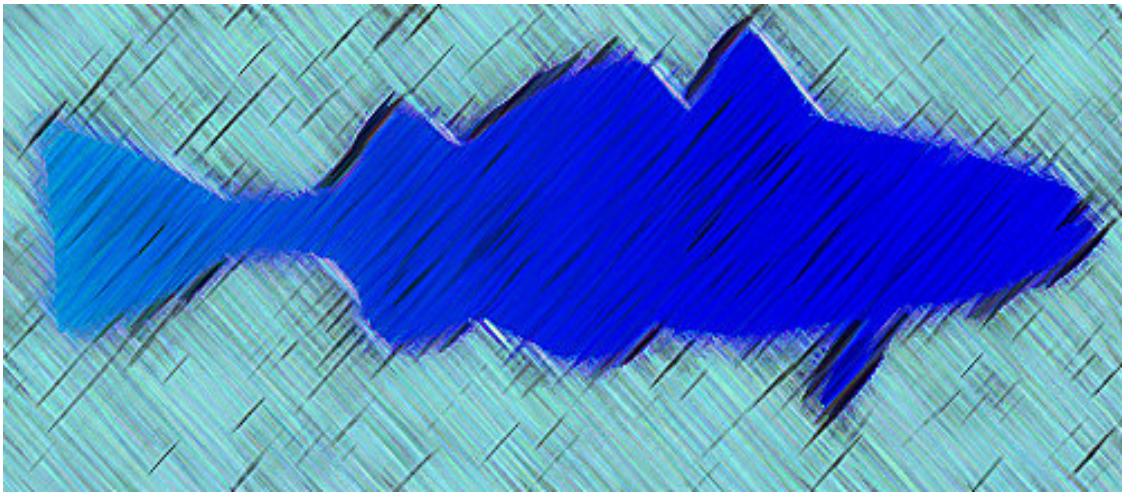
# BCLME COMMERCIAL FISHERIES RIGHTS HOLDER AND VESSEL ANALYSIS

## BCLME Project LMR/SE/03/03



**PRESENTED TO:**

BCLME
Benguela Current Large Marine Ecosystem Programme

**BCLME Activity Centre for Living Marine Resources**

**PRESENTED BY:**

ENVIRO-FISH AFRICA

**ON BEHALF OF:**

ENVIRO-FISH AFRICA | FEIKE | UNIVERSITY OF CAPE TOWN | tralac | BRUCE SHALLARD AND ASSOCIATES
Strategic Fisheries Management Advisors

THE CONSORTIUM

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## EXECUTIVE SUMMARY

There are a number of commercial, industrial-scale fisheries in the BCLME region. Some of the fish stocks being exploited are shared, not only across fisheries but across countries as well. This report examines the following fisheries:

- South Africa
  - Hake offshore demersal trawl
  - Hake inshore demersal trawl
  - Hake long-line
  - Small pelagic purse seine
  - Horse mackerel mid-water trawl
  - West coast rock lobster offshore traps
  - Large pelagic longline
  - Tuna pole & line
- Namibia
  - Hake demersal trawl & Long-line
  - Monk & sole demersal trawl
  - Deep-sea trawl
  - Small pelagic purse seine
  - Horse mackerel mid-water trawl
  - West coast rock lobster traps & hoop nets
  - Large pelagic longline and pole & line
  - Deep-sea red crab traps
- Angola
  - Hake demersal trawl
  - Small pelagic purse seine
  - Small pelagic mid-water trawl
  - Offshore prawn trawl
  - Inshore prawn trawl
  - Deep-sea red crab traps
  - Large pelagic longline, tunny boat and pole & line

At least 1057 rights holders were granted access to these fisheries by the three countries, which in turn required the services of some 1351 vessels, to catch in excess of 1.305 million tons of fish and crustaceans during the 2003 – 2004 season.

The report contains a brief history and explanation of each fishery in each country, which is followed by a description of all of the rights holders and vessels partaking in the fishery during the 2003 – 2004 fishing season. Although some analysis is presented in the report, it is primarily descriptive in nature, as a companion document to the report *BCLME/SE/03/03: A Micro-economic Systems Analysis of the BCLME Commercial Fisheries*. Nevertheless, all data collected on the rights holders and vessels during the 2003 – 2004 season has been collated into a MS Access database, for further analysis by interested parties. The database is available from the BCLME Projects Office in Swakopmund.

The report concludes with an observation on the need for a regional fisheries socio-economic database, and the potential role of the Interim Benguela Current Commission in developing one.

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# 1. GENERAL INTRODUCTION

The following report is part of a greater project looking at the rights-based microeconomic systems and the means of governance of the important commercial fisheries in the three BCLME countries viz. South Africa, Namibia and Angola. It is a snapshot of the 2003 – 2004 fishing season, and describes the participants and vessels active in the commercial fisheries of the Benguela Large Marine Ecosystem at the time. The aim of the report is to provide a brief description of each fishery, details on the quota allocated and the rights holders in each fishery, and a description of the vessels that were active in each of the commercial scale fisheries.

At the start of the study a rights holder survey was designed with the intention of submitting a comprehensive questionnaire to all of the relevant rights holders and vessel owners in the region. This was to ensure that comparative data would be collected in the same manner across all three countries. A database developed from the survey would provide the basis of the study. The survey information would in turn be supported by data gathered from the databases of the various institutions responsible for managing the fisheries in each country, and from other relevant information sources.

However, during the implementation of the Angolan phase of the project, data collection via the rights holder survey turned out to be impossible, both from a practical and regulatory point of view. Eventually it was agreed with the Angolan Minister of Fisheries that fisheries information would only be supplied to the project through the Institute for Fisheries Research (INIP). The information was provided in a prescribed, more generalised format to that collected for South Africa and Namibia, and therefore the Angolan section has been set out somewhat differently to the sections on South Africa and Namibia. The data sources for each country are presented below:

- **South Africa**
  - A rights holder survey carried out specifically for the BCLME project in 2004;
  - The Economic & Transformation Census of selected commercial fisheries, carried out on behalf of Marine & Coastal Management (MCM) prior to the long-term allocation of fishing rights (ETC 2004);
  - The Fisheries Information System Database of all the medium-term rights holders in the South African Fishing Industry (FIS 2002);
  - The Economic and Sectoral Study of the South African Fishing Industry, carried out prior to the allocation of medium term fishing rights (ESS 2000);
  - The Fishing Industry Handbook, G. Warman Publications, Cape Town (various editions)
  - As well as information supplied by MCM on request.

- **Namibia**
  - A rights holder survey carried out specifically for the BCLME project in 2004;
  - Namibian Ministry of Fisheries and Marine Resources (MFMR) fisheries database;
  - Namibia Fishing Industry Online database (www.nfi.com.na);

- Fishing Industry Handbook, G. Warman Publications, Cape Town (various editions)
- As well as information supplied by MFMR on request.

- **Angola**

  - Data collected from the Central Fisheries Database, and collated by the Institute of Fisheries Research (INIP)

Although some analysis is presented, the following report is primarily descriptive in nature. For further analysis by interested parties, all data used in this report has been submitted to the BCLME Projects Office in Swakopmund, Namibia in the form of a MS ACCESS database (*BCLME COMMERCIAL FISHERIES DATABASE V1.5*). The database is available on request.

# 2. SOUTH AFRICA

## 2.1 Introduction

Although the South African fishing industry is made up of some 20 fisheries, only those that target marine resources from the Benguela Current Large Marine Ecosystem will be discussed in this report. The species targeted include the demersal Cape hakes (*Merluccius capensis* and *M. paradoxus*), the small pelagic species (pilchards and anchovy), large pelagic species such as the tunas (*Thunnus alalunga* and others) and swordfish (*Xiphias gladius*), the mid-water horse mackerel (*Trachurus trachurus capensis*) and the west coast rock lobster (*Jasus lalandii*).

All information used in the following analysis relates to the last full fishing season completed in 2004, unless otherwise stated. Depending on the fishery, the seasons were completed at the end of 2003, or before mid-2004.

## 2.2 The Hake fisheries

Two species of hake are caught in South African waters: deepwater hake, *Merluccius paradoxus* and shallow water hake, *M. capensis.* A wide range of economically important by-catch species are also caught, including the Agulhas sole (*Austroglossus pectoralis*) monkfish (*Lophius vomerinus*), kingklip (*Genypterus capensis*) and snoek (*Thyrsites atun*).

A Total Allowable Catch (TAC) limitation for South African hake was first introduced in 1978, and was set at 140,000 tons. Since then, the TAC has remained relatively stable, gradually increasing to about 160,000 tons by 2003. A global TAC for hake is set annually, which is then apportioned between the offshore demersal trawl (± 85% of the total amount), inshore demersal trawl and long-line fisheries (approximately 6% each); with an amount of about 5500 tons set aside for the effort-controlled (TAE) hake hand-line fishery (not included in this analysis).

### 2.2.1 Offshore demersal trawl

The offshore and inshore hake trawl fisheries share a common history. Several companies are operational in both sectors in terms of fishing, processing and marketing of product. The feasibility of hake trawling off the South African coast was first investigated in 1890. Entrepreneurs G.D. Irvin and C.O. Johnson pioneered this fishery, setting up the first modern, industrial-scale fishing operation in South Africa in the process. The history of trawling, processing, distribution and marketing of fish in South Africa up until 1960 is inexorably linked to Irvin & Johnson's fishing company.

By the 1960's demersal trawling had become the most economically important fishery in South Africa. Until the late 1970's the fishery operated on open access principles, with estimated catches by local and foreign vessels soaring to over one million tons. South Africa declared its Economic Exclusion Zone (EEZ) in 1977, expelled the foreign vessels, and embarked on a conservative stock rebuilding strategy. Individual quotas were allocated in 1979 for the first time, to six fishing companies. In 1985, the government introduced a policy to increase access to this lucrative fishery, and the number of participants was increased to 21 by 1992. The period from 1992 to 2000 saw immense changes in the industry, brought about mainly by the development of the new fisheries policy that ultimately culminated in the promulgation of the Marine Living Resources Act (Act 18 of 1998). There was a substantial loss of quota by the established trawling companies to a number of new entrants from previously disadvantaged communities. During this period, the number of participants in the deep-sea sector increased significantly, peaking at 56 quota holders in 2000. Medium-term

(four-year) rights where allocated in 2002, to 53 rights holders. At the time of writing (2005), these rights are still active. However, they will fall away in 2006. The Minister of Environmental Affairs and Tourism has recently called for applications to be made for long-term (15-year) rights to the fishery, which will be awarded in 2006.

#### 2.2.1.1 Rights holders

The medium term rights holders in the offshore demersal hake fishery and their quota allocations for the 2003 season are listed in Table 2.1.

**Table 2.1.** Medium term rights holders in the South African offshore demersal trawl fishery, and their hake quota allocation for 2003.

| Rights Holder | 2003 Allocation (Tons) | Rights Holder | 2003 Allocation (Tons) |
|---|---|---|---|
| Irvin & Johnson Limited | 45,431 | Mayibuye Fishing (Pty) Ltd | 710 |
| Sea Harvest Corporation (Pty) Ltd | 35,159 | DMA Fishing Enterprises (Pty) Ltd | 693 |
| Atlantic & Pioneer Fishing (Pty) Ltd | 10,665 | Noordkaap Visserman Onderneming CC | 693 |
| Food Corp (Pty) Ltd | 6,522 | Snoek Wholesalers Fishing (Pty) Ltd | 654 |
| Viking Fishing Co (Deep Sea) (Pty) Ltd | 3,064 | Pellsrus Historical Fishing Corporation CC | 642 |
| Fernpar Fishing Co (Pty) Ltd | 2,478 | Azanian Fishing (Pty) Ltd | 634 |
| New South Africa Fishing Enterprises (Pty) Ltd | 1,710 | Unomkala Fishing (Pty) Ltd | 628 |
| Trachurus Fishing (Pty) Ltd | 1,330 | Community Workers Fishing Enterprise (Pty) Ltd | 625 |
| Siyaloba Fishing Enterprises (Pty) Ltd | 1,242 | Bayview Fishing (Pty) Ltd | 617 |
| Surmon Fishing (Pty) Ltd | 1,191 | AJF Eigelaar & Seuns (Pty) Ltd | 611 |
| Sistro Fishing Company (Pty) Ltd | 1,173 | Impala Fishing (Pty) Ltd | 523 |
| Ziyabuya Fishing Eastern Cape (Pty) Ltd | 1,115 | Bhana Coastal Fishing CC | 514 |
| Hangberg Fishing Co (Pty) Ltd | 1092 | Khoi-Qwa Fishing Development (Pty) Ltd | 514 |
| Phambili Fisheries (Pty) Ltd | 1,083 | Hoxies (Pty) Ltd | 497 |
| Gambera Cape (Pty) Ltd | 952 | Algoa Bay Sea Products | 491 |
| SACO Fishing (Pty) Ltd | 923 | Dyer Eiland Visserye (Pty) Ltd | 480 |
| Calamari Fishing (Pty) Ltd | 899 | Tradeforth 13 (Pty) Ltd | 463 |
| Premier Fishing Sa (Pty) Ltd | 867 | Visko Sea Products (Pty) Ltd | 463 |
| Bato Star Fishing (Pty) Ltd | 856 | ZWM Fishing (Pty) Ltd | 463 |
| Ntshonalanga Fishing (Pty) Ltd | 831 | Walters, E.F.H. | 456 |
| Quayside Fish Suppliers (Cape) (Pty) Ltd | 781 | J Engelbrecht Visserye CC | 412 |
| Offshore Fishing Company (Pty) Ltd | 780 | Rainbow Nation Fishing (Pty) Ltd | 412 |
| Blue Continent Products (Pty) Ltd | 772 | J & J Visserye CC | 395 |
| Selecta Sea Products (Pty) Ltd | 772 | Anglo Mar Fishing Rights Company | 369 |
| Combined Fishing Enterprises CC | 744 | Siya Phambili Fishing Pty Ltd | 345 |
| Laingville Fisheries (Pty) Ltd | 735 | Usuthu Fishing CC | 336 |
| Radaco Sea Products (Pty) Ltd | 719 | **TOTAL** | **137,526** |

The lion's share of the medium term rights allocation (73%) went to five of the six historic companies in this fishery (one of the companies having withdrawn from the industry), even though a substantial amount of the quota was redistributed to new entrants to the industry (Figure 2.1). Of the rest, nine companies received quota of more than 1000 tonnes for the year, while the bulk (49%) of the fishing companies received between 500 – 1000 tonnes. About 25% of the rights holders received less than 500 tons of hake for 2003.

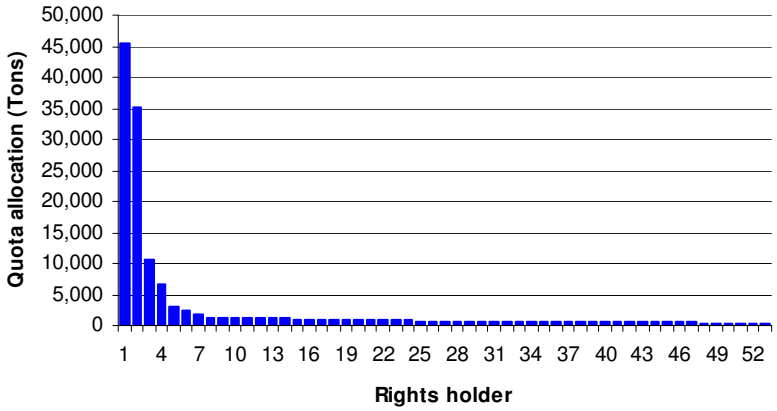


**Figure 2.1.** Hake quota allocations in the South African offshore demersal trawl fishery in 2003.

All rights holders in the offshore demersal fishery were South African fishing companies. Most (77%) were based in the Western Cape Province, but some rights were granted to companies from the Eastern Cape (21%) and one company in the Northern Cape Province. About 21% of the companies were very large, with annual turnovers exceeding R100 million. Approximately the same amount of companies were classed as large, turning over between R10 – R100 million, 39% turn over R1 – 10 million per annum, and the rest (± 20%) were small, having annual turnovers of less than R1 million.

The offshore demersal trawl fishing companies employed approximately 16,400 fisheries related workers. The five large historic demersal trawl companies employed 81% of these workers; 21% of the of the companies employed more than 100 workers, 14% employed between 50 – 100 people, and 41% employed 10 – 50 people. Surprisingly for this type of fishing operation, 15% of the rights holding companies reported less than 10 employees.

#### 2.2.1.2 Vessels

By definition, the offshore demersal fishing vessels may only trawl over fishing grounds deeper than 110 m. Therefore, the vessels used in this fishery are for the most part relatively large, powerful, ocean-going stern trawlers. The fleet can be divided into two broad categories, “fresher” or wetfish trawlers, which pack and store the freshly caught fish on ice, and factory or freezer vessels, which can process the fish at sea, and store the frozen product. Twenty-three freezer vessels were reported fishing in the offshore demersal fishery in 2003, compared to 54 wetfish trawlers. An additional four “combination” vessels (which have both ice and freezer facilities) brought the total number of trawlers operating in the demersal fishery at the time of the survey to 81 (Table 2.2).

**Table 2.2.** The offshore demersal trawl fishing fleet in 2003.

| Vessel | Flag | Length (m) | GRT (tons) | Horse Power (kW) | Year Built | Crew | Type | Rights fished | Owners |
|---|---|---|---|---|---|---|---|---|---|
| ARMANA | RSA | 42 | 390 | 783 | 1962 | 20 | FREEZER | 1 | VIKING FISHING CO (DEEP SEA) (PTY) LTD |
| BEATRICE MARINE | RSA | 54 | 1343 | 1330 | 1988 | 46 | FREEZER | 2 | FOOD CORP (PTY) LTD |
| BENGUELLA VIKING | RSA | 52 | 300 | 746 | 1960 | 20 | FREEZER | 1 | VIKING FISHING CO (DEEP SEA) (PTY) LTD |
| BORONIA | RSA | 57 | 1923 | 2460 | 1992 | 66 | FREEZER | 1 | IRVIN & JOHNSON LIMITED |
| COMPASS CHALLENGER | RSA | 57 | 841 | 1320 | 1983 | 50 | FREEZER | 6 | COMPASS TRAWLING (PTY) LTD |

