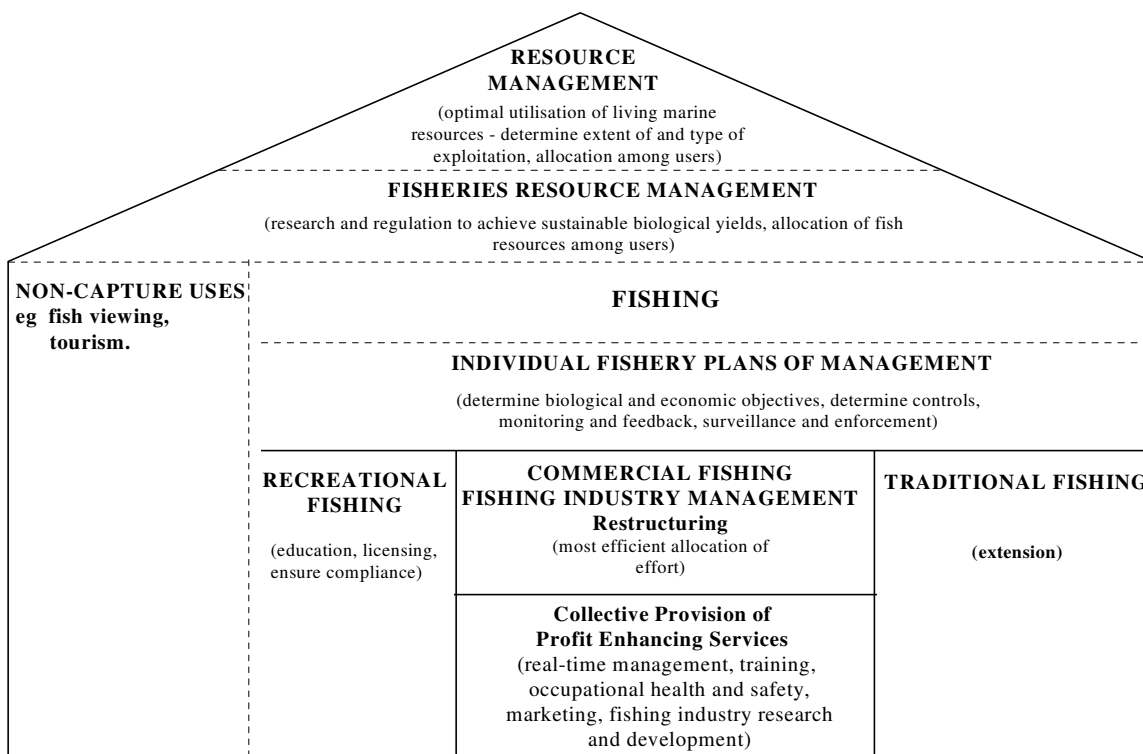
Fishers have strong incentives to harvest the catch. Whether they do so in a sustainable manner will depend upon their security of tenure over the access rights, and the capacity of markets for property rights to reflect the increased value of the fishery resulting from their investment in the stock. Failure to adequately value sustainable future catches can lead to increased fisheries pressure today. Immediate commercial pressures can lead to conflicts between what industry would like to do for the long-term future of the fishery and what they must do for the sake of current profitability/to avoid bankruptcy today. The optimal level of effort requires a sound scientific basis for predicting yields once fishermen are introduced to a fishery. This in turn requires an understanding of stock dynamics and then the setting of a rational TAC.

The relationship between resource management and commercial fishing industry management is displayed in the diagram below:<sup>30</sup>

<sup>30</sup> Cost Recovery for Managing Fisheries, Report No. 17 3 January 1992 (Australian Government Publishing Services)

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### Profile of Fisheries Management



#### 7.2.4 Risk Assessment<sup>31</sup>

Within this overall approach to resource management, the classical approach to fisheries management is based on managing fishing characteristics (effort and catch) in relation to the target species, rather than aspects of the environment or ecosystems in which target species may live. In principle, such approaches are designed to permit a large enough portion of the stock to escape capture long enough to reproduce sufficiently to ensure that there is adequate recruitment to sustain the population and desired level of fishing.

In recent years the well documented over exploitation of many fisheries has led fisheries managers to consider the wider implications of fisheries in the context of the marine ecosystem. International experience has shown that fisheries crash because of surprises (such as a key ecosystem link that was previously unknown; or technology creep gradually eliminating de facto reserves where fishers could not previously fish). The impacts of fishing on habitats and dependant or related species has not been incorporated in this approach to management of stocks.

<sup>31</sup> Material drawn from New Zealand Ministry of Fisheries Sustainability Measures, on Ministry website [www.fish.govt.nz](http://www.fish.govt.nz), and personal conversations with Ministry managers.

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As a result, there has been a recent growth of what are described as “risk-based” assessment approaches to decision making in regard to management of fish stocks. These approaches have been developed as part of the shift to ecosystem based management where fish stocks are only one part of the ecosystem that is being managed.

There is significant debate amongst fisheries managers and between fisheries managers and NGOs on the value and efficacy of the risk assessment approach, but it is undoubtedly a further useful tool that can assist with good fisheries management. The New Zealand Ministry of Fisheries reports:

*“The assessment of risks can include risks relating to lack of understanding of ecosystems and our impacts on them, natural variability of biological systems and unexpected impacts or hidden impacts by people on fisheries and their host environment. There are considerable risks of inequity between the present and the future, between extractive and non-extractive users and across other dimensions. There is also financial and economic risk, risk to life and limb and risks to efficiency”<sup>32</sup>*

It is the wide range of risks that should be considered in this approach that is of relevance to this study, as the utilization of revenue raising techniques raises questions of the “economic risk” of such actions for the Government and stakeholders. This is something we will comment on later in this report.

### 7.2.5 Commercial Fishing Industry Management

It is the role of fishing industry management to ensure the efficient use of resources used in the fishing industry. This role includes:

- To reduce the level of effort in fisheries relative to the level developed previously, particularly under an open access system.
- To enable the collective provision of goods and services within a fishery, i.e. as with other industries where large numbers of participants are selling homogeneous products, individual fishermen cannot retain exclusive access to the fruits of their efforts such as fishery specific research.

To be effective a commercial fisheries management regime requires three components, as follows:

- Fisheries Management Systems strongly supported by research;

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<sup>32</sup> New Zealand Ministry of Fisheries Sustainability Measures, Ministry website [www.fish.govt.nz](http://www.fish.govt.nz)



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- A monitoring, control and surveillance component; and
- A fishery judicial system.

The fisheries management system specifies the regulatory framework for fishing. It encompasses fisheries management rules and relies heavily on information provided through research with respect to the health of stocks and the determination of the total allowable catch of the resource. The principal task of monitoring control and surveillance is to enforce the management system that has been adopted, with a secondary but important task to generate data that can be used to improve both the fishery management and judicial systems, as well as monitoring, control and surveillance.

The fisheries judicial system is usually part of the more general judicial system and imposes sanctions against those found to have violated fisheries regulations. The judicial system complements the monitoring, control and surveillance activity of the fishing management regime.

To attain full economic benefits from fisheries all three components must be appropriately designed, well coordinated and fully functioning.

There are three alternative measures which can be used to resolve the open access problem for commercial fisheries as follows:

- (a) **Royalties:** Royalties price the fish, so the fish will be treated like other inputs in fishermen's production decisions.
- (b) **Input Controls:** This approach involves limiting the amount of inputs directly.
- (c) **Quotas (Fishing Rights):** A global TAC is set and proportioned into shares.

How the open access problem is solved has a direct bearing on charging for management. In a number of countries a Quota Management System (QMS) has been adopted whereby individual property rights – individual quotas, (fishing rights), are created in the fishery. These quotas may be either transferable or non transferable, or have limited transferability.

The premise supporting the introduction of this type of approach has been that the Government and Industry have a shared interest in the fishery and that collaboration, with the mutual objective of sustaining the fisheries, would be the most effective management regime for fisheries.



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Under this management structure the primary functions of the Government with respect to the management of the commercial sector are:

- (a) To establish TACs, and allocate rights; and
- (b) Ensure on an ongoing basis that individual rights limits are not exceeded.

*7.2.6 Principles of Fisheries Management*

Having outlined the overall approach to fisheries management to demonstrate the context for use of revenue raising instruments, we conclude with some fisheries management principles which set the context for the analysis of options for revenue raising.

The fisheries management principles we suggest are applied in countries that are committed to managing their fisheries resources are:

<b>For economic and societal reasons fisheries management is essential.</b>
<b>The principal role of government is to lead the management of the fisheries resource to ensure sustainable economic, environmental and social returns.</b>
<b>The management regime should provide for long term (indefinite) sustainability of yield and allocation of fisheries resource amongst competing users in a way that is most valuable to the community.</b>
<b>Management of the commercial fishing industry is a subset of management of the fisheries resource.</b>
<b>The fundamental premise of the move to rights based fisheries management is the alignment of commercial and Government interests in sustaining fisheries.</b>

These principles must also be considered in terms of user participation in the fishery, in particular the commercial fishery as a critical element of managing cost and extracting benefits. The OECD summarises this as:<sup>33</sup>

<sup>33</sup> OECD, *The Costs of Managing Fisheries*, 2003

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*“The extent of user participation in the process of design, implementation and enforcement of fisheries management regimes will also influence services costs. It is likely that a higher degree of user participation will lead to higher compliance rates, more effective management outcomes, longer lasting returns on management inputs and, potentially, lower overall costs of management. The extent and type of user participation in the decision-making process also influence accountability and transparency of governance.”*

### **7.3 Charges versus Taxation**

#### *7.3.1 Introduction*

It is common for many public sector charges to contain elements of tax. From a fisheries management and revenue raising perspective it is important to understand the different principles between government charges and taxation. Typically the characteristics of a tax relate to the lack of choice and the lack of a direct causal relationship between the amount of the tax and the benefit received.

