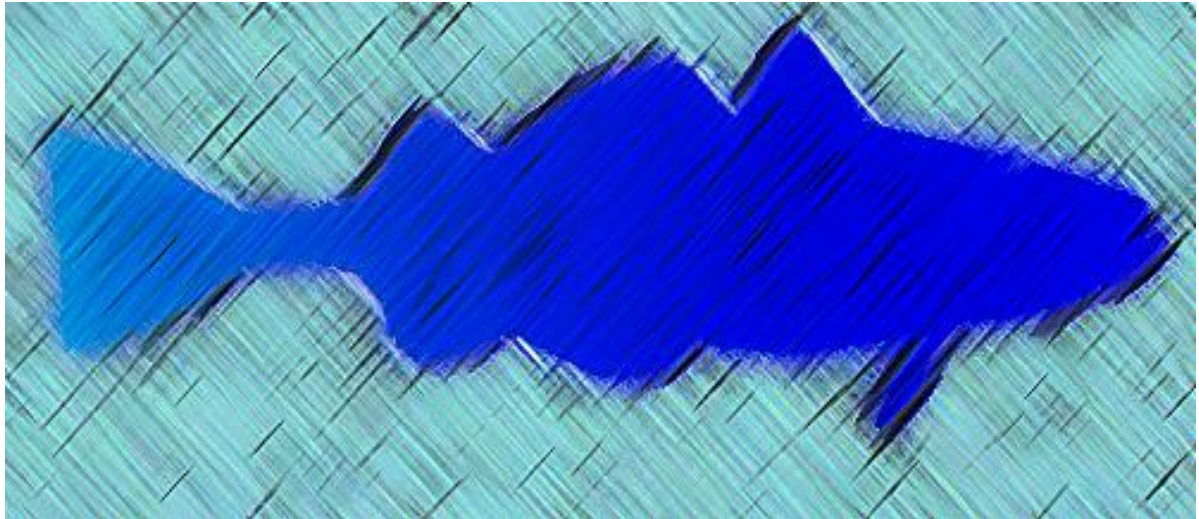


THE DESIRABILITY OF BALANCED TRADE IN FISH AND FISH PRODUCTS AMONG THE THREE BCLME COUNTRIES

BCLME Project LMR/SE/03/02



PRESENTED TO:



BCLME Activity Centre for Living Marine Resources

PRESENTED BY:



ON BEHALF OF:



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EXECUTIVE SUMMARY

This report addresses a common concern in the fishing industry; that the international trade in fish and fish products is in some sense 'unbalanced'. In any market the balance of power may be uneven; moreover this unevenness need not be consistent over time – a product can be sold in a 'buyers market' on one occasion and in a 'sellers market' the next. The question addressed in this paper is slightly different; it asks whether there is any systemic risk faced by the fish exporters of the BCLME countries. The document provides a base of trade information against which such judgements can be made.

There are a number of areas in which such risks could appear. The first of these is in the global commodity chain. The species involved are either traded internationally themselves or have substitutes that are traded internationally. Examples of the former are hake and tuna, an example of the latter is fishmeal produced by the small pelagic fishery, which competes against imported soya meal. The literature on global commodity chains often places the locus of power in the hands of first world retailers, with third world commodity producers forced to compete with one another in a race to minimise costs. The large vertically integrated oligopoly producers in South Africa and Namibia help mitigate this possibility. Although they continue to control the processing facilities, their shares of domestic Total Allowable Catch (TAC)'s are falling as quota is allocated to smaller operators. Where such quota is not immediately sold on as 'paper quota', the small harvester takes on the risk of going to sea, and then sells to the processors. Informal surveys suggested that processors are competing for fish, but this system appears to increase the financial risks faced by fishers, while offering little in the way of additional return. The Angolan government is endeavouring to induce foreign (including South African and Namibian) firms into joint ventures with local Angolan processors to develop similar vertically integrated facilities, but there is little sign that this has yet been successful. The alternative, allowing foreign vessels access to Angolan waters, was the norm until 2004 when the last E.U. - Angola fisheries access agreement expired. At the time of writing it has not yet been renewed.

This introduces a second dimension of balanced trade; the effect of the UN convention on the law of the sea (UNCLOS). This requires that States, whose own fleets are not harvesting at their fisheries' maximum sustainable yields (MSY), should offer quota to foreign vessels. This raises a number of problems. Firstly, the concept of MSY is located firmly in single species modelling and has no place in an ecosystem-based fishery administration. Secondly, the survey data quality in Angola is poorer than that in South Africa and Namibia. Despite joint stock assessment workshops, estimates of MSY are far less robust for Angola. Thirdly, it is not clear what local capacity there is. The commercial industry is effectively unsubsidized in the BCLME, nonetheless there appears to be underutilised capacity in the two southern states (see project LMR/SE/03/03 vessel and rights survey). The existence of under-used vessels suggests that there is no room for foreign direct involvement in the EEZs of South Africa or Namibia. South Africa's industry is operating on an Operational Management Procedure (OMP) system - TACs are being conservatively managed but slowly rising. Namibia's major fisheries are under serious pressure and there can be no suggestion that there is space for foreign operators. The argument for Angola is less clear cut. Foreign agreements are already in place allowing Spanish access to shrimp and Japanese access to deep sea red crab. Given the sanitary and phyto-sanitary standards set by the EU, Namibia's experience suggests that hake for the European market might be best processed on freezer trawlers. Since these (and mid-water trawlers) can be leased internationally, Angola's domestically registered vessel capacity is no indicator that the resource is under-exploited.

The final aspect of the topic is strategic balance. Strategic imbalance in trade is problematic for both Angola and Namibia, though for different reasons. The formal sector of the Angolan Economy currently depends on minerals; primarily oil and to a lesser extent diamonds. This narrow base of internationally traded products makes the achievement of a stable monetary

and fiscal regime difficult. The fishing industry offers an opportunity to broaden and stabilise this economic base with a renewable resource. By contrast Namibia is currently unduly dependent on its fishing industry as a source of employment and of foreign exchange. The immediate pressures facing the economy mean that its planning horizon is short. In consequence fish stocks are showing signs of strain: declining catch per unit effort (CPUE) or smaller average sizes of fish. In South Africa imbalance is not an issue: its economy is the most broadly based in the region, and fishing's contribution to GDP (and to total exports) is relatively small.

Regarding the desirability of 'balanced trade' in fish and fisheries products in the region; in its conventional sense 'balanced trade' describes a situation in which imports balance exports. In the context of the BCLME states such balanced trade has no special merit. This is true no matter whether they are taken as a group or individually. It is expected that a country will consistently run a trade deficit with some of its trading partners and a surplus with others. This is even truer if one is looking a single sector (such a fish and fish products). Of the three countries only one (Namibia) is almost exclusively an exporter. South Africa and Angola both import and export fish as needed. In this situation balanced trade (both in general and in fish and fish products) is not to be expected either among the three countries or between them and their overseas trading partners.

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1. OVERVIEW

The following report is part of BCLME project LMR/SE/03/02 (An Economic and Legal Study to Assess the Policy Prospects for Formulating a Balanced Development of Trade in Fish and Fish Products from the BCLME Area), and addresses the equitable trade in fish resources and fish products in the BCLME region. Equity is a broad concept, and the project is consequently broadly focused. Its primary concern is with equity in the international export of fish and fish products from the Benguela region to major international markets.

Processing takes a number of forms: at one extreme 'low tech' cured and air dried fish is sold largely into Africa, at the other extreme, high value fish is sold into global commodity chains, generally by vertically integrated local firms. Each market makes specific demands on those who supply into it. The simpler markets involve straightforward standards, a relatively homogeneous product with few and basic substitutes, and differentiation largely on the basis of price. The more sophisticated ones have more complex barriers to entry; partly a result of skewed incentives in foreign markets, and partly based on a need for information on product characteristics. In such markets asymmetries in power between buyers and sellers can have profound effects. Sources of inequality include:

- The manner in which the fishery is structured. In some cases local processors process fish for export, either harvesting for themselves or buying wet fish. Some local companies harvest and process fish in partnership with foreign firms, or using foreign owned vessels. Lastly there is a history of foreign fleets that pay a fee for access to BCLME waters.
- Asymmetries of power between the different buyers and sellers along the commodity chain from fisherman to final consumer.
- Uneven market access especially in meeting the demands of sanitary and phyto-sanitary (SPS) standards and eco-labelling.
- Inequalities in beneficiation - the same fish may be processed more efficiently or more profitably by one enterprise than another.
- The effects of state policies and contracts which distort markets and incentives; raise transactions costs or otherwise reduce a fishery's viability or sustainability.

There is considerable overlap between these issues, but each is addressed in a section of the following report. The report provides a background to the level and nature of the trade in fish and fish products, and addresses the desirability of balance in trade.

2. INTRODUCTION

The three countries along the south-west coastline of Africa, South Africa, Namibia and Angola (hereafter referred to collectively as the BCLME countries), share a variety of commercially important fish stocks and marine living resources. Efficient exploitation of these shared stocks clearly requires collaborative stock management; however, since much of the annual harvest is exported, the international trade in these products also needs efficient and collaborative organisation. This report investigates the 'desirability of balanced trade' in fish and fish products harvested in the EEZs of the three BCLME states.

The term 'balanced trade' is open to a number of interpretations all of which can be found, to some extent, in recent economic literature. The most obvious yet least useful is its use to describe a situation in which imports equal exports. This objective makes little sense at a single-sector level - there is no reason why exports and imports of fish and fish products between the three BCLME states should be balanced. Indeed there is no reason why even total exports and imports between the three states should be in balance. World wide, one country's export is another country's import. Consequently at a worldwide level, total exports are by definition identical to total imports. This is neither equality nor an objective, but simply an identity. By the same token, there is no reason why any single country should not have a trade imbalance with another, nor is there any reason that a single country should exactly balance its own imports and exports; an imbalance on the current account of the balance of payments is, by definition, made up by an opposite flow on the capital account.

An alternative approach to 'balanced trade' comes from a usage in the literature on sustainability and globalisation. In this context 'balanced trade' refers to sectoral balance – a pattern of trade that is not excessively dependant on a narrow base of export goods. There, the concern is that the liberalization of world trade under the aegis of the World Trade Organisation (WTO) will lead third world countries to focus excessive effort on production of primary commodities, these being the goods in which their comparative advantage generally lies. In the past such states might have been tempted to diversify their economies away from their initial dependence on mining, agriculture, forestry and fisheries, using tariff and quota barriers to shield local industrial development. Under the WTO rules, however, such protection of infant industries is becoming increasingly difficult. A concern is therefore that, with population growth, such economies are likely to become increasingly dependent on the primary sector, of which fisheries are a part. Exacerbating this is the probability that any current 'most favoured nation' access to first world markets will be short lived. Despite the worldwide shortage of fish stocks, this knowledge could offer an incentive to short term over-harvesting, effectively 'mining' these renewable resource stocks beyond the optimal sustainable level. 'The desirability of balanced trade' is effectively the desirability of a balanced and broad-based economy.

A third interpretation draws on a branch of development literature addressing unequal exchange and dependency in 'core-periphery' models of international trade (Emmanuel, 1972; Amin, 2001; Frank, 1978) and presents 'balanced trade' as the situation pertaining when an export industry is not 'unbalanced' by asymmetric trading power that benefits first world consumers at the expense of local communities and economies in the third world. This aspect may have relevance in the context of fishing partnership agreements which have up till now existed between Angola and the EU, (and before that with the USSR) in terms of which fishing access was granted in return for flat payments. The asymmetries of the agreement that expired in 2004 are well detailed in Lankester (2002).

Emerging from this is a fourth dimension; balance in the context of global commodity chains (Gibbon, 2000). This stresses the distinction between commodity chains driven by producers, and those in which production and processing technology is dictated by consumers, specifically large first world retail chains. The BCLME exports to Europe contain

elements of both approaches. Investment in the fishing sectors of these three countries is uneven. The production chain followed for similar species currently varies according to the territorial waters in which they are caught. The value provided to the local economy is consequently also uneven. The processing and marketing of high value fish varies considerably between South Africa, Namibia and Angola. In all three countries such fish are caught for an international market, but the economic benefits they engender locally are very different. Ensuring balance in the benefits of trade by maximising the value of traded fish products, no matter where in the BCLME they are caught, is therefore a plausible interpretation of 'balanced trade'. This is an aspect that will be more comprehensively addressed in two forthcoming LMR/SE/03/02 reports on 'Legislation in Export Markets' and 'Eco-labelling'

In order to ensure that all the above interpretations are covered, this report will describe the current structure of trade in the BCLME states, first in general, then in fish and fish products. It will further identify protectionist trade measures that might indicate a problem for fishery sustainability as WTO reforms take place. Lastly, it will identify the implications of the UN Convention of the Law of the Sea (UNCLOS) on access rights to 'under-fished' waters in the region, and the potential for this slack to be taken up by regional rather than foreign fishing interests.

3. THE NATURE OF TRADE AND TRADE FLOWS IN THE BCLME STATES

3.1 TOTAL TRADE FLOWS

3.1.1 Exports

South Africa's foreign trade sector is the largest of the three BCLME states, followed by Angola and then Namibia (Table 1).

Table 1: Summary of export trends and statistics for BCLME countries.

Country	Value 2003 ('000 US\$)	Annual growth in value 1999-2003 (%)	Annual growth in value 2002-2003 (%)	Share in world exports (%)	Ranking in world exports
South Africa	31 635 824	4	37	0.4	44
Namibia	1 303 668	-1	2	0	117
Angola ¹	9 324 122	14	19	0.1	66

¹Angolan figures unreported on the COMTRADE database: Angolan exports estimated from international reported imports from Angola.

Source: COMTRADE statistics - TIPS Trade Map (2005).

South Africa's exports rose steadily till the late nineties when they appeared to plateau. Its main trade partners are the European Union (EU), USA and Japan, though regional trade with partners such as Mozambique and Zimbabwe remain important (SADC 2005, Table 2).

The dominance of the EU in South Africa's trade flows has led to free trade agreements, primarily the Trade, Development and Cooperation Agreement (TDCA) implemented in January 2000, to allow duty-free access for 86% of EU imports over the following 12 years in return for the EU liberalising access for 95% of imports from South African over 10 years (SADC, 2005). Trade with the USA also currently receives preferential status under the Generalised System of Preferences (GSP) and the Africa Growth and Opportunity Act (AGOA) (SADC, 2005). South African exports also received duty-free access to regional markets via the Southern African Customs Union (SACU) (SADC, 2005). These countries include Botswana, Lesotho, Namibia and Swaziland (SADC, 2005). South Africa is also a party to the Cotonou Agreement which promotes free trade between least developed countries (LDC, including Namibia and Angola) and the EU (Europa, 2005). Since South Africa is not classed as an LDC, it is thus a participatory, but not benefiting, member in respect of the specific trade liberalisation planned for 2005.

Table 2: South Africa - Top six trading partner states (2000 to 2004) by value of flows.