| Vessel | Flag | Length (m) | GRT (tons) | Horse Power (kW) | Year Built | Crew | Type | Rights fished | Owners |
|---|---|---|---|---|---|---|---|---|---|
| EMILE ADRIEN | RSA | 45 | 569 | 1230 | 1966 | 34 | FREEZER | 2 | MFV EMILE ADRIEN VESSEL CO (PTY) LTD |
| FREESIA | RSA | 41 | 768 | 1860 | 1999 | 28 | FREEZER | 1 | IRVIN & JOHNSON LIMITED |
| FUCHSIA | RSA | 41 | 768 | 1860 | 1999 | 28 | FREEZER | 1 | IRVIN & JOHNSON LIMITED |
| IRIS | RSA | 63 | 1532 | 1343 | 1988 | 54 | FREEZER | 2 | IRVIN & JOHNSON LIMITED |
| ISABELLA MARINE | RSA | 36 | 496 | 1000 | 1991 | 29 | FREEZER | 1 | FOOD CORP (PTY) LTD |
| LEPANTO | RSA | 36 | 270 | 582 | 1961 | 19 | FREEZER | 2 | SELECTA SEA PRODUCTS (PTY) LTD |
| LINCOLN | RSA | 43 | 414 | 0 | 1961 | 23 | FREEZER | 2 | VIKING FISHING CO (DEEP SEA) (PTY) LTD |
| LUCERNE | RSA | 41 | 324 | 710 | 1962 | 18 | FREEZER | 1 | VIKING FISHING CO (DEEP SEA) (PTY) LTD |
| MARIE CLAIRE | RSA | 46 | 500 | 1560 | 1971 | 42 | FREEZER | 4 | MFV MARIE CLAIRE VESSEL COMPANY |
| MILLENIUM | RSA | 48 | 676 | 810 | 1998 | 39 | FREEZER | 2 | SNOEK WHOLESALERS FISHING (PTY) LTD |
| MONIE MARINE | RSA | 49 | 606 | 1104 | 1967 | 33 | FREEZER | 1 | NEW SOUTH AFRICA FISHING ENTERPRISES |
| OCEAN VICTORY TWO | RSA | 82 | 2246 | 2200 | 1974 | 85 | FREEZER | 1 | SEA HARVEST CORPORATION (PTY) LTD |
| PROTEA | RSA | 56 | 806 | 1343 | 1970 | 40 | FREEZER | 1 | IRVIN & JOHNSON LIMITED |
| REALEKA | RSA | 33 | 497 | 927 | 1989 | 30 | FREEZER | 2 | BLUE CONTINENT PRODUCTS (PTY) LTD |
| ROXANA BANK | RSA | 90 | 2899 | 2685 | 1968 | 75 | FREEZER | 1 | IRVIN & JOHNSON LIMITED |
| SISTRO | RSA | 43 | 526 | 736 | 1977 | 38 | FREEZER | 2 | SISTRO FISHING COMPANY (PTY) LTD |
| VERA MARINE | RSA | 49 | 606 | 1193 | 1967 | 34 | FREEZER | 1 | GAMBERA CAPE (PTY) LTD |
| HARVEST LINDIWE | RSA | 60.7 | 2504 | 3375 | 1988 | 76 | FREEZER | 1 | SEA HARVEST CORPORATION (PTY) LTD |
| AFRICAN QUEEN | RSA | 37 | 301 | 746 | 1974 | 20 | WETFISH | 3 | BAYKING FISHING (PTY) LTD |
| ALOE | RSA | 56 | 811 | 1343 | 1972 | 30 | WETFISH | 3 | IGAGASI FISHING (PTY) LTD |
| AMSTELDIEP | RSA | 27 | 168 | 520 | 1969 | 12 | WETFISH | 1 | SEAVUNA FISHING COMPANY (PTY) LTD |
| ANEMONE | RSA | 56 | 801.99 | 1309 | 1971 | 19 | WETFISH | 1 | IRVIN & JOHNSON LIMITED |
| ARCTIC | RSA | 40 | 614 | 1343 | 1978 | 36 | WETFISH | 2 | EYETHU FISHING (PTY) LTD |
| ARUM | RSA | 44 | 752 | 1119 | 1985 | 36 | WETFISH | 1 | IRVIN & JOHNSON LIMITED |
| AUGUSTA ONE | RSA | 29.7 | 127 | 900 | 1977 | 26 | WETFISH | 1 | MFV AUGUSTA I VESSEL CO (PTY) LTD |
| AZALEA | RSA | 56 | 801 | 1343 | 1971 | 31 | WETFISH | 1 | IRVIN & JOHNSON LIMITED |
| BASANI | RSA | 35 | 494 | 820 | 1999 | 35 | WETFISH | 3 | ZWM FISHING (PTY) LTD |
| BLUEBELL | RSA | 57 | 1917 | 2460 | 1989 | 62 | WETFISH | 1 | IRVIN & JOHNSON LIMITED |
| CAPE MACLEAR | RSA | 22 | 73 | 275 | 1964 | 12 | WETFISH | 1 | IRVIN & JOHNSON LIMITED |
| CAROLINE | RSA | 41 | 313 | 745 | 1965 | 22 | WETFISH | 1 | GAMBERA CAPE (PTY) LTD |
| CHRISTELLE | RSA | 20 | 90 | 400 | 1999 | 12 | WETFISH | 1 | SEAVUNA FISHING COMPANY (PTY) LTD |
| COBELO | RSA | 28 | 245 | 552 | 1978 | 20 | WETFISH | 1 | ALGOA FISHING (PTY) LTD |
| CODESA ONE | RSA | 33 | 415 | 736 | 1987 | 31 | WETFISH | 2 | XHANTILOMZI FISHING (PTY) LTD |
| CRASSULA | RSA | 56 | 811 | 1343 | 1971 | 40 | WETFISH | 1 | IRVIN & JOHNSON LIMITED |
| DONNA MARIA LIGIA | RSA | 39 | 293 | 900 | 1965 | 28 | WETFISH | 2 | MFV DONNA MARIA LIGIA VESSEL COMPANY |
| EBHAYI | RSA | 36 | 355 | - | 1979 | 24 | WETFISH | 2 | CALAMARI FISHING (PTY) LTD |
| ESRA CRUZ | RSA | 21 | 77 | 284 | 1964 | 10 | WETFISH | 1 | NOORDKAAP VISSERMAN ONDERNEMING BPK |
| EXEL | RSA | 30 | 221 | 588 | 1966 | 20 | WETFISH | 1 | COMBINED FISHING ENTERPRISES CC |
| FOREST LILY | RSA | 41 | 722 | 1950 | 2002 | 29 | WETFISH | 1 | IRVIN & JOHNSON LIMITED |
| FOXGLOVE | RSA | 41 | 722 | 1950 | 2002 | 29 | WETFISH | 1 | IRVIN & JOHNSON LIMITED |
| GODETIA | RSA | 56 | 801 | 1343 | 1972 | 40 | WETFISH | 1 | IRVIN & JOHNSON LIMITED |
| GULLIVER | RSA | 37 | 432 | 1006 | 1968 | 23 | WETFISH | 2 | LUZIZI FISHING (PTY) LTD |
| HARVEST BELINDA | RSA | 42 | 453 | 954 | 1975 | 23 | WETFISH | 1 | SEA HARVEST CORPORATION (PTY) LTD |
| HARVEST BETTINA | RSA | 41 | 586 | 1285 | 1976 | 25 | WETFISH | 1 | SEA HARVEST CORPORATION (PTY) LTD |
| HARVEST DIANA | RSA | 42 | 453 | 954 | 1975 | 23 | WETFISH | 1 | SEA HARVEST CORPORATION (PTY) LTD |
| HARVEST FLORITA | RSA | 43 | 453 | 954 | 1975 | 25 | WETFISH | 1 | SEA HARVEST CORPORATION (PTY) LTD |
| HARVEST GARDENIA | RSA | 38 | 526 | 866 | 1986 | 23 | WETFISH | 1 | SEA HARVEST CORPORATION (PTY) LTD |

| Vessel | Flag | Length (m) | GRT (tons) | Horse Power (kW) | Year Built | Crew | Type | Rights fished | Owners |
|---|---|---|---|---|---|---|---|---|---|
| HARVEST GAVINA | RSA | 38 | 524 | 866 | 1985 | 24 | WETFISH | 1 | SEA HARVEST CORPORATION (PTY) LTD |
| HARVEST GEORGINA | RSA | 38 | 525 | 866 | 1985 | 23 | WETFISH | 2 | SEA HARVEST CORPORATION (PTY) LTD |
| HARVEST KIRSTINA | RSA | 41.38 | 586 | 1119 | 1974 | 25 | WETFISH | 1 | SEA HARVEST CORPORATION (PTY) LTD |
| HARVEST MARINA | RSA | 41 | 586 | 954 | 1973 | 25 | WETFISH | 2 | AJF EIGELAAR & SEUNS EDMS BPK |
| HARVEST RAMONA | RSA | 46 | 586 | 954 | 1975 | 23 | WETFISH | 1 | SEA HARVEST CORPORATION (PTY) LTD |
| HARVEST SELINA | RSA | 35 | 544 | 976 | 1986 | 25 | WETFISH | 1 | SEA HARVEST CORPORATION (PTY) LTD |
| HARVEST TAMARA | RSA | 41 | 586 | 954 | 1975 | 25 | WETFISH | 1 | SEA HARVEST CORPORATION (PTY) LTD |
| HARVEST VERONICA | RSA | 35 | 544 | 976 | 1966 | 25 | WETFISH | 1 | SEA HARVEST CORPORATION (PTY) LTD |
| HARVEST ZULA | RSA | 41.38 | 586 | 1454 | 1975 | 25 | WETFISH | 1 | SEA HARVEST CORPORATION (PTY) LTD |
| IMMANUEL | RSA | 27 | 115 | 520 | 1968 | 12 | WETFISH | 1 | SEAVUNA FISHING COMPANY (PTY) LTD |
| LARKSPUR | RSA | 44 | 752 | 119 | 1985 | 36 | WETFISH | 1 | IRVIN & JOHNSON LIMITED |
| LEE ANNE | RSA | 42 | 381 | 786 | 1961 | 22 | WETFISH | 2 | SIYALOBA FISHING ENTERPRISES (PTY) LTD |
| LEEUKOP | RSA | - | - | - | - | - | WETFISH | 1 | PORT NOLLOTH JOINT VENTURE FISHING COMPANY |
| LEZANDI | RSA | 20 | 154 | 370 | 2003 | 15 | WETFISH | 1 | ANGLO MAR FISHING RIGHTS COMPANY |
| MARPRO | RSA | - | - | - | - | - | WETFISH | 1 | MARPRO |
| MARRETJIE | RSA | 36 | 330 | 1480 | 1980 | 24 | WETFISH | 2 | EYETHU FISHING (PTY) LTD |
| NERINE | RSA | 44 | 752 | 1119 | 1985 | 36 | WETFISH | 1 | IRVIN & JOHNSON LIMITED |
| SVEINN JONSSON | RSA | 42 | 576 | 1100 | 1973 | 22 | WETFISH | 2 | SENTRAWL (PTY) LTD |
| TORALLA | RSA | 48 | 684 | 900 | 1973 | 41 | WETFISH | 1 | TORALLA VESSEL CO (PTY) LTD |
| UKHOZI | RSA | 28 | 302 | 625 | 1980 | 29 | WETFISH | 2 | PROTEA FISHING COMPANY (PTY) LTD |
| VERBENA | RSA | 53 | 811 | 1343 | 1972 | 40 | WETFISH | 1 | IRVIN & JOHNSON LIMITED |
| VUNA ELITA | RSA | - | - | - | - | - | WETFISH | 1 | VUNA FISHING CO (PTY) LTD |
| VUNA SHAMROCK | RSA | 45 | 439 | 800 | 1965 | 24 | WETFISH | 1 | VUNA FISHING CO (PTY) LTD |
| ZUIDERZEE | RSA | 29 | 193 | 560 | 1974 | 15 | WETFISH | 2 | EYETHU FISHING (PTY) LTD |
| LOBELIA | RSA | 56 | 1051 | 1343 | 1970 | 50 | COMBINED | 1 | IRVIN & JOHNSON LIMITED |
| MARIA MARINE | RSA | 46 | 658 | 1196 | 1971 | 38 | COMBINED | 1 | FOOD CORP (PTY) LTD |
| PORTUNITY | RSA | 22 | 166 | 537 | 2001 | 16 | COMBINED | 1 | NOORDKAAP VISSERMAN ONDERNEMING BPK |
| STEVIA | RSA | 56 | 801 | 1343 | 1973 | 50 | COMBINED | 1 | IRVIN & JOHNSON LIMITED |

The characteristics of the fleet are summarised in Table 2.3. On average, the freezer vessels appear to be larger and more powerful than the wetfish trawlers, but the variation in size and power of the vessels within these two groups is substantial, making it virtually impossible to categorize the vessels based on these attributes alone (Figure 2.2).

**Table 2.3.** Comparisons of some mean characteristics for freezer vessels and wetfish trawlers in the South African offshore demersal trawl fleet.

| Characteristic | Total Fleet | Freezer vessels | Wetfish vessels |
|---|---|---|---|
| Length (m ± Std Dev) | 42.9 ± 12.3 | 49.8 ± 14.0 | 39.2 ± 9.6 |
| GRT (tons ± SD) | 647.6 ± 519.6 | 906.7 ± 713.6 | 507.7 ± 302.6 |
| Horsepower (kW ± SD) | 1097.4 ± 578.5 | 1317.6 ± 724.2 | 976.1 ± 443.3 |
| Crew (± SD) | 30.9 ± 14.8 | 40.0 ± 18.6 | 26.0 ± 9.3 |
| Construction Year (± SD) | 1977.4 ± 11.6 | 1977.6 ± 13.6 | 1977.3 ± 10.5 |

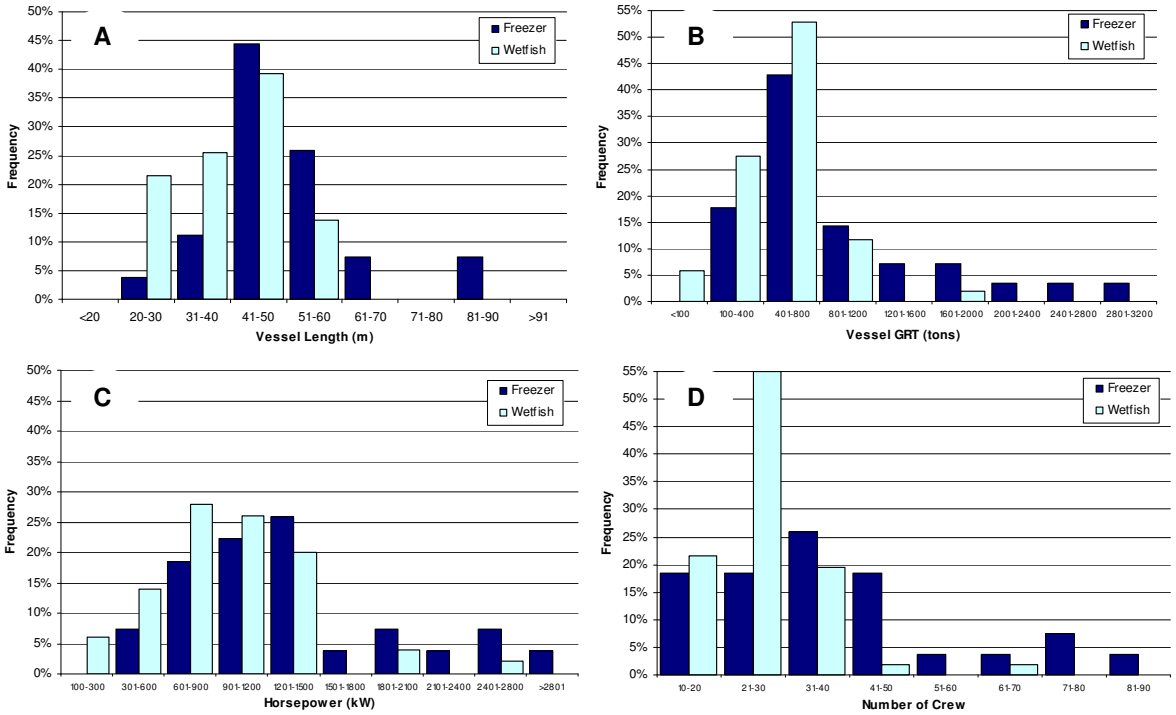


**Figure 2.2.** The offshore demersal trawl wetfish and freezer fishing fleets, summarised by A: length, B: Gross Registered Tonnage, C: Horsepower and D: number of crew.

The freezer vessels carry larger crews, to service their factory facilities. The average age of both groups of vessels was almost identical at 28 years; the average year of construction for the whole fleet was 1977. The oldest vessel was constructed in 1960 and the most recent in 2003. Less than 14% of the vessels in the fleet have been constructed in the last 20 years (Figure 2.3).

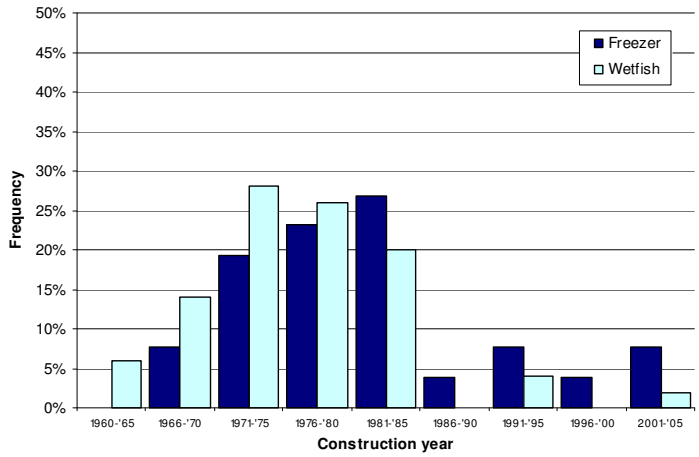


**Figure 2.3.** The age of the South African offshore demersal trawl fleet.

Approximately half the fishing companies in the fishery did not have direct ownership of a vessel in the offshore demersal trawl fleet; however most had some form of investment in a vessel operating company. In terms of the number of rights fished per vessel, the majority of the vessels (69%) fished for one company only, and 25% fished for two companies. Five vessels fished for between 3 - 6 rights holders. The vessel that fished for six rights holders is an example of investment in the industry by small quota holders through collaboration. Four rights-holder companies own the vessel, with quota ranging from 500 – 1,000 tons apiece, through shareholding in a vessel operating company.

Most (± 90%) of the offshore demersal trawl catch was landed in the Western Cape, with some vessels operating out of Port Elizabeth and Mossel Bay in the Eastern Cape (9%) and one vessel operating in Port Nolloth (Northern Cape Province, see Figure 2.4).

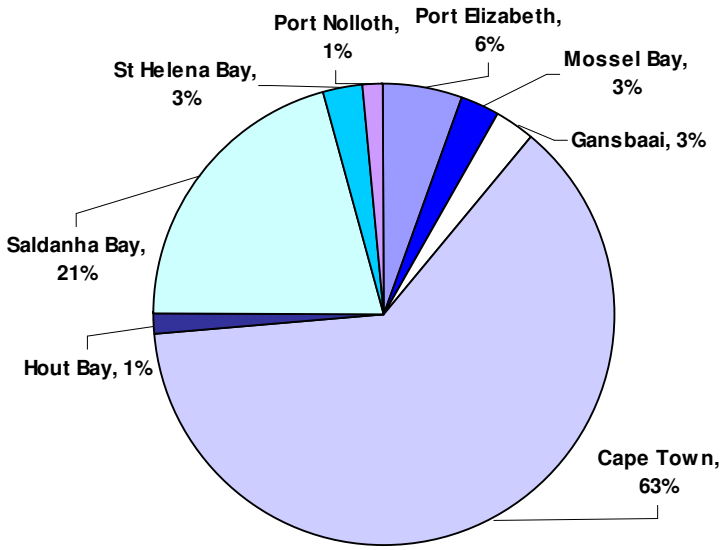


**Figure 2.4.** Ports and fishing harbours from which the South African offshore demersal trawl fleet operate.

### 2.2.2 Inshore demersal trawl

As with the offshore fishery, the inshore demersal trawl fishery was pioneered by Irvin & Johnson, using a few trawlers operating out of East London, Port Elizabeth and Mossel Bay. The inshore fishery is restricted to the area between Cape Agulhas (20° E) in the west and the Great Kei River in the east, extending seawards to a depth of 110 m. Strictly speaking, the inshore demersal trawl fishery is based on the south coast of South Africa, just outside of the Benguela Current Large Marine Ecosystem. However, as the fishery exploits a significant proportion of hake TAC in South Africa, it has been included here. The fishery also targets the Agulhas sole *Austroglossus pectoralis*.

In the 1950's some smaller, privately owned trawlers joined the fishery, primarily targeting the sole stocks. By the 1970s, the inshore trawl fleet had increased to around 60 vessels, and had spread along the south coast to include the fishing harbours of Hermanus and Gansbaai. The introduction of the global hake TAC in 1978 and a sole TAC in the same year had a strong effect on the companies in the inshore fishery. Too many participants were competing for inshore fish resources that had been limited to 7000 tons for hake (6% of the global hake

TAC) and 700 tons for sole in 1979. This resulted in more than a decade of effort rationalization and quota amalgamation. In 1982, 23 companies were active in the fishery, operating 54 boats. Ten years later, only 11 companies were left, operating a fleet of 33 trawlers. In 2000, two new entrants were granted access to the inshore fishery, although the number of active vessels had decreased to 32. With the advent of medium term rights, the number of rights holders in the fishery was limited to 16, operating a permissible maximum of 35 vessels.

#### 2.2.2.1 Rights holders

The medium term rights holders in the inshore demersal hake fishery and their quota allocations for the 2003 season are listed in Table 2.4.

**Table 2.4.** Medium term rights holders in the South African inshore demersal trawl fishery, and their hake and sole quota allocation for 2003.

| Company | Hake Allocation for 2003 (tons) | Sole Allocation for 2003 (tons) |
|---|---|---|
| IRVIN & JOHNSON LIMITED | 3,532 | 91 |
| SEA-VUNA FISHING COMPANY (PTY) LTD | 2,126 | 274 |
| VIKING INSHORE FISHING (PTY) LTD | 1,202 | 177 |
| HERMANUS SEA FOOD ( PTY) LTD | 748 | 89 |
| G&T FISHING ENTERPRISES (PTY) LTD | 410 | 28 |
| CRONJE PJ | 336 | 49 |
| BMC VISSERYE CC | 260 | 18 |
| CHETTY'S FISHERIES CC | 251 | 11 |
| VECTO TRADE 126 (PTY) LTD | 204 | 13 |
| CAPENIS INVESTMENTS (PTY) LTD | 180 | 14 |
| CRONJE MA | 168 | 28 |
| DYER EILAND VISSERYE (PTY) LTD | 120 | 11 |
| EZABANTU FISHING CC | 120 | 11 |
| NKUNGA FISHING CORPORATION (PTY) LTD | 120 | 11 |
| UMOYA FISH PROCESSORS (PTY) LTD | 120 | 11 |
| OOSTHUIZEN BD | 113 | 15 |
| **TOTAL** | **10,010** | **851** |

Most of the resource allocation (hake = 70%, sole = 64%) went to the three largest companies operating in this fishery in 2003. One of the historic operators dropped out of the fishery in 2001. The four new entrants granted access to the fishery through the medium term rights allocation process received a combined amount of about 5% of the total quota available for both the hake and sole resource.

It is important to note that the percentage of the hake quota allocated to a company did not necessarily have bearing on the amount of sole allocated; for example, Irvin & Johnston Limited received the largest hake quota, but only the fourth largest portion of the sole quota. This relationship depended, in part, on which species was traditionally targeted by the rights holder in the past.

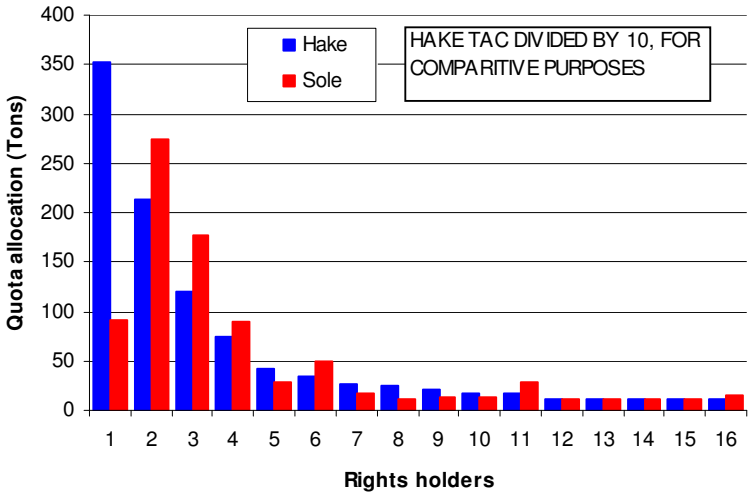


**Figure 2.5.** Hake and sole quota allocations in the South African inshore demersal trawl fishery in 2003. Hake quota was divided by 10 for comparison with sole quota.