Literature establishes some fundamental concepts which are important when considering recovery of costs via revenue raising instruments (as opposed to taxation):

- The payer must be the beneficiary of the good or service;
- The charge must be discernibly related to the cost of the good or service, or its value to the buyer; and
- Costs must be reasonable and related to production processes.

In the interests of economic efficiency the charges made for the provision of an output should proportionately reflect the benefit received in cost terms. It is not however always practicable to measure the benefit accruing to different parties. Where this is the case the assignment of cost may need to be negotiated.

Alternative methods of funding the provision of fisheries services are generally explored in order to ‘drive down’ total costs and attain value for money. In order to meet these objectives the funding system must:

- Be transparent;
- Enable accountability; and

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- Be efficient.

These three key concepts underlie all systems of revenue raising.

### 7.3.2 Beneficiaries

The provision of fisheries services by Governments (or by agencies either public or private on behalf of Government) must be considered in terms of who are the beneficiaries of these services. This will then allow us to consider more precisely how to apply revenue raising instruments to ensure that the beneficiaries pay for such access. The OECD summarises this as set out in the box below.<sup>34</sup>

*By ensuring sustainable use, fisheries services have the potential to create benefits for society and for groups within society – commercial fishers, consumers, recreational fishers, the broader community and cultural and minority groups. These beneficiaries are often described as the stakeholders in the fishery.*

**Commercial fishers** can potentially benefit from fisheries services in three ways:

- *Increasing output from the fishery by managing the stock in a way that maximises biological yields over the long run. This management objective may not coincide with maximising economic yield for commercial fishers, but could represent an improvement on the existing situation where rent may be dissipated in the fishery.*
- *Reducing costs per unit of effort by reducing competition in the fishery. Reducing competition between fishers, either by allocating individual output limits (for example, through individual quotas) or by limiting inputs (for example, through limits on the number and size of vessels), creates the opportunity for increased profits for existing fishers.*
- *Increasing the return per unit of output from the fishery. An example of this could be a change that allows fish to grow to a larger size before they are harvested. If the market places a premium on larger fish, and the value of the earlier catch forgone is less than that premium, then fishers will have gained a benefit from the management system change.*

**Consumers** will benefit from fisheries services if they result in higher sustainable catches and more stable supply. These benefits will be realised through the market as a decrease in the domestic price, resulting in an increase in consumers' surplus. Consumers will also benefit from fisheries

<sup>34</sup> OECD, *The Costs of Managing Fisheries*, 2003

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*services if there is an improvement in the quality of seafood products through improved quality control, the application of sanitary and phytosanitary requirements and so on.*

*In general, **recreational fishers** benefit from fisheries services as a by-product of the management of commercial fishers. This is a result of potentially higher catches, less pressure on fish stocks and reduced crowding on fishing grounds that accompany effective management of commercial fishing activity. In addition, some recreational fisheries are managed in their own right because of either their economic significance to particular regions or through the impact of recreational fishing on fish stocks.*

*The **broader community** benefits from fisheries services in a range of ways. Fisheries management decisions that result in sustainable commercial and recreational fisheries and the protection of other values (such as amenity and existence values) benefit the wider community as well as user groups. Such potential non-market benefits are not necessarily received by any particular group. This is in contrast to the benefits accruing to commercial fishers and consumers which can be described as market benefits (that is, they relate directly to the activity of fishing or consumption and are reflected in the prices of inputs to and outputs from fishing). In addition, cultural minorities and indigenous people benefit where fisheries services provide for the interests and customs of those groups.*

### 7.3.3 Who Should Pay for Services

In considering the beneficiaries of fisheries services provided by Governments, it is important to draw a distinction between the commercial fishing industry and the recreational, artisanal, subsistence and in some cases, the limited commercial fisheries. While there is an expectation generally held by the commercial fishing industry that they should in some manner “pay” for the services and benefits they receive from Government for the provision of fisheries services, it is by no means as clear for the other categories listed above.

While it is undoubtedly the case that, at least in part, the other categories of participants in the fishery gain some benefits from the provision of Government fisheries services, it is far less clear who should pay for these services, or where the value from the services should be attributed. There are arguments that the commercial fishing industry gains from the services provided by Governments to manage the remaining participants in the fishing sector. Equally there are arguments that these groups themselves gain from the services and should therefore pay, or alternatively have Government pay on their behalf as part of Government’s wider economic and social responsibility.

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To allow for consideration of who should pay, options for payment could include:

- Government funding of all services funded through general taxation;
- Whole or part payment of services by the stakeholder groups through the selected form of revenue raising instruments; and
- Payment of all or part of the services provided to these groups by the commercial fishing industry through the selected form of revenue raising instrument.

This is an important consideration, given the size and economic and social impact of these participants in the fishing sector and their impacts on the wider community in the three BCLME countries. It is a consideration that will need to be discussed during the proposed consultation round so that policy positions on this attribution of costs can be defined.

### 7.3.4 *Public Goods, Private Goods, Club Goods*<sup>35</sup>

Having considered who the beneficiaries from fisheries services are, we are now able to define which services are public, which are private and which are shared or club goods. For the purpose of the analysis, outputs of a public sector organisation can be grouped under the following categories:

**Private Goods** are those outputs which are exclusively consumed by individual economic units. Since the benefit of outputs of this kind only accrues to the consumer or group of consumers, the full cost should be charged.

**Public Goods** are those outputs which simultaneously benefit society as a whole and are characterised by non-rivalry in consumption (that is, one person's consumption does not reduce the amount available for others) and non-excludability of benefits (that is, a person cannot be excluded from the benefit even if they do not pay). Outputs which are provided to fulfil a social objective belong to this category.

It is fair to say that most goods have elements of both public goods and private goods.

In the midst of **public** and **private goods** are a range of **club goods** the benefits of which are enjoyed by an identifiable class of persons. Where such a 'club' relates to all or part of the fishing

<sup>35</sup> Club Goods are also described in some jurisdictions as "Mixed Good". In this report we use the term "Club Good" which should also be read as referring to "Mixed Good"

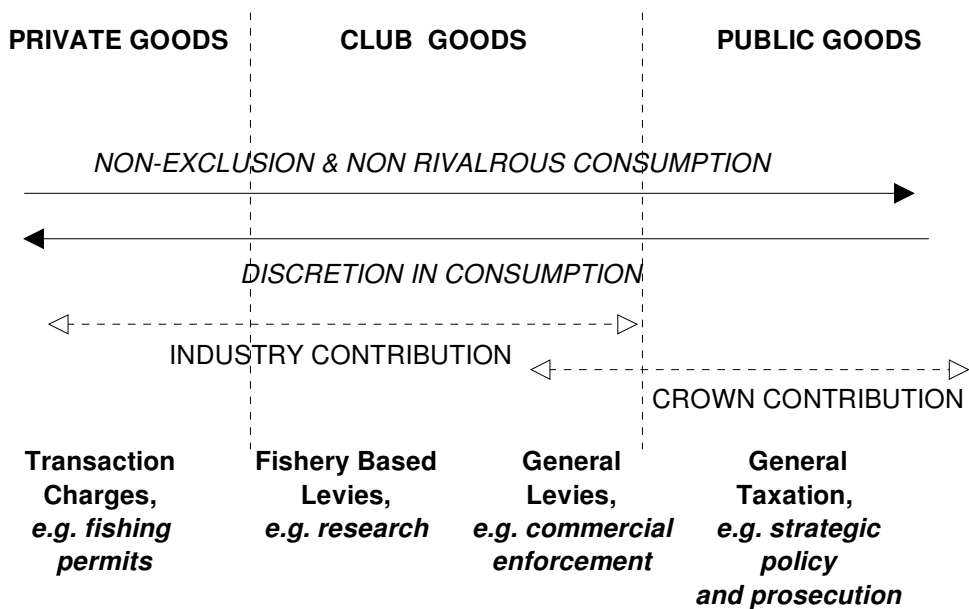
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industry, as opposed to recreational fishers or customary fishing, the costs of related services are recovered from those parts of the industry.

Public goods are properly funded by the Government, and private goods from the individual, but club goods must also be considered as an important component in recovering costs from the fishing industry.

This continuum may be displayed as follows:

**A PRIVATE TO PUBLIC GOODS CONTINUUM**



The options for the application of revenue raising instruments take into account whether services are public, private, or club goods and address this in various ways.