	2004	2003	2002	2001	2000
Exporters					
World ('000 US\$)	46 493 914	34 543 056	26 212 016	24 188 256	26 606 640
<i>Percentage of total exports</i>					
Top 6	50.1%	52.9%	52.6%	42.7%	49.7%
Germany	14.2%	14.8%	15.6%	10.5%	13.2%
USA	8.6%	9.9%	11.8%	11.0%	12.0%
China	7.5%	6.4%	5.2%	4.4%	3.7%
Japan	6.8%	7.0%	6.9%	5.5%	8.0%
UK	6.8%	8.7%	9.0%	7.4%	8.5%
France	6.1%	6.0%	4.1%	4.0%	4.3%
Importers					
World (000 US\$)	39 256 203	31 635 824	23 064 368	27 927 600	26 075 280
<i>Percentage of total imports</i>					
Top 6	48.3%	46.8%	43.4%	27.7%	36.4%
USA	11.6%	12.2%	10.6%	7.5%	9.2%
UK	10.5%	10.1%	10.9%	6.5%	8.8%
Japan	10.2%	9.9%	6.5%	4.6%	5.2%
Germany	8.0%	7.7%	8.2%	4.7%	7.3%
Netherlands	4.6%	4.8%	5.2%	2.9%	3.9%
Taiwan (China)	3.4%	2.1%	2.1%	1.6%	2.1%

Source: COMTRADE statistics – Trade Map (2005)

In Namibia, foreign trade has remained an integral part of overall economic activity, with exports, on average, accounting for half of Gross Domestic Product (GDP) since 1990 (SADC, 2005; see Table 3). Exports have remained relatively stable over the past decade. Namibia's exports are dominated by unprocessed primary products (though its fish exports are largely processed) which have made the value of these exports vulnerable to international commodity prices and variability of the Rand value (SADC, 2005). Its major trading partners are the EU, USA, Japan and China. Namibia also has strong ties with other SACU countries, including South Africa (SADC, 2005). Exports also have preferential market access to the European Union through the Cotonou Agreement and to the USA via the AGOA and GSP (SADC, 2005). The AGOA trade agreements are expected to be renewed beyond 2008 (Kaira, 2001).

Table 3: Namibia - Top six trading partner states (2000 to 2003) by value of flows.

	2003	2002	2001	2000
Exporters				
World	1 427 939	1 310 141	1 552 947	1 434 892
<i>Percentage of total exports</i>				
Top 6	88.4%	88.3%	92.1%	92.4%
South Africa	80.5%	77.3%	86.0%	86.2%
Germany	2.3%	3.1%	2.0%	2.0%
Spain	1.4%	1.2%	0.8%	0.6%
China	1.3%	0.9%	1.1%	0.5%
UK	1.2%	2.6%	1.2%	2.0%
USA	1.0%	2.0%	0.9%	1.3%
Importers				
World	1 303 668	1 282 913	1 404 472	1 326 732
<i>Percentage of total imports</i>				
Top 6	84.9%	80.5%	88.4%	78.4%
South Africa	31.5%	25.4%	30.9%	25.4%
Angola	24.9%	14.5%	5.8%	7.0%
Spain	12.8%	12.1%	13.1%	10.0%
UK	10.4%	24.6%	35.3%	32.7%
USA	2.7%	3.2%	3.0%	3.0%
Congo	2.6%	0.7%	0.4%	0.3%

Source: COMTRADE statistics – Trade Map (2005)

Angola's exports are dominated by just one sector, oil and oil products, which account for over 90% of exports by value (SADC, 2005; Afrol News, 2005). The direction of trade is also narrow; the USA and China together accounted for 70% of exports in 2003 (MIAS/DFAT, 2005; Table 4). Export flows have begun to increase in the last few years following the internal peace agreement and the country's active promotion of new investment and development. Angolan trade in the region has been limited, though expected to grow (SADC, 2005). There is a clear need to diversify the economy and to broaden the export base into sustainable products. This suggests a potentially important role for the development of the fisheries sector, particularly in value-added processing.

Table 4: Angola - top 6 trading partner states (2000 to 2003) by value of flows.

	2003	2002	2001	2000
Exporters				
World	4 310 080	2 877 560	3 141 358	1 908 918
<i>Percentage of total exports</i>				
Top 6	63.6%	59.5%	43.5%	54.8%
Portugal	17.1%	18.7%	14.3%	17.9%
USA	11.4%	12.9%	8.8%	11.8%
Netherlands	11.1%	4.0%	3.4%	3.8%
South Africa	10.4%	11.2%	9.8%	10.3%
Namibia	7.5%	6.5%	2.6%	4.9%
France	6.1%	6.2%	4.6%	6.0%
Importers				
World	9 324 122	7 827 753	6 779 194	8 181 084
<i>Percentage of total imports</i>				
Top 6	93.2%	80.1%	87.2%	92.4%
USA	48.3%	41.8%	48.3%	45.9%
China	23.7%	13.9%	10.6%	22.5%
Taiwan Province of (China)	8.1%	7.6%	6.8%	3.7%
France	7.4%	8.1%	9.7%	4.6%
Korea Rep. of Korea	2.9%	2.3%	3.2%	8.0%
Belgium	2.8%	6.3%	8.5%	7.7%

Source: COMTRADE statistics – Trade Map (2005)

The importance of fish and fish product export flows to overall exports in each country is summarised in Table 5. Namibia exhibits the highest dependence on its fish exports of all BCLME countries. Fish is its most significant export product, accounting for nearly a quarter of all exports in 2003. While the annual increase in the value of world exports in fish products have increased by 4% between 1999 and 2003, annual increases in value for Namibia and South Africa were double and triple this rate. In Angola, though fish products ranked 8th among exports, their contribution was minimal (less than half a percent).

Although South Africa's economy is the most broad-based and least imbalanced of the three, it faces a problem of regional dependence or imbalance; the coastal communities of the Western Cape coast being heavily dependent on the fishing industry (FAO, 2001b).

Table 5: Summary of fish and fish products: relative importance and performance.

Country	Fish products as % of total exports in 2003	Annual growth in value 1999-2003 (%)	Annual growth in value 2002-2003 (%)	Ranking in country exports	Ranking in world exports
South Africa	1.2	12	25	19	34
Namibia	23.75	8	16	1	40
Angola ¹	0.05	-36	-93	8	133

¹Angolan figures unreported on the COMTRADE database: Angolan exports estimated from international reported imports from Angola.

Source: COMTRADE statistics - Trade Map (2005).

3.1.2 Imports

South African trade flows dominate imports into the BCLME countries (Table 6). Growth in the value of imports has occurred in all countries except for Namibia where a slight decrease has been experienced. In comparison with these trends, the annual growth in the global imports has been 6% between 1999 and 2003. As with export flows, the establishment of peace in Angola appears to have facilitated development and is reflected in the growth in imports during the later part of the reporting period.

Table 6: Summary of import trends and statistics for the BCLME countries.

Country	Value 2003 (000 US\$)	Annual growth in value 1999-2003 (%)	Annual growth in value 2002-2003 (%)	Annual growth of world imports 1999-2003 (%)	Share in world imports (%)	Ranking in world imports
South Africa	34 543 056	9	32	6	0.4	42
Namibia	1 427 939	-2	9	6	<0.1	141
Angola ¹	4 306 028	22	50	6	0.1	93

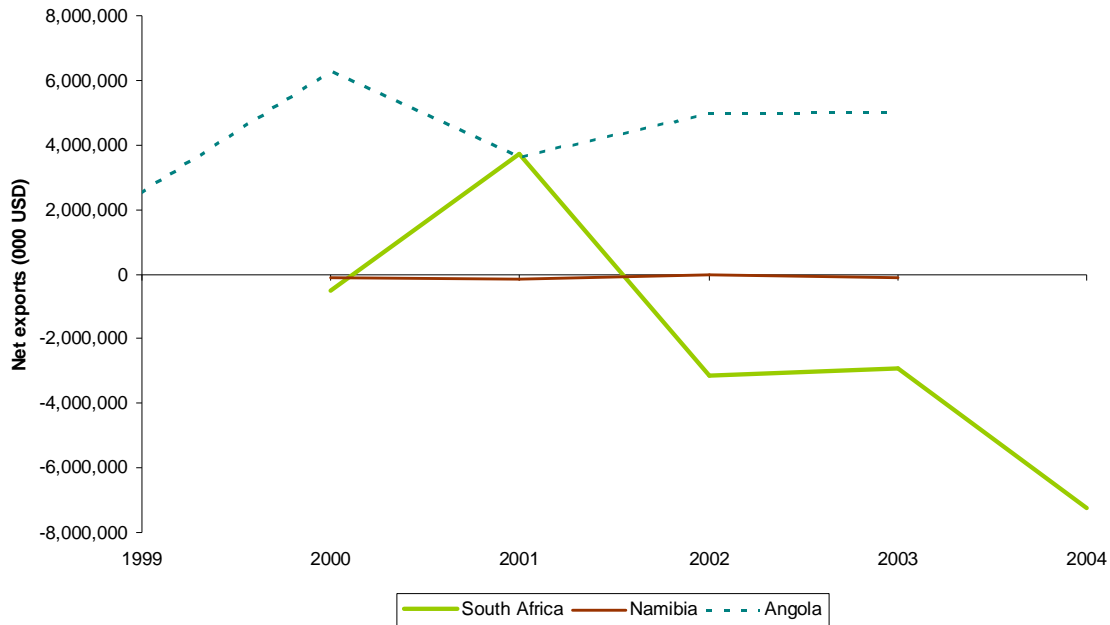
¹Angolan figures unreported on the COMTRADE database: Angolan exports estimated from international reported imports from Angola.

Source: COMTRADE statistics - Trade Map (2005).

South Africa's imports are predominantly from EU countries and the US, though important contributions exist from Asia (Japan, China) and the Middle East (oil from Saudi Arabia and Iran) (SADC, 2005; see Table 2). Namibia's import pattern is similar to South Africa's, being dominated by the US and EU countries (SADC, 2005; see Table 3). Angola's import flows are more balanced than its exports, with four main sources: Portugal, South Africa, USA and the Netherlands (Trade Map, 2005; see Table 4).

3.1.3 Balance of trade flows

Overall balance of trade (in terms of net exports) shows that South Africa and Namibia are currently net importers, with South Africa having only recently achieved this status (Figure 1). Namibia has maintained its status as a net exporter, with some fluctuation, throughout the period shown in Figure 1, but the discrepancy between exports and imports are relatively small and Namibia's trade flows can be considered near balanced. Angola's net flows have been relatively stable; the country has been a net exporter for the period considered.

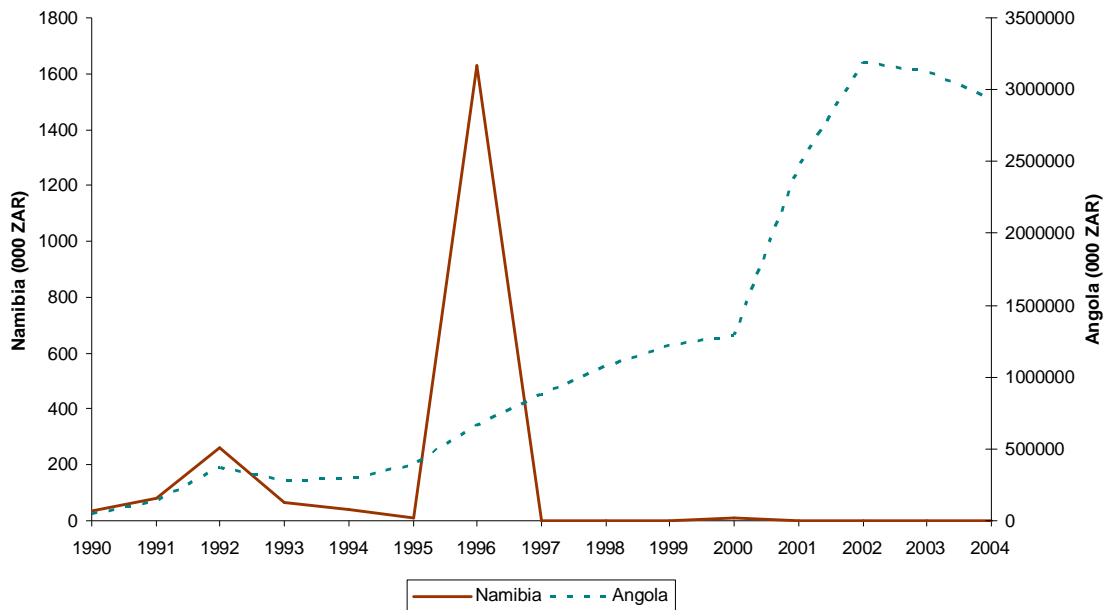


Source: COMTRADE statistics - TIPS Trade Map (2005).

Figure 1: Balance of trade (net total exports) for BCLME countries between 1999 and 2004 (Angolan values inferred).

3.1.4 Trade between BCLME countries

Angola represents the more important export partner for South Africa of the two other BCLME countries, with these exports having increased dramatically over time (Figure 2). The variety of products is extremely diverse, with no single product type accounting for more than 9% of trade flow values (DTI, 2005). In comparison, South Africa's exports to Namibia have been extremely low, barring a significant spike in 1996, and no substantive exports from South Africa to Namibia have been reported by the Department of Trade and Industry (DTI, 2005) since 2002. Trade between Angola and Namibia has fluctuated over time and no clear trends are apparent (Figure 3). The balance of trade varies, with Namibia being characterised as a net importer of goods and services from South Africa, while Angola has maintained its status as a net exporter and appears to be increasing the balance in favour of exports to South Africa over time. The most recent figures for January and February 2005 indicate that exports from Namibia to South Africa have massively increased over their 2004 values in the same period with a rise of over 63000% (DTI, 2005). These trade flow values were primarily diamonds (99%), the remainder consisting of frozen fish (DTI, 2005). Similar statistics for Angolan trade flows indicate little change from last year (DTI, 2005).



Source: TIPS (2005)

Figure 2: Exports to BCLME countries by South Africa. Angolan figures on the right hand axis; Namibian on left.



Source: TIPS (2005)

Figure 3: Imports to South Africa from the BCLME countries. Angolan figures on the right hand axis; Namibian on left.

Unfortunately no equivalent time series data has been available to plot the trends in recent exports and imports between Namibia and Angola over the same period (Table 7). Trade appears unbalanced in favour of exports into Angola from Namibia, but values of both exports and imports have increased over time.

Table 7: Foreign trade flows: Namibia/Angola. All figures in US\$ '000.

	2001	2002	2003
Imports (Angola into Namibia)	1 382	5 551	4 511
Exports (Namibia into Angola)	82 089	186 538	324 761
Balance (net exports)	80 707	180 987	320 250

Source TIPS Trade Map (2005)

Angola's trade relations with other BCLME countries have thus been generally low, but are expected to increase as regional treaties and trade initiatives gain momentum in future (SADC, 2005). South Africa was one of the top 4 countries exporting into Angola, accounting for 12% of import flows in 2003 (MIAS/DFAT, 2005, see Table 4), while imports from Namibia made up only 7.5% of Angola's total in 2003.

3.2 TRADE IN FISH AND FISH PRODUCTS

3.2.1 Exports

South Africa and Namibia ordinarily exhibit high and relatively similar levels of exports in fish and fish products (Figure 4). Angola's exports have been relatively low, reflecting the general trends in all its trade flows, and dependence on oil as the main export product. The importance of foreign fishing vessels and lack of onshore processing which have characterised the fishing sector in Angola also contribute to the low volumes. The temporary increase in exports experienced in 2002 appears to be linked to a peak in exports to South Africa, but may have been a result of the zero TAC for small pelagic fishes declared in Namibia that year (see Figure 7).

Angola's low exports should however be seen in the light of the financial contribution made by the system of agreements that it has shared with EU countries in return for granting them fishing access to its water. These agreements have contributed nearly €130 million since 1989 (Table 8). Agreements have generally been short term with regular renewal every 2-3 years. This situation has however been suspended since August 2004 due to stalled negotiations (ANIP, 2005).

Table 8: Summary of fishery access rights payments, EU to Angola 1989-2004.