Unlike the offshore demersal trawl fishery, where all the rights are owned by fishing companies, some (± 19%) of the rights holders in the inshore fishery were individuals. About 31% of the rights holding companies could be classified as very large to large, with annual turnovers exceeding R10 million. About 44% of the operations were medium scale entities (R1 – 10 million), and the rest were small (a turnover of less than R1 million per annum). Excluding the employees from Irvin & Johnston, whose numbers were included in the offshore demersal fishery, the inshore fishery employed a further 1,160 workers. Thirty-one percent of the companies employed more than 100 workers, one company employed between 50 – 100 workers, and 53% of the rights holders employed less than 51 people. Most (66%) of the employment in the fishery was located at operations in the Western Cape Province (mainly Mossel Bay), but some employment occurred in the Eastern Cape Province (34%).

### 2.2.2.2 Vessels

The vessels operating in the inshore demersal fishery are wetfish trawlers. On average, they are smaller than those active in the offshore fishery (Table 2.5). Permit conditions limit the size of the vessels operating in this fishery to a maximum length of 30 m, with a maximum power limit of 750 kW. The size of the fleet is limited to 35 vessels, as part of the management strategy for the fishery by Marine & Coastal Management. However, only twenty-eight vessels were reported active in the fishery in 2003, according to a census carried out in 2004 (ETC'2004).

**Table 2.5.** The inshore demersal trawl fishing fleet in 2003.

| Vessel | Flag | Length (m) | GRT (tons) | Horse Power (kW) | Year Built | Crew | Rights fished | Owners |
|---|---|---|---|---|---|---|---|---|
| AMSTELDIEP | RSA | 27 | 168 | 520 | 1969 | 12 | 1 | SEAVUNA FISHING COMPANY (PTY) LTD |
| BALUGURU | RSA | 19 | 76 | 272 | 1990 | 12 | 1 | CAPENSIS INVESTMENTS (PTY) LTD |
| BUCCANEER | RSA | 22 | 87 | 360 | 1969 | 12 | 1 | GANSBAAI FISHING WHOLESALERS |
| CAPE CROSS | RSA | 22 | 78 | 0 | 1963 | 12 | 2 | BMC VISSERYE CC |
| CAPE FRIO | RSA | 22 | 73 | 298 | 1964 | 12 | 1 | IRVIN & JOHNSON LIMITED |

| Vessel | Flag | Length (m) | GRT (tons) | Horse Power (kW) | Year Built | Crew | Rights fished | Owners |
|---|---|---|---|---|---|---|---|---|
| CAPE MACLEAR | RSA | 22 | 73 | 275 | 1964 | 12 | 1 | IRVIN & JOHNSON LIMITED |
| CAPE SEAL | RSA | 22 | 74 | 300 | 1960 | 12 | 1 | IRVIN & JOHNSON LIMITED |
| CAPE VIDAL | RSA | 22 | 73 | 300 | 1964 | 12 | 1 | IRVIN & JOHNSON LIMITED |
| CHRISTELLE | RSA | 20 | 90 | 400 | 1999 | 12 | 1 | SEAVUNA FISHING COMPANY (PTY) LTD |
| DONNA MARIA | RSA | 39 | 293 | 900 | 1965 | 28 | 1 | MFV DONNA MARIA LIGIA VESSEL COMPANY (PTY) LTD |
| GURUSAM | RSA | 16 | 44 | 0 | 1985 | 12 | 1 | CHETTY'S FISHERIES CC |
| IMMANUEL | RSA | 27 | 115 | 520 | 1968 | 12 | 1 | SEAVUNA FISHING COMPANY (PTY) LTD |
| LADY IMELDA | RSA | 15 | 45 | 186 | 1996 | 8 | 1 | VIKING INSHORE FISHING (PTY) LTD |
| LEONORA | RSA | 15 | 49 | 186 | 1998 | 8 | 1 | VIKING INSHORE FISHING (PTY) LTD |
| LINDIWE | RSA | 15 | 47 | 221 | 2000 | 8 | 1 | VIKING INSHORE FISHING (PTY) LTD |
| LINDSAY | RSA | 31 | 174 | 670 | 1973 | 21 | 1 | VIKING INSHORE FISHING (PTY) LTD |
| LOCQUERAN | RSA | 21 | 106 | 441 | 1975 | 11 | 1 | IRVIN & JOHNSON LIMITED |
| LORELEI | RSA | 21 | 81 | 300 | 1989 | 10 | 1 | MFV LORELEI VESSEL COMPANY (PTY) LTD |
| MANDI | RSA | 12 | 125 | 140 | 1996 | 6 | 1 | SEAVUNA FISHING COMPANY (PTY) LTD |
| MARY ANN | RSA | 14 | 24 | 142 | 1994 | 8 | 1 | CRONJE PJ |
| MARY JO | RSA | 14 | 24 | 142 | 1996 | 8 | 1 | CRONJE PJ |
| NAMUTONI | RSA | 21 | 81 | 276 | 1966 | 10 | 2 | CRONJE MA |
| ROCHELLE | RSA | 12 | 125 | 220 | 1996 | 6 | 1 | SEAVUNA FISHING COMPANY (PTY) LTD |
| SANTA ISABEL | RSA | 19 | 65 | 360 | 1973 | 19 | 1 | MFV SANTA ISABEL VESSEL COMPANY (PTY) LTD |
| SEEHEIM | RSA | 21 | 81 | 276 | 1967 | 10 | 2 | CRONJE PJ |
| ST BLAIZE | RSA | 24 | 139 | 420 | 1979 | 11 | 1 | IRVIN & JOHNSON LIMITED |
| ST CROIX | RSA | 24 | 179 | 420 | 1987 | 11 | 1 | IRVIN & JOHNSON LIMITED |
| STAALKOP | RSA | 19 | 100 | 320 | 1964 | 8 | 2 | VECTO TRADE 126 (PTY) LTD |

Unlike the offshore demersal trawlers, only three vessels fished for more than one rights holder in 2003. The characteristics of the inshore fleet are summarised in Table 2.6.

**Table 2.6.** A summary of some mean characteristics for wetfish trawlers in the South African inshore demersal trawl fleet.

| Characteristic | Average for Fleet |
|---|---|
| Length (m ± Std Dev) | 20.7 ± 5.9 |
| GRT (tons ± SD) | 95.9 ± 57.4 |
| Horsepower (kW ± SD) | 316.5 ± 191 |
| Crew (± SD) | 11.7 ± 14 |
| Construction Year (± SD) | 1979.4 ± 4.6 |

The average age of the vessels operating in the inshore demersal trawl fishery was about 26 years (Figure 2.6); almost the same as that of the offshore fleet (28 years).

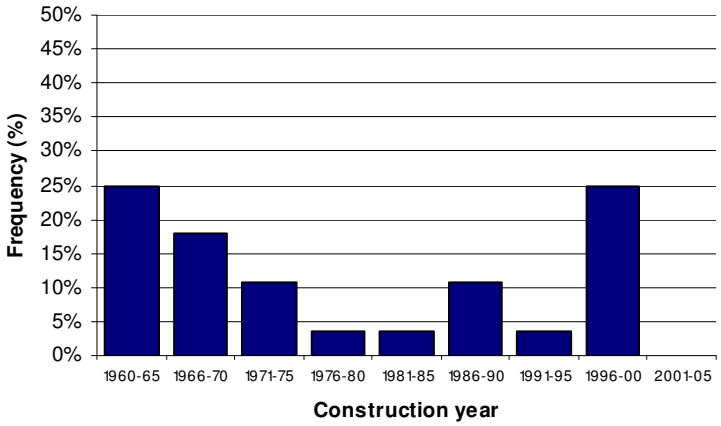


**Figure 2.6**. The age of the South African inshore demersal trawl fleet.

Most (83%) of the inshore demersal trawl vessels reported landing their catch at Mossel Bay in the Western Cape, but some (17%, Figure 2.7) offloaded their catch in Port Elizabeth.

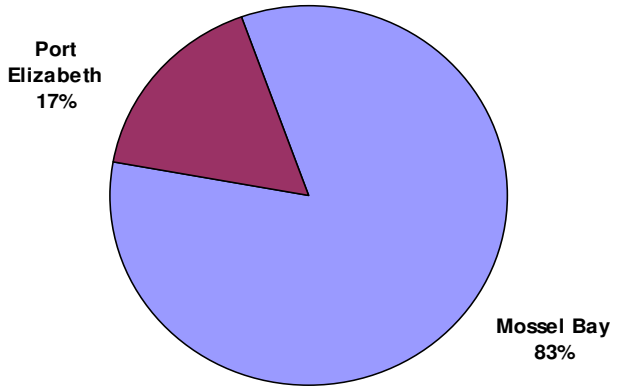


**Figure 2.7.** Ports at which the South African inshore demersal trawl fleet landed their catch in 2003.

On average, the inshore trawlers carry less than half the crew of the offshore trawlers. Eighty-two percent of the inshore fleet had 8 to 12 crew; two vessels had only six crewmembers each, while one vessel had as many as 28 crew. The total number employed on the inshore trawl vessels in 2003 were 323 crewmembers.

### 2.2.3 Hake longline

The hake longline fishery is one of the most recent additions to the South African fishing sector. The first experimental permits were granted in 1983, to nine fishing companies that already held hake quotas for the demersal trawl fishery. Two years later the fishing effort had moved from the west coast to the south coast of the Western Cape Province, to target kingklip. This was because the hake caught by the longline method were subtracted from the right-holders' demersal trawl quota, while the kingklip catches were not quota-controlled. The market price for kingklip was also significantly higher than for hake. In 1986, six more kingklip-directed experimental longline permits were issued, but the resource could not sustain the subsequent fishing pressure. After initially being high, catches decreased sharply

until a moratorium was declared on demersal longlining in 1990. Nevertheless, an interest in demersal longlining in South Africa had been stimulated by the experiment, especially with the realisation that hake of exceptional quality could be economically caught in relatively shallow water, using longline technology.

The interest in longline fishing for hake (including illegal fishing pressure) led to the reinstatement of the demersal longline experiment in 1994, with the proviso that only hake could be targeted. A carefully monitored and controlled one-year pilot study was followed by a two-year hake-directed experimental fishery.

About 80 vessels were allowed to operate in the experimental fishery. During this time, the lucrative Prime Quality (PQ) market for fresh South African hake on ice was developed in Europe (primarily in Spain). The experiment was declared a success and fishing rights were awarded under the Marine Living Resources Act in 1999 and 2000, but these allocations were disputed in court and had to be set aside. Eventually medium-term rights were successfully awarded to 75 rights holders in 2001, but this number almost doubled after a series of appeals were made to the Minister.

Currently, the hake longline fishery consists of an inshore and an offshore sector. Those vessels operating under an inshore permit are not restricted to the inshore fishing grounds, but may only use longlines with 4000 hooks or less. The offshore permit holders may use more than 4000 hooks per line, but may not fish in waters shallower than 110 m. The demersal longline vessels use a unique double-line system designed to cope with the harsh weather, strong currents and hard, rough substrate of the fishing grounds. They may only deploy the longlines before sunrise, to minimise seabird catches.

#### 2.2.3.1 Rights holders

There were 141 medium-term rights holders in the South African hake longline fishery. The rights holders and their quota allocations for 2003 are presented in Table 2.7.

**Table 2.7.** Medium term rights holders in the South African demersal longline fishery, and their hake quota allocation for 2003.

| RIGHTS HOLDER | 2003 Allocation (Tons) | RIGHTS HOLDER | 2003 Allocation (Tons) |
|---|---|---|---|
| ABANTU FISHING (PTY) LTD | 57 | MAINTENANCE FISHING CC | 57 |
| ACTIVE TWENTY (PTY) LTD | 57 | MALI BONGWE FISHERIES CC | 57 |
| AFD FISHING CC | 57 | MASAKHANE DEVELOPMENT TRUST | 57 |
| AFRICAN STAR FISHING (PTY) LTD | 57 | MASIFUNDE FISHING CC | 57 |
| AL-AMAN FISHING CC | 57 | MASIKHULE FISHING CC | 88 |
| ALGOA MARINE EXPORTERS (PTY) LTD | 57 | MAST FISHING (PTY) LTD | 57 |
| ALICE COMMUNITY FISHING ENTERPRISES | 57 | MAZIDLEKHAYA FISHING CC | 57 |
| ALICENTRE FISHING CC | 88 | MONODON FISHING ENT.(PTY) LTD | 57 |
| AMAQOBELA FISHING (PTY) LTD | 57 | MOSSEL BAY INDIGENOUS FISHERMEN | 88 |
| BAFIAANSBERG (EDMS) BPK | 57 | NATI SI NAKO FISHING CC | 57 |
| BALOBI PROCESSORS (PTY) LTD | 57 | NOORDKAAP VISSERMAN ONDERN | 132 |
| BAYVIEW FISHING (PTY) LTD | 57 | NPS AGENCIES CC | 57 |
| BIZAFRIKA 131 (PTY) LTD | 57 | OCEAN UKHOZI FISHERIES CC | 88 |
| BLUEFIN FISHING ENTERPRISES CC | 88 | OCEAN VIEW & MASIPHUMELELE FISHING | 88 |
| BLUEFIN HOLDINGS (PTY) LTD | 57 | OPEN CIRCLE PROJECTS ONE CC | 57 |
| BROSS INVESTMENTS (PTY) LTD | 57 | PAKAMANI FISHING (PTY) LTD | 88 |
| CALAMARI FISHING (PTY) LTD | 57 | PELLSRUS HISTORICAL FISHING CORP | 88 |
| CAPE FISH PROCESSORS (PTY) LTD | 88 | PETERSENS FISHING ENTERPRISES CC | 57 |
| CARINA FISHING CC | 57 | PIKE ROCK FISHING CC | 57 |

| RIGHTS HOLDER | 2003 Allocation (Tons) | RIGHTS HOLDER | 2003 Allocation (Tons) |
|---|---|---|---|
| CARPENSIS FISHING INDUSTRIES | 57 | PIMPANO SIXTEEN (PTY) LTD | 57 |
| COMBINED FISHING ENTERPRISES CC | 57 | PREMIER FISHING SA (PTY) LTD | 57 |
| CYRIL BURREL FISHING CC | 57 | QUANTUS FISHING (PTY) LTD | 57 |
| D & H FISHERIES CC | 57 | R D SUMMERS FISHERIES CC | 57 |
| D CHRISTY AND SONS (PTY) LTD | 57 | RAILOUN MIERWAAN | 57 |
| DEUS TE AJUDE FISHING (PTY) LTD | 88 | RAINBOW NATION FISHING CC | 57 |
| DIABLO TRADE 113 (PTY) LTD | 88 | REIGER VISSERYE CC | 88 |
| DMA FISHING ENTERPRISES (PTY) LTD | 57 | RIETVLEI FISHING C | 88 |
| DYER EILAND VISSERYE (EDMS) BPK | 57 | RISAR FISHING CC | 88 |
| EASTERN MARINE ENTERPRISES (PTY) LTD | 57 | ROBBERG FAST FOODS SA (PTY) LTD | 57 |
| EMACHIBINI FISHERIES CC | 57 | ROYAL ALGOA FISHING CO (PTY)LTD | 57 |
| EYABANTU FISHERIES CC | 57 | S A COMMERCIAL FISHERMEN | 265 |
| EYETHU FISHING (PTY) LTD | 57 | SAFRIKA FISHING CC | 57 |
| EZABANTU FISHING CC | 57 | SAUL CLOETE & VENNOTE (PTY) LTD | 57 |
| EZINTLANZINI FISHING (PTY) LTD | 88 | SCEPTRE FISHING (PTY) LTD | 57 |
| EZOLWANDLE FISHNG (PTY) LTD | 88 | SIBANYE FISHING COMPANY (PTY) LTD | 88 |
| FAULKNER FISHING ENTERPRISES CC | 57 | SIMUNYE FISHERMAN CC | 57 |
| FERRO FISHING (PTY) LTD | 57 | SISONKE FISHING CC | 57 |
| FULLDECK INVESTMENTS (PTY) LTD | 88 | SIYAKHA FISHING CC | 57 |
| GAMKA FISHING ENTERPRISES CC | 57 | SIZABANTU FISHING CORPORATION | 88 |
| GENUINE FISHING CC | 57 | SKOTSHE KLOOF FISHERY CC | 57 |
| GEROMBE FISHING ENTERPRISES CC | 88 | SLH FISHERIES LIMITED | 57 |
| GIBBISEPS VISSERYE (EDMS) BPK | 57 | SOLOMONS FISHING CC | 57 |
| GLOMORONE (PTY) LTD | 57 | SOUNDPROPS INVEST. 1167 (PTY) LTD | 88 |
| GOVEST EIGHT CC | 57 | SOUTH AFRICAN SEA PRODUCTS LTD | 57 |
| HACKY FISHING (PTY) LTD | 88 | SOUTH. POINT OCEANIC FRESH PROD. | 57 |
| HEATWAVE FISHING CC | 57 | STARMARK (PTY) LTD | 57 |
| HENBASE 2361 CC | 57 | TARIDOR FIVE CC | 88 |
| HENTIQ 1173 (PTY) LTD | 88 | THE CAPE PENINSULA LINEFISHERMAN | 88 |
| HENTIQ 2349 (PTY) LTD | 57 | THE FISHING TRUST | 57 |
| HUMANSDORP COMM. WORKERS (PTY) LTD | 88 | THE TUNA HAKE CORPORATION LTD | 705 |
| I FORTUNE AND CREW (PTY) LTD | 88 | TITANIC ELEVEN CC | 57 |
| IMBUMBA FISHING CC | 57 | TRADE OFF 65 (PTY) LTD | 88 |
| IMPALA FISHING CO (PTY) LTD | 88 | TRAWL INVESTMENTS CC | 57 |
| INJECTRADE 1100 CC | 57 | TTM FISHING (PTY) LTD | 57 |
| INTER FISH (PTY) LTD | 57 | UKLOBA FISHING | 88 |
| INTLANZI FISHING (PTY) LTD | 88 | ULWANDLE FISHING (PTY) LTD | 57 |
| ITHEMBA LABANTU FISHING CC | 57 | UMFONDINI FISHING (PTY) LTD | 88 |
| J- BAY SQUID CATCHES (PTY) LTD | 57 | UMZAMOWETHU FISHERMEN CO-OP. CC | 57 |
| J & J VISSERYE CC | 57 | UNATHI WENA FISHING CC | 57 |
| JFP FISHING CC | 57 | V M YOUNG VISSERYE BK | 88 |
| JOENARDO FISHING CC | 57 | VALORTRADE 1143 CC | 57 |
| KALAHARI FISHING CC | 57 | VASCO DA GAMA FISHING CC | 57 |
| KHULANI FISHING (PTY) LTD | 88 | VERSATEX TRADING 249 (PTY)LTD | 57 |
| KNYSNA FISHING COMPANY (PTY) LTD | 88 | Victor George NEWMAN CC | 88 |
| KUSASA COMMODITIES 63 (PTY) LTD | 57 | VIKING FISHING CO (DEEP SEA) (PTY) LTD | 57 |
| KWIK FREEZE FISHERIES (PTY) LTD | 88 | WESTFORT FISHING CC | 57 |
| L M FISHERIES (PTY) LTD | 88 | YELLOWSTAR TRADING 1154 (PTY) LTD | 57 |
| LAAGGETY VISSERYE CC | 57 | YEYETHU FISHING (PTY) LTD | 57 |
| LAINGVILLE FISHERIES (PTY) LTD | 88 | YOUR TRADE 19 CC | 57 |
| LE-TAP FISHING CC | 57 | ZIMELE FISHING CC | 57 |
| LONGLINE FISHING (PTY) LTD | 88 | **RESERVE** | **229** |
| | | **TOTAL** | **10,440** |

The distribution of quota amongst the rights holders was relatively even compared to the rest of the hake fisheries (Figure 2.8). Three cooperative-type fishing organisations held approximately 11% of the quota (Tuna Hake Corporation Limited, 6.9%; SA Commercial Fishermen, 2.6% and Noordkaap Vissermans Onderneming, 1.3%). The rest of the rights holders could be divided into two groups; those with ± 0.9% portions of the TAC (40 rights holders) and those with ± 0.6% (98 rights holders).

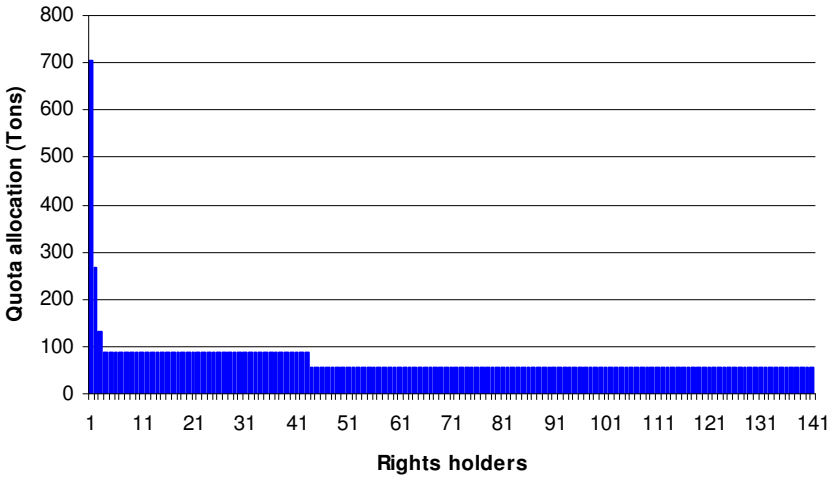


**Figure 2.8.** Hake quota allocations in the South African demersal longline fishery in 2003.

More than half the rights holding entities were propriety limited companies (52%), and most of the rest were closed corporations (45%). Two rights were held by individuals (1.5%), and two were held in trusts (1.5%). The hake longline fishery is not as Capital intensive as the rest of the demersal hake fisheries, and was identified by Marine & Coastal Management as ideally suited for the empowerment of small and medium enterprises and historically disadvantaged fishers. Most of the medium term rights holders were small (± 50%) or medium (± 40%) sized operations. Only about 10 percent of the companies were classified as large companies in 2004.