**7.4 Options for Revenue Raising Instruments**

*7.4.1 Introduction*

Having considered some of the conceptual background to allocation and charging of costs under a range of revenue raising instruments and comparisons with use of taxation, we will now turn to consideration of the options for use of revenue raising instruments.

We will look at the following:

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- Rent Collection Mechanisms;
- Cost Recovery Mechanisms;
- High Level Practicalities of the Mechanisms; and
- Summary.

This is followed by a section on implementation issues.

### *7.4.2 Rent Collection Mechanisms*

There are a number of potential vehicles for obtaining revenues from a fisheries management system. The various potential mechanisms to collect rent include a fee on effort (such as a licence fee); a royalty or tax on catch, gross revenue, and / or net revenue; a property tax; or a tax on the transfer of rights.

In examining the rent extraction alternatives several factors should be considered:

- Whether the rent fee is sufficient to cover the cost of management (including research, monitoring and enforcement activities);
- Whether the extraction of rent is sufficient to reduce the costs of access to appropriate levels;
- Whether the rents should be extracted initially or be extracted on a continuous basis (in such a way that the rent extracted fluctuates with the value of the access right); and
- What the appropriate level of rents extraction is to encourage fishermen to accept and comply with the programme.

Based on these considerations, it is hard to see how licence fees or taxes on catch or on gross or net revenues could satisfy the above criteria. Unless there were annual adjustments of the taxes, only a tax on net revenues could reflect the change in the value of the access rights. This value will be difficult to monitor because of its high information requirements. Detailed capital and operating cost information of each firm would be needed. Additionally, deductions from accelerated depreciation and investments write-off may provide a greater chance to avoid taxes.

Where quotas (or fishing rights) are used, the application of a quota tax is another option. Under this system the value of quota is assessed on a regular basis and assessed a fixed percentage. From the standpoint of economic efficiency, both a tax on profits and a quota tax can capture the



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same amount of rent. However, if economic profits are viewed as an incentive for innovation, a quota tax may be preferable as it does not penalise individual innovation. A potential handicap of this approach is the difficulty in assessing the value of the fishing right.

Another possibility would be a capital gains tax on the value of the quotas. However, rents are likely to be most significant at the initial sale of the quota. Another limitation of this approach is that revenues would accrue to the general treasury and not to the management agency.

A transfer tax (i.e., imposing a tax every time the right is sold) has also been advocated. The tax could be expressed as a percentage of the sale value of the quota. As in the case of a property tax, there is the danger of underreporting. The expression of this transfer tax as a percentage of the quota has been suggested as a means to overcome this underreporting difficulty.

An alternative option is to auction the quotas periodically, as does the Chilean QMS. Under this system, quota lasts for 10 years. Each year a given percentage is deducted from the total quota holding and reverts to the management authority. This mechanism is the most efficient in capturing most of the rent since the value of the quota reflects expected discounted benefits from the resource.

More recently, the use of public quota share (PQS) has been proposed, where a certain percentage of the quota sold reverts to the management agency. For instance, if 500 tons of quota is sold and the PQS is 40%, then 200 tons would be acquired by the management agency and 300 by the buyer. This regime would likely affect the market value of the quota. The buyer will presumably pay for 300 tons worth, taking into account that at the subsequent sale of quota, the amount of quota transferred to the second buyer would be 180 tons, with 120 tons (40%) reverting to the management agency.

This scheme has several advantages: shares obtained by the management agency could be auctioned off to generate revenue; quotas may be withheld from the market to improve the health of the stocks or to allow adjustments in the TAC; government shares could be used for social development programs such as providing the quotas at low cost to disadvantaged communities; the regime is easy to monitor and enforce; it is a good tool to extract windfall gains and reduce quota prices for new entrants; it reduces anticipatory or speculative investment in the fishery; and revenues could be used to cover management costs and provide society with some returns from its resource.

On the other hand, this regime has a series of shortcomings. First, the regime creates an incentive to lease rather than sell the quota. Second, there will likely be fierce opposition by industry to any

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mechanism that extracts rents (due to anticipation of receiving windfall gains and past history where they did not have to pay for the use of “free” resource). Third, this may slow down any fleet rationalisation process as fishers wanting to exit the fishery would receive less compensation due to the lower value of the quotas.

In addition, there may be difficulty in establishing appropriate PQS. Also, if the management authority has too many quota shares it may acquire market power. Finally, it may be difficult for the management authority to determine the appropriate amount of research and enforcement costs, leading to an excessive expansion of its operations and authority.

The ranges of rent collection mechanisms, based on taxation concepts, all therefore have some flaws and / or difficulties in practical application. They lack specificity of application and do not create the right incentives for the fishing industry or the Government.

It is important to note that while such mechanisms may be inefficient long term, they may be appropriate in a short term or during a transitional period. Such a transition may be from small scale fishery to commercial, or a fishery dominated by a domestic minority, or dominated by a foreign party. All of these circumstances are relevant in the BCLME countries and need to be considered.

### 7.4.3 Cost Recovery

Having looked at rent extraction mechanisms it is however, appropriate to look at the alternative mechanism available based on more direct and specific charging based on the cost recovery principles.

Typically, provision of goods and services by the Public sector has been funded by taxes. There are two deficiencies of this method of recovery. These relate to the lack of choice (citizens are obligated to pay and have little influence over how the funds are allocated) and the lack of a direct causal relationship between the amount of the tax and the benefit received.

On the other hand, in a typical open-market business transaction, *customers* are charged a *price* for a particular good or service. Typically, this price incorporates a margin over and above the actual cost of providing the good or service. While this may be an effective mechanism to achieve the objectives for the provision of private goods, it is not necessarily appropriate with respect to public goods and services.

An alternative mechanism of recovering the costs of providing regulatory services is by way of a cost recovery regime. Under this mechanism, *citizens* (i.e. fishers) are charged the *cost* of a particular service that they cause to be provided or purchased by the Government. Commitment to

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the wider public objectives of sustainable management provides the incentive to Industry participants to assume these costs. It is in the best interests of the participants to protect their personal property rights and longer-term investment in the Industry.

Cost recovery is governed by a number of key principles. These include:

- Cost of goods and services should be recovered from those who benefit directly;
- The payer must be the beneficiary of the goods or service;
- The charge must be discernibly related to the cost of the good or service, or its value to the buyer; and
- In order to maintain an economically efficient level of output in a monopoly situation there must be a process that ensures there is no abuse of monopoly power.

Together, these principles support the concepts identified earlier. Specifically, in order to discern the cost of a good or service and the subsequent charge, those costs must be identified and allocated in a *transparent* manner. Similarly, by allocating in a transparent manner, stakeholders are held *accountable* for ensuring the good or service in question is adequately provided for, recovered and managed. Finally, both the formal and informal checks and balances will ensure the drive for *efficiency* and accountability is an ongoing quest.

There are a number of sound reasons for cost recovery. In particular it:

- Provides equity by recovering costs of goods and services from those who benefit directly;
- Improves the allocation of government resources by ensuring that consumers assign an appropriate value to the goods or services produced;
- Encourages departmental cost efficiency by providing for transparent costs and, as a consequence, by inducing consumer feedback; and
- Assists in reducing net government expenditure.

A cost recovery programme can be carefully designed to ensure these benefits are realised by the stakeholder group. It is unlikely they will arise immediately on implementation. For this reason, expectations must be managed to ensure a longer-term commitment to the predetermined objectives for the implementation of such a programme.

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Cost recovery processes may also be introduced to recover part costs as a shared approach between Government and the fishing industry, or may be imposed in part in association with other rent collection mechanisms (section 7.4.2). This may also be appropriate to consider as an interim or transitional measure

### 7.4.4 High-level Practicalities

There are many virtues arising from a regime using cost recovery to recover costs over a tax recovery mechanism. However, in practice there are also a number of issues that will arise and need to be resolved in due course. Some of these issues are outlined below.