Protocol	No of years	Total community financial contribution (million €)	Average payment per year (million €)
3/8/2002 - 2/8/2004	2	31.0	15.5
3/5/2000 - 2/5/2002 (extended to 2/8/2002)	2	14.0	7.0
3/5/1999 - 2/5/2000	1	12.0	12.0
3/5/1996 - 2/5/1999	3	15.3	5.1
3/5/1994 - 2/5/1996	2	9.8	4.9
3/5/1992 - 2/5/1994	2	18.5	9.3
3/5/1990 - 2/5/1992	2	18.0	9.0
3/5/1989 - 2/5/1990	1	10.0	10.0

Source: EU (2005).

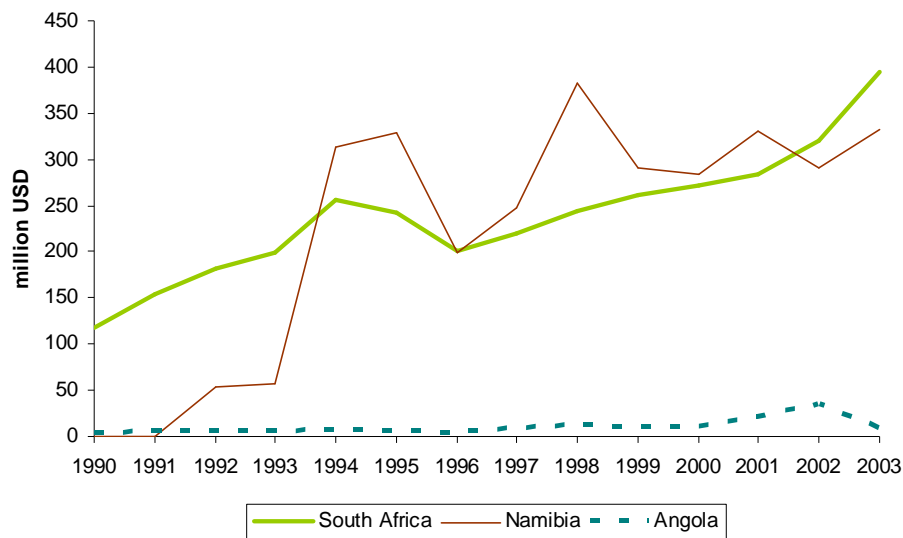


Figure 4: Total exports of fish and fish products based on FAO commodities production and trade data. Includes the following major groups (FAO defined): Crustaceans & molluscs, crustaceans & molluscs (canned), fish (canned), fish (dried, slated or smoked), fish (fresh, chilled or frozen), meals, inedible, oils, sponge and corals, etc.

South Africa and Namibia feature prominently in the top exporters of frozen hake, generating 10% and 17% of the value of world exports of these products (Table 9, Appendix 1). Note that Namibia has experienced a negative annual growth in these exports which has peaked at 34% in 2003. South Africa has experienced an almost exact opposite trend peaking at 39% positive growth rate in the same year. A number of other products are derived from BCLME fisheries but these are not as central to overall export flows.

The value of the exports from the BCLME countries of the main products displayed in Table 9 and Table 10 are dominated by hake.

The main importers of South African frozen hake are Spain and Portugal which accounted for 77% of total flow value in 2003 (Trade Map, 2005). By comparison, Angola's imports of hake from South Africa in 2003 were less than 1% of total value and consisted of low value hake (US\$577/tonne). High value hake (>US\$1000 /tonne) was generally destined for EU and USA markets.

Spain also features as the main importer of Namibian hake (84% of flow value). High value hake export flows have experienced negative growth more recently, while there has been an increase in exports of low value hake to other countries in the region (Ghana, Zimbabwe, Congo and Mauritius). Barnard (2005) suggests that the strengthening of Namibia's currency has probably been a key factor in this and has led to recent reports of an imminent crisis in the Namibian fishing sector. The combination of fewer large fish in the catch and lower Spanish and Italian Euro-denominated prices has also had an impact.

Details on the flows of other hake products are more difficult as these are classified under generic processed fish products such as fillets. These and other forms of processed fish undoubtedly include products which incorporate the meat of other species (Appendix 5). The main importers of fish fillets, whether frozen or chilled, are the EU and USA. These flows are marked by a relatively high value per tonne averaging between US\$2000–3500/tonne.

Table 9: National Exports of BCLME fish and fish products (HS code 03 only)¹.

Country	Value 2003 ('000 US\$)	Quantity 2003 (tonnes)	Annual growth in value 1999-2003 (%)	Annual growth in quantity '99-2003 (%)	Annual growth in value 2002-2003 (%)	World market share (%)	Ranking in world market
Hake							
<i>Hake, frozen</i>							
Namibia	53 721	29 693	-7	-24	-34	17	2
South Africa	33 333	17 520	8	-6	39	10	4
Small pelagic							
<i>Mackerel, frozen</i>							
Namibia	30 460	68 631	205	167	284	3	5
South Africa	1 007	2 520	-11	-26	201	0	29
<i>Mackerel, fresh or chilled</i>							
South Africa	37	69	14			0	28
<i>Sardines etc, frozen</i>							
Angola	242	717			656	0	41
Namibia	1 026	766	-12	-30	7	0	26
South Africa	10 774	17 991	29	22	98	4	7
<i>Sardines etc, fresh or chilled</i>							
South Africa	122	215	-11	-7	72	0	18
Tuna							
<i>Tunas, albacore or long finned, fresh or chilled</i>							
Namibia	367	508	33	44	-46	0	18
South Africa	247	106				0	22
<i>Tunas, albacore or long finned, frozen</i>							
Namibia	139	103	-57	-53	-89	0	31
South Africa	3 968	3 498	0	-3	-30	1	13
<i>Tunas, yellow fin, fresh or chilled</i>							
South Africa	3 659	803			37	1	18
<i>Tunas, yellowfin, frozen</i>							
Namibia	1 399	1 603			-27	0	28
South Africa	299	221	10	-7	30	0	45
<i>Tunas (other), frozen</i>							
Namibia	13 311	5 182	269	116	21369	1	5
South Africa	531	405	39	24	5	0	33
<i>Tunas (other), fresh or chilled</i>							
Namibia	79	35	-55	-48	-76	0	55
South Africa	106	42	161	181	33	0	52

Source: COMTRADE statistics – TIPS Trade Map (2005).

¹ Higher level (More detailed) data on export flows have been placed in appendices 1-7 of this document.

Table 10: National Exports of BCLME crustaceans.

Country	Value 2003 ('000 US\$)	Quantity 2003 (tonnes)	Annual growth in value 1999-2003 (%)	Annual growth in quantity '99-2003 (%)	Annual growth in value 2002-2003 (%)	World market share (%)	Ranking in world market
<i>Crab, prepared or preserved</i>							
Angola	1 883	282	1	-5	-24	0	20
<i>Crabs frozen</i>							
Namibia	2 490	1 287	-1	5	-39	0	26
<i>Rock lobster, not frozen</i>							
South Africa	17 278	810	16	8	22	6	4
<i>Rock lobster, frozen</i>							
Namibia	823	63	-37	-35	-88	0	31
South Africa	25 107	1 019	42	14	45	4	7

Source: COMTRADE statistics –Trade Map (2005).

BCLME countries contribute fairly little to the overall export flows of sardines, anchovies and other small pelagic fish, usually less than one percent of total world export flows of these products (see Appendix 2). The largest of the flows is from South Africa, which contributes 4% of the total global export flows in frozen sardine products. Half of South Africa's frozen sardine exports are to the Far East, with little regional trade; whereas Namibia's exports are entirely regional, with South Africa the destination for over 70% (Appendix 2). In comparison, Angola accounted for 2% of the regional trade value, having undergone significant growth since 1999. These flows are characterised by their low value per tonne, largely under US\$1000/tonne, with the exception of Namibian flows in 2003, which stood out as being relatively high (US\$1339/tonne).

The exports of these small pelagic fish are roughly matched by flows in horse mackerel products (Appendix 4). In this case however, Namibia is the major stakeholder, accounting for 3% of world exports in frozen horse mackerel. All exports of mackerel are, however, characterised by a relatively low value (US\$300-900/tonne). Also, unlike many of the other flows in fish products, the main importing states are other African countries such as Congo, Ghana, Mozambique and Malawi. For example, 94% of Namibia's exports of frozen horse mackerel were destined for the Congo. A similar situation exists for South Africa, whose main export destination for frozen horse mackerel is Mozambique (94% of export flow value).

Tuna exports represent a small part of the fisheries exports from BCLME countries, equal or less than 1% of total export flows (Appendix 4). Unprocessed tuna of various species are destined primarily for EU and Far Eastern countries such as Japan, Thailand and Vietnam. Angola is the top importer of processed tuna from South Africa and Namibia, accounting for 29% and 100% of export values respectively. The other major importers of processed South African tuna are also African nations, the top four after Angola being Mozambique, Zimbabwe, Zambia and Malawi.

Rock lobster exports from BCLME countries are dominated by South Africa, which exports 4% of frozen and 6% of non-frozen rock lobster globally (Appendix 7). Trade in rock lobster products is characterised by high value exports (>US\$10 000/tonne) entirely destined for developed countries in the EU, Far East and USA. South African flows have increased (by between 16% and 42% depending on the particular product) in value between 1999 and 2003. Over the same period Namibia's flows, which were limited to frozen products, declined

by 37%. Namibian catches fluctuated during this period from 304 tonnes in 1999 up to a peak of 365 tonnes in 2000 and 2001 and have since declined to 269 tonnes in 2003 (FIH, 2004). South African catches have shown a steady decline during this period (FIH, 2004).

Japan is the major importer of fish meal from the BCLME countries (Appendix 7). Other Asian countries are important importers of fish meal but Namibia stands out for having South Africa as its second major export destination for fish meal.

3.2.2 Imports

Imports of fish and fish products into South Africa decreased during the late nineties (Figure 5). This may have reflected the then weakening exchange rate value of the Rand. The currency's subsequent strengthening has had profound effects, both internally and in Namibia, whose currency is pegged to the Rand (Barnard, 2004). See Appendix 2 for a detailed breakdown of countries and trade values related to fish and fish products.

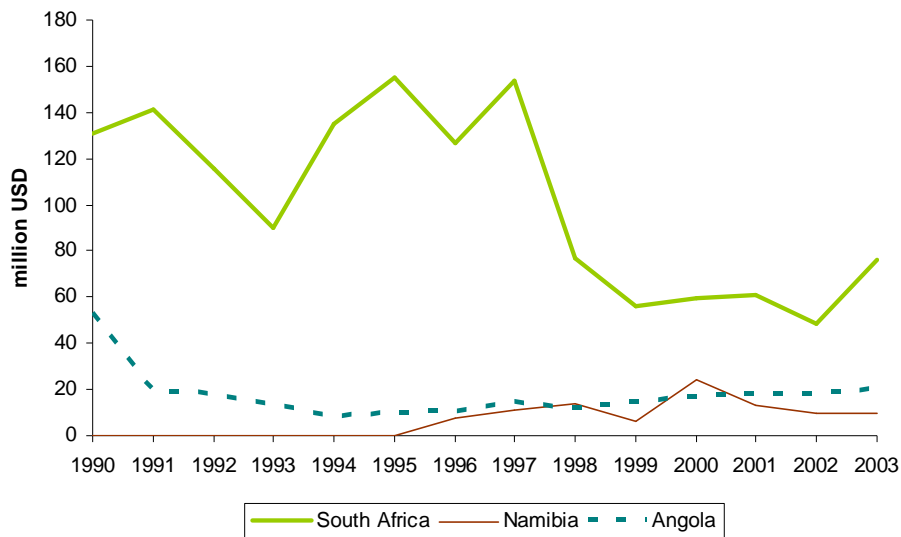


Figure 5: Total value of imports of fish and fish products based on FAO commodities production and trade data. This includes data on the following major groups (FAO defined): Crustaceans & molluscs, crustaceans & molluscs (canned), fish (canned), fish (dried, slated or smoked), fish (fresh, chilled or frozen), meals, inedible, oils, sponge and corals etc (Note: imports to Namibia are recorded as zero prior to 1995 and do not represent missing data according to the database).

3.2.3 Balance of trade

The balance of total trade in fish and fish products is positive for South Africa and Namibia, with both being net exporters and both exhibiting a steady increase over the period considered (Figure 6). Angolan trade flows are relatively small and near balanced. This can be attributed to Angola being the lone BCLME country to have its fishing allocations dominated by foreign fleets and exhibiting a lack of the processing infrastructure needed to capitalise on the significant stocks which exist in its waters.

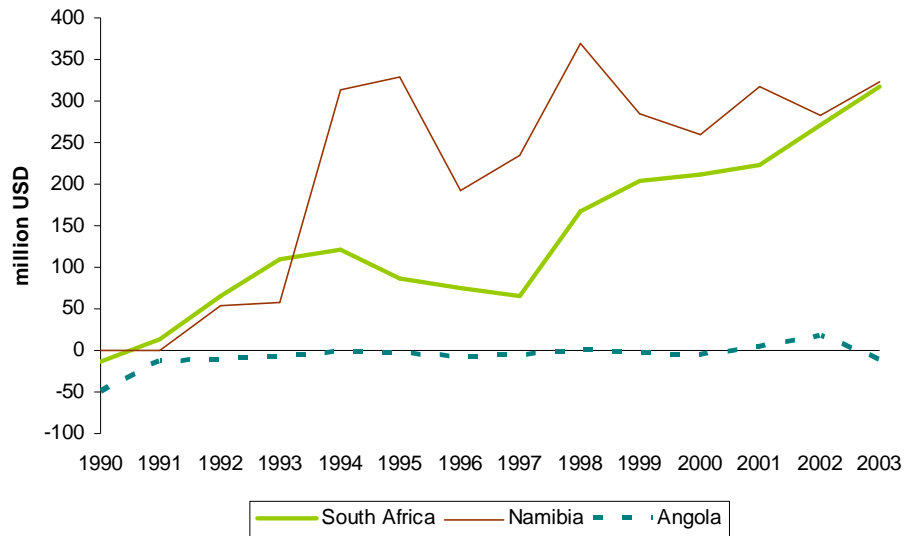
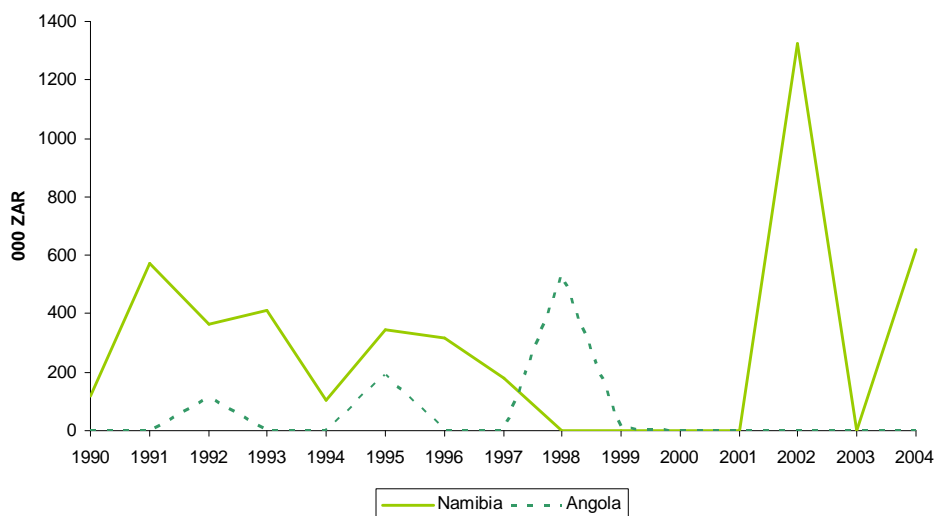


Figure 6: Balance of trade (net exports) in fish and fish products by BCLME countries based on FAO commodities production and trade data. This includes data on the following major groups (FAO defined): Crustaceans & molluscs, crustaceans & molluscs (canned), fish (canned), fish (dried, slated or smoked), fish (fresh, chilled or frozen), meals, inedible, oils, sponge and corals etc.