Most (± 88%) of the rights holders employed less than 50 workers, which is in keeping with a fishery dominated by small companies; 7 % of the companies employ between 50 – 100 workers, whilst 5% employ more than 100 staff.

According to the Economic & Transformation Census carried out for the fishery in 2004, approximately 5625 people were employed by the hake longline rights holders. However, some of the larger fishing companies had rights to a number of fisheries, and there is likely to be a “cross-pollination” effect when attempting to estimate employment derived solely from the hake longline fishery. For example, the three large, multiple rights holding fishing companies like Premier Fishing, Viking Fishing and SA Sea Products employed some 1760 people (31% of the hake longline total) between them. Marine & Coastal Management estimates that the hake longline fishery employs approximately 3600 permanent workers and a further 3200 part time workers.

Medium-term hake longline fishing rights were awarded to operations in the Western Cape Province (67% of the total), the Eastern Cape Province (31%) and to three companies in the Northern Cape Province (2%).

### 2.2.3.2 Vessels

Approximately 90 demersal longline vessels were operating in the hake fishery in 2003. The fact that there are more rights holders than vessels in the fishery points to some vessels fishing for more than one rights holder. Fifty-six percent of the vessels fished for one rights holder only; 24 % fished for just two rights holders; 17% fished for between 3 – 5 rights holders, and 3 vessels fished for as many as six rights holders each (Table 2.8).

**Table 2.8.** The hake demersal longline fishing fleet in 2003.

| Vessel | Flag | Length (m) | GRT (tons) | Horse Power (kW) | Year Built | Crew | Rights fished | Owners |
|---|---|---|---|---|---|---|---|---|
| ABE SHAPIRO | RSA | 19 | 65 | 164 | 1968 | 15 | 2 | SOLIPROPS 1083 CC |
| ABRAHAM T | RSA | 21 | 100 | 308 | 1962 | 20 | 1 | JOAO MF DE FARIA |
| ALASKA | RSA | 20 | 68 | 500 | 1964 | 18 | 2 | ALASKA FISHING CC |
| ANNA AMELIA | RSA | 12 | <25 | 84 | 1946 | 12 | 1 | ROBBERG FAST FOODS SA PTY LTD |
| ARANDA | RSA | 14 | 25 | 93 | 1997 | 18 | 1 | BIZ AFRIKA 131 PTY LTD |
| ARIES | RSA | 29 | 214 | 360 | 1963 | 25 | 5 | ARIES BOAT COMPANY PTY LTD |
| ARIZONA | RSA | 20 | 75 | 385 | 1950 | 24 | 2 | INTLANZI FISHING PTY LTD |
| ARMANDO | RSA | 17 | 61 | 224 | 2002 | 21 | 1 | FERRO FISHING PTY LTD |
| ATLANTIC PRIVATEER | RSA | 21 | 99 | 300 | 1966 | 22 | 2 | ALGOA MARINE EXPORT. PTY LTD |
| AUGUSTA ONE | RSA | 30 | 127 | 474 | 1977 | 26 | 4 | MFV AUGUSTA I VES. CO. PTY LTD |
| AVRIL W | RSA | 18 | 64 | 207 | 1966 | 18 | 1 | SA SEA PRODUCTS LTD |
| BARBARA W | RSA | 18 | 64 | 200 | 1966 | 20 | 1 | SA SEA PRODUCTS LTD |
| BARCELONA | RSA | 12 | <25 | 166 | 1984 | 14 | 1 | ST FRANCIS SEA PRODUCTS |
| BRANDARIS | RSA | 21 | 109 | 450 | 1969 | 25 | 2 | PURPLE DOT INVEST. 6 PTY LTD |
| CAPE PADRONE | RSA | 22 | 74 | 295 | 1964 | 23 | 3 | RISAR FISHING CC |
| CAPENSIS | RSA | 32 | 221 | 298 | 1967 | 25 | 1 | QUANTUS FISHING PTY LTD |
| CAPRIVI | RSA | 21 | 102 | 300 | 1196 | 25 | 4 | BALOBI PROCESSORS PTY LTD |
| CASTELLAMARE | RSA | 21 | 86 | --- | 1968 | 24 | 1 | LAINGVILLE FISHERIES PTY LTD |
| CHRISTIE LEONIE | RSA | 21 | 91 | 250 | 1962 | 24 | 4 | IBHAYI COMM. BOAT OWN. PTY LTD |
| CHRISTO REI | RSA | 23 | 116 | 382 | 1991 | 25 | 1 | CYRIL BURREL FISHING CC |
| COLLEEN | RSA | 9 | <25 | 15 | 1954 | 12 | 1 | VASCO DA GAMA FISHING CC |
| COMET | RSA | 20 | 84 | 223 | 1959 | 22 | 1 | COMET FISHING CC |
| CONQUISTADOR | RSA | 18 | 46 | 240 | 1988 | 25 | 1 | SCEPTRE FISHING PTY LTD |
| CONSTANTIABERG | RSA | 18 | 56 | 172 | 1967 | 14 | 1 | SA SEA PRODUCTS LTD |
| CRISTIAAN ANJAGIRT | RSA | 16 | 54 | 272 | 1999 | | 1 | COMFISH PTY LTD |
| CYRIL BURREL TWO | RSA | 17 | 47 | 180 | 1958 | 12 | 1 | TUNA HAKE CORPORATION |
| DISA | RSA | 28 | 190 | 597 | 1974 | 25 | 6 | BOLOKO TRADING INVEST. PTY LTD |
| ELANDSBERG | RSA | 16 | <25 | --- | --- | 12 | 1 | JJ DE FLORENCA |
| ELLIS S | RSA | 19 | 74 | 282 | 1958 | 21 | 1 | GEROMBE FISHING ENT. CC |
| ERONGO TWO | RSA | 15 | 56 | 186 | 1999 | 24 | 1 | GAMKA FISHING PTY LTD |
| EROS | RSA | 22 | 93 | 425 | 1968 | 25 | 2 | ALICENTE FISHING CC |
| GIRL DIANA | RSA | 21 | 91 | 254 | 1963 | 30 | 1 | BLUE CONTINENT PROD. PTY LTD |
| HAI LIM 38 | RSA | 26 | 114 | 525 | 1994 | 6 | 2 | DYER EILAND VISSERYE (PTY) LTD |
| HERMAN S | RSA | 20 | 72 | 224 | 1957 | 20 | 1 | IMPALA FISHING PTY LTD |
| HIGH LAND QUEEN | RSA | 21 | 116 | 335 | 1968 | 22 | 2 | MVB HIGHLAND QUEEN BEL PTY LTD |
| HIGHLAND QUEEN | RSA | 14 | <25 | 180 | 1996 | 19 | 2 | HIGHLAND FISHERIES CC |
| KENTUCKY | RSA | 19 | 78 | 317 | 1959 | 20 | 1 | KENTUCKY FISHING CC |
| KIRSTENBERG | RSA | 20 | 64 | 172 | 1968 | 17 | 1 | MASIZAKHE FISHING COOP LTD |
| LARGO | RSA | 20 | 76 | 335 | 1963 | 35 | 1 | MOSSEL BAY INDIG. FISHERMEN |

| Vessel | Flag | Length (m) | GRT (tons) | Horse Power (kW) | Year Built | Crew | Rights fished | Owners |
|---|---|---|---|---|---|---|---|---|
| LEIN SAT | RSA | 18 | --- | --- | --- | --- | 1 | BIZ AFRIKA 1504 PTY LTD |
| LOCHANORA | RSA | 25 | 98 | 350 | 1981 | 22 | 2 | RD SUMMERS FISHERIES CC |
| LORRAINE | RSA | 12 | <25 | 180 | 1997 | 17 | 2 | Dyer Eiland Visserye (Pty) Ltd |
| LOUISE MARI | RSA | 17 | 81 | 268 | 1996 | 30 | 1 | LM FISHERIES PTY LTD |
| MALAGAS TWO | RSA | 21 | 97 | 315 | 1968 | 22 | 1 | KENTUCKY FISHING CC |
| MARTINHO | RSA | 19 | 83 | --- | 1955 | 20 | 1 | NORTE PESCA FISHING CC |
| MAXIMUS | RSA | 23 | 158 | 336 | 2002 | 30 | 5 | MAXIMUS FISHING PTY LTD |
| MFV CHRISTIE SUE | RSA | 19 | 73 | 240 | 1963 | 18 | 1 | MANUEL DE OLIM FISHING CC |
| MONNICKENDAM | RSA | 20 | 91 | 425 | 1962 | 23 | 6 | BLUE VENTURE FISHING PTY LTD |
| NICOLETTE | RSA | 20 | 83 | 350 | 1965 | 20 | 5 | BROSS INVESTMENTS PTY LTD |
| NUWELAND | RSA | 11 | <25 | 80 | 1970 | 4 | 1 | BAFIAANSBERG EDMS BPK |
| OCEAN RECOVERY | RSA | 23 | 96 | 283 | 1959 | 34 | 1 | GRAHAM MC CARTHY |
| OCEANA EMERALD | RSA | 20 | 141 | 300 | 1969 | 24 | 5 | BLUEFIN FISHING ENTERPRISES CC |
| OUMA | RSA | 16 | 51 | 318 | 1959 | 15 | 1 | VIRISSIMO FISHING PTY LTD |
| PAKAMANI | RSA | 21 | 117 | 330 | 1962 | 25 | 3 | PAKAMANI FISHING PTY LTD |
| PALINURUS | RSA | 45 | 424 | 1035 | 1961 | 29 | 6 | MFV PALINURUS VES. COM. PTY LTD |
| PAUL | RSA | 20 | 88 | 425 | --- | 16 | 2 | BATSATA FISHING PTY LTD |
| PAULINE BRIDGET | RSA | 15 | 42 | 120 | 1953 | 16 | 1 | CARPENSIS FISHING IND. PTY LTD |
| PENKOP TWO | RSA | 21 | 98 | 309 | 1965 | 20 | 3 | MONIZ FISHERIES PTY LTD |
| PERLE DU ATLANTIC | RSA | 15 | 44 | 180 | 1986 | 23 | 3 | SIBANYE FISHING COMPANY PTY LTD |
| ROOIBERG | RSA | 12 | 47 | 145 | 1958 | 8 | 1 | JB HELENA |
| SAFRICA FISHING | RSA | 14 | <25 | 150 | 2001 | 16 | 1 | SAFRIKA FISHING CC |
| SAMANTHA | RSA | 12 | <25 | 165 | 1991 | 16 | 1 | TTM FISHING |
| SANTA MONICA | RSA | 29 | 225 | 550 | 1964 | 22 | 3 | SA TUNA EXPORTERS PTY LTD |
| SAO GABRIEL | RSA | 20 | 90 | 268 | 1962 | 19 | 2 | SAO GABRIEL FISHING CC |
| SEA PRIDE TWO | RSA | 24 | 99 | 500 | 1967 | 20 | 2 | SEA PRIDE FISHING CC |
| SEAN PAQUITO THREE | RSA | 19 | 81 | 400 | 1998 | 21 | 2 | JD PAQUITO |
| SHAROLIN DAWN | RSA | 19 | 68 | 250 | 1962 | 20 | 1 | JOSE M DA COSTA FERNANDES |
| SHARON | RSA | 17 | 73 | 235 | 1994 | 28 | 2 | JURASSIC FISHING IND. PTY LTD |
| SHIAN FENG CHANG 18 | RSA | 27 | 151 | 375 | 1973 | 16 | 2 | COMBINED FISHING ENT. CC |
| SHIVON | RSA | 17 | 89 | 260 | 1999 | 25 | 5 | HUMANSDORP CFW PTY LTD |
| SILVER HUNTER | RSA | 20 | 100 | 255 | 1967 | 18 | 3 | VISKO SEA PRODUCTS PTY LTD |
| SOUTHERN TIGER | RSA | 22 | 72 | 240 | 1944 | 20 | 1 | BAYANA BAYANA FISHING CC |
| ST LUCIA | RSA | 14 | <25 | 125 | 1945 | 12 | 1 | D & H FISHERIES CC |
| SULAIMAN | RSA | 18 | 71 | --- | 2001 | 20 | 2 | ARBAH HOLDINGS PTY LTD |
| SW GANNET | RSA | 16 | 46 | 250 | --- | 16 | 1 | SW GANNET PTY LTD |
| SWELLENDAM | RSA | 18 | 78 | 240 | 1959 | 18 | 1 | HACKY FISHING PTY LTD |
| SWORDFISH | RSA | 19 | 78 | 390 | 1981 | 25 | 1 | DC SMITH & DJ SMITH |
| TERN | RSA | 14 | <25 | 90 | 1994 | 16 | 1 | TERN FISHING TRUST |
| THE DON | RSA | 17 | 65 | 186 | 1995 | 25 | 4 | DMA FISHING ENTERPRISES PTY LTD |
| TIGER FISH | RSA | 18 | 60 | --- | 1958 | 12 | 2 | LAMBERTSBAY FISHING |
| TINA | RSA | 17 | 53 | 215 | 1980 | 15 | 2 | JOENARDO FISHING CC |
| TRUDY MARLENE | RSA | 20 | 68 | 254 | 1964 | 23 | 1 | VM YOUNG VISSERYE BK |
| VALHALLA | RSA | 18 | 57 | 217 | 1955 | 15 | 2 | JOENARDO FISHING CC |
| VLOTTENBERG | RSA | 15 | 39 | 135 | 1952 | 16 | 1 | ITHEMBA LABANTU FISHING CC |
| WERKENDAM | RSA | 16 | 47 | 179 | 1957 | 21 | 1 | AFRICAN STAR FISHING PTY LTD |
| WESKUS ONE | RSA | 20 | 66 | 255 | 1965 | 18 | 1 | JORGE DE OLIM FISHING CC |
| WESTERDAM | RSA | 20 | 67 | 250 | 1968 | 17 | 1 | MFV WESTERDAM CC |
| WHITE ROSE | RSA | 13 | 32 | --- | 1994 | 16 | 1 | SKAGEN FISHING CC |

More than 50 % of the demersal longline vessels were between 18 – 22 m in length (see Table 2.9 for the mean value). The fleet included a vessel as small as 9 m, and one as large as 45 m. Marine & Coastal Management reports that there is some level of subdivision of the vessels according to size, with the larger vessels targeting the offshore fishing area, and the smaller vessels operating within the inshore region.

**Table 2.9.** A summary of some mean characteristics for demersal longlining vessels in the South African hake longline fleet.

| Characteristic | Average for Fleet |
|---|---|
| Length (m ± Std Dev) | 19 ± 5 |
| GRT (tons ± SD) | 90 ± 56 |
| Horsepower (kW ± SD) | 281 ± 142 |
| Crew (± SD) | 20 ± 6 |
| Construction Year (± SD) | 1972 ± 16 |

Surprisingly for a sector that is relatively new to the South African fishing industry, the average age of the demersal hake longline vessels (33 years, Table 2.9) was older than the inshore and offshore demersal hake trawlers. More than half (± 55%) of the vessels were constructed between 1955 and 1970, pointing to vessels used in other fisheries, undergoing a fishing gear refit to the longline configuration. From Figure 2.8 it appears that some new vessels were built for the fishery after 1991 (± 24% of the total number of vessels reported in the fishery in 2003).

The size of the crew on the demersal longline vessels was distributed relatively evenly about the mean value of 20 members reported in Table 2.9. Nearly 70% of the longliners had complements of between 15 to 25 crewmembers (Figure 2.9). The smallest vessel in the fleet had a crew of only four members, while the largest crew in the fleet consisted of 35 members. An estimated 1767 crewmembers were employed in the fishery in 2003.

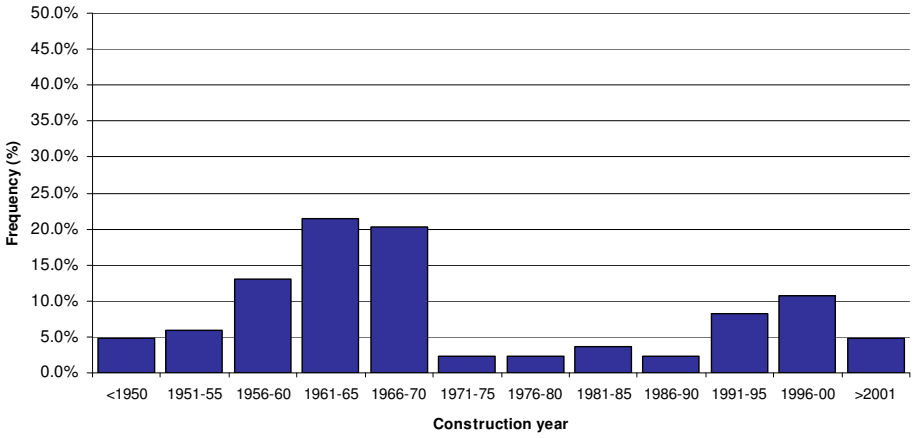


**Figure 2.8**. The age structure of the demersal longline fleet fishing in the South African hake fishery.

The hake longline fleet operates out of fishing harbours from Port Nolloth in the Northern Cape, around the Western Cape right up to Port Elizabeth in the Eastern Cape (Figure 2.10). Twenty-five percent of the fish caught in 2003 were landed at harbours in the Eastern Cape, 74% in the Western Cape Province and 1% at Port Nolloth in the Northern Cape.

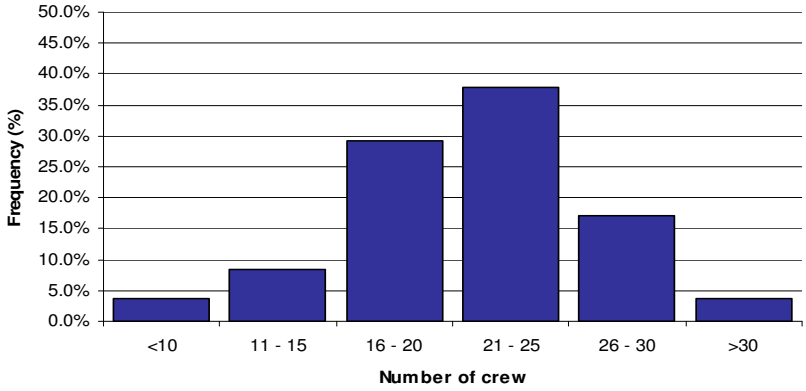


**Figure 2.9.** The number of crew on the demersal longline vessels operating in the South African hake fishery.

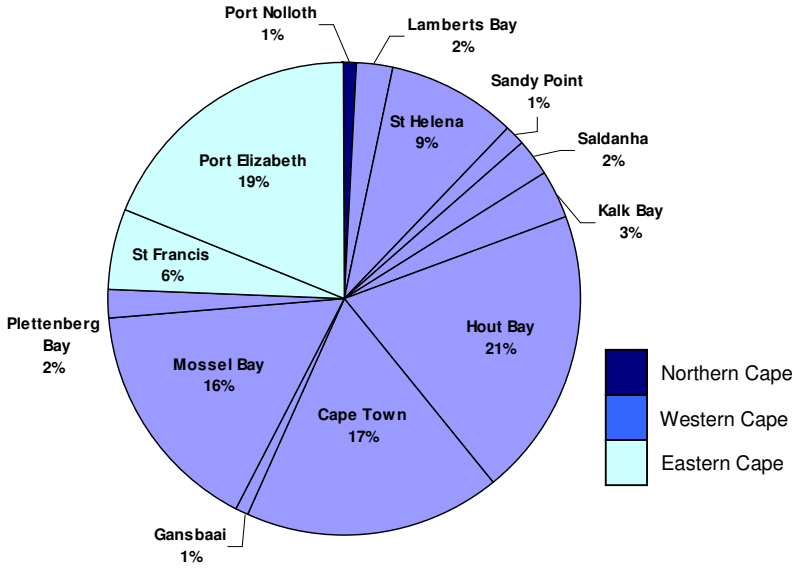


**Figure 2.10.** Fishing harbours at which the hake demersal longline fleet landed their catch in 2003.

## 2.3 Small pelagic purse seine fishery

As its name suggests, the South African small pelagic fishery targets small species of shoaling fish that frequent the upper reaches of the ocean. They are harvested by vessels using purse-seine nets, relatively close inshore. The fishery targets two species; anchovy (*Engraulis encrasicolus*) and pilchard (*Sardinops sagax*), with a by-catch of round-eye herring (*Etrumeus whiteheadi*) and juvenile horse mackerel (*Trachurus trachurus*). The anchovy are usually caught along the west coast of the Western Cape Province, near Saldanha Bay and St Helena Bay, while the pilchards are targeted along the south-eastern coast, east of Mossel Bay and, to some extent, off Port Elizabeth in the Eastern Cape Province.

The fishery was founded on pilchard after the Second World War, when a fleet of privately owned purse seine vessels began targeting pilchard and horse mackerel. By 1953 the authorities felt it necessary to protect the pilchard resource by setting an annual maximum catch limit of 270 000 tons. However, it was never enforced and catches regularly exceeded this limit. By 1955 the pelagic fishing fleet had grown to 140 vessels, and catches grew to include anchovy, chub mackerel (*Scomber japonicus*), and red-eye round herring (*Etrumeus whiteheadi*). The maximum catch limit for pilchard was repealed in 1961, resulting in more than 410 000 tons of this species being landed in 1962. This amount of fishing pressure was not sustainable, and by 1966 the pilchard stocks had collapsed.