#### **Enforcement and Ability to Invoice**

*It is necessary for the agency providing the services to have some form of mandate with which to charge their clients. Preferably this will be legislative so clients are required by law to pay any charges incurred. Alternatively, the mandate may form part of the rules governing industry participation and involvement. Regardless, the service delivery agency must have the ability to invoice and efficiently recover costs from the clients to which they provide services.*

#### **Accounting Policies**

*The service delivery agency will need to develop and approve satisfactory accounting policies to support the recovery regime. This may require consultation with parties including both Government and Industry representatives. Such policies would need to address the costs that will be recovered (both of an income and capital nature), who will be charged and on what basis.*

#### **What Costs to Include and the Type of Charge to Incur**

*In any organisation, some costs incurred can be directly attributed to the provision of a good or service (direct costs). In addition, some costs incurred will be of an indirect nature (indirect/overhead costs) and will need to be allocated or recovered on an equitable basis. Many decisions arise from this distinction. These include:*

- *Should costs be recovered by way of transaction charges or levies?*



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- *What services will incur a separate transaction fee?*
- *What direct and/or indirect costs should be included in transaction fees?*
- *What costs should be recovered by way of a levy?*

*The definitions of public, private and club goods provided earlier in this section, help guide the decision making as to what type of charge to incur.*

### ***Selection and Implementation of Service Delivery Agency***

*Should the Service Delivery Agency (SDA) be an agency other than of the government, approval of Industry representatives may be necessary. A consultation and selection process will need to occur before an acceptable agency can be appointed. The cost and resources to both the applicants and the Government as the approver are considerable.*

### ***Relationships***

*A significant commitment from all stakeholders to the regime is necessary in terms of developing open relationships. These relationships should be built on the principles of trust and respect, particularly during the initial phase of development and implementation of the programme. It is vitally important that responsibility is delegated to the appropriate party and those responsibilities are carried out. Open communication flows are necessary to meet the objectives of Government, Industry and the SDA.*

### ***Reinvestment***

*Decisions relating to capital funding and reinvestment are likely to be a key issue in determining the level of costs that will be recovered from clients. These decisions include:*

- *How to fund the initial financial outlay?*

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- *What ongoing developments will be required?*
- *How will these ongoing developments be funded (e.g. external finance, one-off levy, transaction charges and regular levies)?*
- *Is there an event in the future that would require a substantial financial outlay?*
- *What mechanisms would be used to fund such an outlay?*

*These decisions will influence the final charges borne by Industry. More importantly, these decisions will influence the ability for Industry to attain both their financial and non-financial objectives.*

### **Outcomes**

*The final outcomes of a cost recovery model should clearly articulate each service that will be provided to clients, estimate the cost of providing that service and set the appropriate charges for the period under consideration.*

*It is important that the model is transparent, easy to calculate and robust. The model should also be flexible to allow for any changes in required services, allocation basis and cost structure. Finally, all aspects of the cost recovery model should be reviewed regularly to reflect an evolving environment – both internally and externally.*

### 7.4.5 Summary

There are a variety of business tools or frameworks that promote the concepts of transparency, accountability and efficiency. We have outlined a range of “rent extraction” options for application under a fishery management system and commented on their good and bad features. This has been followed by a similar analysis of a cost recovery approach.

We believe the cost recovery mechanism should be considered for application in the BCLME countries. This may however be as a shared approach with Government sharing some costs and/or in part imposing rent extraction processes either short term or during a transition to longer term measures.

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The world's fishing industry is increasingly turning to cost recovery regimes to achieve fisheries management objectives and to allow industry to assume responsibility for fisheries management practices and associated cost. Although, in practice implementation of such a mechanism will encounter many problems, they are by no means insurmountable.

As commented on earlier in the report, the implementation of revenue raising instruments is a matter that has the potential to raise questions of risk for the Government and the stakeholders. As part of the assessment of these risks, the implementation of a cost recovery approach would need to consider the risks involved for Government and the fishing industry.

Our analysis suggests that experience shows that the risk is low for all parties if the cost recovery programme is developed in a transparent collaborative way. There may be cost imposts on the fishing industry as a result of this, but this should reflect agreed benefits to the industry from the services provided by the Government. This is a factor that will need consideration in the proposed consultation phase.

A well-implemented cost recovery programme can give rise to many benefits, not the least being a transparent, highly participatory, fair and more efficient fisheries management framework. The New Zealand framework is just one example of how a cost recovery framework may be designed to achieve the wider objectives of a sustainable fisheries management regime. We note that the New Zealand approach is a "shared" approach with Government and fishing industry sharing the costs.

Application of cost recovery in the BCLME environment will have its own specific challenges which are commented on in the following sections.

### 7.5 International Use of Revenue Raising Instruments

#### 7.5.1 Frameworks for Revenue Raising

Revenue raising, as outlined above, must be considered as an integral part of good fisheries management. The OECD reports that revenue raising (and in most cases cost recovery) has been introduced:<sup>36</sup>

*"[A]s part of a package of management reforms driven by a perceived need to improve the efficacy and cost-effectiveness of fisheries management, coupled with the increased application of the user pays concept in the provision of many government services. Such innovations are aimed at better aligning the incentives for both fishers and governments to pursue cost-effectiveness in the provision of fisheries services."*

<sup>36</sup> OECD, *The Costs of Managing Fisheries*, 2003

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Coupled with the link between fisheries management and revenue raising is another important success factor, good user participation. The OECD summarises this as:

*“[T]he extent of user participation in the process of design, implementation and enforcement of fisheries management regimes will influence services costs. It has been argued that a higher degree of user participation will lead to higher compliance rates, more effective management outcomes, longer lasting returns on management inputs and, potentially, lower overall costs of management.”*

This is represented by the following table showing the ratios of Government to user participation.

<b>Extent of Government Participation</b>						
<b>Management Tasks</b>	<b>Instructs</b>	<b>Consults</b>	<b>Co-operates</b>	<b>Advices</b>	<b>Is informed</b>	<b>Not involved</b>
Assessment						
Setting Objectives						
Selecting						
Allocation Among Users						
Allocation Over Time						
Enforce Regulations						
	<b>Is Informed</b>	<b>Advices</b>	<b>Co-operates</b>	<b>Consults</b>	<b>Instructs</b>	<b>Self-management</b>
<b>Extent of User Participation</b>						

Source: OECD (2003)

Good governance in fisheries management is closely linked to this participation principle and to the resultant costs of services varies markedly dependant on the approach taken. The OECD provides a very clear demonstration of this in the following figure:

**Typology of Fishery Service Delivery and Payment Models**



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Typology of Fishery Service Delivery and Payment Models					
Model	What Type and Level of Services to Provide	Who Provides the Services	Who pays for the Services	Incentives for Improved Fishery performance	Incentives for Increased Cost-effectiveness
1	Government	Government	Government	Poor	Poor
2	Government	Government	Industry	Poor	Poor
3	Government	Government Contracts Service Providers	Industry	Poor	Good
4	Government and Industry	Government Contracts Service Providers	Industry	Good	Good
5	Government Sets Standards and Industry Undertakes Decisions	Devolved to Industry	Industry	High	High

*Source: OECD (2003)*

This demonstrates that incentives for increased cost effectiveness are strongest when Government and industry work closely together with responsibility given to industry, coupled with effective, targeted, well specified revenue raising instruments.

In the past, governments have paid for all fisheries management costs out of general taxation. More recently, there has been a growing trend towards other targeted revenue raising programmes as a means to recover all or part of the government's management costs and adopt cost effective management practices.

All these programmes seek to cover some or all of the administrative, monitoring and enforcement, and research costs from the beneficiaries of these programs. In the case of fisheries, rights owners, as the primary beneficiaries of fisheries management, are seen as the primary source of funding for essential management activities.

Under a rights based approach the benefits of effective fisheries management accrue largely to the holders of rights, through operational profits and appreciation of the sale or lease value of their

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rights. Management activities which permit TACs at or near theoretical maximum sustainable yields maximize the present value of rights.

In addition, if rights are initially allocated rather than auctioned or sold, government is providing original rights holders with a windfall gain. As a consequence, most countries which have implemented such systems have developed mechanisms to recover at least the management costs, and in some cases have also taxed the rents captured by original rights holders.

The following table sets out the types of revenue raising instruments that can be applied and their method of imposition, ranging from the general taxation measures (aimed at paying for public good services) through a series of more specific types of measures, to cost recovery which addresses specific costs either as a private or club cost. The table then summarises the current application of such measures in the BCLME countries and internationally.

## Revenue Raising Instruments

TYPE	MEANS OF IMPOSITION	PURPOSE			COUNTRIES USING INSTRUMENTS			
		Public	Private	Club	BCLME			International
					SA	Namibia	Angola	
Income Tax <sup>1</sup>	Statute – applied on earnings.	✓	–	–	✓	✓	✓	Nearly All <sup>8</sup>
Company Tax <sup>1</sup>	Statute – applied on earnings.	✓	–	–	✓	✓	✓	Nearly All <sup>8</sup>
Sector Tax <sup>2</sup>	Statute – applied variously.	✓	–	✓	–	?	?	Various
Fishing Licence FLN <sup>3</sup>	International Agreement.	–	✓	–	✓	✓	?	All
FLN Access <sup>4</sup>	International Agreement with fee based on catch capacity.	✓	✓	–	–	–	✓	Most Pacific Islands, African States <sup>9</sup>
Royalties (Domestic) <sup>5</sup>	Statute – based on access right.	✓	?	–	–	–	✓	Most Pacific Islands, African States <sup>9</sup>
Levies (Charges) <sup>6</sup>	Statute – based on access right but targeted to purposes e.g. research.	–	–	✓	✓	✓ <sup>11</sup>	–	Most OECD Countries
Cost Recovery <sup>7</sup>	Statute – based on access rights but charged on specific recovery of cost basis.	–	✓	✓	–	✓ <sup>11</sup>	–	NZ, Australia etc <sup>10</sup>

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**THE CONSORTIUM****Notes:**

1. Regarded internationally as the “business of Government” to tax society for the public good – income on individuals, company tax on companies is also supplemented in many countries by sales taxes, or Goods & Services Taxes (GST) or Value Added Taxes (VAT) all applied generally to the public and designed as revenue raising for the overall cost of Government business on behalf of the public.
2. Domestic fishing licences traditionally a nominal charge or an estimated recovery of cost of issue.
3. Charges for FLN licences generally set to cover administrative costs of FLN presence in country including compliance.
4. Access fees applied as a significant fee for foreign presence often set at 6% of assessed market value (e.g. PNG).
5. Royalties are the “crudest” rent extraction mechanism applied to a fishing industry as a “club”.
6. Levies (sometimes called user charges) are applied by Governments to extract some estimate of overall cost of administering the fishing industry, broadly set to recover targeted areas of expenditure.
7. Cost recovery seeks to recover specific costs of administering all aspects of the commercial fishing industry, by a range of means – some private (by transaction charges) but most “club” by specific charges relating to the cost of the service.
8. Government taxation is applied in nearly all countries except for some “oil rich” Middle Eastern countries such as the UAE, Qatar and Saudi Arabia.
9. FLN arrangements have traditionally been between historic fishing nations in Europe such as Spain and France but more recently the EU – with many developing African states and South American states; and between Far Eastern fishing states such as Japan, Korea, China and Russia and Pacific Island developing nations and South America.
10. See the following table for more detail on aspects of application of cost recovery.
11. Charges partly specific and partly general in nature.