3.2.4 Trade between BCLME countries

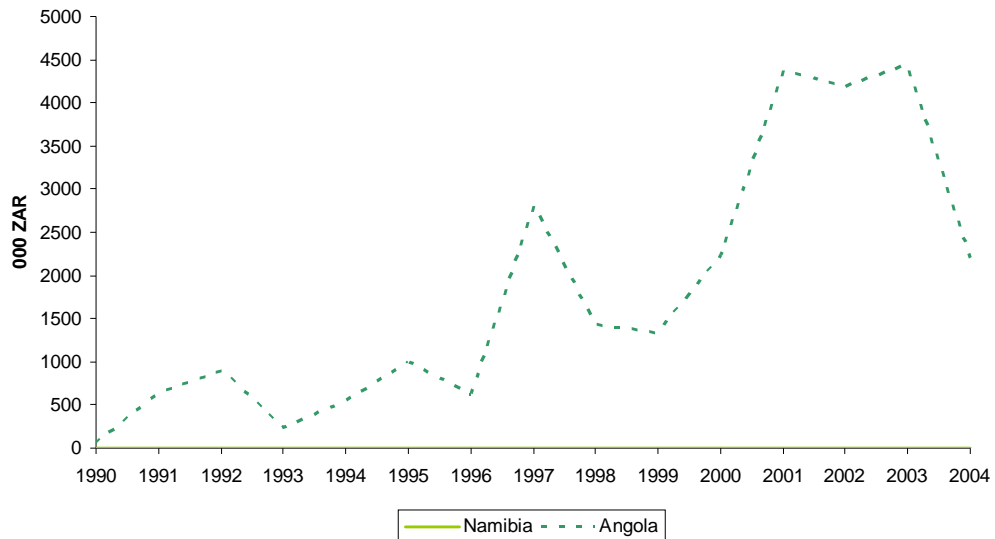
Though flows of imports to South Africa do exist from other BCLME countries, these flows are relatively minor, averaging less than half a percent of total imports of fish products between 1990 and 2004 (Figure 7). Namibia ranked 23rd of all countries in terms of the value of its imports of frozen fish into South Africa in 2004 (DTI, 2005). Statistics for January/February 2005 however show a massive increase (105%) in these fish imports from Namibia to South Africa and Namibia currently ranks 7th in the list of countries importing frozen fish to South Africa (DTI, 2005).



Source: TIPS Trade Map, 2005

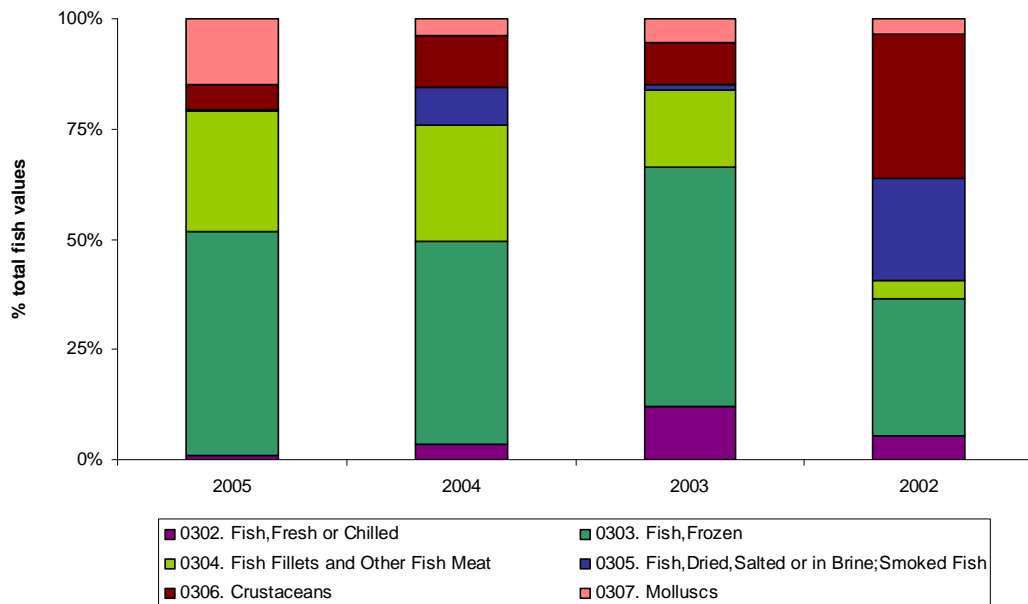
Figure 7: Imports of fish and fish products into South Africa from BCLME countries.

In terms of recorded export flows, the only BCLME country regularly receiving fish and fish products from South Africa is Angola (Figure 8), although data from Product Map (2005) based on COMTRADE statistics, suggests limited exports of sardines into Namibia from South Africa in 2003. These flows are relatively minor; in this case averaging a tenth of a percent of total fish product exports by South Africa (see Table 9). A variety of products are exported, but value of flows is dominated by frozen fish products (Figure 9).



Source: TIPS trade map

Figure 8: Exports of fish and fish products from South Africa to other BCLME countries.



Source: DTI (2005)

Figure 9: Trends in fish and fish products exported to Angola from South Africa. Values are shown as a proportion of the value of all fish products exported to Angola. Values for 2005 are only for January/February.

4. FISHING CAPACITY

This section addresses BCLME domestic fishing capacity. It provides the background against which section 5 (on the potential access to BCLME waters by foreign fleets in terms of UNCLOS) should be read.

Recent information on South Africa's fishing fleet is summarised in Table 11. The majority of vessels were constructed in the 1970's although there are substantial variations in vessel age. In 1997 the Department of Environmental Affairs & Tourism (DEAT) noted that South African fisheries were oversubscribed and recent expert opinions (D. Japp, Fisheries and Oceanographic Support Services; B. Clark, Anchor Consulting; pers. comm.) suggest that over capacity in capital and labour remains an issue given current Total Allowable Catch or Effort (TAC/TAE) allowances. The FAO (2001b) argued that the further expansion of the fishing industry was limited by the resource rather than labour or capital. Given the nature of global commodity chains, processing and marketing capacities are also significant - the export sector of the South African fishing industry is dominated by vertically integrated oligopoly firms. These are reasonably attuned to foreign market demands and SPS requirements. International sales of fish are likely to continue to occur through them, even though their quota access to the resource may decline.

Table 11: Summary of current status of fishing capacity and characteristics in South Africa based on recent (2002-2004) data.

Fishery	Number of vessels	Average year of construction	Std. Dev. of construction year
Hake (deep-sea trawl)	73	1976	10.5
Hake (long-line)	92	1972	16.0
Inshore Trawl (Hake)	32	1976	15.4
Mid-water Trawl (Horse mackerel)	8	1977	14.0
Small Pelagic	89	1975	13.1
Tuna (Hand-line)	158	1969	16.4
Shark (long-line)	25	1968	17.6
WC Rock Lobster	238	1976	16.8

Source: Fisheries Information System, MCM

The Namibian government has promoted restructuring of its fleet to encourage onshore processing of fish catches with the aim of greater economic welfare (Sumaila, 2000). This has been done through the allocation of hake quotas to wet fish trawlers, with this allocation increasing from 20 to 60% between 1992 and 1995 (Sumaila, 2000). Table 12 summarises data on the number of vessels in each fishery as well as the catches by those vessels over time.

Table 12: Total catches and numbers of vessels in different fishery types in the Namibian EEZ.

	1997	1998	1999	2000	2001	2002	2003
<i>Reported catch (tonnes)</i>							
Demersal Trawl	130 139	169 326	182 758	191 368	192 274	176 972	209 043
Mid-water trawl	301 847	312 422	320 394	350 819	315 245	359 183	360 447
Pelagic	27 685	68 562	44 653	29 702	10 763	4 160	22 255
Tuna	1 314	1 442	1 155	1 419	3 198	2 837	3 371
Rock Lobster	199	350	304	365	365	361	269
Crab					2 343	2 471	2 092
<i>No. of vessels</i>							
Small Pelagic	36	35	33	30	26	25	24
Demersal Trawlers	98	85	97	111	128	114	80
Long-liners	15	6	20	24	38	10	18
Mid-water	32	25	26	26	24	20	23
Deepwater	7	5	6	5	3	6	6
Large Pelagic	39	47	54	56	68	71	Not available
Linefish	24	25	27	26	22	26	Not available
Crab	3	3	3	2	2	2	Not available
Rock Lobster	29	29	27	29	29	38	25

Sources: FIH (2004), NFI (2004).

A recent study of the hake fishing fleet in Namibia (Japp & Steenkamp, 2004) found a distinct over capacity in the wetfish vessels used. Freezer vessels spent double the number of days fishing than wetfish vessels and caught, on average, over 13 tonnes per day, in comparison to only 5.1 tonnes per day for wetfish trawlers. This low number of fishing days by wetfish trawlers thus allows far more vessels to be in the fleet than would be expected based on economic efficiency. Based on the average catch per day and number of wetfish vessels, the total catch capacity of these vessels, if they were to be used for the full 240 day fishing period, would be in the order of 114 thousand tonnes per season.

In South Africa the fishing industry has also recognised the social advantages of onshore processing. The employment (especially female employment) per ton of fish landed being greater than that offered by factory freezer trawlers. This has an opportunity cost however, the average profit margin on the fish harvest is lower, and consequently so are tax revenues accruing to the State.

Angolan capacity has been characterised by a large foreign element which has operated under agreements since 1987 in return for a set fee (see Table 8 and Table 20). It is clear that Angola lacks significant capacity in its industrial fishing fleet as this sector has been dominated by foreign vessels. Much will depend on the details of any future access agreements between the Angolan government and the EU.

Table 13: Angola: national and foreign fishing vessels (2003).

Fishery	National		Foreign
	<i>Semi-industrial</i>	<i>Industrial</i>	<i>Industrial</i>
Demersal	16		16
Gillnet	7		7
Long-line (Hake)	18		3
Long-line (Tuna)	1		33
Pelagic	6		6
Purse seine	18	78	8
Shrimp	17	4	22
Transport	3		6
Trap	1		

Source: FAO (2004b)

The infrastructure for further development of the fleet and value-added processing within Angola are currently minimal, a legacy of its history. It has been highlighted as an area for further investment and promotion (SADC, 2005; FIH, 2003). Nonetheless, Angola's national fleet has maintained a legitimate level of catch, though the most recent data available indicates a downward trend in most fisheries apart from long-line, crab trapping and artisanal fisheries (Table 14). Recent controls put in place by the Angolan government in response to perceived decreased catches have focussed on effort regulation. These include:

- Prohibiting all pelagic trawl fishing. This would exclude 19 vessels licensed for this fishery in 2003.
- Reduction in demersal catches through the use of closed seasons, maximum quotas per vessel (500 tonnes), vessel size limits for certain areas, reduced by-catches and the preferential licensing of long-liners
- Reduction in deepwater shrimp fisheries through vessel limits (35 industrial), reduced by-catch (10% of total), closed periods and increase in minimum mesh size (from 45 to 55 mm).

Other fisheries such as purse seine, crab and rock lobster have been maintained at 2003 levels (FAO, 2004b). It should be noted however that though Angola-EU talks over renewing the fishery agreements have stalled, Angola has (through agreements with the elements of the Spanish industry) allowed for Spanish shrimp fishing vessels to continue to operate as joint ventures in its waters, allowing 10 of the original 16 vessels back into its waters (Agritrade, 2005). It remains to be seen whether these ventures will represent a real attempt at "Angolanisation" of the fishing industry (Agritrade, 2005).

Efforts to increase private sector involvement within the national fleet have also seen rapid increase: FIH (2003) reported that only 20% of the national fleet catch was being landed by state-owned vessels, a third of the amount in the preceding year.

Shore based processing facilities capable of meeting EU sanitary and phyto-sanitary standards are currently limited in Angola, suggesting a greater role for using freezer trawlers in harvesting and processing high value fish. It is not clear, however, that these should be foreign vessels operating through international access agreements (in terms of UNCLOS).

This point is addressed in more detail in section 5.

Table 14: Trends in catches (tonnes) for different gear types by the Angolan national fleet.

Gear	1998	1999	2000	2001
Purse seine	55 309	78 170	134 630	129 790
Trawl	29 849	42 844	45 212	43 264
Long-line (Tuna)	835	2 692	1 078	231
Long-line (fishhook)	2 710	6 693	2 542	8 949
Crab trap	692	460	646	836
Shrimp	5 099	940	2 908	2 860
Artisanal	31 131	38 001	45 802	50 420

Source: FAO (2004b)

5. STATE INTERVENTION INTO FISHERIES TRADE

This section will investigate the level to which state intervention affects trade and the potential impacts of efforts by WTO to minimise such intervention. This includes policy and related legal and economic incentives linked to tariffs, quotas and subsidies.

5.1 SOUTH AFRICA

The Marine Living Resources Act (1998), under section 18, states that only “South African persons” may hold fishing rights. This is reiterated under Section 7.2 of the 2005 General Policy on the allocation and management of long-term commercial fishing (DEAT, 2005a). Further provision is made for the promotion of transformation within fishing sectors through the promotion of participation by black stakeholders. This thus effectively excludes foreign vessels from South Africa’s waters. Recent policy changes in the Tuna fishery have brought it into line with the other SA fisheries; it was the last fishery where foreign vessels had access to fish in South African waters.

As with Namibia, a system of licensing fees, tariffs and levies apply to fishing vessels and the tonnage of catches reported (FIH, 2004). In South Africa fishing vessels are required to pay an annual license fee based on the length of the vessel, up to a maximum of R1340 for vessels exceeding 20m. A number of administration fees linked to this licensing process are also payable ranging from R30 to R140 (FIH, 2004). Levies on catches, charged per unit mass are also in place (Table 15). Due to the explicit exclusion of non-South Africans as rights holders, no further incentives in terms of preferential fees and levies are incorporated into the fees structure.

Table 15: South Africa: recent levies on commercially exploited species.

Species	2004 (R/ton)	2003 (R/ton)	2002/1 (R/ton)
Hake (long-line or trawl)	174	165	115
Monk	177	168	100
Horse mackerel (trawl)	14	13	12
Pelagic (industrial)	12	11	8.2
Pelagic (edible)	44	42	31.2
West Coast Rock Lobster	3593	3409	3000
Tuna (pole & line)	113		

Source: FIH (2004)

South Africa’s fishing industry has never been subsidized by the state, though some structures have been established to assist the development of capital (SADC, 2001b). The majority of this assistance has been through the subsidization of financing and joint-venture financing for infrastructure related to fishing, such as harbour facilities, boats and housing. The two main agents for this in the past were the Fisheries Corporation and Small Business Development Corporation (SBDC), which have left many fishers with outstanding loans to this day. More recently Business Partners (former SBDC) and the Industrial Development Corporation of South Africa (IDC) have offered favourable interest rates and loans to fishers with the aim of providing source capital to new stakeholders in the interest of transformation within the fishing industry. Reduced fuel taxes to commercial boat operators are also offered but this can be equated with similar practices globally and are not considered true subsidies.