In response to the decline of the pilchard resource, the small pelagic fleet began to target anchovy, using nets with a smaller mesh size. This switch caused major repercussions in the fleet, as the fishing equipment required to target anchovy was far more costly. Many of the private boat owners stopped fishing, or sold their vessels to the processing factories. The factories also invested in new, larger vessels to compensate for the loss of catching capacity. By 1987 anchovy catches had almost reached 600 000 tons, and made up more than 80% of small pelagic landings. Two years later the stocks crashed, and by 1996 only 40 000 tons of anchovy were caught. At the same time, the pilchard stocks were recovering. Juvenile pilchards occur in the same areas as the anchovy fishing grounds, and the steady increase in pilchard abundance led to a situation where the by-catches of juvenile pilchard in the anchovy catches were too high for the fishery to operate efficiently.

As a result, a complex operational management procedure (OMP) was implemented for the small pelagic fishery at the beginning of 1994. Initial TACs for both pilchard and anchovy are calculated based on the number of spawning adults present in surveys carried out at the end of the previous year, and are revised based on estimates of the number of juveniles present in mid-year survey samples. The advantage of these surveys are that they give a direct estimate of the existing pelagic fish stocks as well as an estimate of the following year's stocks, thereby reducing the chance of the stocks being over-fished, and insuring that the fishery is well-managed. The result is that anchovy and pilchard catches have subsequently increased, with landings of both species averaging around 250 000t each over the past five years. The by-catch species are managed differently, with an upper catch limit set for juvenile horse mackerel (± 5000 tons per annum) and a precautionary maximum catch limit (PMCL) for round herring (± 100 000 tons p.a.).

Although it is the largest fishery in South Africa (by mass of landed fish), the value of the product is low. Value is added through onshore processing. Anchovy and round-herring are mostly processed into fishmeal and fish oil, with some production of fish paste. Pilchards are mostly canned for human consumption, but there is also a market for large pilchards which are packaged as baitfish, or for human consumption.

### 2.3.1 Rights holders

The result of the switch from targeting pilchard to anchovy in the late 1960's was that a number of purse-seine vessel operators had to sell their vessels to the processing factories and leave the fishery due to increased costs. At the same time, to feed the production capacity of their factories, the processors were forced to invest in new, purpose built anchovy vessels. This meant that the operators in the fishery fell into two groups; those that were private boat owners, and those that owned processing plants and operated a fleet of vessels.

After this period of restructuring, the first individual small pelagic "rights" were issued in 1974. Only the processing factories in the fishery received quota. The private boats were in turn allocated entrenched catching rights, which were bound to the factories' quotas. The private boat owners were paid for their catch on a negotiated formula. In 1984, the "minimum catch"

right for each of the boats was implemented by the authorities, which were allocated to the private boat owners still operating in the fishery at the time.

By the early 1990's the status of the private boat owners with entrenched catch-rights began to change. In 1992, there were 49 sardine directed right-holders and 36 anchovy directed right-holders operating some 85 vessels. During the medium term rights allocation process in 2001/2002, 113 small pelagic fishing rights were allocated, including 92 allocations for pilchards and/or 86 allocations for anchovy, as well as 21 allocations for pilchard baitfish (Table 2.10).

**Table 2.10.** Medium term rights holders in the South African small pelagic fishery, and their pilchard and/or anchovy quota allocation for 2003.

| RIGHTS HOLDER | PILCHARD Allocation (tons) in 2003 | ANCHOVY Allocation (tons) in 2003 | PILCHARD BAIT Allocation (tons) in 2003 |
|---|---|---|---|
| 82 BOUNDARY ROAD CC | 784 | 2023 | 0 |
| A J F EIGELAAR AND SONS (PTY)LTD | 547 | 804 | 0 |
| ACHMAD SULAIMAN | 0 | 141 | 917 |
| AL-AMAN FISHING CC | 0 | 0 | 1840 |
| ALBERTS FISHING CC | 0 | 584 | 755 |
| ALEXANDROS DEMETRIOS STAMATIS | 917 | 141 | 0 |
| ALPHA FISHING COOPERATION CC | 0 | 663 | 699 |
| ARNISTON FISH PROCESSORS (PTY)LTD | 1841 | 286 | 0 |
| AZANIAN FISHING CC | 898 | 377 | 0 |
| BALOBI PROCESSORS (PTY) LTD | 916 | 0 | 0 |
| BASIC TRADING COMPANY (PTY) LTD | 917 | 141 | 0 |
| BLUEFIN FISHING ENTERPRISES CC | 916 | 0 | 0 |
| BLUEFIN HOLDINGS (PTY) LTD | 1773 | 809 | 0 |
| BONGOLWETHU FISHING ENTERPRISES (PTY) LTD | 0 | 141 | 917 |
| CAPE FISH PROCESSORS (PTY) LTD | 1841 | 286 | 0 |
| CAPE PILCHARD PIONEER CC | 1089 | 1856 | 0 |
| CB TREDOUX | 0 | 0 | 916 |
| CHAPMANS PEAK FISHERIES (PTY) LTD | 917 | 141 | 0 |
| COMBINED FISHING ENTERPRISES CC | 918 | 254 | 0 |
| COMMUNITY PROCESSORS AND DISTRIBUTORS | 2092 | 2634 | 0 |
| D CHRISTY & SONS (PTY) LTD | 916 | 0 | 0 |
| DMA FISHING ENTERPRISES (PTY) LTD | 916 | 0 | 0 |
| DROMEDARIS VISSERYE LTD | 1906 | 4259 | 0 |
| DYER EILAND VISSERYE (PTY) LTD | 916 | 0 | 0 |
| EDWARDS FISHING (PTY) LTD | 596 | 750 | 0 |
| EMACHIBINI FISHERIES (PTY) LTD | 2829 | 2680 | 0 |
| ERONGO FISHING CC | 0 | 1632 | 1295 |
| EXTRA DIMENSIONS 70 (PTY) LTD | 699 | 663 | 0 |
| EZINTLANZINI FISHING (PTY) LTD | 1820 | 281 | 0 |
| FOODCORP (PTY) LTD | 11871 | 6632 | 0 |
| GANSBAAI MARINE (PTY) LTD | 11212 | 4353 | 0 |
| GERMISHUYS EN GROENEWALD BP | 803 | 511 | 0 |
| GEROMBE FISHING ENTERPRISES CC | 916 | 0 | 0 |
| HARRY WILLIAMS | 917 | 141 | 0 |
| HCL GRIFFITHS | 699 | 663 | 0 |
| HENBASE 2655 CC | 784 | 2023 | 0 |

| RIGHTS HOLDER | PILCHARD Allocation (tons) in 2003 | ANCHOVY Allocation (tons) in 2003 | PILCHARD BAIT Allocation (tons) in 2003 |
|---|---|---|---|
| HENTIQ 2349 (PTY) LTD | 916 | 0 | 0 |
| HUMANSDORP COMM. FACTORY WORKERS (PTY) LTD | 916 | 0 | 0 |
| IMPALA FISHING (PTY) LTD | 1199 | 1506 | 0 |
| ITHEMBA LABANTU FISHING CC | 1227 | 0 | 0 |
| J ENGELBRECHT VISSERYE CC | 0 | 1629 | 1349 |
| JAFFA'S BAY FISHING CC | 2783 | 2743 | 0 |
| JALOERSBAAI (PTY) LTD | 916 | 0 | 0 |
| KALAHARI FISHING CC | 916 | 0 | 0 |
| KENNETH KINGMA | 0 | 64 | 916 |
| KHULANI FISHING (PTY) LTD | 918 | 254 | 0 |
| KNYSNA FISHING COMPANY (PTY) LTD | 0 | 0 | 916 |
| KOMICX PRODUCTS (PTY) LTD | 1841 | 286 | 0 |
| LAINGVILLE FISHERIES (PTY) LTD | 1202 | 506 | 0 |
| LAMBERTS BAY FISHING COMPANY LTD | 10163 | 11886 | 0 |
| LATIEF ALBERTYN FISHERIES | 0 | 663 | 699 |
| MACLACHLAN A C | 1273 | 1659 | 0 |
| MANETRADE 2094 CC | 1246 | 1717 | 0 |
| MARINATA VISSERSVROUE CC | 0 | 1454 | 1535 |
| MARION DAWN FISHING CC | 0 | 0 | 916 |
| MEERMIN VISSERYE CC | 784 | 2023 | 0 |
| MOUNT PLEASANT FISHING (PTY) LTD | 916 | 0 | 0 |
| NOMALUNGELO FISHING CC | 784 | 2023 | 0 |
| NOORDBAAI VISSERS LTD | 1201 | 1767 | 0 |
| NTSHONALANGA FISHING (PTY) LTD | 3531 | 1644 | 0 |
| OFFSHORE FISHING COMPANY (PTY) LTD | 2333 | 2212 | 0 |
| OKUSELWANDLE FISHING CC | 917 | 141 | 0 |
| ORGEL VISMAATSKAPPY LTD | 2902 | 4270 | 0 |
| P&H FORWARD FISHING | 0 | 141 | 917 |
| PALM SPRINGS FISHING CC | 609 | 1153 | 0 |
| PATERNOSTER VISSERY LTD | 2951 | 5583 | 0 |
| PELAGIC FISHING ENTERPRISES (PTY) LTD | 1503 | 1893 | 0 |
| PENGUIN FISHERIES CC | 916 | 0 | 0 |
| PHAKAMISA FISHING (PTY) LTD | 2031 | 314 | 0 |
| PIONEER FISHING WEST COAST LTD | 16190 | 13518 | 0 |
| PIONEER FISHNG EAST COAST (PTY) LTD | 1621 | 1704 | 0 |
| PREMIER FISHING SA (PTY) LTD | 18285 | 11652 | 0 |
| QUAYSIDE FISH SUPPLIES CAPE (PTY) LTD | 3065 | 847 | 0 |
| RD SUMMERS FISHERIES CC | 0 | 0 | 916 |
| REIGER VISSERYE CC | 1097 | 2076 | 0 |
| RISAR FISHING CC | 1841 | 286 | 0 |
| SACO FISHING (PTY) LTD | 3427 | 947 | 0 |
| SALBURG (PTY) LTD | 917 | 141 | 0 |
| SALDANHA BAY CANNING CO (PTY) LTD | 5249 | 8939 | 0 |
| SCEPTRE FISHING (PTY) LTD | 916 | 0 | 0 |
| SCOPEFULL 116 (PTY) LTD | 0 | 0 | 1205 |
| SEA POINT FISHING CC | 466 | 881 | 0 |
| SENTINEL SEAFOODS (PTY) LTD | 917 | 141 | 0 |
| SIBANYE FISHING COMPANY (PTY) LTD | 917 | 141 | 0 |
| SINETHEMBA FISHING CC | 917 | 141 | 0 |

| RIGHTS HOLDER | PILCHARD Allocation (tons) in 2003 | ANCHOVY Allocation (tons) in 2003 | PILCHARD BAIT Allocation (tons) in 2003 |
|---|---|---|---|
| SIYASEBENZA FISHING (PTY) LTD | 917 | 141 | 0 |
| SOUNDPROPS 1167 INVESTMENTS (PTY)LTD | 2225 | 2390 | 0 |
| SOUTH AFRICAN SEA PRODUCTS LTD | 8902 | 10412 | 0 |
| SOUTH EAST ATLANTIC SEA PRODUCTS(PTY)LTD | 916 | 0 | 0 |
| ST HELENA BAY FISHING INDUSTRIES LTD | 23938 | 8068 | 0 |
| TALHADO FISHING ENTERPRISES (PTY) LTD | 916 | 0 | 0 |
| TERRASAN PELAGIC FISHERY (PTY) LTD | 5230 | 6693 | 0 |
| THE CAPE PENINSULA LINEFISHERMAN | 916 | 0 | 0 |
| TRADEMANE (PTY) LTD | 916 | 157 | 0 |
| TRADEPROPS 153 (PTY) LTD | 3900 | 10056 | 0 |
| TRAKPROPS 22 (PTY) LTD | 1613 | 1027 | 0 |
| TRAWL INVESTMENTS CC | 916 | 0 | 0 |
| UKLOBA FISHING CC | 1142 | 1812 | 0 |
| ULWANDLE FISHING (PTY) LTD | 0 | 101 | 916 |
| UMFONDINI FISHING (PTY) LTD | 1227 | 190 | 0 |
| UMZAMANI FISHING CC | 0 | 663 | 699 |
| UMZAMOWETHU OYSTER BAY FISHERMENS CORP CC | 847 | 2184 | 0 |
| UNATHI WENA FISHING CC | 784 | 2023 | 0 |
| UNITRADE 947 (PTY) LTD | 916 | 0 | 0 |
| V M YOUNG VISSERYE CC | 1841 | 286 | 0 |
| VERMONT FISHING (PTY) LTD | 916 | 0 | 0 |
| VIKING INSHORE FISHING (PTY) LTD | 916 | 0 | 0 |
| VUNANI INVESTMENTS HOLDING (PTY) LTD | 0 | 141 | 917 |
| WALTERS EFH VISKO SEA PRODUCTS | 917 | 141 | 0 |
| WEST POINT FISHING CORP (PTY) LTD | 5154 | 9752 | 0 |
| YOLUNTU SEA PRODUCTS BK | 0 | 0 | 916 |
| ZIMELE FISHING ENTERPRISES CC | 0 | 0 | 916 |
| ZWM FISHING (PTY) LTD | 917 | 141 | 0 |
| **TOTAL** | **223,767** | **181,192** | **21,072** |

In general, the medium term small pelagic allocations can be grouped into large quota, which went to the traditional, processing-related operations; medium quota, which reflect the existing private vessel owner-type operations, and the smaller “new entrant” quota which was allocated to primarily black economic empowerment and/or SMME operations (Figure 2.11).

Sixty-three percent of the rights holding entities were proprietary limited companies, 32% were closed corporations and there were six individual rights holders still operating in the fishery.

Based on annual turnover in 2003, four percent of the small pelagic rights holders were very large companies, 19% were large companies, but most were small or medium-sized enterprises (77%). In terms of employment, 23% of the rights holders employed more than 100 people, 54% employed between 10 and 100 people, and 23% had less than 10 employees. The total number employed by the small pelagic fishery rights holders was about 12 000 people. However, the number of people directly employed in the small pelagic fishery was difficult to estimate, as more than 65% of the companies operating in the fishery held rights to more than one fishery. Nevertheless, MCM has estimated that about 7800 people are currently (2005) employed in the fishery (5300 permanent, 2500 seasonal). Of this total, approximately 1170 people are employed on the small pelagic purse seine vessels as crew.

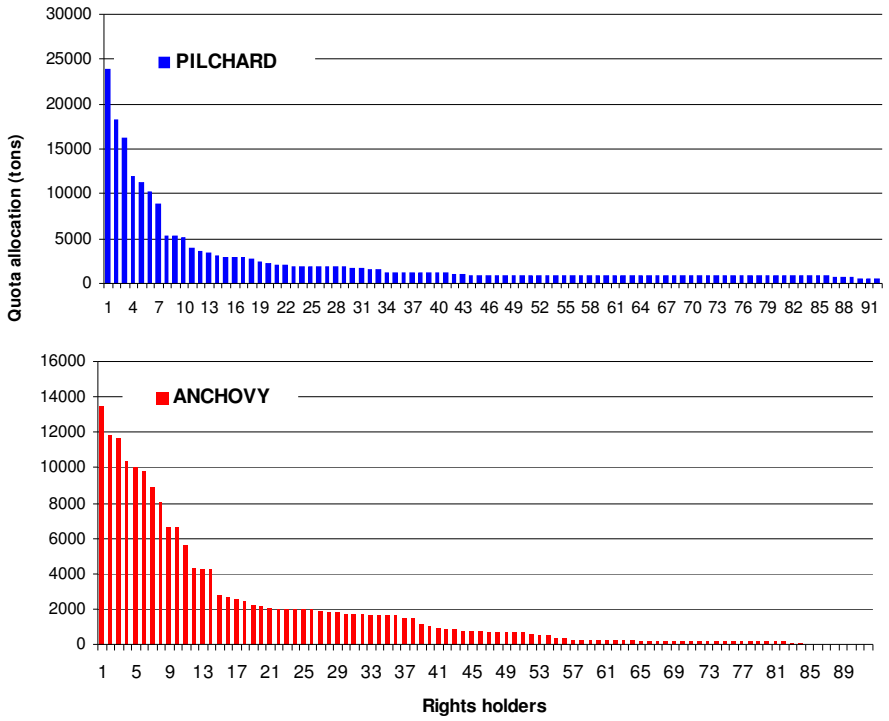


**Figure 2.11.** A comparison of rights holder quota allocations for pilchard and anchovy in 2003, for the South African small pelagic purse seine fishery.

### 2.3.2 Vessels

The size of the small pelagic fleet has remained relatively constant over the last 10 or so years. Eighty-five purse seine vessels were reported active in the fishery in 1992, and even though the number of rights holders has increased significantly since then, about 90 vessels were fishing in the small pelagic fishery in 2003 (Table 2.11).

**Table 2.11.** The South African small pelagic purse seine fishing fleet in 2003.

| Vessel | Flag | Length (m) | GRT (tons) | Horse Power (kW) | Year Built | Crew | Rights fished | Owners |
|---|---|---|---|---|---|---|---|---|
| ACCORD | RSA | 30 | 267 | 700 | 1970 | 12 | 2 | EDWARDS FISHING PTY LTD |
| ADENIA | RSA | 34 | 347 | 638 | 1975 | 11 | 2 | PREMIER FISHING SA PTY LTD |
| AFRICAN VENTURE | RSA | 13 | --- | 95 | 1958 | 16 | 2 | RUSTEE PTY LTD |
| ANKOVELD | RSA | 24 | 125 | 770 | 1969 | 10 | 2 | AJF EIGELAAR & SONS PTY LTD |
| ANTONIE W | RSA | 15 | 36 | 230 | 1980 | 16 | 2 | WALTERS BOOT BELANGE |
| ARANOS | RSA | 35 | 292 | 795 | 1972 | 12 | 1 | FOODCORP (PTY) LTD |
| AREND E | RSA | 14 | 38 | 175 | 1997 | 18 | 1 | KOMICX PRODUCTS PTY LTD |
| ARIZON 2 | RSA | 18 | 58 | 247 | 1961 | 10 | 3 | MFV ARIZON2 VESSEL CO PTY LTD |
| ARNO LOUIS | RSA | 20 | 79 | 349 | 1965 | 9 | 1 | LJ GROENEWALD GHARDE & ARNO TRUST |
| ATLANTIC ENDEAVOUR | RSA | 24 | 153 | 560 | 1968 | 10 | 1 | WEST POINT FISHING CORP PTY LTD |
| ATLANTIC ENTERPRISE | RSA | 25 | 153 | 565 | 1970 | 10 | 4 | MVB ATLANTIC ENTERPRISE FISHING PTY LTD |
| ATLANTIC PIONEER | RSA | 21 | 98 | 350 | 1966 | 10 | 3 | ATLANTIC PIONEER FISHING PTY LTD |
| ATLANTIC PRIDE | RSA | 26 | 175 | 565 | 1971 | 11 | 2 | SIYADOBA FISHING (PTY) LTD |