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The table above is supported by the OECD which provides a table setting out the key features of fisheries management in OECD countries and their application of revenue raising instruments (called “cost recovery and user charges”). This table is included as Appendix IV.

In addition, Appendix V gives a summary of the New Zealand approach to the use of revenue raising instruments. This summary explains the evolution of the New Zealand approach from use of royalties and resource rentals in the 1980s, to a full cost recovery regime now, shared with the Government.

As a summary the following table describes revenue generating mechanisms among a number of selected countries.

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### Fisheries Revenue Generating Mechanisms (US\$ million)

Country	Annual value of fisheries <sup>a</sup>	Annual fisheries Management budget	Amount of Management recovered (%)	Revenue collection mechanism	Fisheries-specific revenue collection <sup>b</sup>	Service-specific revenue collection <sup>c</sup>
Argentina	1,500 <sup>d</sup>	29.6 <sup>e</sup>	24.3 (82.1%)	Fees, royalties on “charting” system (squid) and penalties. <sup>f</sup>	Yes	No
Australia <sup>g</sup>	223.4 <sup>h</sup>	13.1 <sup>i</sup>	5.3 (40.5%)	Quota levies, levies based on vessel characteristics, observer fees, license permit fees, etc.	Yes	Yes
Canada <sup>i</sup>	1,009.4	131.2	28.2 (21.5%)	In competitive fisheries, license fees are based on the average value of landings by fleet category. <sup>k</sup> In individual quota fisheries, license fees are based on a percentage of the average landed value multiplied by quota holdings. <sup>l</sup>	Yes	Yes
Chile	1,140 <sup>m</sup>	17.5	13.6 (78%) <sup>n</sup>	License fees and auction revenue. <sup>o</sup>	No	Yes
Iceland	778	35	14 (40%) <sup>p</sup>	Quota holding levies on a weight basis.	No	Yes <sup>q</sup>
New Zealand <sup>r</sup>	337.9	29.6	19.9 (67.2%)	Levies on quota holdings by fish stock for ITQ holders, Catch levies on a weight basis for non-ITQ fisheries, Vessel monitoring levy, Licensed fish receivers levy, Conservation service levies, etc. <sup>s</sup>	Yes	Yes
United States	1,800 <sup>t</sup>	900 <sup>u</sup>	0.7 (<0.01%)	Fees used to cover administrative costs of issuing permits.	Yes	No

<sup>a</sup> Includes all marine fisheries regardless of the management regime used. These figures are ex-vessel values unless otherwise noted.

<sup>b</sup> Refers to whether the revenue generating mechanism/formula is adjusted by fishery.

<sup>c</sup> Refers to whether there are specific charges for distinct services.

<sup>d</sup> The figure shown represents an estimate of the country’s gross fisheries product. Although no ex-vessel figures exist, if we use FAO’s country profile 1994 figures (latest ones) and relate ex-vessel values to exports, we can “grossly” estimate current ex-vessel values based on 1996 exports (US\$ 997 m). Using this relationship we find that ex-vessel value is in the order of US\$ 618 m for 1996.

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- <sup>e</sup> The Fisheries Subsecretariat overall budget is US\$ 17.42 million, however, US\$ 8.9 million are allocated to coastal Provinces leaving a “net” budget of US\$ 8.52million. INIDEP receives US\$ 12.13 million (Poplawsky, W., 1999. Pers. comm.).
- <sup>f</sup> This includes primarily fees and penalties. Penalties generated about US\$ 3 million. Fees include among other things royalties paid by the squid charting system. Annual royalties for squid are US\$150,000 per vessel. The Subsecretariat has not yet decided on what fee system it will implement.
- <sup>g</sup> All values are for 1997/98 based on an exchange rate of 1 AU\$=0.64 US\$ (Kettle, A., 1999. Pers. comm.).
- <sup>h</sup> Fisheries managed by Australian Fisheries Management Authority only (Commonwealth fisheries only (i.e., no state fisheries)). Fish production from state waters accounts for approximately 75% of Australia’s total fisheries production.
- <sup>i</sup> Includes AFMA’s research costs only. Note that most of the research is conducted by Fisheries Research and Development Corporation (FRDC), a government organization.
- <sup>j</sup> Values are for 1996 based on an exchange rate 1 CA\$= 0.6558 US\$ (Segard, S., 1999. Pers. comm.; Cofsky, D., 1999. Pers. comm;)
- <sup>k</sup> In competitive fisheries, where all license holders have equal access to the stock, license fees for each species are the same for all license holders in a given vessel category and area. The fees are based on the average annual value of landings per license for the recent four year period (1990-93). This is estimated by taking the annual landed value of the species for the fleet sector, averaged over four years, and dividing by the number of licenses held within the fleet sector. Then based on the average landed value per license an incremental fee schedule is used.
- <sup>l</sup> In individual quota fisheries, the fee per ton is equal to 3% of the average value of landings up to \$ 50,000 Canadian and 5% anything above \$50,000 Canadian, based on the average value of landings for the species caught between 1990-93.
- <sup>m</sup> Export value for 1997 (Polanco, R., 1999. Pers. comm.). It should be noted that most of the production is derived from vertically integrated firms, particularly in pelagic fisheries.
- <sup>n</sup> Chile does not have a formal cost recovery mechanism. Fishermen have the option of paying their license fees to the Fisheries Research fund instead of paying them to the general treasury as a means of keeping revenues within the sector. In 1998, about 32% of Fisheries Research Fund budget came from license fees. The cost recovery figure is based on 1998 license fees estimated at US\$10.8 million and from expected 1999 ITQ auctions estimated at US\$2.8 million. ITQ auction values vary yearly. It should be noted that the annual value of the fishery is based on export value, not ex-vessel value, and therefore deflates management costs relative to the size of the fishery. (Carbajal, V. , 1999. Personal comm.; Polanco, R. , 1999. Pers. comm).
- <sup>o</sup> License fees are based on boat size, specifically GRT (gross registered tonnage).
- <sup>p</sup> The Icelandic government collects about 14 million from the industry; however, about 50% of the revenues go to fund a vessel buy-back program. In 1996, Iceland exported US\$ 1,384 m. (Arnason, R., 1999. Pers. comm.)
- <sup>q</sup> For instance, there is an annual fee on quota holdings that supports monitoring and enforcement. This fee is approximately US\$ 2.5 per cod metric ton of cod equivalent.
- <sup>r</sup> Fisheries values are based on NCR (1999) whereas budget and cost recovery rates for 1998/99 are derived from Shallard, B., 1999. (Pers. comm.) Figures were estimated based on 1 NZ\$=0.5398 US\$.
- <sup>s</sup> ITQ Levies will be charged by fish stock on all quota owners on the basis of their quota holding at the end of each month. The levies will be charged irrespective of the amount of fish actually caught against that quota. These are paid on a per ton basis. An annual levy will be charged on catches of the major species not managed under the quota system. These charges are generally not fish stock based; the same rate applies irrespective of the fisheries management area from which the fish is taken, except in the case of scampi. Non ITQ levies will be charged on the basis of monthly catch information supplied in Licensed Fish Receiver (LFR) returns. Conservation Service levies are to cover costs incurred by the Department of Conservation in researching the effects on protected species of bycatch resulting from commercial fishing, and measures to mitigate the adverse



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effects of commercial fishing on protected species. Money collected from levies generally is applied across the board rather than to specific fisheries. Some specific cases such as a stock assessment research project for a specific fish stock will be levied against those quota holders and the funds applied to research on that particular fishery.

- t Average for the 1991-96 period as annual catches in federal waters vary (Andersen et al., 1998).
- u Estimate based on NOAA's FY 99 request for US\$ 450 million, US Coast Guard expenditure of US\$ 400 million (on fisheries law enforcement alone) and other Federal fisheries program expenditures estimated to be approximately US\$ 50 million (Andersen et al., 1998).