A review by Trollvik (2002) had found no discernable impact of tariff reductions on South Africa's trade flows. These tariff reductions were agreed on by participating countries at the Uruguay Round of WTO talks and were scheduled to be implemented in 1999. As noted under the discussion of foreign exports, South Africa enjoys duty-free trade flows under the SACU agreement and a SADC protocol is intended to pave the way for free trade with regional member states which include Namibia and Angola. The development of free trade and preferential trade agreements with many of its partners may act to pre-empt the impacts of tariff reduction on exports and imports with its main trading partners in terms of fish and fishery products.

5.2 NAMIBIA

Prior to independence, Namibia's fishing sector was dominated by foreign fleet vessels, which led to an explicit prioritisation of the need to expand involvement by nationals in the fishing industry through the process of "Namibianisation" (Hampton et al., 2000; MFMR 2004). This process is described by MFMR (2004) as: "To be able to take up opportunities provided by development of the fisheries sector, Namibians must be able to acquire skills through training. In addition, to increase the role which Namibian businesses play in the sector, supporting policies and programmes are needed for the allocation of fishing rights and quotas. This goal will be achieved by strengthening the research and training capacities of the fishing industry."

These policy goals have since been established as law under the Marine Fisheries Act (1992), Part IV, section 14 (6) which states: "When considering applications for either a right of exploitation or a quota consideration may be given to:

- (a) Whether or not the applicant is a Namibian citizen;
- (b) Where the applicant is a company, whether or not the beneficial control of the company is vested in Namibian citizens;
- (c) The beneficial ownership of any vessel which will be used by the applicant;
- (d) The ability of the applicant to exercise the right of exploitation in a satisfactory manner."

In a similar vein, the Marine Fisheries Regulations, Section 2 (2) makes provisions for "the advancement of persons in Namibia who have been socially or educationally disadvantaged by discriminatory laws or practices which have been enacted or practised before the independence of Namibia" as well as for "regional development within Namibia".

Quota holders in Namibia are liable for a number a fees including:

- (a) Quota fees per metric tonne based on species (see below)
- (b) By-catch fees
- (c) Fund levies
- (d) License fees

Of these, quota fees have been structured in order to reduce costs on vessels and methods which promote the ideals of "Namibianisation" (Table 16).

Recent concern over a crisis in the Namibian fishing industry and requests for reduced quota fees have resulted in a 5% reduction in quota fees for the current season (UN/IRIN, 2005). A moratorium on quota fees was initially requested by industry stakeholders but the Namibian government has refused, claiming that outstanding debts on quota fees dates from as far

back as 2000. There are currently initiatives in place to have all outstanding quota debtors submit plans on how they are preparing to pay these debts by a cut-off period set for 2006 (UN/IRIN, 2005). It is claimed that these outstanding fees run into “millions” of Namibian dollars (UN/IRIN 2005).

This includes reduced fees for Namibian or Namibian-based vessels as well as for production methods which increase economic welfare through their dependence on shore-based labour-intensive processing such as “wet-fish hake”. These concerted efforts by Namibian policy have helped to increase the Namibian proportion of the fishing fleet from 50.5% in 1991 to a high of 84% in 1998, although recent years have seen a decrease in these numbers (Table 17).

Namibian shares in quota allocations for the three main stocks (hake, horse mackerel and pilchard) ranged from 71 to 82% in 1999, compared to 13 to 37% in 1989. No quotas or licenses are available to non-Namibian vessels and any that do fish the EEZ must do so under charter to a Namibian rights holder (Office of the President, 2000).

As is the case in South Africa, Namibia offers no true subsidies to its fishing industry apart from a rebate offered on fuel purchases (SADC, 2002). Namibia also enjoys preferential trade agreements with South Africa under SACU and the SADC Free Trade protocol, with Angola included under the latter.

Table 16: Fees payable by species and fishery for quota holders in Namibia.

Species of Fish	Fee (N\$/metric tonne)
Hake (Wet)	
Namibian vessels	300
Namibian-based vessels	600
Foreign vessels	1200
Hake (Frozen)	
Namibian vessels	550
Namibian-based vessels	850
Foreign vessels	1450
A rebate equal to N\$220 per metric ton 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	
Horse mackerel (Processed at Sea)	
Namibian vessels	80
Namibian-based vessels	120
Foreign vessels	180
Horse mackerel (Processed on Land)	
Namibian vessels	40
Namibian-based vessels	60
Foreign vessels	100
A rebate equal to the full quota fee per metric ton is applicable in respect of each metric ton of horse mackerel landed in Namibia under the quota, irrespective of the category of vessel used.	
Pilchard	
Namibian vessels	110
Namibian-based vessels	165
Provided that in respect of quota allocated for catching of pilchard for the purpose of processing fish-meal.	24.50
Crab	
Namibian vessels	400
Namibian-based vessels	650
Foreign vessels	1100
A rebate of N\$165.00 per metric ton is applicable if the fish is landed in Namibia, irrespective of the category of vessel by means of which the fish was caught.	
Rock Lobster	
Namibian vessels	5000
Namibian-based vessels	8500
Foreign vessels	14000
A rebate equal to the full quota fee per metric ton is applicable in respect of the first eight (8) metric ton of rock lobster quota for Namibian vessels.	
Tuna (sashimi and pole & line)	
Namibian vessels	350
Namibian-based vessels	550
Foreign vessels	950

Source: MFMR (2004).

Table 17: Trend in “Namibianisation” of Namibia’s fishing fleet.

	1997	1998	1999	2000	2001	2002
Total vessels	283	260	293	309	340	335
% National	80	84	80	80	68	71

Source: NFI 2004

5.3 ANGOLA

Angolan state intervention in the fishing fleet has steadily moved from an open access policy to various foreign fleets via various agreements to an increasingly national-focused policy, as has developed in Namibia and South Africa. Although the Angolan Investments Law of 2003 makes provision for incentives to promote new investments in various industrial sectors, including fisheries, the recent Fisheries Act does place some obstacles to participation by non-Angolans in the fishery. These include preference to Angolans in the allocation of fishing rights (Article 32) and to “commercialise the fish products, by priority in the national market” (Article 37 (g)). Where Angolan stakeholders are unable to utilize the full TAC, the new Fisheries Act allows for the establishment of agreements with foreign states to allow access to Angola’s EEZ by a foreign fleet under Article 50. The same article also promotes utilisation by neighbouring countries, with SADC countries being given preference under the Act in Article 50 (2). Furthermore the advantage offered to SADC countries as fishing partners is also supported under UNCLOS which gives preference to “developing States in the region or sub-region” (Article 62(3)). The UNCLOS Article also makes provision to “minimize economic dislocation in States whose nationals have habitually fished in the zone or which have made substantial efforts in research and identification of stocks”. This would thus appear to offer some hope for EU countries which have fished Angola’s EEZ in the past. The latter clause, relating to investment in research, however also opens an opportunity to Namibia which has agreements in place for research into shared stocks, such as red crab and pilchards, as well as the current research being undertaken as part of the BCLME project, which includes all three countries (FAO, 2004a). The SADC treaty seeks to promote increased regional trade, which would include the BCLME countries. This is best summarised under Article 22, section 1 which states: “Member states shall conclude such protocols as may be necessary in each area of co-operation, which shall spell out the objectives and scope of, and institutional mechanisms for, co-operation and integration.”

The Angolan situation relating to subsidies is unclear. The FAO management profile for the fishery states “Being active in a viable economic sector the fishing fleet should be subject to general legislation, with no special provisions for investment funding. Economic incentives should only be used to promote fishing of underexploited stocks, for introduction and testing of new technologies and for general improvements in fishery-related operations” (FAO, 2004b). The recent Investment law of 2003 allows for generous tax breaks to potential investors in Angola, including those in the fishing industry. Angola has also shown significant improvements in the privatisation of its national fleet since 1993 (FIH, 2003).

6. UTILIZATION OF TAC AND THE POTENTIAL FOR INTERVENTION BY FOREIGN FISHING FLEETS

A variety of international conventions promote the sustainable use of living marine resources with the aim of achieving maximum sustainable yields (MSY). UNCLOS, under Article 61, makes provision for Total Allowable Catch (TAC) estimates to be determined by each coastal state which are “designed to maintain or restore populations of harvested species at levels which can produce the maximum sustainable yield”² (Article 61(3), UNCLOS, 1982). At the same time, should a coastal state be unable to harvest the full TAC it has set for the resources within its EEZ, provision is made under UNCLOS Article 62 to allow foreign states access to its waters:

“The coastal State shall determine its capacity to harvest the living resources of the exclusive economic zone. Where the coastal State does not have the capacity to harvest the entire allowable catch, it shall, through agreements or other arrangements.....give other States access to the surplus of the allowable catch....” (Article 62 (2), UNCLOS, 1982).

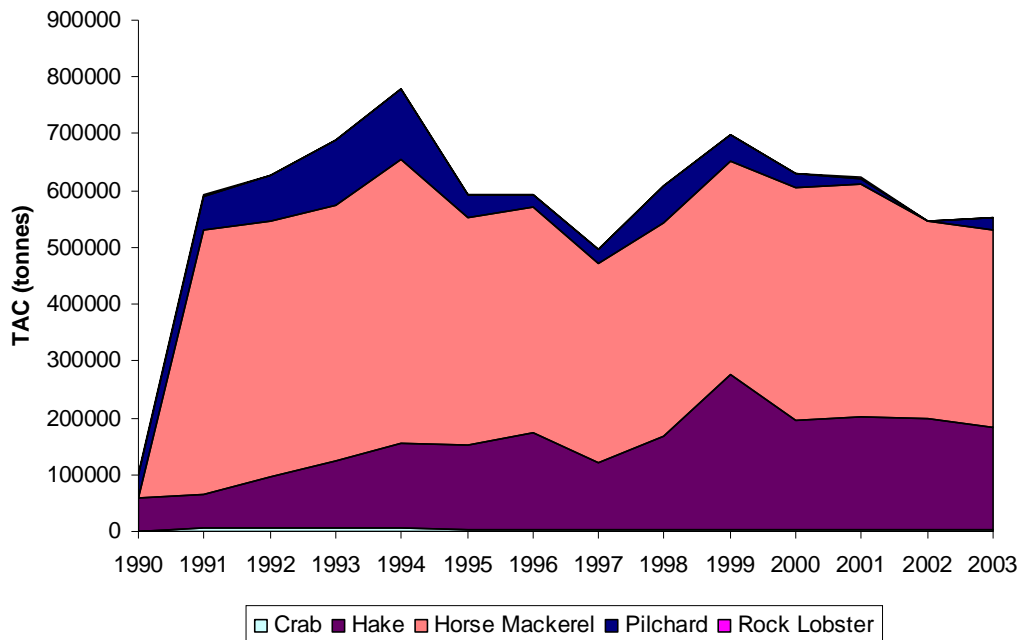
This section will seek to document the level of utilisation of TAC by each BCLME country with the aim of identifying unused TAC, thus opening the door for intervention by foreign fishing fleets under UNCLOS. If such a situation exists, discussion will be initiated as to the most appropriate foreign states to be considered as preferred partners in taking up this excess, bearing in mind the need for a balanced trade between the sub-region and potential developed partner states. This would also be advised by existing capacity and growth in the foreign fleet and any national policy which would constrain or favour any specific foreign country as discussed in previous sections.

Booth and Hecht (2000) in a review of the utilisation of South African living marine resources considered the majority of South Africa’s fish stocks to be fully and, in some cases, over-utilised. South Africa excluded the majority of foreign fishing vessels in its demersal fishery in 1983, and by 1993 the only “foreign” vessels were linked to a bilateral agreement and joint-venture involving Mozambique nationals with a quota of 1000 tonnes of hake (DEAT 1997). In December 2004, the South African government announced the complete “South Africanisation” of its fishing quotas with the allocation of “Large Pelagic” (tuna and swordfish) rights (DEAT, 2005b). South Africa has however previously granted limited access to their small pelagic stocks of pilchard and anchovy to Namibian vessels in what was considered an exceptional circumstance (DEAT, 2002). Access was limited to South African quota holders who were granted permission to sell up to a maximum of 25% of their quota to Namibian stakeholders. This access was only possible due to unprecedented high stocks of these species, resulting in a high TAC which South African fleets could not fully harvest. This was combined with an extremely low stock resulting in a zero TAC being announced for this species in Namibia. This particular example sets a potential precedent for allowing neighbouring SADC countries into South Africa’s EEZ where excess TAC is available.

Namibian TAC’s for various species have fluctuated over time (Figure 10) but data on catches for each species between 1990 and 2003 indicates that the fishing fleet has been harvesting near and even in excess of the TAC during this period (Table 18). Analysis of total TAC versus total recorded catches for the fishery (reported by SADC, 2000) indicates an average of 94% of TAC being caught between 1995 and 1999. Namibia can thus be considered to be harvesting to the limits of its TAC, offering little room for foreign fleets to

² Maximum Sustainable Yield is a controversial target. Only by chance does it coincide with maximum economic yield, though some modellers claim that the two are often close. More to the point, it is a concept that emerges from single species modelling and falls away completely when multi-species or ecosystem level modelling is used.

intervene in the fishery. This is supported by the proportion of the fishing fleet considered Namibian averaging 77% between 1997 and 2003 (NFI 2004). As noted above a zero TAC was set for pilchards in 2002 by the Namibian government but this capacity was utilized in South Africa to harvest excess TAC available there (DEAT 2002).



Source: FIH (1997, 2004) and NFI (2004)

Figure 10: Trends in Namibian TAC from 1990.

Table 18: Mean proportion of TAC being caught annually between 1990 and 2003.

Fishery	Mean % of TAC
Crab	74%
Hake	87%
Horse Mackerel	88%
Monk	109%
Pilchard	106%
Rock Lobster	88%

Sources: FIH (2001, 2004)

Recent years have seen a number of retrenchments and reduced earnings (up to 40-60% of share prices for the same period in 2004) in what has come to be termed a crisis for Namibia’s fisheries sector (UN/IRIN, 2005). Blame for the crisis has largely been attributed to the strengthening of the Rand, and thus also the Namibian dollar, as well as fluctuations in the prices for fuel and low Euro fish prices. Poor financial management in the handling of quotas and use of aging and inefficient vessels have also been blamed (UN/IRIN, 2005). This current crisis has led to demands from the industry for government to implement reduced quota fees, rebates on fuel prices and port usage fees (UN/IRIN, 2005). UN/IRIN (2005) reports that 3 fishing companies have closed and that 2 more are under provisional liquidation. South African fishing companies have also reported decreased earnings as a result of decreased value of earnings off of export flows, but have been able to rely on a large domestic market to support income (CBN, 2005).

From a trade perspective it is important to note that national fishing policies can have regional implications. In an attempt to preserve jobs onshore Namibia has reserved 60% of hake quota for wet-fish vessels. Since the quality of wet-fish deteriorates if the vessel is long at sea, such vessels make frequent and short excursions, and tend to focus on fishing grounds close to their home ports. The consequence has been localised over-fishing, manifested in a declining size distribution of the wet-fish hake catch³, and suggesting a problematic future for these grounds. From the perspective of the regional industry, the policy had important consequences: 'baby' hake fetch low prices per kilogram. They are not currently worth exporting to Europe, and are instead being sold at low prices in the region. South African producers are consequently receiving lower prices for their own smaller fish and reporting reduced profitability in consequence. The point is worth stressing: even though South Africa is not normally a major importer of Namibian fish, their markets are interlinked to the extent that fisheries policies in one country can affect prices in the other.