| Vessel | Flag | Length (m) | GRT (tons) | Horse Power (kW) | Year Built | Crew | Rights fished | Owners |
|---|---|---|---|---|---|---|---|---|
| ATLANTIC SKIPPER | RSA | 22 | 98 | 270 | 1967 | 10 | 1 | SOUTH AFRICAN SEA PRODUCT LTD |
| BABY RONALD | RSA | 14 | 29 | 180 | 1936 | 8 | 2 | DYER EILAND VISSERYE (PTY) LTD |
| BELLA DA LUNAR | RSA | 22 | 104 | 388 | 1971 | 10 | 1 | PIONEER FISHING WEST COAST LTD |
| BELLA PRIMA | RSA | 23 | 99 | 347 | 1968 | 10 | 1 | FOURIE EKSTEEN PELAGIES BPK |
| BLOUGANS | RSA | 18 | 66 | 400 | 1963 | 23 | 1 | DYER EILAND VISSERYE (PTY) LTD |
| BOSBOK | RSA | 20 | 89 | 348 | 1965 | 9 | 2 | BERGANS VISSERYE VENOOTSKAP |
| CAPE FISH 1 | RSA | 16 | 57 | 220 | 2000 | 12 | 1 | CAPE FISH PROCESSORS PTY LTD |
| CAPRICORN | RSA | 23 | 96 | 500 | 1969 | 10 | 1 | AZANIAN FISHING CC |
| CHRISTIAAN ANJAGIRT | RSA | 16 | 54 | 272 | 1999 | 8 | 1 | COMFISH PTY LTD |
| CONQUISTADOR | RSA | 18 | 46 | 240 | 1988 | 25 | 2 | SCEPTRE FISHING PTY LTD |
| CONSORTIUM ALPHA | RSA | 22 | 100 | 430 | 1970 | 18 | 2 | TRANSAT COMPANY PTY LTD |
| CRAIG | RSA | 17 | 68 | 224 | 1994 | 25 | 1 | K KINGMA ( C & K FISHING ) CC |
| DALNESS | RSA | 15 | 36 | 185 | 1951 | 8 | 2 | CHARL BAREND TREDOUX |
| DOLOREZE | RSA | 22 | 100 | 403 | --- | 10 | 1 | ORANJERIVIER VISSERYE (EDMS) BPK |
| DRAKENSKOP | RSA | 21 | 99 | 455 | 1968 | 10 | 1 | EMACHIBINI FISHERIES PTY LTD |
| DUINEKUS | RSA | 34 | 302 | 839 | 1972 | 16 | 2 | DUINEKUS FISHING PTY LTD |
| EDELWEISS | RSA | 21 | 100 | 403 | 1969 | 10 | 2 | GERMISHUYS EN GROENEWALD BK |
| ELLIS S | RSA | 19 | 74 | 282 | 1958 | 21 | 1 | GEROMBE FISHING ENTERPRISES CC |
| ELOMI | RSA | 21 | 95 | --- | 1996 | 10 | 2 | HENTIQ 2302 PTY LTD |
| FRED MARIE | RSA | 16 | 30 | 140 | 1984 | 13 | 2 | SIBANYE FISHING COMPANY PTY LTD |
| GLEN MIST | RSA | 21 | 100 | 377 | 1968 | 10 | 1 | PREMIER FISHING SA PTY LTD |
| HENRIETTE | RSA | 21 | 100 | 295 | 1966 | 10 | 1 | LAMBERTS BAY FISHING COMPANY LTD |
| KALAHARI | RSA | 20 | 83 | --- | 1968 | 9 | 3 | TASNEEM FISHING PTY LTD |
| KATHLEEN LOUISE III | RSA | 20 | 93 | 355 | 1964 | 10 | 1 | UKLOBA FISHING CC |
| KAVALIER | RSA | 24 | 147 | 465 | 1968 | 10 | 1 | J ENGELBRECHT VISSERYE CC |
| KOLGANS | RSA | 20 | 89 | 250 | 1967 | 10 | 1 | W J SWART & PARTNERS |
| KRANZBERG | RSA | 21 | 99 | 355 | 1968 | 10 | 1 | ORGEL VISMAATSKAPPY BEPERK |
| LOCHANORA | RSA | 25 | 98 | 350 | 1981 | 22 | 2 | RD SUMMERS FISHERIES CC |
| LOERIESFONTEIN | RSA | 22 | 99 | 347 | 1969 | 10 | 2 | PIONEER FISHING WEST COAST LTD |
| MANICWA | RSA | 17 | 58 | 186 | 1989 | 25 | 2 | H C L GRIFFITHS |
| MARCON | RSA | 21 | 100 | 251 | 1968 | 10 | 1 | MARCON FISH PTY LTD |
| MERCURY | RSA | 22 | 93 | 377 | 1967 | 10 | 1 | PREMIER FISHING SA PTY LTD |
| MERLENE | RSA | 21 | 250 | 925 | 1966 | 10 | 1 | H E WESSELS |
| MIZPAH | RSA | 26 | 175 | 638 | 1972 | 10 | 1 | PREMIER FISHING SA PTY LTD |
| MYMOENA | RSA | 14 | --- | --- | 2000 | 12 | 1 | MARION DAWN FISHING CC POGGENPOEL & PARTNERS |
| OCEANA AKWARIUS | RSA | 22 | 111 | 360 | 1970 | 10 | 1 | LAMBERTS BAY FISHING COMPANY LTD |
| OCEANA CONCORDE | RSA | 26 | 174 | 455 | 1972 | 10 | 3 | ST HELENA BAY FISHING INDUSTRIES LIMITED |
| OCEANA GARNET | RSA | 24 | 190 | 721 | 1995 | 11 | 1 | SOUTH AFRICAN SEA PRODUCT LTD |
| OCEANA KRANS | RSA | 20 | 86 | 270 | 1966 | 10 | 3 | SOUTH AFRICAN SEA PRODUCT LTD |
| OCEANA ORION | RSA | 21 | 100 | 285 | 1974 | 10 | 1 | LAMBERTS BAY FISHING COMPANY LTD |
| OCEANA PARAGON | RSA | 21 | 102 | 285 | 1989 | 10 | 6 | SINETHEMBA FISHING CC |
| OCEANA PEGASUS | RSA | 22 | 118 | 285 | 1990 | 10 | 1 | LAMBERTS BAY FISHING COMPANY LTD |
| OCEANA PLUTO | RSA | 22 | 100 | --- | 1968 | 10 | 2 | NOORDBAAI VISSERS BEPERK |
| OCEANA RUBY | RSA | 22 | 100 | 338 | 1984 | 10 | 1 | SOUTH AFRICAN SEA PRODUCT LTD |
| OCEANA SAPPHIRE | RSA | 22 | 100 | 383 | 1973 | 10 | 2 | SOUTH AFRICAN SEA PRODUCT LTD |
| OCEANA VIKING | RSA | 31 | 253 | 711 | 1976 | 12 | 2 | ST HELENA BAY FISHING INDUSTRIES LIMITED |
| RIETVLEI | RSA | 22 | 158 | 463 | 1967 | 10 | 1 | SOUNDPROPS 1167 INVESTMENTS PTY LTD |
| ROSEVELD | RSA | 21 | 99 | 350 | 1967 | 10 | 1 | AJF EIGELAAR & SONS PTY LTD |

| Vessel | Flag | Length (m) | GRT (tons) | Horse Power (kW) | Year Built | Crew | Rights fished | Owners |
|---|---|---|---|---|---|---|---|---|
| RUNTU | RSA | 21 | 99 | 360 | 1968 | 10 | 1 | WILDEGANS VISSERYE BPK |
| RUWEKUS | RSA | 37 | 316 | 839 | 1971 | 16 | 1 | PIONEER FISHING WEST COAST LTD |
| SANTA MONICA | RSA | 29 | 225 | 550 | 1964 | 22 | 4 | SA TUNA EXPORTERS PTY LTD |
| SCOMBER | RSA | 19 | 96 | 225 | 1997 | 25 | 2 | SOUTH EAST ATLANTIC SEA PRODUCTS PTY LTD |
| SHIVON | RSA | 17 | 89 | 260 | 1999 | 25 | 8 | HUMANSDORP COMMUNITY FACTORY WORKERS PTY LTD |
| SILVER BOUNTY | RSA | 27 | 271 | 597 | 1979 | 11 | 1 | WEST POINT FISHING CORP PTY LTD |
| SILVER CHALLENGER | RSA | 30 | 271 | 597 | 1979 | 10 | 1 | SALDANHA BAY CANNING CO PTY LTD |
| SILVER CLIPPER | RSA | 22 | 100 | 625 | 1973 | 10 | 1 | PATERNOSTER VISSERY LTD |
| SILVER DOLPHIN | RSA | 23 | 138 | --- | 1964 | 10 | 1 | WEST POINT FISHING CORP PTY LTD |
| SILVER KATONKEL | RSA | 23 | 134 | 480 | 1971 | 10 | 2 | WEST POINT FISHING CORP PTY LTD |
| SILVER REAPER | RSA | 21 | 92 | 250 | 1966 | 28 | 2 | TALHADO FISHING ENTERPRISES PTY LTD |
| SILVER SNAPPER | RSA | 22 | 100 | 375 | 1969 | 10 | 1 | SNEEUGANS VISSERYE BPK |
| SOUTH WEST FALCON | RSA | 24 | 163 | 373 | 1971 | 10 | 2 | SLIP KNOT FISHING PTY LTD |
| SOUTHERN BELLE | RSA | 34 | 304 | 795 | 1965 | 12 | 1 | PREMIER FISHING SA PTY LTD |
| SOUTHERN CROSS | RSA | 28 | 225 | --- | 1964 | 20 | 1 | SOUTH WEST TRAWLERS CC |
| STARCREST | RSA | 35 | 381 | 711 | 1972 | 12 | 1 | ST HELENA BAY FISHING INDUSTRIES LIMITED |
| STORMKOP | RSA | 21 | 99 | --- | 1968 | 10 | 1 | MANETRADE 2094 CC |
| SUIDERKUS | RSA | 32 | 345 | 895 | 1973 | 16 | 5 | EAGLE FISHING PTY LTD |
| THE DON | RSA | 17 | 65 | 186 | 1995 | 25 | 4 | DMA FISHING ENTERPRISES PTY LTD |
| TOWERKOP | RSA | 34 | 273 | 698 | 1985 | 12 | 2 | NTABENI FISHING PTY LTD |
| UMFANA | RSA | 17 | 70 | 298 | 2001 | 12 | 5 | SIYASEBENZA FISHING PTY LTD |
| UMFONDINI | RSA | 15 | 50 | 230 | 1997 | 20 | 4 | UMFONDINI FISHING PTY LTD |
| VEGKOP | RSA | 27 | --- | 638 | 1974 | 12 | 2 | FOODCORP (PTY) LTD |
| VIRAGO | RSA | 14 | --- | 215 | 2001 | 18 | 1 | HUMANSDORP COMMUNITY FACTORY WORKERS PTY LTD |
| WATERBABY | RSA | 13 | --- | 142 | 1996 | 8 | 1 | VIKING FISHING CO TRAWLERS PTY LTD |
| WILDEKUS | RSA | 35 | 409 | 864 | 1970 | 12 | 1 | ST HELENA BAY FISHING INDUSTRIES LIMITED |
| WILLEM W | RSA | 19 | 105 | 272 | 1997 | 28 | 2 | VISKO SEA PRODUCTS PTY LTD |
| ZAY-YAAN | RSA | 15 | 47 | 165 | 1997 | 20 | 1 | TRAWL INVESTMENTS CC |

The small pelagic fleet consisted mostly of wood or steel-hulled purse seine vessels ranging in length from 15 to 25 m (75% of the fleet). Average length was about 22 m (Table 2.12); the largest vessel was 37 m in length, while the smallest was 13 m. The fishing gear used is a purse seine net. The top-line of the purse seine net is mounted on floats. The net is shot over the side of the vessel and then towed around a shoal of pelagic fish until the shoal is completely encircled. The bottom of the net is then gathered in, trapping the fish, and the nets are then hauled onboard with the aid of hydraulic winches. A fish pump is used to transport the fish from the net to the hold whilst the net is being hauled aboard. Many of the vessels carry two sets of nets, including a pilchard net and a smaller-meshed, more expensive anchovy net.

**Table 2.12.** A summary of some mean characteristics for purse seine vessels in the South African small pelagic fleet.

| Characteristic | Average for Fleet |
|---|---|
| Length (m ± Std Dev) | 22 ± 6 |
| GRT (tons ± SD) | 135 ± 88 |
| Horsepower (kW ± SD) | 418 ± 207 |
| Crew (± SD) | 13 ± 5 |
| Construction Year (± SD) | 1975 ± 13 |

Sixty-five percent of the vessels were constructed between 1960 and 1975, a period of Capitalization in the small pelagic fishery when catches peaked and then crashed, resulting in a restructuring of the industry. In Figure 2.12, a smaller peak in the frequency of occurrence of construction year for the period 1995 – 2000 probably reflects capitalization in pelagic purse seine vessels by the new entrants into the fishery.

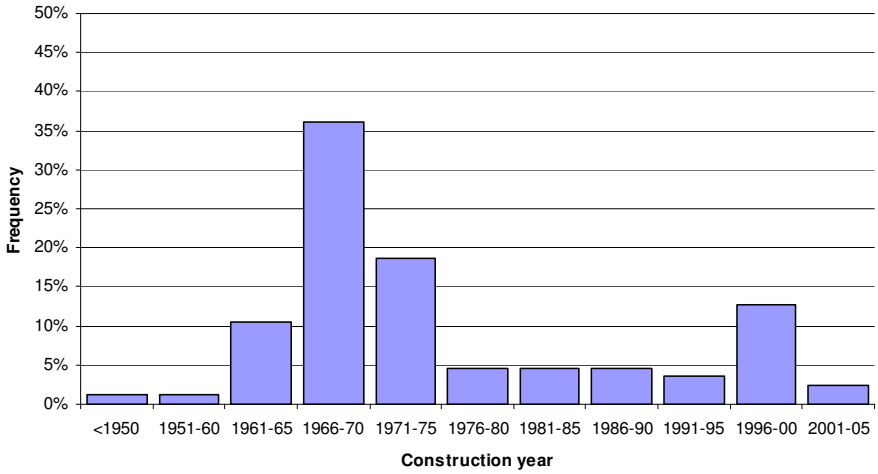


**Figure 2.12**. The age structure of the purse seine fleet in the South African small pelagic fishery.

The size of the crew on the purse seine vessels was relatively small compared to the other "industrial scale" fisheries. Fifty-six percent of the fleet had complements of 10 crewmembers or less, while 86% of the vessels had crews of 20 or less. The largest crew complement was 28 in 2003; the smallest was eight members.

The small pelagic fishing fleet operates primarily out of fishing harbours along the west coast of the Western Cape Province, from Lamberts Bay to Cape Town (71% of the landings were recorded in this region in 2003, Figure 2.13). Some vessels were based along the south coast of the Western Cape Province, at Gansbaai, Hermanus and Mossel Bay (20%), while the rest operated from St Francis Bay and Port Elizabeth in the Eastern Cape Province (8% of the total landings).

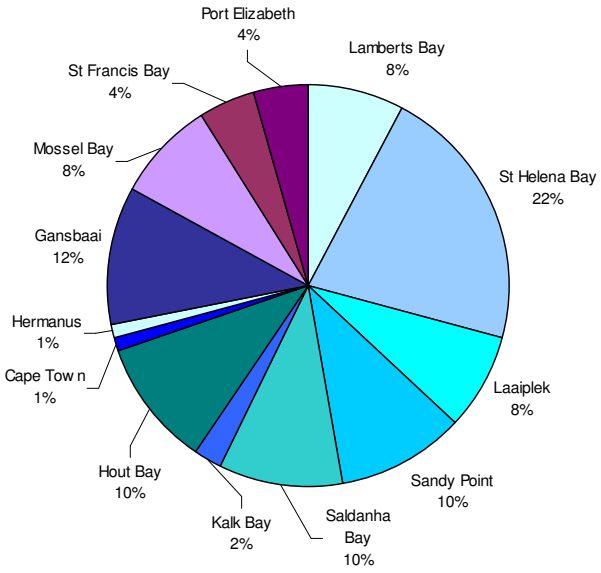


**Figure 2.13.** Ports and fishing harbours at which the small pelagic purse seine fleet landed their catch in 2003.

## 2.4 Mid-water trawl

The mid-water trawl fishery is a relatively new addition to the South African fishing sector. The fishery targets the horse mackerel (*Trachurus trachurus*), which is a semi-pelagic species that is distributed throughout South African waters. The species also occurs throughout the water column; juveniles are captured near the surface in the purse seine nets of the small pelagic fishery off the west coast, while larger horse mackerel are taken in the deep, demersal trawl nets of the offshore hake fishery. Horse mackerel-directed fishing using mid-water trawl nets by the foreign fishing fleet was permitted in South African waters until 1978 (until 1991 for the Japanese mid-water trawlers). In the early 1990's, there was an initiative by some of the larger hake-directed fishing companies to develop a local mid-water trawl fishery. The first nine quotas for the local mid-water trawl fishery were issued in 1990. By 1994, seventeen companies had horse mackerel directed, mid-water trawl rights.

As with the fisheries discussed before, the first horse mackerel quota allocations were based on the Total Allowable Catch (TAC) management principle. However, the horse mackerel TAC was based in part on CPUE data supplied by the Japanese trawlers. When the Japanese fleet left the fishery and this information was no longer available, the fishery was managed using the "Precautionary Maximum Catch Limit" (PMCL) approach. The PMCL is currently based on abundance estimates from demersal surveys, but the species population dynamics is still not well-enough understood for this approach to be considered reliable. For this reason, the PMCL for horse mackerel has fluctuated from 40 000 tons in 1992, to 58 000 tons in 1994, 34 000 tons in 1999 and up to 44 000 tons in 2002, as the understanding of the species dynamics have improved and the population models have been revised. Adding to the problem is the fact that horse mackerel make up a significant part of the catch of the small pelagic fishery and the demersal trawl fisheries. The horse mackerel population is particularly sensitive to the small pelagic fishery, which removes the juveniles that would otherwise recruit into the trawl fisheries. Purse seine catches of horse mackerel juveniles have now been limited to a maximum of 5000 tons per annum. The PMCL is shared between horse mackerel directed mid-water trawling, and the by-catch from the demersal hake trawl fisheries.

### 2.4.1 Rights holders

Effectively, two groups of rights holders exist in the mid-water trawl fishery. The first consists of companies who also have rights in the demersal hake trawl fishery. These companies do not have dedicated mid-water trawlers, but some of their vessels carry mid-water trawl nets. Depending on a variety of reasons, the vessels will sometimes target horse mackerel instead of hake. These rights holders must declare which species is the target species when trawling, and any hake caught whilst trawling for horse mackerel will be taken from their hake quota allocation, and *visa-versa* when trawling for hake. Twelve of the 17 mid-water trawl rights holders have hake demersal trawl fishing rights. The second group consists of those rights holders using a dedicated mid-water trawler to target horse mackerel.

Five new entrants were allocated medium-term rights to the mid-water trawl fishery in 2001. At the time, they were awarded quota of 500 tons each (escalated to 542 tons in 2003), and the rest was divided up amongst the established mid-water trawl companies (Table 2.13, Figure 2.14).

All the rights holders in the horse mackerel directed mid-water trawl fishery were proprietary limited companies. Fifty-nine percent of these companies could be classed as large to very large operations, with turnovers exceeding R10 million per annum. The rest were small to medium sized companies.

**Table 2.13.** Medium term rights holders in the South African mid-water fishery, and their horse mackerel quota allocation for 2003.

| RIGHTS HOLDER | 2003 Allocation (Tons) | RIGHTS HOLDER | 2003 Allocation (Tons) |
|---|---|---|---|
| BLUE CONTINENT PRODUCTS(PTY) LTD * | 3930 | SACO FISHING PTY LTD* | 2783 |
| CALAMARI FISHING (PTY) LTD*† | 542 | SCENEMATIC FOURTEEN (PTY) LTD† | 542 |
| FERNPAR FISHING CO (PTY) LTD | 1351 | SEA HARVEST CORPORATION (PTY) LTD* | 2777 |
| FOOD CORP (PTY)LTD* | 2668 | SURMON FISHING PTY LTD*† | 542 |
| HANNASBAAI FISHING CO. (PTY) LTD | 738 | TRACHURUS FISHING PTY LTD* | 2661 |
| HENTIQ 3043 (PTY) Ltd† | 542 | TRESSO TRADING 282 (PTY) LTD† | 542 |
| IRVIN& JOHNSON LTD* | 3001 | VIKING FISHING CO PTY LTD* | 4717 |
| KLIPBANK VISSERYE PERSONEL (PTY) LTD† | 542 | VISKO SEA PRODUCTS PTY LTD* | 1885 |
| NTSHONALANGA FISHING PTY LTD* | 1737 | **TOTAL** | **31500** |

* Companies that also have offshore demersal hake trawl rights
† Companies that were new entrants in 2001

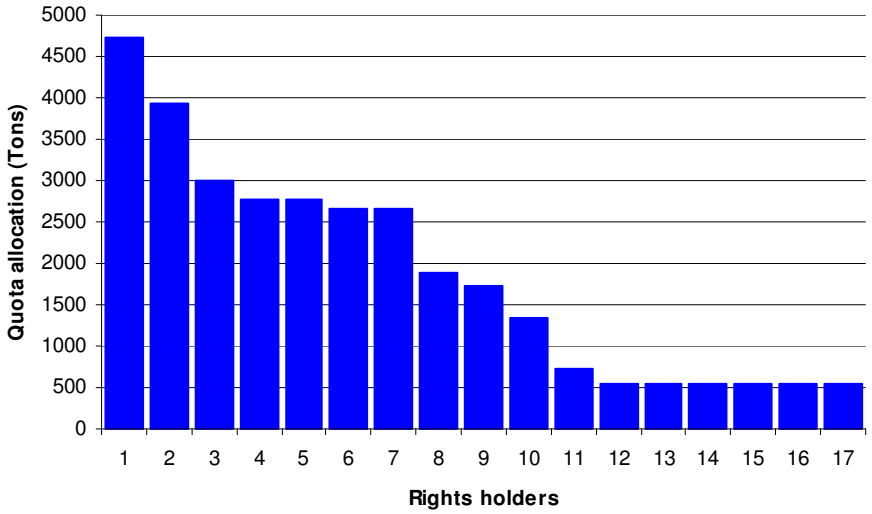


**Figure 2.14.** A comparison of rights holder quota allocations for horse mackerel in 2003, for the South African mid-water trawl fishery.

Due to the nature of participation in the fishery, it is virtually impossible to estimate the number of people permanently employed directly through mid-water trawling. Most of the mid-water trawl companies had rights and employed people in other fisheries, who were used to catch and/or process horse mackerel in an *Ad hoc* manner. The rest of the rights holders combined their quota on one large, foreign-flagged mid-water trawler.

### 2.4.2 Vessels

Until recently (2004), the only dedicated mid-water trawler in the fishery was the *Admiral Golovko*, a large (100 m, 5640 ton) Russian trawler, employing 85 crewmembers, of which about 16 were South African and the rest were Russian. The trawler was hired by Blue Continent Products (BCP), a wholly owned subsidiary of Oceana Fishing Ltd. The *Admiral Golovko* fished for eight horse mackerel rights holders, including BCP. The Oceana Group has recently bought in a new, Panama flagged mid-water trawler called the *Desert Diamond* (108 m, 7765 ton) through a subsidiary company called Desert Diamond Fishing (Pty) Ltd. This vessel has a crew of 90 members, most of which will be South African, and some will be women.

Although it was clearly stated in the mid-water trawl fishery policy published by the Department of Environmental affairs and Tourism in early 2005 that only one large mid-water trawl vessel would be allowed access to the fishery, an additional vessel was granted access in late 2005. The *White Shark* is owned and operated by Foodcorp (Pty) Ltd, under the Belize flag, and is the same size as the *Desert Diamond*.