### 7.5.2 Introduction of Rent Collection and Cost-Recovery

Governments must consider use of revenue raising instruments for implementing rent collection and / or cost recovery mechanisms prior to the implementation of a rights based approach where possible. Most administrators of rights based systems and limited entry programs have regretted the failure to have done so initially. Once the system is in place and rent is generated, it becomes increasingly difficult to extract that rent since rents will only accrue to the initial holders as the initial sale value of quota captures the stream of discounted benefits from the fishery.

From an economic perspective, attempting to collect rent from subsequent rights holders (after initial sale of rights) is inappropriate as the original quota holder received all of the rent.

### 7.5.3 Application of funds from Revenue Raising Instruments

Funds obtained from revenues charged on rights holders are generally used to cover the administration, monitoring and control and research costs of running such a system. This revenue generally provides sufficient funds to cover Government costs, including those of research and monitoring and control. The following box gives some comparative approaches to this.

#### ***Aligning Revenues and Management Costs***

*In New Zealand, fisheries management costs are allocated on fishery per fishery basis. For example, the costs of the research programme on hake are charged only to the hake ITQ shareholders. If there is no research program on squid, then squid ITQ shareholders pay only the general research and stock assessment levy covering general costs that cannot be allocated to specific fisheries. Similar arrangements are made for administration and monitoring and enforcement programs. Cost recovery mechanisms tend to increase efficiency and cost effectiveness of the management, as industry scrutinizes the need, extent, quality, and cost of services rendered by the management agency.*

*Similarly in Australia revenues collected from a particular fishery are only used to cover management costs of that fishery. In Canada, on the other hand, revenues collected from the different fisheries go to a general management fund. Government does not attempt to assess the costs for each fishery.*

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Consultation and collaboration is important between Government and Industry to ensure that the appropriate application of funds is effectively provided for. The following box gives examples.

### **Government and Industry Collaboration in Funding Fisheries Management**

*In New Zealand, the Fisheries Act of 1996 allows the Government to recover from the commercial fishing industry, in relation to all commercial species, a substantial part of the Government's costs of managing fisheries. The various categories of services that are to be paid for by the Government or the industry are defined in the Act. The annual cost recovery process is undertaken by the Ministry of Fisheries in consultation with stakeholders. The Fisheries Act establishes the concept of "Approved Parties" for organizations seeking to participate in the cost recovery consultation process. These Approved Parties are groups which the Minister of Fisheries considers to have an interest in management and conservation of New Zealand fisheries.*

*There is a two-stage consultation process for cost recovery as follows:*

- *Consultation involving all Approved Parties on the nature and extent of fisheries services to be provided by the Government for the coming financial year, and the proposed cost of these services.*
- *Further consultation with industry representatives to determine how the costs are to be shared by industry sectors, and the levy rate necessary to recover these costs.*

*Since the introduction of cost recovery, the fishing industry has been concerned, as the major contributor to the revenue of the Ministry of Fisheries, to ensure that it has meaningful input into the type and quantity of the required services and the way in which they are provided. This has been a somewhat controversial process, with the industry not currently satisfied that the process and the resultant charges are appropriately applied.*

*The process is evolving however, with some of the required services being made available for contestable delivery, and there is a possibility that some services will be devolved to the industry in the near future.*

In concluding this section on application of funds, there are a number of different approaches used internationally. The following box provides comparative examples of the rationale applied to recovery of costs in Australia and New Zealand.

### **Comparative Approaches**

*In New Zealand cost recovery efforts are based on the “avoidable cost principle”. This principle states that the existence of the commercial fisheries sector generates a cost that would not otherwise exist if the sector was not present. Thus, the sector should be charged for the extra expenditures it generates including any damages to the environment and/or other externalities it may cause in addition to any management and research costs. In Australia, on the other hand, their cost recovery mechanism is grounded on the “attributable cost principle”. Under this principle the commercial fishing industry pays for the costs directly related to fishing activity while the government pays for those activities that may benefit the broader community, as well as the industry, and satisfy a range of specific obligations.*

*In applying this principle the Australian Fisheries Management Authority (AFMA) first determines what expenditures are attributable to a specific group. Once the “attributable” group has been identified AFMA determines to what extent the costs are recoverable. A cost is considered recoverable if the cost can be effectively collected and enforced.*

*In determining the “recoverability”, their cost recovery policy considers: among other things, the extent the user group benefits from the activity, consistency with government’s cost recovery policy in other sectors, the existence of extenuating socio-economic considerations, the existence of government policies that impact the cost recoverability for a given activity, and the cost effectiveness of recovering the costs for a particular activity. For instance, AFMA considers that surveillance costs are fully recoverable from commercial fishermen whereas enforcement costs are fully recoverable from the Government.<sup>37</sup>*

## **7.6 Implementation of Revenue Raising Instruments**

Government-provided services vary widely in their economic and institutional characteristics. No single charging formula applies to every case. In most cases the analysis will not generate a single answer, but will help identify a range of charging options for recovering the costs of providing the service. Which option is chosen will depend on the weight given to the different efficiency, equity and fiscal objectives of user charges.

If individual BCLME countries wish that their fisheries sectors contribute directly to the overall welfare of the State over and above the actual costs associated with the management of the fishery, then that must be an individual decision for each country.

<sup>37</sup> Surveillance costs cover activities related to the detection of “unauthorized” or illegal fishing activities which are a breach in the legislation. This includes the use of VMS, analysis and auditing of catch declarations and other paper and electronic record. A range of mechanisms are employed by the States, on AFMA’s behalf, to detect illegal fishing activities, including at-sea patrols, in-port inspectors and aerial surveillance. Enforcement covers activities directed at the apprehension and prosecution of those identified through surveillance to be in breach in legislation (AFMA, 1998).

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Any such move away from a 'user charge' or 'cost recovery' system will negatively bias that fishery as the operating costs will be higher than the value to be gained (i.e. services provided, scientific research etc).

This would also negatively impact on the ability of each country to ensure a balanced and sustainable development of the fisheries as the cost of entry will be progressively higher as the charging and levying regimes are weighted away from 'user charges' to 'general revenue raising'.

While it is an individual choice of each nation to seek to extract as much revenue as possible from a sector, each country must recognise that such an approach will work in opposition to achieving balanced and sustainable development. Cost of entry, and therefore cost of development is linked, to be higher in those countries with a goal to raise general revenue.

Such general revenue raising will not directly impact the participants i.e. the fishers, therefore there will be an imbalance in any investment, weighted against those countries that seek to extract general revenue on top of a 'user charges' component.

### 7.7 Summary

This section sets out the principles of fisheries management, to set the context for consideration of the use of revenue raising instruments as a critical and integral component of fisheries management. We have then analysed the principles of revenue raising instruments, and described the alternative approaches of charging for services versus taxation.

The section provides a description of the range of approaches possible under revenue raising instruments, broken down into a group of options based on rent extraction using general or targeted taxation concepts, and then at cost recovery.

The conclusions reached are that rent extraction processes have difficulties but may be effective short term or during a transition. Cost recovery processes however being more specific and targeted may be the best approach long-term and is appropriate for consideration by BCLME either for full recovery of Government management costs, or in part shared with Government or in part shared with other rent extraction processes. We note however that there are some implementation challenges and matters concerning timing of application that will need careful consideration.

The next section provides recommendations, including comment on these implementation questions.

## **8 CONCLUSIONS AND RECOMMENDATIONS**

### **8.1 Introduction**

From our investigations to date and our analysis, the use of revenue raising instruments in the three countries is currently based on a set of user charges that are often not directly related to government fishing agency costs, nor are they set on a transparent basis following consultation with industry. This approach is consistent with the degree of participatory fisheries management in each country.

There is however a clear indication in South Africa that both MCM and the industry favour a move to a “user pays” cost recovery process (in whole or in part) based on a fully transparent process, clear delineation of what costs the charges, fees and levies are based on, full consultation, and secure access rights.

Discussions indicate that this approach is also favoured in Namibia. In Namibia the specificity of charging is already greater than in South Africa, and this approach is supported by both MFMR and the industry.

For Angola we know that charging is currently on a fee basis for “private goods”, such as fishing licences and on a targeted taxation basis under the previous Agreement with the EU. This is consistent with the current nature of the fisheries management regime as we understand it.

Based on the general intent demonstrated, we considered that a set of principles should be developed as set out below.

### **8.2 Principles for the use of Revenue Raising Instruments**

The following high-level principles have been developed as a result of our information gathering to date, our analysis, consideration of policy options and conclusions that particularly for the larger industrial sectors, cost recovery should be considered in the long term for the BCLME countries.

These principles are indicative of a best practice regime and the sustainable fisheries management of an ecosystem such as that based on the Benguela Current.

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**An effective “fisheries sector specific” revenue raising regime will be based on a set of principles, known to and agreed by all parties. Best practice internationally suggests the following principles:**

### **Sustainable Management**

Long-term sustainability of the resource is paramount. Resource management requires a thorough understanding of how ecological systems function and how various users affect the function of the system. The long term sustainability of these systems, including the long term utilisation of the fishing resource is the objective of resource management.