Data on Angolan TAC and total catches is less clear, but indicates that the TAC being harvested has fluctuated over time, decreasing by 10 000 tonnes in 2004 (Table 19). Figures for total TAC in SADC (2000) show that recent TAC's represent significant decreases from limits set in 1995 when TAC reached a maximum of 356 000 tonnes and had decreased to 237 000 tonnes by 1999. This trend of decreased TAC continued into 2002, following which TAC underwent a spike surpassing 1999 levels. Recent information from FAO (2004b) indicates that a moratorium on small pelagic fisheries has been declared and that effort will be reduced in demersal and deepwater shrimp fisheries. In recent years the bulk of this TAC has been harvested under various agreements with EU countries. These EU/Angola fishing partnerships have been in force since 1987 (Lankester 2002, see Table 20). It should be noted however that Lankester (2002) suggests that no TAC's were stipulated in these agreements, contradicting FAO (2004b) and SADC (2000) where figures for TAC's are presented. Foreign vessels in the commercial fishing fleet have increased, 59% of the fleet being foreign in 2003, compared to 55% in 1998 (FAO, 2004b; SADC, 2000).

Table 19: Summary of TAC (tons) in different Angolan fisheries.

Resource or species group	2000	2001	2002	2003	2004
Deepwater rose shrimp	1 600	1 500	1 200	1 200	1 200
Striped red shrimp	800	500	500	500	500
Deep-sea crab	2 000	1 800	1 500	1 500	1 200
Sardinellas	85 000	85 000	100 000	110 000	120 000
Horse mackerel	80 000	80 000	60 000	50 000	40 000
Chub mackerel	---	---	---	21 000	21 000
Dentex group (sea breams)	10 000	10 000	12 000	12 800	7 400
Grunts	3 000	3 000	3 000	3 000	2 000
Croakers and groupers	4 200	4 200	4 200	4 200	3 000
Angolan hake	6 000	3 000	3 000	3 000	1 200
Cape hake	6 000	4 000	3 000	3 000	3 000
Big-eye grunt	7 000	7 000	7 000	8 000	6 000
Sharks (excluding dog sharks)	---	---	---	6 000	8 000
Others	15 000	14 000	14 000	25 000	25 000
Total	220 600	214 000	209 400	249 200	239 500

Source: FAO (2004b)

³ As predicted by standard age cohort based models such as Beverton and Holt.

Table 20: Numbers of foreign (EU) vessels by fishery under Angola/EU agreements. (Demersal fishery figures are given in gross registered tonnes (GRT)).

Protocol period (year/year)	Shrimp vessels	Demersal (GRT/month)	Purse seine	Long-line (surface)	Long-line (bottom)	Expt'l Pelagic licenses	Ocean-going freezer tuna vessels	Wet tuna vessels
02/04	22	4200	15	18		2		
00/02	22	3750	18	25		2		
99/00	22	2000	18	25	1750	2		
98/99	22	2000	9	12		2		
94/96	22	1900	4	5	900			
92/94	22	1800	27 ²	5				
90/92	24	600 ¹					28	5
89/90	22 (39) ³	1200 ¹		2			28	

¹Experimental fisheries

²Freezer purse seine vessels

³The number of shrimp vessels was decreased from 39 vessels (May 1989) to 29 (June to December 1989) and then to 22 (January to May 1990).

Source: Europa (2005)

Based on these patterns of TAC utilization by national fleets and patterns of fishing by foreign vessels, Angola remains bound by UNCLOS to allow foreign vessels to catch the excess stocks available under the TAC's it has set. Other than Red Crab (Japan), access to Angola's EEZ by foreign fleets has been primarily accorded to EU states through a series of agreements initiated in 1987 and subsequently renewed every two years (Lankester, 2002). The last of these agreements expired in August 2004 and had not been renewed by June 2005 due to stalled negotiations over conflicts between the old access agreements and the new Angolan Fishery Act which recently came into force (ANIP, 2005).

On the whole, the existing policy (the new Angolan Fisheries Act, UNCLOS and the SADC fishery protocol) supports the case for SADC countries as favoured fishing partners in the case of excess TAC availability. Countries such as Russia and Portugal which have offered research services and have a history of fishing these waters also have preferred rights. Both South Africa and Namibia have the fleet capacity to capitalise on this opportunity, but have not rushed to do so. Russian mid-water trawl vessels are already being leased by operators in Namibia and (until 2004) South Africa.

As shown earlier, South Africa and Namibia are currently fishing near their TAC, and this is being set with maximum sustainable yield in mind. The countries should not be under any pressure through UNCLOS to open up their waters to foreign vessels. They have in fact taken measures to prevent foreign access and prioritise fisheries access for their own nationals, though South Africa does offer access, under very specific circumstances, to neighbouring SADC partners Mozambique and Namibia.

Angola is the one state that may underutilise the resource. The apparent incapacity of its national fishing fleet seems to suggest room for a substantial foreign element to harvest in its waters. An important point, however, is that the modelling of Angola's fish resources is incomplete and has been confined to simple single species estimates.

Given the incompleteness of data and the paucity recent of stock assessment models, it is not clear that foreign fleets have a genuine claim to access to Angolan waters under UNCLOS.

7. CONCLUSION

South Africa's economy is broad based by regional standards. Its historic heavy dependence on mining and agriculture began to diminish when it began its drive to industrialisation in the 1920s. The fishing industry's significance is greatest as a regional employer. Despite the regional dominance of the South African economy, and political concerns about its potential to dominate the local economies of its neighbours, there is no sign that the South African fishing industry is intent on expanding its involvement in either Namibia or Angola. If anything the opposite is true as South African fishing capital continues to shift out of Namibia.

Angola faces the classic problems of an oil state. Its challenge will be to design fiscal policies that address these and to diversify the economy. The tools available for this are well discussed by Auty and Mikesell (1998) or at a more popular level by Barnett and Ossowski (2003) or Eiffoort, *et al.* (2003). Regarding the fishing industry itself, the challenge in Angola will be to make it ecologically and economically sustainable. This will require regulations that allow cost minimisation together with the satisfaction of international SPS standards. The Namibian experience with wet-fish trawling suggests that the Angolan authorities should not use quota restrictions to preclude factory vessels, despite the social advantages of onshore processing. There is a strong case for up to date research being conducted ahead of allowing any foreign fleet access to these waters. Historic research by Eastern European survey vessels needs to be augmented by good quality current surveys and reliable catch data. Allowing access to the EU fleet runs the risk of generating imperfect catch and effort data and potentially over-fishing an already depleted stock. Maximum Sustainable Yield based TACs are always going to be difficult to set when stock assessments are incomplete. That such rules are based on single species modelling is a further problem.

Namibia faces a number of problems regarding balance in trade. The first is the exchange rate regime. Namibia's currency link with the SA Rand makes sense as South Africa is its largest trading partner and commercial ties established prior to independence remain intact. Moreover it is tied to the south by rail and road links. Nonetheless the exchange rate link means that local exporters face instabilities uncorrelated with their own government's monetary and fiscal policies. This can be a strength; a source of discipline and prudence but it can also generate profound problems for an export sector as it has done for the Namibian fishing industry in the period of Rand firmness during 2004/2005. The second is the need for new investment in the industry. Maximising the return on a fish harvest requires the capacity to process the products demanded by the market. This may mean a capital intensive approach to production. Increasingly stringent sanitary and phyto-sanitary packaging and product quality often mean that traditional labour intensive processing methods are non-feasible and that capital equipment has to be replaced sooner than expected. Uncertainty about quota, effective taxes and exchange rates hinders such investment.

In conclusion then; 'balanced trade' in the conventional sense describes a situation in which imports balance exports. In the context of the BCLME states such balanced trade has no special merit. This is true no matter whether they are taken as a group or individually. It is expected that a country will consistently run a trade deficit with some of its trading partners and a surplus with others. This is even truer if one is looking a single sector (such a fish and fish products). Of the three countries only one (Namibia) is almost exclusively an exporter. South Africa and Angola both import and export fish as needed. In this situation balanced trade (both in general and in fish and fish products) is not to be expected either among the three countries or between them and their overseas trading partners.

8. REFERENCES

Afrol News. 2005a. 99.4% of Angola's exports are oil diamonds. 02/05/2005. Afrol News. Web: <http://www.afrol.com/articles/16248>. Accessed: 29/05/2005.

Agritrade. 2005. Fisheries news update. Web: <http://www.agricta.org/agritrade/fisheries/newsf0502.htm>. Accessed: 06/06/2005.

ANIP. 2005. Discordant Points Hinder Angola and EU Fishing Accord. 26 April 2005. ANIP – Angola National Private Investment Agency News. Web: http://www.iie-angola-us.org/full_headlines.php?id=322. Accessed: 28/05/2005.

Amin S. 2001. Imperialism and globalisation. *Monthly Review* 53 (2), June 2001

Auty RM & Mikesell RF. 1998. *Sustainable Development in Mineral Economies*. Clarendon Press. Oxford.

Barnard M. 2005. Namibia's fishing industry 'beyond saving'. *The Namibian* 17/03/2005.

Barnett S & Ossowski R. 2003. What Goes Up.... *Finance and Development*, March 40 (1). Web: <http://www.imf.org/external/pubs/ft/fandd/2003/03/barn.htm>.

Booth AJ. Hecht T. 2000. Utilisation of South Africa's Living Marine Resources. In: Durham BD Pauw JC (eds). *Marine biodiversity status report for South Africa at the end of the 20th Century*. Web: <http://www.nrf.ac.za/publications/marinerep/utilise.htm>. Accessed: 30/05/2005.

CBN. 2005. Rowing against the Rand. June 2005. Web: http://www.cbn.co.za/issues/months/June2004/6_2004_1322.htm. Accessed: 06/06/2005.

DEAT. 1997. White paper on a Marine fisheries policy for South Africa. 5 May 1997. Department of Environmental Affairs and Tourism, Pretoria.

DEAT. 2002. SA comes to the aid of fishermen. DEAT Press Release 6 Sep 2002. Web: <http://www.info.gov.za/speeches/2002/02090915461003.htm>. Accessed: 24/05/2005.

DEAT. 2005a. General policy on the allocation and management of long term commercial fishing rights: 2005. Branch Marine and Coastal Management, Department of Environmental Affairs and Tourism, Roggebaai.

DEAT. 2005b. Media Release 7/12/2004. Department of Environmental Affairs and Tourism. Web: <http://www.info.gov.za/speeches/2004/04120809451001.htm>. Accessed: 01/06/2005.

DTI. 2005. South African Trade Statistics. Department of Trade and Industry. Web: <http://www.dti.gov.za/econdb/raportt/rapmenu1.html>. Accessed: 02/06/2005.

Eiffert B. Gelb A. and Borje Tallroth N. *Managing Oil Wealth*. *Finance and Development* March. Vol 40 no 1. <http://www.imf.org/external/pubs/ft/fandd/2003/03/eife.htm>

Emmanuel A. 1972. *Unequal exchange: a study of the imperialism of trade*. Monthly Review Press, New York.

EU. 2005. Angola: Fact Sheet. Fisheries and Maritime Affairs. The European Commission. Web: http://europa.eu.int/comm/fisheries/doc_et_publ/factsheets/facts/en/pcp4_2s01.htm. Accessed: 25/05/2005.

Europa. 2005. The Cotonou Agreement. Web:

http://europa.eu.int/comm/development/body/cotonou/overview_en.htm. Accessed: 04/06/2005.

FAO. 2001a. Information on Fisheries management in the Republic of South Africa. January 2001. Web: <http://www.fao.org/fi/fcp/en/zaf/body.htm>. Accessed 30/05/2005.

FAO. 2001b. Fishery Country Profile: The Republic of South Africa. Food and Agriculture Organisation of the United Nations. Web: <http://www.fao.org/fi/fcp/en/ZAF/profile.htm>. Accessed 30/05/2005.

FAO. 2002. Information on Fisheries management in the Republic of Namibia. November 2002. Web: <http://www.fao.org/fi/fcp/en/nam/body.htm>. Accessed 30/05/2005.

FAO. 2004a. Fishery Country Profile: The Republic of Angola. Food and Agriculture Organisation of the United Nations. December 2004. Web: <http://www.fao.org/fi/fcp/en/ago/profile.htm>. Accessed 30/05/2005.

FAO. 2004b. Information on Fisheries management in the Republic of Angola. December 2004. Web: <http://www.fao.org/fi/fcp/en/ago/body.htm>. Accessed 30/05/2005.

FIH. 1997. Fishing Industry Handbook: South Africa Namibia and Mozambique. George Warman Publications Cape Town.

FIH. 1999. Fishing Industry Handbook: South Africa Namibia and Mozambique. George Warman Publications Cape Town.

FIH. 2000. Fishing Industry Handbook: South Africa Namibia and Mozambique. George Warman Publications Cape Town.

FIH. 2002. Fishing Industry Handbook: South Africa Namibia and Mozambique. George Warman Publications Cape Town.

FIH. 2003. Fishing Industry Handbook: South Africa Namibia and Mozambique. George Warman Publications Cape Town.

FIH. 2004. Fishing Industry Handbook: South Africa Namibia and Mozambique. George Warman Publications Cape Town.

Frank AG. 1978. Dependent Accumulation and Underdevelopment. Macmillan, London.

Gibbon P. 2000. Global commodity chains and economic upgrading in less developed countries. CDR working paper 00.2. Centre for Development Research, Copenhagen.

Hampton I Boyer DC Penney AJ Pereira AF Sardin M. 2000. Integrated overview of fisheries of the Benguela Current Region. Thematic Consultancy Report to the Benguela Current Large Marine Ecosystem (BCLME) Programme. Web: <http://bclme.org/factfig/fisheries.asp>. Accessed: 01/06/2005.

Japp D & Steenkamp Z. 2004. Optimum proportioning of the hake TAC between wetfish and freezer fish operators in Namibia. Ministry of Fisheries and Marine Resources/ Hake Association of Namibia.

Kaira C. 2001. Customs Union negotiates free trade deal with USA. The Namibia Economist 13/02/2001.

Lankester K. 2002. The EU-Angola fisheries agreement and Fisheries in Angola. Web: http://www.panda.org/downloads/marine/angola_fishing_brief.doc. Accessed: 25/05/2005.

MIAS/DFAT. 2005. Fact Sheet: Angola. Market Information and Analysis Section/ Department for Foreign Affairs and Trade. Web: <http://www.dfat.gov.au/geo/fs/ango.pdf>. Accessed: 38/05/2005.

NFI. 2004. Namibian Fishing Industry Online. Web: <http://www.nfi.com.na>. Accessed: 24/05/2005.

Office of the President. 2000. Namibia: A decade of peace, prosperity and democracy 1990-2000. Web: <http://www.op.gov.na>. Accessed: 30/05/2005.

Product Map. 2005. Trade Data. International Trade Centre UNCTAD/WTO Palais des Nations CH-1211 Geneva 10 Switzerland. Web: <http://www.p-maps.org/pmaps/index.php>. Accessed: 30/05/2005.

SADC 2005. Official trade industry and investment review 2005. Southern African Marketing Co. (Pty) Ltd/ SADC Secretariat. Web: <http://www.sadcreview.com>. Accessed: 01/06/2005.

SADC. 2000. SADC Marine Fisheries & Resources Sector. Web: <http://www.sadcfisheries.com>. Accessed: 26/05/2005.

Sumaila UR. 2000. Fish as vehicle for development in Namibia. Forum for Development Studies 2: 295-316.

Sunday Times. 2004. Namibia's fishing industry hits hard times. Sunday Times 11/11/2004.

TIPS. 2005. Trade and Industry Policy Strategies. Web: <http://www.tips.org.za>. Accessed: 25/05/2005.