Very large freezer vessels like the *Admiral Golovko*, *Desert Diamond* and the *White Shark* are required to fish the horse mackerel resource economically, as the value of the fish is very low, and they are highly nomadic. They occur in relatively small shoals, with the largest aggregations of adult horse mackerel occurring offshore along the south and east margins of the Agulhas Bank, requiring that the vessels have the ability to stay at sea for long periods, with the capacity to process and store large volumes of fish.

The demersal trawl vessels that sometimes drag mid-water trawl nets for horse mackerel are usually the larger freezer vessels active in the offshore hake fishery (Table 2.14). However, it is difficult to summarise the vessel type, as different vessels from the demersal trawler companies' fleet are used from year to year.

**Table 2.14.** Some of the vessels active in the horse mackerel mid-water trawl fishery in 2003.

| Vessel | Flag | Length (m) | GRT (tons) | Horse Power (kW) | Year Built | Crew | Rights fished | Owners |
|---|---|---|---|---|---|---|---|---|
| ADMIRAL GOLOVKO | RUS | 100 | 5640 | 5152 | 1974 | 85 | 8 | ATLAS SHIPPING CORPORATION |
| ROXANA BANK | RSA | 90 | 2900 | 2517 | 1968 | 75 | 1 | IRVIN & JOHNSON LIMITED |
| MFV SOKOLINOE | RSA | 76 | 2555 | 1706 | 1969 | 80 | 1 | SEVASTOPOL OCEAN FISHERIES ENTERPRISE |
| IRIS | RSA | 63 | 1532 | 1678 | 1988 | 54 | 1 | IRVIN & JOHNSON LIMITED |
| VERA MARINE | RSA | 49 | 606 | 814 | 1967 | 34 | 1 | L-V FISHING CO PTY LTD |
| MARIE CLAIRE | RSA | 49 | 500 | 600 | 1977 | 42 | 1 | MFV MARIE CLAIRE VESSEL CO PTY LTD |
| LINCOLN | RSA | 43 | 414 | 955 | 1961 | 23 | 1 | PAT- KING FISHING COMPANY(PTY) LTD |
| HARVEST GARDENIA | RSA | 38 | 526 | 866 | 1986 | 23 | 1 | SEA HARVEST CORPORATION LTD |

There are no dedicated, land-based horse mackerel processing operations, as most of the processing is carried out on board the fishing vessels. In 2003, the bulk of the fish caught by the *Admiral Golovko* was processed and frozen on board, and then transhipped and exported to Central and West Africa. Some by-catch was landed for local processing. Most of the other vessels in the fishery process and freeze the horse mackerel at sea as well, although Viking Fishing lands and processes some horse mackerel in Mossel Bay. The rest of the fleet operates out of Cape Town.

It is unlikely that the mid-water trawl fishery provides direct, permanent employment for more than between 200 to 250 South Africans, including vessel crewmembers.

## 2.5 West coast rock lobster

The cape or west coast rock lobster (*Jasus lalandii*) occurs inshore (<200 m depth) along the coast of southern Africa, from Walvis Bay in Namibia to East London in the Eastern Cape Province of South Africa. Although previously caught for bait, the species was first fished commercially in South Africa in the late 1880's. The commercial fishery is based on the west coast, from Port Nolloth in the Northern Cape Province to Gansbaai on the south coast the Western Cape Province. Traditionally, small rowing boats were used to deploy baited, hand-hauled hoop-nets. This method is still used in the commercial fishery, although rigid traps were introduced in the 1970's, which were deployed from larger vessels that could target the resource further offshore.

The fishery grew steadily, and by the 1950's catches had increased to an average of about 14,000 tons per year. The first signs that the resource had been over-fished were apparent in the late 1960's when catches began to decline. This trend continued through the 1970's and early 1980's, even though catch effort was increased through the introduction of the larger, more powerful vessels using rigid-trap technology.

An attempt to manage the fishery through the allocation of tail-mass production quotas was first made in 1946. However, the allocations were based on the performance of the fishery in

the previous season, and ineffective as a management tool. The first Total Allowable Catch (TAC) was set at a precautionary 4000 tons of landed, whole-mass lobster in 1983, and this restored some stability to the resource. During the same period, the fishery was divided up into zones and areas, and zone-specific quotas were allocated. Other controls introduced included minimum size limits, a closed season, and a ban on harvesting moulting lobsters and berried (egg bearing) females. A bag limit was also introduced to limit recreational catches by free divers.

By the end of the 1991 season, it was clear that catch rates had begun to decrease once again, and the TAC was steadily revised downwards, until it reached a low of 1500 tons in 1995. This decrease was not just because of over fishing; environmental conditions caused the natural growth rate of the west coast rock lobsters to decrease substantially, which led to a concomitant decrease in recruitment (the number of young lobsters of the right size entering the fishery). Since then, the resource has been on the rebound, with a TAC of more than 2600 tons allocated for the 2004 – 2005 season.

### 2.5.1 Rights holders

In 1998, the west coast rock lobster fishery was split into commercial and subsistence quota holders, and the recreational sector. Medium term rights were allocated in 2001, to "full commercial" and "limited commercial" (ex- subsistence) rights holders, also described as the offshore and nearshore commercial fisheries, respectively. The offshore rights holders receive quota allocations greater than 1500 tons, and are allowed to use trap boats and rigid traps. The inshore rights holders receive quota less than 1500 tons, and are restricted to the use of hoop-nets. In 1992, there were 39 commercial rights holders in the fishery; after the medium term rights allocation in 2001, the west coast lobster resource was apportioned between 234 offshore commercial and 511 nearshore limited commercial right-holders. The amount of the TAC allocated to each sector was split 80% and 20% respectively, based on the approximate percent of the rock lobster biomass occurring inshore and offshore. Since then, an additional 230 tons of rock lobster have been made available in a new fishing zone, along the Western Cape south coast, east of Cape Hangklip. Another 274, nearshore limited commercial rights holders have been granted access to this resource.

Under the ambit of the present study, this report will concentrate on the "full commercial" or offshore sector of the South African west coast rock lobster fishery, while taking cognizance of the role played by the inshore rights holders in the fishery. The full commercial rights holders are presented in Table 2.15. The allocated amounts are not evenly distributed amongst the rights holders, favouring the historical quota holders, as shown in Figure 2.15.

**Table 2.15.** Medium term, full commercial rights holders in the South African west coast rock lobster fishery, and their quota allocations for the 2003 – 2004 fishing season.

| RIGHTS HOLDER | QUOTA (kg) | RIGHTS HOLDER | QUOTA (kg) |
|---|---|---|---|
| A.A FISHING CC | 3041 | KLEIN OPSTAAN VISSERYE BK | 8073 |
| ABBA LANGEBAAN FISHING BK | 8470 | KOMICX PRODUCTS (PTY) LTD | 7947 |
| ABREAU FISHING COMPANY (PTY) LTD | 3575 | KONSORTIUM KREEFBELANGE (PTY) LTD | 37524 |
| ACTIVEST TWENTY (PTY) LTD | 15204 | KREEFBAAI VISSERYE CC | 7784 |
| AFRICA' S BEST 249 LTD | 3041 | KUSASA COMMODITIES 245 (PTY) LTD | 3041 |
| AFRICA' S BEST 250 LTD | 3041 | KUSASA COMMODITIES 63 (PTY) LTD | 6836 |
| AGRELA FISHING (PTY) LTD | 2781 | KWENANE R | 2928 |
| AIR FRESH FISHERIES CC | 3041 | LAAGGETY VISSERYE BK | 3041 |
| ALGEMENE VISSERS NO 2 (PTY) LTD | 9012 | LAINGVILLE FISHERIES (PTY) LTD | 3041 |

| RIGHTS HOLDER | QUOTA (kg) | RIGHTS HOLDER | QUOTA (kg) |
|---|---|---|---|
| ALPHA VISSERYE (Edms) Bpk | 9012 | LAMBERTS BAY FISHING Co (PTY) LTD | 108779 |
| AMANDLA ABASEBENZI (PTY) LTD | 7132 | LANGKLIP SEEPRODUKTE (Edms) Bpk | 7642 |
| AMAQOBELA FISHING (PTY) LTD | 3041 | LATIEF ALBERTYN FISHERIES CC | 6677 |
| ANG JERRY FISHING CC | 8783 | LIVE ROCK LOBSTER CORPORATION (PTY) LTD | 17533 |
| ANGELICO SM | 3503 | LOBSTER ISLAND FISHING (PTY) LTD | 32100 |
| ARRIES J | 3724 | LOUWENIANS FISHING CC | 8216 |
| ARROWLINE FOURTEEN CC | 3041 | LOUW'S FISHING CC | 7060 |
| ASKALA VISSERYE BK | 8651 | MAFUKUZELA FISHING (PTY) LTD | 8942 |
| ATLANTIC FISHING ENTERPRISES (PTY) LTD | 9248 | MALANDE FISHING CC | 8001 |
| BAFIAANSBERG (EDMS) BPK | 9012 | MALGAS VISSERYE BK | 9012 |
| BATO STAR FISHING (PTY) LTD | 9738 | MARION DAWN FISHING CC | 4876 |
| BATSILVA CC | 5541 | MASCONI E | 2495 |
| BIZ AFRICA 32 (PTY) LTD | 8362 | MIYA'S FISHERIES (PTY) LTD | 8723 |
| BIZ AFRIKA 655 (PTY) LTD | 3041 | MTSHAU FISHING CC | 8579 |
| BLUEFIN HOLDINGS (PTY) LTD | 8827 | MUDGE POINT FISHING CC | 3041 |
| BOAT ROCK FISHING CC | 3041 | MULLINS FISHING CC | 4733 |
| BOBBEJAANBERG VISSERYE BK | 9016 | NAMAQUA FISHING COMPANY LTD | 37320 |
| BODENSTEIN CP | 3214 | NATI SI NAKO FISHING CC | 4930 |
| BONGOLETHU FISHING ENTERPRISES | 3041 | NETRING FISHING (PTY) LTD | 9572 |
| BOVENTREK BELIOGGINGS (PTY) LTD | 9984 | NEW DISTRICT SIX FISHING (PTY) LTD | 5751 |
| BRIDGER & ANGELICO FISHERIES (PTY) LTD | 21903 | NGXIKI FISHING CC | 3041 |
| BUBESI FISHING (PTY) LTD | 3041 | NOGIE KLARIE FISHING CC | 4858 |
| BUFFELJAGS MARINE DEVELOPMENT TRUST | 3041 | NOORDBAAI VISSERS LTD | 3041 |
| BUFFELSJAG ABALONERS CC | 3041 | NORTH BAY FISHING COMPANY LTD | 121937 |
| C R ADAMS FISHING CC | 4299 | NTABETHEMBA FISHING CC | 3041 |
| CALVIN VISSERYE CC | 6014 | OCEAN VIEW FISHING CC | 7060 |
| CAPE REEF PRODUCTS (PTY) LTD | 17735 | OCEAN UKHOZI FISHING (PTY) LTD | 8507 |
| CAPTAINS FISHING CC | 3041 | OLYMPIA FISHING CC | 8723 |
| CHANGING TIDES 113 (PTY) LTD | 59850 | OVERBERG COMMERCIAL ABALONE DIVERS | 3041 |
| CHAPMANS PEAK FISHERIES (PTY) LTD | 49319 | OVERSTRAND MARINE CC | 3041 |
| CJW VAN ZYL BELEGGINGS (PTY) LTD | 10080 | PATERNOSTER VISSERYE Bpk | 55454 |
| COAST TRADING COMPANY (PTY) LTD | 55373 | PENGUIN VISSERYE BK | 7038 |
| COMPMATIX FIVE (PTY) LTD | 3719 | PENINSULA FISHING ENTERPRISES (PTY) LTD | 10623 |
| CSM FISHING CC | 8365 | PESCE SMOKERS CC | 4155 |
| DADDYS MONEY (PTY) LTD | 5281 | PIKE ROCK FISHING CORPORATION CC | 8723 |
| DAVY'S FISHERIES | 8001 | PIMPANO SIXTEEN (PTY) LTD | 3719 |
| DENBURG FISHERIES (PTY) LTD | 9882 | PIMPANO TWENTY (PTY) LTD | 3214 |
| DESEEDA SEEPRODUKTE (EDMS) BPK | 8389 | PLETTENBERG BAY FISHING (PTY) LTD | 7658 |
| DEWMIST INVESTMENTS CC | 4250 | PORT NOLLOTH FISHERIES (PTY) LTD | 11140 |
| DOCMATRIX ELEVEN (PTY) LTD | 3894 | PREMIER FISHING (PTY) LTD | 41652 |
| DOCMATRIX FOURTEEN (PTY) LTD | 2925 | QUAYSIDE FISH SUPPLIERS (CAPE) (PTY) LTD | 10583 |
| DOLFYN VISSERYE BK (was VAUGHAN JA) | 8362 | R.J.A FISHING ENTERPRISES CC | 3041 |
| DORINGBAAI VISSERYE BK | 4352 | RAAFF FISHERIES CC | 3041 |
| DORMAKORP VIER (EDMS) BPK | 3503 | RAZORBILL PROPERTIES 248 LTD | 3041 |
| DROMEDARIS VISSERYE BPK | 78551 | RD SUMMERS FISHERIES 248 LTD | 7349 |
| Du PREEZ FISHING (PTY) LTD | 4352 | REID DE | 2206 |
| DYER EILAND VISERYE BK | 4086 | ROCKY BANK FISHING CC | 3004 |
| EASY CHOICE TWELVE (PTY) LTD | 2997 | ROMANSBAAI VISSERYE BPK | 3041 |
| EC WASSERFALL FISHING CC | 10445 | SA SEA PRODUCTS LTD | 146565 |

| RIGHTS HOLDER | QUOTA (kg) | RIGHTS HOLDER | QUOTA (kg) |
|---|---|---|---|
| ELAPA VISPRODUCKTE BPK | 8769 | SAFRIKA FISHING CC | 5075 |
| ERONGO FISHING (PTY) LTD | 8001 | SALDANHA BAY CANNING CONNING (PTY) LTD | 28759 |
| EZINTLANZINI FISHING (PTY) LTD | 6210 | SANCHO FISHING (PTY) LTD | 2337 |
| EZOLWANDLE FISHING (PTY) LTD | 7567 | SARDINAS BK | 7618 |
| F.G FISHING ENTERPRISES CC | 3041 | SAUL CLOETE & VENNOTE (PTY) LTD | 7349 |
| FANTIQUE TRADE 486 CC | 4568 | SCENEMATIC FOURTEEN (PTY) LTD | 43878 |
| FERRO FISHING (PTY) LTD | 4507 | SCOTSHE KLOOF FISHERY CC | 8507 |
| FISHERMENS MOVEMENT CC | 5075 | SEA HAVEN HOLDINGS (PTY) LTD | 3041 |
| FJJ BRAND FISHING (PTY) LTD | 3041 | SEA POINT FISHING CC | 3041 |
| FOODCORP (PTY) LTD | 85081 | SEAWEED FISHIERIES CC | 7277 |
| FRICEBA FISHING (PTY) LTD | 2781 | SEBIEN A | 2538 |
| FRIEDMAN & RABINOWITZ (PTY) LTD | 27907 | SEDERZEE VISSERYE BK | 5798 |
| FULL DECK INVESTMENTS (PTY) LTD | 9086 | SENTINEL SEA FOODS (PTY) LTD | 13218 |
| GEELBEK VISSERYE CC | 8147 | SEWESTER SEEPRODUKTE BK | 7618 |
| GIBBISEPS VISSERYE (EDMS) BPK | 3041 | SIBANGE FISHING (PTY) LTD | 3503 |
| GJ. ALFRED ONDERNEMINGS CC | 3041 | SIBANYE FISHING COMPANY (PTY) LTD | 10427 |
| GOMES FISHING (PTY) LTD | 5075 | SIKHULULE FISHING | 3041 |
| GOOD HOPE FISHERIES (PTY) LTD | 17693 | SILWER VISSERYE BK (was VAUGHAN JOHANNA) | 2929 |
| GOURMENT FISH PRODUCTS (PTY) LTD | 10695 | SIMON'S TOWN FISHERIES CC | 8362 |
| GREY COTTAGES INVESTMENTS LTD | 3041 | SIR LOWRY'S PASS VISSERYE | 9012 |
| GREYS MARINE CC | 6211 | SIYAKHA FISHING CC | 7784 |
| H H LEVENDAL FISHING CC | 4352 | SIYAZAKHA FISHING CC | 3041 |
| HARBOUR LIGHTS (KALK BAY) (PTY) LTD | 23722 | SLH FISHERS LTD | 9087 |
| HARRY COTTLE FISHERIES (PTY) LTD | 8507 | SOETWATER FISHING CC | 3041 |
| HAWSTON ABALONE DIVERS (PTY) LTD | 3041 | SA COMMERCIAL FISHERMENS CORP. (PTY) LTD | 80393 |
| HAWSTON SEAFARMS FOUNDATION | 3041 | SPARKOR (PTY) LTD | 17445 |
| HAWSTON VISSERS MAASKAPPY | 3041 | ST HELENA BAY FISHING INDUSTRIES LTD | 32476 |
| HELDERBERG KOMMERSIELE VISSERMANS VERENIGING | 7712 | STEPHAN ROCK LOBSTER PACKERS (PTY) LTD | 72990 |
| HENBASE 2655 CC | 9012 | STERNSIDE FISHING CC | 3133 |
| HENQUE 3137 CC | 3041 | SUIDE-ORANJE VISSERYE (PTY) LTD | 14553 |
| HENTIQ 2349 (PTY) LTD | 8723 | SUNSET FISHING CC | 3568 |
| HICKSONS FISHING COMPANY LTD | 10734 | T & N VISSERYE BK | 8001 |
| HOUT BAY FISHERMENS WIDOW ASSOCIATION | 6967 | TAKALANI FISHING CC | 3041 |
| I FORTUNE & CREW (PTY) LTD | 10171 | TARIDOR FIVE CC | 6988 |
| IBHOTIVE FISHING (PTY) LTD | 2925 | THANDANI FISHERIES CC | 7567 |
| IBHOTWE FISHING (PTY) LTD | 2880 | THE TUNA HAKE FISHING CORPORATION LTD | 3041 |
| IKWEZI FISHING (PTY) LTD | 3041 | THREE COINS FISHING CC | 2924 |
| IMIFUNO FISHING (PTY) LTD | 3655 | TIGER REEF FISHING CC | 3763 |
| INDLOVU FISHING (PTY) LTD | 3430 | TOMREN CTA 427 FISHING NO 1 CC | 3041 |
| INKOSI KETA MARINE (PTY) LTD | 3041 | TRADE FACTOR FIFTEEN (PTY) LTD | 3430 |
| INTABA FISHING (PTY) LTD | 3503 | TRAKPROPS 22 (PTY) LTD | 3041 |
| INTER NATION TRADERS (PTY) LTD | 6842 | TRAWL INVESTMENTS CC | 3041 |
| INTERACTIVE TRADING 45 (PTY) LTD | 3041 | TUNA MARINE (PTY) LTD | 7567 |
| INTLANZI FISHING (PTY) LTD | 3041 | UKULIMA FISHING (PTY) LTD | 3430 |
| INYANGA FISHING (PTY) LTD | 3503 | UMFONDINI FISHING (PTY) LTD | 3041 |
| ITHUBA FISHING (PTY) LTD | 8942 | UMOYA FISHING (PTY) LTD | 44826 |
| J & J VISSERYE BPK | 3041 | UMZAMANI FISHING BK | 11900 |

| RIGHTS HOLDER | QUOTA (kg) | RIGHTS HOLDER | QUOTA (kg) |
|---|---|---|---|
| J ENGELBRECHT VISSERYE BK | 8579 | UNITRADE 947 (PTY) LTD | 3041 |
| JAFFA'S BAY FISHING CC | 7471 | UTHANDO FISHING (PTY) LTD | 2925 |
| JESSICA FISHING ENTERPRISES CC | 9160 | VAUGHAN A | 6655 |
| JJ da MATA & SONS FISHING COMPANY (PTY) LTD | 7369 | VESTWORX THIRTEEN (PTY) LTD | 6211 |
| JOC FISHING CC | 5036 | VISWATER VISSERMAN TRUST | 7567 |
| JOHN OVENSTONE LTD | 78302 | WALPAT SEA PRODUCTS (PTY) LTD | 5881 |
| JOHN QUALITY PRODUCTS LTD | 7928 | WALTERS EFH | 2493 |
| JULIES NICOLAAS | 3434 | WEST COAST FISHERMAN & WORKERS CO. (PTY) LTD | 3041 |
| KALK BAY MANNE FISHERS (PTY) LTD | 4803 | WICHMAN PETER ANDREW | 3041 |
| KALK BAY PIONEERS (PTY) LTD | 3041 | YORK POINT FISHERIES CC | 3041 |
| KARBONKELBERG MARINE CC | 9160 | YOUNG VM | 8579 |
| KHOISAN FISHING CC | 8001 | **TOTAL** | **2,613,750** |

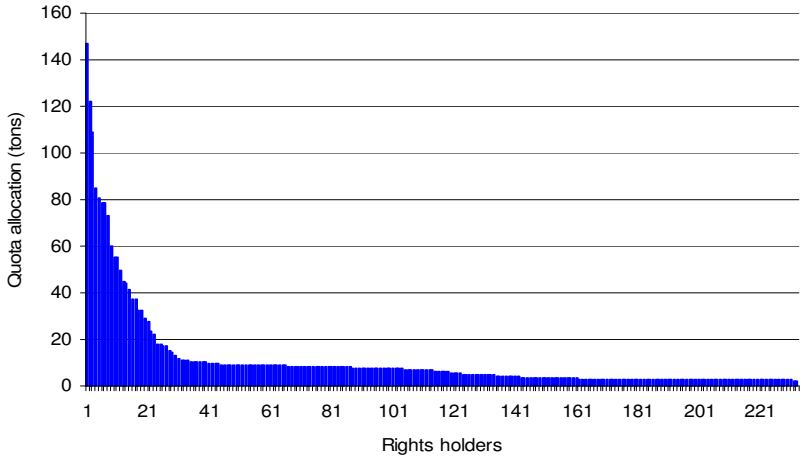


**Figure 2.15.** A comparison of full commercial (offshore) rights holder quota allocations for the South African west coast rock lobster fishery in 2003.