### **Role of Government**

Governments play a pivotal role in sustainable fisheries management. This includes:

Policy setting to encourage long-term sustainability of the resource

Management and administration of licensing and revenue gathering systems

Research on fish stocks

Compliance to ensure industry participants conform to legal requirements

### **Role of Business**

The role of the fishing industry in partnership with Government in a successfully managed fishery is to conduct catching, processing, and marketing all within the sustainability framework set by government

### **Cooperation / Consultation / Participation**

Open dialogue between industry, government, other interested parties is essential for effective and efficient operation of a fishery sector.

### **Framework in Place**

A cost recovery regime cannot influence the wider business environment and the inherent risks / rewards associated with operating within a particular environment.

### **Priority Involvement of Angola, Namibia, and South Africa in the BCLME Fisheries**

Any incentives or disincentives must operate in favour of Angola, Namibia, and South Africa.

### **User Pays Principle**

Direct costs must be recovered on a user pays principle and must not be a selective tax for general revenue raising. If such taxation is required by a government, this should be implemented via the taxation regime.

### **Harmonisation**

The harmonisation of principles and process and the alignment of incentives across the three countries is essential.

### **Beneficial Biases**

Beneficial biases may be required to assist with harmonisation, but are not recommended as an overall approach.

### **8.3 Conclusions**

South Africa and Namibia currently have well developed fisheries management systems based on fishing rights (quotas), at least for major species, and with the concept of limited transferability applicable. Therefore cost recovery based on the premise of participation of both Industry and Government, plus the use of transaction charges, could be seen to benefit both Government and Industry. In Angola however, a transitional period of a transaction charging approach and an interim tax regime (such as has been applied to EU vessels fishing in Angolan waters) will continue to be required.

From our viewpoint there is no reason for all three countries to act in exactly the same manner. South Africa and Namibia have their own separate fisheries management regimes operating, albeit that there are many similarities in approach. This includes the use of fishing rights (quotas), encouragement to domestic rather than foreign fishing vessels and companies and a move towards specificity in the current charging regimes. Angola has followed a different path with the agreement with the EU.

In terms of “best practice” charging regimes that are specific and are moving to meet the principles we have outlined, the Namibian Government is closest with some targeting of charges. South Africa is not yet there as current charges are general in nature, but MCM has a clear intention to move quickly towards a cost recovery approach.

As commented above, Angola has followed a different path but will find significant advantages in looking at the cost recovery approach in the longer term as its own domestic industry develops.

Our recommendation would be to agree that the three countries should apply these concepts in their own way and over their own timetable guided by the BCLME programme, or the BCC, based on an agreed implementation plan. There is sufficient evidence of willingness by the authorities and industries in Namibia and South Africa towards a cost recovery approach to recommend that they consider proceeding down this path over a period of time with a measured transition from the current charging regime to a new one. Importantly this needs to be considered in conjunction with Project LMR/SE/03/03, which has analysed property rights issues in the BCLME countries.



#### 8.4 Recommendations and Implementation

Based on these conclusions our recommendations for introduction of revenue raising instruments are that the three BCLME countries:

1. Agree to implement a revenue raising system based on cost recovery principles in each BCLME country,
2. Determine a timeframe for implementation and where appropriate, any interim measures required, and publication of the timeframe,
3. Prepare policy and pass appropriate legislation in the legislatures of each country to implement, and
4. Implement by application of an appropriate and agreed charging regime on the fishing industry of each country.

To achieve these recommendations we propose that one of the components for the implementation of the Benguela Current LME Strategic Action Programme comprise funding a development project to investigate and develop an implementation plan for appropriate revenue raising systems based on cost recovery (including any necessary interim measures), in each of the three countries and report to Ministers within a defined timeframe,

Although larger than the proposed mandate for the SAP, but to give some guidance to the BCC in relation to the magnitude of full implementation of a cost recover system, we attach an outline of a Terms of Reference (TOR) for a complete delivery project. The proposal is for a single service provider to undertake this project in the three countries.

The outline is of necessity at this stage generic and outlines the entire process, but can be curtailed and refined further in consultation with the BCC if there is a desire to proceed down this path.



## 9 DRAFT OUTLINE TERMS OF REFERENCE FOR DEVELOPMENT, CO-ORDINATION AND IMPLEMENTATION OF REVENUE RAISING INSTRUMENTS BASED ON COST RECOVERY IN SOUTH AFRICA, NAMIBIA AND ANGOLA

### 9.1 Objective

To undertake a development project to investigate, develop and co-ordinate an implementation plan for appropriate revenue raising systems based on cost recovery (including any necessary interim measures), in each of the three countries and report to Ministers within a defined timeframe, and subject to approval by Ministers, for the project to co-ordinate and manage the implementation of the agreed systems in each of the three countries

### 9.2 BCLME Requirements

BCLME is proposing to adopt the “user pays” principle as the mechanism to ensure that appropriate funding is made available to BCLME countries to manage, monitor and control, as well as undertake research into the availability of their fisheries resources.

To ensure that the aims and objectives can be achieved, a framework must be developed that will enable optimal functioning of the fisheries sector on a sustainable basis. This requires the development of the appropriate policies, system design, controls and monitoring processes, and the presentation of a number of options to enable the most appropriate solution to be selected and implemented.

Consultants (service providers) with a depth of understanding and experience will be necessary. They will be required to work closely with Government officials, and the fishing industry to develop a robust cost recovery system that meets immediate needs and long-term requirements. This system will need to include, as necessary, interim measures and co-ordinated provisions between the countries to ensure benefits are realised.

### 9.3 System Requirements

The service provider will be required to draft the policy, develop a system, complete with measures and controls, that will enable the optimum functioning of cost recovery on a sustainable basis. Service providers will be required to recommend a range of options to be developed and a recommendation of how to proceed. The proposed system must address aspects such as;

- What is cost recovery?

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- Why have cost recovery?
- When should cost recovery guidelines be applied?
- Who should pay and how much?
- What are recoverable and non-recoverable costs?
- How are costs shared?
- How are new activities incorporated within a cost recovery system?
- How should cost recovery be imposed?
- What is the impact of other Government Departments on such a system?
- What will be the impact (including economic) of such a system on the fishing industry and other stakeholders/ interested parties,
- What are the legal requirements to implement a cost recovery system?
- What is the initial outlay to Governments before costs are recovered?
- Do the Fisheries Ministries have the logistic and skills basis to implement such a system or any part thereof?
- How will the service provider ensure that the proposed system is viable and sustainable?

The process of arriving at such a system and its measures and controls would require the identification of and consultation with key role-players within Government Ministries as well as the fishing industry.

### 9.4 Project Phases

The project could comprise the following phases, not necessarily following on each other, but in some instances developing in parallel:

Phase 1: Planning of Project

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- Phase 2: Desk-top study investigating and researching cost-recovery systems of other countries with similar fishing industries following which local industry stakeholder consultation would take place
- Phase 3: Assess the current management and controls of the Fisheries Ministries of each country relating to income and expenditure, future commitments and the recovery of costs
- Phase 4: Integration and Synthesis of results from Phases 2 & 3 and the Development of contents of the Cost Recovery Policy and drafting of new Cost Recovery Policy and suitable regulations
- Phase 5: Design of Business System around approved Draft Policy and make recommendations for Implementation Phase
- Phase 6: Implementation Phase between the Ministries and the service provider
- Phase 7: Post Implementation Phase (monitoring, reporting and adjustments)

The proposed detailed actions to be undertaken under each of these phases is outlined in more detail in the following Schedule, (Section 9.8)

### 9.5 Co-ordination

One of the key drivers of development and implementation of appropriate revenue raising systems based on cost recovery (including any necessary interim measures) in the three countries will be co-ordination of such systems both during development and implementation. This will ensure the greatest benefit is gained from implementation. An important element of this co-ordination will be choosing a service provider able to undertake the development as a co-ordinated project across the three countries.

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9.6 Timeframe

The following table sets out a high level timeframe for the project. This is based on experience delivering similar projects but would be subject to refinement if the project proceeds, particularly in terms of applying the project across the three countries

ACTIVITY		PROPOSED TIMEFRAMES-Months - Elapsed Time												
		1	2	3	4	5	6	7	8	9	10	11	12	13
Phase 1	Planning	█												
Phase 2	a) Desk-top study investigating and researching cost-recovery systems of other countries with similar fishing industries.		█											
	b) Local industry stakeholder consultation (information gathering).			█										
Phase 3	a) Assessment of current management and controls of income and expenditure.		█											
	b) Preparation of scheme for future commitments and recovery of costs.			█										
	c) Project Decision Points				◆									
Phase 4	a) Development of Implementation Plan.				█									
	b) Development a Draft Cost Recovery Policy.				█									
	c) Design of presentation package.					█								
	d) Delivery of presentations.						█							
	e) Project Decision Points								◆					



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ACTIVITY		PROPOSED TIMEFRAMES-Months - Elapsed Time												
		1	2	3	4	5	6	7	8	9	10	11	12	13
Phase 5	a) Design & Build of Business System around approved Cost Recovery Policy. b) Make recommendations for Implementation Phase.					■	■	■	■	■	■	■	■	■
Phase 6	Implementation Phase: a) Commissioning; and b) Final Report.							■	■	■	■	■	■	■
Phase 7	Post Implementation Phase (monitoring, reporting and adjustments).													■
Project Management & Reporting	Monthly Steering Committee meeting and reporting.	*	*	*	*	*	*	*	*	*	*	*	*	*

## 9.7 Knowledge and Skills Transfer and Training

The service provider will need to provide a knowledge and skills transfer plan to ensure the transfer of knowledge and skills between the service provider and the Ministries. This plan will be used to create commitment and common understanding between the service provider and the Ministry and between the Ministries in the three countries.