Trade Map. 2005. Trade Map: Trade Web: <http://trademap.net>. Accessed: 30/06/2005.

Trollvik T. 2002. The impact of World Trade Organisation agreements on fish trade. FAO Fisheries Circular No. 977. FIIU/C977. Food and Agriculture Organisation of the United Nations Rome.

UN/IRIN. 2005. Namibia: Fishing Industry on the Line. United Nations/ Integrated Regional Information Networks 14/04/2005.

APPENDIX 1

Hake products categorised to the HS6 level with details of value, quantity and major destinations for exports in 2003 from relevant BCLME countries.

Importers	Exported value 2003 (000 US\$)	Share in Namibia's exports, %	Exported quantity 2003 (tonnes)	Unit value (US\$/tonnes)	Export trend in value between 1999-2003, % p.a.	Export trend in quantity between 1999-2003, % p.a.	Export growth in value between 2002-2003, % p.a.
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Product: 030378 Hake, frozen, excluding heading No 03.04, livers and roes

Angola: not applicable

Namibia: 17% of world exports for this product, its ranking in world exports is 2

<i>World</i>	53,721	100	29,693	1,809	-7	-24	-34
Spain	45,185	84	21,380	2,113	2	-25	-30
South Africa	4,984	9	5,545	899	3	-12	29
France	1,085	2	467	2,323	9	3	-40
Italy	949	2	659	1,440	-31	-20	-62
Netherlands	518	1	166	3,120	-53	-58	-83
Ghana	489	1	927	528			172
Germany	126	0	55	2,291	-66	-67	-88
Israel	110	0	200	550	-18	16	124
UK	61	0	19	3,211	-53	-62	-89
Australia	58	0	18	3,222	-52	-57	-96
Zimbabwe	45	0	55	818	-51	-48	96
Trinidad/Tobago	41	0	97	423			
Greece	23	0	27	852	-62	-57	-4
Congo	15	0	24	625	39		88
Mauritius	13	0	30	433	-20	-12	18
Belgium	11	0	16	688	-31	3	-48

South Africa: 10% of world exports for this product, its ranking in world exports is 4

<i>World</i>	33,333	100	17,520	1,903	8	-6	39
Spain	16,805	50	9,498	1,769	25	-1	42
Portugal	12,217	37	5,150	2,372	9	-2	45
Italy	2,540	8	1,828	1,389	-19	-19	7
Australia	356	1	132	2,697	-35	-41	401
France	293	1	122	2,402	-22	-27	-53
UK	281	1	124	2,266	44	18	4
Jordan	222	1	277	801	17	28	50
USA	183	1	80	2,288	-32	-43	395
Germany	134	0	50	2,680	64	42	43
Netherlands	124	0	38	3,263	29		
Angola	41	0	71	577	-24	4	720
Switzerland	33	0	14	2,357	-12		
Mauritius	27	0	15	1,800	-25		
New Zealand	26	0	39	667	-3		
Zimbabwe	18	0	49	367	-33	-1	-28
Israel	12	0	3	4,000	-55	-70	-82

APPENDIX 2

Sardine, anchovy and other small pelagic species (excluding mackerel) products categorised to the HS6 level with details of value, quantity and major destinations for exports in 2003 from relevant BCLME countries.

Importers	Exported value 2003 (000 US\$)	Share in country exports, %	Exported quantity 2003 (tonnes)	Unit value (US\$/tonne)	Export trend in value between 1999-2003, %, p.a.	Export trend in quantity between 1999-2003, %, p.a.	Export growth in value between 2002-2003, %, p.a.
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Product : 030261 (Sardines, sardinella, brisq/sprats, fr/chd, ex hd No 03.04, livers & roes)

Angola & Namibia: not applicable

South Africa: less than 1% of world exports for this product, its ranking in world exports is 18

<i>World</i>	122	100	215	567	-11	-7	72
Angola	63	52	56	1,125			1475
Japan	34	28	50	680			580
Madagascar	13	11	105	124			

Product : 030371 (Sardines, sardinella, brisq or sprats, frozen ex hd No 03.04, livers & roes)

Angola: less than 1% of world exports for this product, its ranking in world exports is 41

<i>Total</i>	242	100	717	338			656
Nigeria	239	99	688	347			

Namibia: less than 1% of world exports for this product, its ranking in world exports is 26

<i>World</i>	1,026	100	766	1,339	-12	-30	7
South Africa	731	71	434	1,684	-15	-23	-11
Seychelles	137	13	93	1,473			
Panama	90	9	97	928			
Botswana	39	4	50	780	-3	16	
Angola	16	2	27	593	90		-88

South Africa: 4% of world exports for this product, its ranking in world exports is 7

<i>World</i>	10,774	100	17,991	599	29	22	98
Malaysia	4,281	40	4,544	942	5	-2	522
Japan	1,061	10	1,866	569	71	50	-12
New Zealand	964	9	2,040	473	28	26	4
Fiji	954	9	2,018	473	214	161	69
Mauritius	933	9	1,764	529	36	6	79
Australia	465	4	1,223	380	7	-1	343
Uruguay	459	4	1,036	443	43	49	170
Indonesia	334	3	661	505			-13
China	275	3	499	551	154	89	282
USA	258	2	493	523			416

Taiwan	186	2	381	488	4	-12	389
Singapore	147	1	375	392	39	35	113
Hong Kong	69	1	154	448			-34
Lithuania	55	1	140	393	148	100	112
Tonga	51		116	440			920
Mozambique	50		145	345	-7	4	56
Polynesia	47		100	470			
Samoa	39		90	433			
Austria	32		114	281			
DPR Korea	22		47	468			
Switzerland	18		27	667			-80
New Caledonia	14		50	280			-7
Maldives	11		15	733			
Spain	11		27	407	-33		-50
Rep. Korea	10		12	833			-89

Product: 160413 (Sardines, sardinella & brisq o sprats prep o presvd, whole o pce ex mincd)

Angola: not applicable

Namibia's exports represent 1% of world exports for this product, its ranking in world exports is 12

<i>World</i>	8,952	100	6,245	1,433	-14	-23	117
South Africa	6,999	78	5,270	1,328	-7	-16	156
Angola	1,145	13	242	4,731	33	-19	6
UK	808	9	733	1,102	-69		

South Africa's exports represent 1% of world exports for this product, its ranking in world exports is 14

<i>World</i>	7,755	100	5,760	1,346	5	-6	-19
UK	2,975	38	2,066	1,440	184	158	-4
Mauritius	2,144	28	1,416	1,514	12	2	10
Panama	740	10	682	1,085	-3	-2	-15
Mozambique	460	6	270	1,704	-8	-8	-2
Angola	214	3	150	1,427	333	420	118
Malaysia	204	3	226	903	-42	-45	-55
Singapore	158	2	171	924	-13	-22	129
Ghana	116	1	150	773	12	19	-73
Canada	112	1	104	1,077	-1	0	-4
Zimbabwe	103	1	71	1,451	113	148	171
France	96	1	72	1,333			-27
U S A	95	1	87	1,092	-49	-49	-86
Zambia	91	1	41	2,220	-31	-52	-19
Togo	87	1	78	1,115	34	-17	112
Papua NG	54	1	51	1,059			-75
Malawi	31		19	1,632	-27	-31	-31

DR Congo	20	8	2,500	-45	-45	-90
New Zealand	18	18	1,000	-45	-53	-64
Australia	11	68	162	-67	-23	-90

Product: 160416 (Anchovies, prepared or preserved, whole or in pieces, but not minced)

Angola & South Africa: not applicable

Namibia: less than 1% of world exports for this product, its ranking in world exports is 38

<i>World</i>	15	100
Angola	15	100

APPENDIX 3

Mackerel products categorised to the HS6 level with details of value, quantity and destinations for exports in 2003 from relevant BCLME countries.

Importers	Exported value 2003 ('000 US\$)	Share in country exports, %	Exported quantity 2003 (tonnes)	Unit value (US\$/tonne)	Export trend in value between 1999- 2003, %, p.a.	Export trend in quantity between 1999-2003, %, p.a.	Export growth in value between 2002- 2003, %, p.a.
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Product: 030264 (Mackerel, fresh or chilled, excluding heading No 03.04, livers and roes)

Angola & Namibia: not applicable

South Africa: less than 1% of world exports for this product, its ranking in world exports is 28

<i>World</i>	37	100	69	536	14		
Mozambique	24	65	48	500	45		
Malawi	12	32	20	600			

Product: 030374 (Mackerel, frozen, excluding heading No 03.04, livers and roes)

Angola: not applicable

Namibia: 3% of world exports for this product, its ranking in world exports is 5

<i>World</i>	30,460	100	68,631	444	205	167	284
Congo	28,643	94	64,423	445	763		508
South Africa	1,059	3	2,311	458	15	-8	51
Mozambique	307	1	929	330	21	15	1235
Ghana	174	1	426	408			2075
France	142		267	532			
Mauritius	58		150	387			-41
Panama	22		25	880			
Area Nes	16		34	471			
Angola	14		25	560			0
Russian Fed.	12		21	571			

South Africa: less than 1% of world exports for this product, its ranking in world exports is 29

<i>World</i>	1,007	100	2,520	400	-11	-26	201
Mozambique	949	94	2,416	393	-17	-27	442
Canada	34	3	60	567			
DRC	20	2	39	513	250		-41

APPENDIX 4

Tuna (various species) products categorised to the HS6 level with details of value, quantity and major destinations for exports in 2003 from relevant BCLME countries.

Importers	Exported value 2003 (000 US\$)	Share in country exports, %	Exported quantity 2003 (tonnes)	Unit value (US\$/tonne)	Export trend in value between 1999-2003, % p.a.	Export trend in quantity between 1999-2003, % p.a.	Export growth in value between 2002-2003, % p.a.
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Product : 030231 (Tunas, albacore or longfinned, fr or chd excl headg No 03.04, livers & roes)

Angola: not applicable

Namibia: less than 1% of world exports for this product, its ranking in world exports is 18

<i>World</i>	367	100	508	722	33	44	-46
Spain	356	97	505	705	76	172	113

South Africa: less than 1% of world exports for this product, its ranking in world exports is 22

<i>World</i>	247	100	106	2,330			
Spain	219	89	96	2,281			
USA	25	10	10	2,500			

Product: 030232 (Tunas, yellowfin, fresh or chilled, excl heading No 03.04, livers and roes)

Angola & Namibia: not applicable

South Africa: 1% of world exports for this product, its ranking in world exports is 18

<i>World</i>	3,659	100	803	4,557			37
USA	2,566	70	642	3,997			44
Japan	1,000	27	132	7,576			15
Spain	53	1	21	2,524			
UK	18		3	6,000			-25
Italy	13		2	6,500			
India	10		3	3,333			

Product: 030239 (Tunas nes, fresh or chilled, excluding heading No 03.04, livers and roes)

Angola: not applicable

Namibia: less than 1% of world exports for this product, its ranking in world exports is 55

<i>World</i>	79	100	35	2,257	-55	-48	-76
South Africa	39	49	15	2,600	-62	-39	-68
USA	30	38	16	1,875	-24	-54	-84
Japan	10	13	3	3,333			-29

South Africa: less than 1% of world exports for this product, its ranking in world exports is 52

<i>World</i>	106	100	42	2,524	161	181	33
Spain	95	90	40	2,375			

Product: 030341 (Tunas, albacore or longfinned, frozen, excl headg No 03.04, livers & roes)

Angola: not applicable

Namibia's exports represent 0% of world exports for this product, its ranking in world exports is 31

World	139	100	103	1,350	-57	-53	-89
Spain	128	92	94	1,362	-46	-35	-89

South Africa's exports represent 1% of world exports for this product, its ranking in world exports is 13

World	3,968	100	3,498	1,134	0	-3	-30
Spain	1,554	39	1,233	1,260	12	6	-50
Thailand	574	14	526	1,091	116	61	250
Samoa	457	12	332	1,377			-66
US Outlying Is.	371	9	216	1,718			120
France	273	7	300	910	59	62	-41
Greece	208	5	143	1,455	17	27	54
Singapore	151	4	182	830	174		
USA	148	4	186	796	-65	-63	3
Japan	141	4	302	467			
Taiwan	30	1	30	1,000			
New Zealand	30	1	23	1,304			
Malaysia	20	1	13	1,538			

Product: 030342 (Tunas, yellowfin, frozen excluding heading No 03.04, livers and roes)

Angola: not applicable

Namibia: less than 1% of world exports for this product, its ranking in world exports is 28

World	1,399	100	1,603	873			-27
Spain	1,012	72	628	1,611			-46
France	143	10	97	1,474			
Ecuador	127	9	73	1,740			
South Africa	117	8	804	146			134

South Africa: less than 1% of world exports for this product, its ranking in world exports is 45

World	299	100	221	1,353	10	-7	30
Japan	115	38	81	1,420			29
Vietnam	79	26	61	1,295			
Spain	36	12	34	1,059	5	-20	-71
UK	31	10	11	2,818	-1		
Thailand	28	9	25	1,120			

Product: 030349 (Tunas nes, frozen, excluding heading No 03.04, livers and roes)

Angola: not applicable

Namibia: 1% of world exports for this product, its ranking in world exports is 5

World	13,311	100	5,182	2,569	269	116	21369
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Spain	11,151	84	4,467	2,496			24141
Italy	986	7	328	3,006			
Netherlands	630	5	122	5,164			
France	264	2	38	6,947			
Germany	95	1	27	3,519			
Mauritius	91	1	89	1,022	178		
UK	48		18	2,667			
Greece	24		27	889			
South Africa	22		66	333	-47	-27	38

South Africa: less than 1% of world exports for this product, its ranking in world exports is 33

<i>World</i>	531	100	405	1,311	39	24	5
Japan	221	42	49	4,510			-46
USA	140	26	49	2,857			
Germany	42	8	24	1,750			
Vietnam	41	8	31	1,323			
Hong Kong	35	7	23	1,522			
Portugal	21	4	24	875			
Spain	12	2	25	480	-55	-44	-83

Product: 160414 (Tunas skipjack & Atl bonito, prepard/preservd, whole/in pieces, ex mincd)

Angola: not applicable

Namibia: less than 1% of world exports for this product, its ranking in world exports is 80

<i>World</i>	20	100	1	20,000	31	-19	67
Angola	20	100	1	20,000	35		82

South Africa: less than 1% of world exports for this product, its ranking in world exports is 50

<i>World</i>	343	100	138	2,486	18	12	44
Angola	99	29	32	3,094	175	154	71
Mozambique	87	25	37	2,351	25	12	36
Zimbabwe	51	15	31	1,645	21	17	629
Zambia	47	14	15	3,133	-4	-27	27
Malawi	28	8	9	3,111	7	20	100
Tanzania	19	6	10	1,900			138

APPENDIX 5

Products derived from unspecified species which are likely to include species, and/or stocks relevant to the BCLME region. These have been categorised to the HS6 level with details of value, quantity and major destinations for exports in 2003 from relevant BCLME countries.