Coupled with this the service provider will need to implement a customised end-user training and performance support strategy to provide the Ministries with a best practice approach to staff training and development during the course of the project.

## 9.8 Activities Schedule

The following provides detail of activities that will be required during the phases of this project:

### 9.8.1 Phase 1: Planning of Project

#### 1. Desk-top Study:

Plan a literature review of relevant publications, legislation and documentation. Plan the structure of the review-findings summary and list key performance areas that the summary should address.

#### 2. Stakeholder Management:

Plan the stakeholder management component of the project in such a way that key and relevant stakeholders are first identified, prioritised and then consulted. Plan the structure of the consultation process and the key areas for which stakeholder comment is sought.

#### 3. Internal Assessment:

Plan an internal assessment on the management of the MLRF in such a way that conventions, patterns and trends as well as areas of concern may be identified.

#### 4. Draft Cost Recovery policy:

Plan the preparation of a cost recovery policy for the Ministries. Plan for the presentation of the draft policy to the Ministries, National Treasuries and the Ministers.

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### 5. Business System Design:

Plan for the design of the business system that will operate, manage and control the cost recovery system and develop an Information Technology system in order to facilitate management and control of the business system.

### 6. Staff Training and System Commissioning:

Plan for the precise training of staff so that effective utilisation of the system may be accomplished and in conjunction with the trained staff, commission the system so that it may be operated independently from the service provider.

### 9.8.2 Phase 2: Desk-Top Study Investigating and Researching Cost-Recovery Systems of Other Countries with Similar Fishing Industries and Local Industry Stakeholder Consultation (Information Gathering)

#### 1. Desk-top Study:

Conduct a desk-top study comprising a literature review of relevant publications and documentation. Record the review findings in a summary that lists key features of cost-recovery processes used elsewhere.

#### 2. Stakeholder Management:

Give effect to the stakeholder management plan, clearly listing relevant details of key stakeholders (including other Government Departments) and industry role-players; their specific interest with regard to the various sectors and fisheries; the structure of consultation with stakeholders and a summary of results in the key areas of cost-recovery.

### 9.8.3 Phase 3: Assessment of Current Management and Controls Relating to Income and Expenditure, Future Commitments and the Recovery Of Costs

#### 1. Assessment of the Ministries:

Conduct an internal assessment on the management and controls of the Ministries in such a way that conventions, patterns and trends as well as

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areas of concern may be identified. Document all findings in a report including recommendations to improve current processes.

### 2. **Assessment of activities within the Ministries**

Conduct an assessment to determine the GAPS between the current operations and the future operations including the impact of new activities (new vessels, new offices, etc)

#### 9.8.4 **Phase 4: Develop a Draft Cost Recovery Policy:**

##### 1. **Draft policy framework development:**

Integrate and synthesise the results from Phases 2 & 3. Draft a phased implementation plan.

##### 2. **Prepare draft cost recovery policy:**

Draft a cost recovery policy incorporating the inclusion of empowering legislation and regulations.

##### 3. **Presentation of Draft Policy:**

Present the draft policy to the executive management of the Ministries, National Treasuries and the Ministers, record comments and make necessary amendments. Present the policy to the fishing industry and stakeholders. Process the draft policy to its final approval.

#### 9.8.5 **Phase 5: Design of Business System Around Approved Cost Recovery Policy and Make Recommendations for Implementation Phase**

##### 1. **Design Business System:**

Informed by the results of Phases 3 and 4, design the business system that will operate, manage and control the cost recovery programme in accordance with the approved policy and develop a computer system in order to facilitate management and control of the business system. This system must demonstrate how costs are to be recovered from the various industry role-players as well as how costs are reconciled against revenue received through the system.



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### 2. **Make recommendations pertaining to Implementation of the Business System:**

Compile a report outlining the scope, time and qualitative aspects of the implementation of the Cost Recovery Business System, including the training programme pertaining to Departmental staff required to operate the system or recommend the best possible solution.

#### 9.8.6 Phase 6: Implementation Phase

##### 1. **Commissioning the System:**

In accordance with the implementation plan, and in conjunction with the trained staff, commission the system and facilitate its working introduction into the Ministries. Monitor and evaluate the success of the implementation and attend to any teething problems that may be encountered.

##### 2. **Adjustments and Final Report:**

Implement and make adjustments that may be necessary arising from the commissioning of the system and prepare a final report documenting the commissioning process and findings as well as any further recommendations for the Ministries' attention.

#### 9.8.7 Phase 7: Post Implementation Phase (Monitoring, Reporting and Adjustments)

##### 1. **Follow-up audit:**

The impact and effectiveness of the Cost Recovery Programme must be monitored and evaluated. The results from this monitoring exercise must be presented to the Ministries as part of a comprehensive report on the Cost Recovery Programme. The report must also include recommendations for future phases of such a programme.

## GLOSSARY

<b>BCLME</b>	Benguela Current Large Marine Ecosystem
<b>Black Economic Empowerment (BEE)</b>	The South African Government defines empowerment as a broad-based process that includes ownership, management, employment equity, skills development, procurement, corporate social responsibility, investment and enterprise formation.
<b>Company Taxation</b>	Corporate taxes as applied by each BCLME country to entities operating in the fisheries sector in each country.
<b>Consortium</b>	The consortium of companies and individuals formed to undertake the five BCLME projects including Enviro-Fish Africa (Pty) Ltd, Feike (Pty) Ltd, the University of Cape Town, the Trade Law Centre of Southern Africa, and Bruce Shallard & Associates.
<b>Cost Recovery</b>	Cost recovery refers to a funding mechanism operated by governments whereby the consumer of services pays for the provision of those services directly. This is the 'user pays' concept in operation.
<b>EEZ</b>	Exclusive Economic Zone
<b>EC</b>	European Community
<b>EU</b>	European Union
<b>Fishing Right</b>	A portion of a TAC that is allocated to an individual or a group of individuals (e.g. a fishing company) for a specified period. Also referred to as <b>quota</b> .
<b>GEF</b>	Global Environment Facility
<b>Goods – Club</b>	A club good has the property that people can be excluded from its benefits at low cost, but its use by one person does not detract from its use by another. Also referred to as "Mixed Good"
<b>Goods – Private</b>	A private good has the property that people can be excluded from its benefits at low cost, and its use by one person conflicts with its use by another.
<b>Goods – Public</b>	A public good has the property that excluding people from its benefits is either difficult or costly, and its use by one person does not detract from its use by another.
<b>Historically Disadvantaged Individual (HDI)</b>	South African persons who were disadvantaged by unfair discrimination on the basis of their race before 1994.

## THE CONSORTIUM

<b>Inception Report</b>	Combined Inception Report for BCLME Projects LMR/MC/03/01, LMR/SE/03/02, LMR/SE/03/03, LMR/SE/03/04, and LMR/SE/03/05, 24 December 2003.
<b>MCM</b>	Marine & Coastal Management, Department of Environmental Affairs & Tourism, South Africa.
<b>MFMR</b>	Ministry of Fisheries & Marine Resources, Namibia
<b>MLRA</b>	Marine Living Resources Act (18 of 1998), South Africa
<b>MLRF</b>	Marine Living Resources Fund, South Africa
<b>Pelagic Fish</b>	Small fish that form large shoals in the surface layer of the sea i.e. the pelagic zone. Species include sardine, anchovy, and horse mackerel.
<b>Project Team</b>	The Project Team for BCLME Project LMR/SE/03/05 was led by Bruce Shallard of Bruce Shallard & Associates with assistance from Andrew Gibbs and Paul Shallard of Deloitte, New Zealand. Other members of the Consortium provided advice and input as required.
<b>Quota</b>	A portion of a TAC that is allocated to an individual or a group of individuals (e.g. a fishing company) for a specified period. Correctly referred to as a <b>fishing right</b> .
<b>Relevant Fisheries</b>	For the purposes of this project the species of relevance are defined as hake, horse mackerel, deep-sea red crab, tuna, sardine and anchovy, and rock lobster.
<b>SADC</b>	Southern African Development Community
<b>TOR</b>	Terms of Reference for: BCLME Project LMR/SE/03/05 – An Analysis of Revenue raising Instruments for the Important Commercial Fisheries in the BCLME Countries
<b>Total Allowable Catch (TAC)</b>	The maximum amount of catch allowed in a particular fishery, usually in one year.
<b>UNDP</b>	United Nations Development Programme
<b>UNOPS</b>	United Nations Office of Programme Services
<b>User Charges</b>	Levies or other revenue raising instruments that are levied to assist in financing scientific research, management and administration, and compliance control for the fisheries sectors in each BCLME country.

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We would like to acknowledge and thank the following individuals and organisations for their thoughts and contributions during the preparation of this Report.

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