Importers	Exported value 2003 (000 US\$)	Share in country exports, %	Exported quantity 2003 (tonnes)	Unit value (US\$/tonne)	Export trend in value between 1999-2003, % p.a.	Export trend in quantity between 1999-2003, % p.a.	Export growth in value between 2002-2003, % p.a.
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Product: 030269 (Fish nes, fresh or chilled excl heading No 03.04, livers and roes)

Angola & South Africa: not applicable

Namibia: less than 1% of world exports for this product, its ranking in world exports is 39

World	10,124	100	3,549	2,853	-23	-33	-21
Spain	6,428	63	2,395	2,684	-25	-33	-31
South Africa	3,381	33	1,053	3,211	-15	-33	5
Germany	280	3	78	3,590	-29	-30	833
USA	26		9	2,889	142	52	-90

Product : 030379 (Fish nes, frozen, excluding heading No 03.04, livers and roes)

South Africa: not applicable

Angola: less than 1% of world exports for this product, its ranking in world exports is 94

World	362	100	408	887	-43	-51	-95
Thailand	164	45	78	2,103			
Japan	112	31	32	3,500	-14	-20	700
Italy	38	10	8	4,750	-30	-49	-91
Spain	25	7	12	2,083	-62	-62	-99
Namibia	23	6	278	83			-79

Namibia: less than 1% of world exports for this product, its ranking in world exports is 100

World	21	100	4	5,250	-58	-70	-93
South Africa	20	95	4	5,000	-39	-58	-53

Product: 030410 (Fish fillets and other fish meat, minced or not, fresh or chilled)

Angola & Namibia: not applicable

South Africa: less than 1% of world exports for this product, its ranking in world exports is 53

World	783	100	243	3,222	133	93	49
Spain	542	69	156	3,474			245
Portugal	118	15	23	5,130	88		-38
Mozambique	45	6	34	1,324	49	3	-43
Germany	39	5	17	2,294			333
Angola	14	2	3	4,667	59		
Zimbabwe	13	2	6	2,167			

Product: 030420 (Fish fillets frozen)

Angola: not applicable

Namibia: 1% of world exports for this product, its ranking in world exports is 21

World	65,284	100	26,219	2,490	9	-25	16
Spain	42,946	66	17,200	2,497	18	-25	34
USA	4,162	6	2,644	1,574	28	74	42
Australia	3,859	6	942	4,097	26	-36	8
Netherlands	3,615	6	1,232	2,934	40	-18	-34
France	2,755	4	940	2,931	59	66	-8
Italy	1,793	3	503	3,565	-11	-31	-53
Portugal	1,787	3	460	3,885	86	88	42
Germany	1,650	3	448	3,683	42	24	7
South Africa	1,436	2	1,301	1,104	-53	-47	23
Malaysia	811	1	290	2,797	244		395
Denmark	133		44	3,023	40	27	0
Sweden	104		24	4,333			-37
Jordan	80		126	635			
UK	74		18	4,111	-59	-65	-84
Israel	53		19	2,789			96
Greece	19		13	1,462			

South Africa: 1% of world exports for this product, its ranking in world exports is 18

World	86,120	100	28,374	3,035	7	5	15
Italy	22,480	26	6,030	3,728	13	9	8
Australia	17,905	21	6,453	2,775	3	2	30
Spain	14,786	17	6,392	2,313	24	20	17
USA	8,376	10	2,657	3,152	-11	-8	5
France	7,826	9	2,274	3,442	4	-4	24
Portugal	5,329	6	1,588	3,356	10	6	40
Germany	2,113	2	406	5,204	19	-10	179
UK	2,077	2	642	3,235	-14	-23	-13
Switzerland	1,150	1	237	4,852	173	160	-5
Netherlands	1,124	1	432	2,602	29	49	28
Mauritius	686	1	217	3,161	11	5	28
Belgium	680	1	196	3,469	-2	-7	-8
Israel	420		118	3,559	38	22	-6
Sweden	309		75	4,120			122
Zimbabwe	206		90	2,289	38	29	13
Japan	161		415	388	11	129	66
Zambia	80		20	4,000	44	19	78

Hong Kong	66	17	3,882	26	39	-92
Angola	65	20	3,250			622
Nigeria	61	6	10,167			
Canada	53	15	3,533	-21	-19	279
Greece	45	16	2,813	96	43	2
Ireland	25	10	2,500			
US Outlying Islands	24	26	923			41
Denmark	20	6	3,333			

Product: 030490 (Fish meat nes, minced or not, frozen)

Angola: not applicable

Namibia: 1% of world exports for this product, its ranking in world exports is 15

<i>World</i>	15,377	100	5,166	2,977	288	227	118
Spain	9,481	62	2,978	3,184	281	265	264
Germany	1,475	10	549	2,687			649
Netherlands	1,359	9	398	3,415	235	148	413
Italy	1,333	9	422	3,159			-41
France	530	3	151	3,510			225
Portugal	340	2	78	4,359			-75
USA	275	2	104	2,644			
UK	173	1	58	2,983			497
Australia	112	1	35	3,200			
Israel	106	1	162	654			
South Africa	105	1	95	1,105	15	23	-42
Jordan	89	1	137	650			

South Africa: less than 1% of world exports for this product, its ranking in world exports is 38

<i>World</i>	1,829	100	752	2,432	-9	-13	8
Italy	644	35	251	2,566	-21	-18	144
Spain	333	18	160	2,081	67	56	-47
France	200	11	80	2,500	-30		
Netherlands	167	9	57	2,930	13	-33	3240
Portugal	119	7	62	1,919	1	8	120
USA	112	6	30	3,733	141		-22
Australia	57	3	15	3,800	-39	-45	-71
Germany	51	3	58	879	-62		
Mauritius	45	2	15	3,000	42		
Zimbabwe	36	2	3	12,000	52		
Angola	30	2	8	3,750		-16	329
Greece	14	1	6	2,333			
Mozambique	14	1	6	2,333	-34	-42	-13

Product: 030530 (Fish fillets, dried, salted or in brine but not smoked)
Angola & South Africa: not applicable

Namibia: less than 1% of world exports for this product, its ranking in world exports is 44

<i>World</i>	30	100	30	1,000	-57		
Area Nes	19	63	11	1,727			
South Africa	11	37	19	579			

Product: 030559 (Fish nes, dried, whether or not salted but not smoked)
Angola: less than 1% of world exports for this product, its ranking in world exports is 68

<i>World</i>	278	100	8	34,750	45	66	84
Hong Kong	278	100	8	34,750	45	66	84

Namibia: less than 1% of world exports for this product, its ranking in world exports is 80

<i>World</i>	155	100	69	2,246	-12	-14	-83
France	145	94	65	2,231	46	38	-50

South Africa: less than 1% of world exports for this product, its ranking in world exports is 22

<i>World</i>	4,661	100	1,818	2,564	-10	-12	27
DRC	2,666	57	1,565	1,704	7	2	43
Hong Kong	1,023	22	49	20,878	7	-10	58
Japan	490	11	20	24,500	12	17	-33
Congo	302	6	157	1,924	-56	-50	19
Mozambique	162	3	22	7,364	205	96	22
Mauritius	18	0	4	4,500			

Product: 030569 (Fish nes, salted and in brine, but not dried or smoked)
Angola: not applicable

Namibia: less than 1% of world exports for this product, its ranking in world exports is 39

<i>World</i>	231	100	130	1,777	-18	-18	67
South Africa	173	75	114	1,518	84	58	27
France	56	24	16	3,500	-49		

South Africa: less than 1% of world exports for this product, its ranking in world exports is 53

<i>World</i>	95	100	63	1,508	15	21	2
Zimbabwe	50	53	26	1,923	55	124	150
Kenya	25	26			-2		

Product: 160419 (Fish nes, prepared or preserved, whole or in pieces, but not minced)
Angola & Namibia: not applicable

South Africa's exports represent 0% of world exports for this product, its ranking in world exports is 37

<i>World</i>	473	100	432	1,095	7	3	-50
Spain	194	41	150	1,293	36	104	-68
Mauritius	115	24	56	2,054			-43
Mozambique	62	13	165	376	-11	-25	520
Angola	47	10	32	1,469			488
Zambia	22	5	9	2,444	-13	-11	-73

Tanzania	13	3	10	1,300			-7
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Product: 160420 (Fish prepared or preserved, except whole or in pieces)

Angola: not applicable

Namibia: less than 1% of world exports for this product, its ranking in world exports is 65

<i>World</i>	168	100	254	661	-18	-6	54
Angola	93	55	156	596	466		121
South Africa	75	45	98	765	-16	-1	103

South Africa: less than 1% of world exports for this product, its ranking in world exports is 47

<i>World</i>	799	100	311	2,569	-20	-19	11
Egypt	129	16	27	4,778	-7	-15	4
UAE	110	14	24	4,583	25	9	21
Zimbabwe	91	11	36	2,528	3	-13	26
Angola	84	11	58	1,448	187		500
Mauritius	80	10	36	2,222	-19	-28	627
Pakistan	65	8	15	4,333	-4	-13	
Malawi	57	7	25	2,280	96	97	338
Zambia	52	7	21	2,476	24	25	206
Mozambique	32	4	9	3,556	-28	-44	113
Nigeria	13	2	7	1,857	8		
Portugal	12	2	9	1,333	-50	-25	-52
Canada	11	1	4	2,750	48		
Ghana	11	1	11	1,000	36		450
Tanzania	10	1	9	1,111			67

APPENDIX 6

Fish meal products categorised to the HS6 level with details of value, quantity and major destinations for exports in 2003 from relevant BCLME countries.

Importers	Exported value 2003 (000 US\$)	Share in country exports, %	in Exports quantity 2003 (tonnes)	Unit value (US\$/tonne)	Export trend value between 1999-2003, % p.a.	Export in trend quantity between 1999-2003, % p.a.	Export growth in value between 2002-2003, % p.a.
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Product: 030510 (Fish meal fit for human consumption)

Namibia & South Africa: not applicable

Angola: less than 1% of world exports for this product, its ranking in world exports is 31

<i>World</i>	50	100	20	2,500			
Nigeria	50	100	20	2,500			

Product: 230120 (Flour, meal & pellet of fish, crust, mol/oth aqua invert, unfit human cons)

Angola: less than 1% of world exports for this product, its ranking in world exports is 56

<i>World</i>	600	100	1,157	519	1		-77
Japan	332	55	687	483			-66
Philippines	234	39	410	571			
Brazil	34	6	60	567			

Namibia: less than 1% of world exports for this product, its ranking in world exports is 15

<i>World</i>	16,178	100	29,169	555	38	18	-21
Japan	3,875	24	6,618	586	185	139	-58
South Africa	3,461	21	6,325	547	-21	-34	2
Taiwan	2,369	15	3,986	594			-29
China	2,216	14	4,738	468			30
Hong Kong	1,139	7	1,827	623			
Ghana	955	6	2,080	459			222
Denmark	719	4	999	720			
Botswana	260	2	485	536	-23	-32	442
Trinidad/Tobago	178	1	354	503			
Nigeria	173	1	300	577			765
Angola	126	1	201	627			
Korea, DPR	122	1	201	607			171
Korea, Rep.	120	1	203	591			
Zimbabwe	98	1	102	961	-43	-55	-31
Swaziland	92	1	174	529			
Panama	75	0	135	556			19
France	72	0	118	610			132
Russian Fed.	65	0	102	637			-85
Brazil	40	0	80	500			

Indonesia	16	0	94	170			-63
South Africa: less than 1% of world exports for this product, its ranking in world exports is 17							
<i>World</i>	<i>15,411</i>	<i>100</i>	<i>45,473</i>	<i>339</i>	<i>123</i>	<i>95</i>	<i>28</i>
Japan	5,489	36	25,602	214	221	120	22
Hong Kong	3,651	24	6,455	566	278	239	2471
Taiwan	939	6	3,174	296	46	26	-25
Cyprus	799	5	1,519	526			467
Mauritius	413	3	797	518	25	15	43
Switzerland	393	3	660	595			
Brazil	377	2	718	525			219
Indonesia	358	2	698	513			
Turkey	340	2	798	426			148
Mozambique	325	2	560	580	-34	-37	62
Croatia	312	2	575	543			-65
Romania	292	2	600	487			
China	233	2	484	481			-83
Germany	233	2	391	596			
Slovenia	180	1	420	429			-64
Malaysia	172	1	320	538			
Finland	167	1	340	491			
Nigeria	114	1	200	570			
India	89	1	180	494			
Philippines	87	1	140	621			
Chile	69	0	140	493			
Bulgaria	64	0	100	640			45
Korea, DPR	64	0	0				
Cameroon	49	0	100	490			7
Thailand	49	0	100	490			
Spain	42	0	126	333			
Saint Helena	40	0	141	284			264
Korea, Rep.	30	0	60	500			
New Caledonia	21	0	38	553			-91
Zimbabwe	19	0	33	576	36		0

APPENDIX 7

Fish meal products categorised to the HS6 level with details of value, quantity and major destinations for exports in 2003 from relevant BCLME countries.

Importers	Exported value 2003 (000 US\$)	Share in country exports, %	Exported quantity 2003 (tonnes)	Unit value (US\$/tonne)	Export trend in value between 1999-2003, % p.a.	Export trend in quantity between 1999-2003, % p.a.	Export growth in value between 2002-2003, % p.a.
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Product: 030611 (Rock lobster & other sea crawfish, frozen in shell/not, incl boiled in shell)

Angola: not applicable

Namibia: less than 1% of world exports for this product, its ranking in world exports is 31

<i>World</i>	823	100	63	13,063	-37	-35	-88
Japan	756	92	38	19,895	-29	-36	-83
Netherlands	65	8	23	2,826			-96

South Africa: 4% of world exports for this product, its ranking in world exports is 7

<i>World</i>	25,107	100	1,019	24,639	42	14	45
USA	13,373	53	298	44,876	132	12	59
Japan	8,213	33	519	15,825	6	5	4
Hong Kong	1,621	6	102	15,892			
Italy	781	3	50	15,620			305
France	540	2	15	36,000	27	1	-29
China	264	1	16	16,500			
Spain	168	1	9	18,667	159		
Portugal	137	1	9	15,222			

Product: 030614 (Crabs frozen, in shell or not, including boiled in shell)

Angola & South Africa: not applicable

Namibia: less than 1% of world exports for this product, its ranking in world exports is 26

<i>World</i>	2,490	100	1,287	1,935	-1	5	-39
Japan	2,008	81	853	2,354	-8	-6	-33
China	403	16	143	2,818	80	73	-63
Area Nes	78	3	291	268			

Product: 030619 (Crustaceans nes, frozen, in shell or not including boiled in shell)

Angola & South Africa: not applicable

Namibia: less than 1% of world exports for this product, its ranking in world exports is 74

<i>World</i>	11	100	2	5,500			
Hong Kong	11	100	2	5,500			

Product: 030621 (Rock lobster & oth sea crawfish not fz, in shell/not, incl boiled in shell)

Angola & Namibia: not applicable

South Africa: 6% of world exports for this product, its ranking in world exports is 4

World	17,278	100	810	21,331	16	8	22
Hong Kong	6,031	35	295	20,444	53	31	0
Japan	3,781	22	218	17,344	-16	-10	-20
China	2,668	15	113	23,611	35	36	34
Italy	2,011	12	75	26,813	78	37	465
France	1,932	11	72	26,833	69	41	207
Spain	405	2	16	25,313	170		1661
Taiwan	194	1	9	21,556	-7	-7	40
Mauritius	118	1	4	29,500	19		20
Luxembourg	39		2	19,500			457
Netherlands	38		2	19,000			
Greece	22		1	22,000			
USA	17		2	8,500	-1		
Portugal	11				6		

Product: 160510 (Crab, prepared or preserved)

South Africa: not applicable

Angola: less than 1% of world exports for this product, its ranking in world exports is 20

World	1,883	100	282	6,677	1	-5	-24
Japan	1,883	100	282	6,677	1	-5	-24

Namibia: less than 1% of world exports for this product, its ranking in world exports is 40

World	37	100	34	1,088
South Africa	35	95	33	1,061



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