Five full commercial rights holders were based in the Northern Cape Province at Port Nolloth. One rights holder was from the Eastern Cape, while the rest (228 rights holders) were based in the Western Cape Province. Sixty percent of the rights holding entities were proprietary limited companies, 33% were closed corporations and 2% were trusts. Individuals made up 13% of the full commercial rights holders, as opposed to the limited commercial rights holders, of which most (88%) were individuals.

Only 12% of the full commercial rights holders were large or very large companies, in terms of annual turnover. About a third were medium-sized enterprises (R1 – 10 million turnover per annum) whilst the rest (66%) were small operations, turning over less than R1 million in a year.

From a recent survey that covered approximately 67% of the full commercial west coast rock lobster rights holders, it appears that 48% of the rights holders employed less than 10 people; 40% employed 10 – 100 workers, and 12% had more than 100 employees. Two very large companies employed more than 5500 people between them (ETC'2004). It is very difficult to estimate the number of people earning a living from the full commercial rock

lobster fishery alone, as the small amount of quota allocated to the majority of the rights holders, and the seasonal nature of the fishery means that a large percent of the work force needs alternate sources of income during the year. Marine & Coastal Management estimates that approximately 2000 people are employed in shored-based activities (mainly processing) in the fishery, with a further 2500 employed as fishing crew.

### 2.5.2 Vessels

It is difficult to obtain a firm number for the vessels operating in the full commercial, offshore rock lobster fishery. In theory, this number should be limited to the larger vessels (>10 m in length) that deploy rigid traps. In practise, a range of vessels is used to deploy both traps and hoop-nets to catch the rights holders' quota. Some vessels apparently catch rock lobster for both offshore and inshore quota holders. These issues will be addressed during the long-term allocation of offshore west coast rock lobster rights, currently (2005) under way in South Africa. Table 2.16 lists the vessels that were nominated to fish for west coast rock lobster by the successful full commercial, medium term (2001 – 2005) rights holders in the fishery. The size categories into which the fleet can be divided are shown in Figure 2.16.

**Table 2.16.** Vessels nominated by medium term, full commercial rights holders in the west coast rock lobster fishery (sorted by vessel length).

| Vessel | Flag | Length (M) | GRT (Tons) | Horse Power (KW) | Year Built | Crew | Rights Fished | Owners |
|---|---|---|---|---|---|---|---|---|
| HAI LIM 38 | RSA | 26 | 114 | 525 | 1994 | 6 | 1 | DYER EILAND VISSERYE (PTY) LTD |
| LEEUKOP | RSA | 24 | 96 | 254 | 1963 | 16 | 1 | PORT NOLLOTH FISHERIES PTY LTD |
| SEA PRIDE II | RSA | 24 | 99 | --- | 1967 | 20 | 1 | SEA PRIDE FISHING CC |
| PORTUNITY | RSA | 22 | 166 | 537 | 1966 | 12 | 1 | YELLOW STAR TRADING 1022 LTD |
| SOUTHERN TIGER | RSA | 22 | 72 | 240 | 1944 | 20 | 1 | BAYANA BAYANA FISHING CC |
| MALAGAS 2 | RSA | 21 | 97 | 315 | 1968 | 22 | 1 | KENTUCKY FISHING CC |
| PAKAMANI | RSA | 21 | 117 | 330 | 1962 | 25 | 1 | PAKAMANI FISHING PTY LTD |
| PENKOP TWO | RSA | 21 | 98 | 309 | 1965 | 20 | 1 | MONIZ FISHERIES (PTY) LTD |
| SEAN PAQUETTO 3 | RSA | 21 | 80 | --- | 1998 | 21 | 1 | BLUE POINTER TRADING 104 (PTY) LTD |
| ALASKA | RSA | 20 | 68 | --- | 1964 | 18 | 1 | ALASKA FISHING CC |
| ARIZONA | RSA | 20 | 75 | 385 | 1950 | 24 | 2 | INTLANZI FISHING PTY LTD |
| KARIBA | RSA | 20 | 72 | 275 | 1959 | 16 | 1 | SILVA FISHING ENTERPRISE CC |
| KIRSTENBERG | RSA | 20 | 64 | --- | 1998 | 17 | 1 | MASIZAKHE FISHING COOP LTD |
| MONNICKENDAM | RSA | 20 | 91 | 425 | 1962 | 23 | 1 | BLUE VENTURE FISHING PTY LTD |
| NICOLETTE | RSA | 20 | 83 | 350 | 1965 | 20 | 1 | BROSS INVESTMENTS PTY LTD |
| PAUL | RSA | 20 | 88 | 425 | 1962 | 16 | 1 | BATSATA FISHING PTY LTD |
| TRUDY MARLENE | RSA | 20 | 68 | 253 | 1964 | 23 | 1 | VM YOUNG VISSERYE CC |
| WESKUS ONE | RSA | 20 | 66 | 255 | 1965 | 18 | 1 | JORGE DE OLIM FISHING CC |
| WESTERDAM | RSA | 20 | 67 | 250 | 1960 | 17 | 1 | MFV WESTERDAM CC |
| ABE SHAPIRO | RSA | 19 | 65 | --- | 1968 | 15 | 1 | SOLIPROPS 1083 CC |
| CHRISTIE SUE | RSA | 19 | 73 | 240 | 1962 | 18 | 1 | MANUEL DE OLIM FISHING CC |
| GIRL JUDITH | RSA | 19 | 59 | 190 | 1957 | 34 | 1 | NAMAQUA FISHING COMPANY LTD |
| NEW MEXICO | RSA | 19 | 75 | 272 | 1958 | 18 | 1 | NEW MEXICO CC |
| SOUTH WEST HERON | RSA | 19 | 45 | 142 | 1953 | 16 | 1 | EASY CHOICE TWELVE (PTY) LTD |
| ZILDORA | RSA | 19 | 70 | 251 | 1964 | 18 | 1 | MFV ZILDORA VESSEL COMPANY (PTY) LTD |
| BLOUGANS | RSA | 18 | 66 | 400 | 1963 | 23 | 1 | DYER EILAND VISSERYE (PTY) LTD |

| Vessel | Flag | Length (M) | GRT (Tons) | Horse Power (KW) | Year Built | Crew | Rights Fished | Owners |
|---|---|---|---|---|---|---|---|---|
| LEINSAAT | RSA | 18 | 61 | 425 | 1963 | 20 | 1 | BATSATA FISHING PTY LTD |
| OCEANA HARRIER | RSA | 18 | 68 | 260 | 1957 | 10 | 2 | OCEANA GROUP LIMITED |
| SILVER FERN | RSA | 18 | 32 | 205 | 1952 | 14 | 1 | JJ DA MATA & SONS FISHING CO PTY LTD |
| SILVERFISH | RSA | 18 | 61 | 224 | 1958 | 10 | 2 | OCEANA GROUP LIMITED |
| VALHALLA | RSA | 18 | 57 | 217 | 1955 | 15 | 1 | JOENARDO FISHING CC |
| VLAEBERG | RSA | 18 | 42 | 205 | 1952 | 16 | 1 | JJ DA MATA & SONS FISHING CO PTY LTD |
| CYRIL BURREL | RSA | 17 | 47 | 180 | 1958 | 18 | 1 | DEWMIST INVESTMENTS CC |
| DAVID LURIE | RSA | 17 | 44 | --- | 1999 | 9 | 1 | LAING VILLE FISHERIES |
| STATENDAM | RSA | 17 | 38 | 160 | 1951 | 8 | 6 | MFV STATENDAM VESSEL COMPANY (PTY) LTD |
| TINA | RSA | 17 | 53 | 215 | 1980 | 15 | 1 | JOENARDO FISHING CC |
| ALISTAIR | RSA | 16 | 50 | 130 | 1958 | 10 | 2 | ALPHA VISSERYE EDMS BPK |
| ANNA | RSA | 16 | 41 | 108 | 1964 | 26 | 1 | NORTH BAY FISHING COMPANY LTD |
| BRESSA | RSA | 16 | 43 | 200 | 1951 | 12 | 1 | BRIDGER & ANGELICO FISHERIES (PTY) LTD |
| CHRIS TRAUTMAN | RSA | 16 | 47 | 150 | 1957 | 12 | 2 | TRAUTMAN FISHING ENTERPRISES CC |
| JOHN BARBERY | RSA | 16 | 49 | 108 | 1955 | 29 | 1 | NORTH BAY FISHING COMPANY LTD |
| KINGKLIP | RSA | 16 | 44 | 199 | 1948 | 15 | 1 | SIBANGE FISHING (PTY) LTD |
| LESLEY J | RSA | 16 | 41 | 108 | 1963 | 16 | 1 | SA SEA PRODUCTS LTD |
| MARTIN J | RSA | 16 | 41 | 108 | 1963 | 7 | 1 | SA SEA PRODUCTS LTD |
| NEWLANDS | RSA | 16 | 31 | 180 | 1948 | 10 | 5 | SOLANGA FISHING PTY LTD |
| OUMA | RSA | 16 | 51 | 240 | 1959 | 15 | 2 | VIRISSMO FISHING (PTY) LTD |
| PLETTENBERG | RSA | 16 | 38 | --- | 1952 | 12 | 1 | GOMES FISHING (PTY) LTD |
| ROSALYN JOY | RSA | 16 | --- | 300 | 1952 | 11 | 2 | E & S FISHING |
| SOUTH WEST GANNET | RSA | 16 | 46 | 250 | 1956 | 16 | 1 | BATSILVA CC |
| SPES NOVA | RSA | 16 | 45 | 261 | 1954 | 15 | 3 | TRADE FACTOR FIFTEEN (PTY) LTD |
| ANTOINETTE | RSA | 15 | 39 | 138 | 1955 | 12 | 2 | BALELO PTY LTD |
| ARCHER | RSA | 15 | 42 | 145 | 1952 | 16 | 1 | FERRO FISHING PTY LTD |
| GENOA | RSA | 15 | 39 | 125 | 1954 | 16 | 1 | SA SEA PRODUCTS LTD |
| JADE | RSA | 15 | 41 | 130 | 1987 | 26 | 1 | ROGER THOMAS HOOKE |
| JAMES KAIZER | RSA | 15 | 43 | 86 | 1962 | 10 | 1 | SA COMMERCIAL FISHERMENS CORP |
| JONATHAN | RSA | 15 | 33 | 224 | 1968 | 12 | 1 | JOC FISHING CC |
| PAULINE BRIDGET | RSA | 15 | 42 | 82 | 1953 | 16 | 1 | CAPENSIS FISHING (PTY) LTD |
| PAULSBERG | RSA | 15 | 30 | 86 | 1978 | 12 | 1 | SA SEA PRODUCTS LTD |
| SOUTH WEST PETREL | RSA | 15 | 35 | 142 | 1951 | 13 | 1 | AGOSTINHO DA SILVA FISHING (PTY) LTD |
| S. WEST CORMORANT | RSA | 15 | 39 | 175 | 1948 | 10 | 1 | DORMAKORP VIER (EDMS) BPK |
| SWARTBERG | RSA | 15 | <25 | 86 | 1978 | 10 | 4 | SA SEA PRODUCTS LTD |
| TOMREN | RSA | 15 | 29 | 112 | 1946 | 12 | 1 | JOHNNY PEDRO FERREIRA |
| UMFONDINI | RSA | 15 | 50 | 230 | 1997 | 20 | 4 | UMFONDINI FISHING (PTY) LTD |
| WILMAG | RSA | 15 | 38 | 170 | 1950 | 10 | 2 | TELO BROTHERS (PTY) LTD |
| ZAY-YAAN | RSA | 15 | 47 | 165 | 1997 | 20 | 1 | TRAWL INVESTMENTS CC |
| ANESTA | RSA | 14 | <25 | 125 | 1954 | 8 | 2 | MULLINS FISHING CC |
| ANG JERRY | RSA | 14 | <25 | --- | 1957 | 15 | 3 | ANG JERRY FISHING CC |
| ATLANTIC OCEAN | RSA | 14 | <25 | 101 | 1960 | 8 | 7 | MFV ATLANTIC OCEAN VESSEL CO (PTY) LTD |
| BABY RONALD | RSA | 14 | 29 | 180 | 1936 | 8 | 1 | ROMANSBAAI VISSERYE BPK |
| BENYAMI | RSA | 14 | <25 | 86 | 1980 | 6 | 2 | NORTH BAY FISHING COMPANY LTD |

| Vessel | Flag | Length (M) | GRT (Tons) | Horse Power (KW) | Year Built | Crew | Rights Fished | Owners |
|---|---|---|---|---|---|---|---|---|
| BEVERLYN | RSA | 14 | <25 | --- | --- | 12 | 1 | GUIZEPPINA DI GIORGIO |
| DEUS TE AJUDE | RSA | 14 | <25 | 120 | 1951 | 8 | 6 | MFV DEUS TE AJUDE VESSEL COMPANY (PTY) LTD |
| EL PESCADOR | RSA | 14 | <25 | 160 | 1955 | 10 | 1 | PLUSCOR FIVE (PTY) LTD |
| GRYSBOK | RSA | 14 | <25 | 97 | 1993 | 10 | 6 | HICKSONS FISHING COMPANY LTD |
| HIRAM | RSA | 14 | <25 | 86 | 1980 | 6 | 2 | NORTH BAY FISHING COMPANY LTD |
| IVY DOREEN | RSA | 14 | <25 | --- | 1960 | 18 | 2 | JAFFA'S BAY FISHING CC |
| JENNY ANNE | RSA | 14 | <25 | 135 | 1952 | 8 | 4 | MFV JENNY ANNE VESSEL COMPANY (PTY) LTD |
| MAINE | RSA | 14 | <25 | 105 | 1974 | 10 | 3 | PREMIER FISHING SA PTY LTD |
| POTBERG | RSA | 14 | <25 | 86 | 1977 | 12 | 1 | S A SEA PRODUCTS & CAPE FISH PROCESS |
| SIBANYE | RSA | 14 | <25 | 120 | 1999 | 8 | 3 | SIBANYE FISHING COMPANY PTY LTD |
| SOUTHERN HORIZON | RSA | 14 | <25 | 140 | 1990 | 10 | 5 | PREMIER FISHING SA (PTY) LTD |
| ST ANNE | RSA | 14 | <25 | --- | 1956 | 12 | 1 | KALK BAY MANNE FISHERS (PTY) LTD |
| SUDWEST | RSA | 14 | <25 | --- | 1950 | 12 | 1 | COMPMATIX TWENTY ONE (PTY) LTD |
| TICKEY | RSA | 14 | <25 | 134 | 1949 | 15 | 1 | KARBONKELBERG MARINE CC |
| VELOMA | RSA | 14 | <25 | 150 | 1939 | 7 | 1 | CANOA FISHING PTY LTD |
| VUKANI | RSA | 14 | <25 | 134 | 2000 | 17 | 4 | NGONYAMA FISHING PTY LTD |
| ROOIGOUD | RSA | 13.85 | <25 | --- | 1987 | 6 | 1 | NAMAQUA FISHING COMPANY LTD |
| BOA VIGEM | RSA | 13 | <25 | --- | 1952 | 12 | 1 | BOAVIGEM |
| BOLAND | RSA | 13 | <25 | 90 | 1998 | 6 | 1 | CHANGING TIDES 113 (PTY) LTD |
| DELMAY | RSA | 13 | <25 | --- | 1987 | 9 | 1 | DE SILVA, J & PARTNER |
| FREDA R | RSA | 13 | 38 | --- | 1947 | 6 | 2 | VESTRIX SEVENTEEN (PTY) LTD |
| IMPALA | RSA | 13 | <25 | 98 | 1948 | 10 | 3 | IMPALA FISHING PTY LTD |
| INTREPID | RSA | 13 | 45 | 177 | 2000 | 6 | 1 | ERONGO FISHING CC |
| MISS ITALY | RSA | 13 | <25 | 96 | 1947 | 14 | 1 | ALGEMENE VISSERS 2 PTY LTD |
| MODERN MAID | RSA | 13 | <25 | --- | 1989 | 6 | 1 | REBELO FISHING |
| SEA POINT | RSA | 13 | <25 | --- | 1999 | 8 | 1 | DROMEDARIS VISSERYE BEPERK |
| SEAGULL | RSA | 13 | <25 | 60 | 1948 | 12 | 2 | ACTIVEST TWENTY-TWO (PTY) LTD |
| SILVER LEADER | RSA | 13 | <25 | 125 | 1997 | 10 | 5 | BLUE HORIZON FISHING (PTY) LTD |
| STAR OF THE SEA | RSA | 13 | <25 | 195 | 1961 | 14 | 3 | MARION DAWN FISHING CC |
| ALBERLEZE | RSA | 12 | <25 | --- | 1961 | 6 | 5 | MFV ALBERLEZE VESSEL COMPANY PTY LTD |
| BLOUDAM | RSA | 12 | <25 | 125 | 1979 | 6 | 5 | PREMIER FISHING SA (PTY) LTD |
| BOESMANLAND | RSA | 12 | <25 | 90 | 1989 | 6 | 1 | CHANGING TIDES 113 (PTY) LTD |
| DEBNAL | RSA | 12 | <25 | --- | 1991 | 12 | 1 | NORTH BLINDER PTY LTD |
| EDDIE VAN DYK | RSA | 12 | <25 | --- | 1988 | 12 | 3 | PATERNOSTER VISSERYE BPK |
| FLAMINGO | RSA | 12 | <25 | 98 | 1945 | 12 | 1 | WICHMAN PETER ANDREW |
| IRMA | RSA | 12 | <25 | 81 | 1977 | 5 | 2 | ST HELENA BAY FISHING INDUSTRIES LIMITED |
| JO ANN | RSA | 12 | 40 | 84 | 1981 | 6 | 2 | FOOD CORP (PTY) LTD |
| JOE DOE | RSA | 12 | <25 | --- | 1980 | 12 | 2 | PATERNOSTER VISSERYE BPK |
| LORRAINE | RSA | 12 | <25 | 180 | 1997 | 17 | 1 | DYER EILAND VISSERYE (PTY) LTD |
| MARGUERITE | RSA | 12 | <25 | --- | 1981 | 6 | 3 | TRADE FACTOR TWELVE (PTY) LTD |
| MARION DAWN | RSA | 12 | <25 | 195 | 1960 | 14 | 2 | MARION DAWN FISHING CC |
| STEENBRASDAM | RSA | 12 | <25 | 125 | 1982 | 6 | 5 | PREMIER FISHING SA (PTY) LTD |
| TAJ MAHAAL | RSA | 12 | <25 | 125 | 1997 | 15 | 2 | I. FORTUNE AND CREW (PTY) LTD |
| TAMARA | RSA | 12 | <25 | 81 | 1983 | 5 | 5 | ST HELENA BAY FISHING INDUSTRIES LTD |

| Vessel | Flag | Length (M) | GRT (Tons) | Horse Power (KW) | Year Built | Crew | Rights Fished | Owners |
|---|---|---|---|---|---|---|---|---|
| WELGEMOED | RSA | 12 | <25 | 190 | 1948 | 6 | 5 | MFV WELGEMOED VESSEL CO. (PTY) LTD |
| ALANA | RSA | 11 | <25 | 120 | 1973 | 6 | 2 | CALVIN VISSERYE BK |
| DABULA MANZI | RSA | 11 | <25 | 240 | 1972 | 5 | 1 | UMZAMANI FISHING CC |
| ELAND | RSA | 11 | <25 | 200 | 1978 | 12 | 3 | TUSCAN MOOD 289 (PTY) LTD |
| JACOBS V | RSA | 11 | <25 | --- | 1980 | 5 | 1 | SCENEMATIC TWELVE (PTY) LTD |
| JAKKIE V | RSA | 11 | <25 | 75 | 1980 | 4 | 2 | ELANDIA VISSERYE BK |
| MARIA LUISA | RSA | 11 | <25 | --- | 1988 | 12 | 1 | LATERS MMA |
| MARLENA | RSA | 11 | <25 | 115 | 1978 | 12 | 2 | INKOSI KETA MARINE PTY LTD |
| MARLINA | RSA | 11 | <25 | 153 | 1978 | 10 | 2 | TARIDOR FIVE CC |
| NOMMER SEWE | RSA | 11 | <25 | 80 | 1978 | 6 | 1 | NOMMER SEWE BOOTBELANG (PTY) LTD |
| NUWELAND | RSA | 11 | <25 | 80 | 1970 | 4 | 1 | BAFIAANSBERG (EDMS) BPK |
| OUBOETA | RSA | 11 | <25 | 125 | 1994 | 10 | 1 | CSM FISHING (PTY) LTD |
| PENNY | RSA | 11 | <25 | --- | 1986 | 11 | 1 | A VAUGHAN |
| THREE COINS | RSA | 10 | <25 | --- | 1977 | 10 | 1 | J A VAUGHAN |
| WESTERN DEBBIE | RSA | 10 | 36 | 91 | 1980 | 12 | 1 | SIR LOWRY'S PASS FISHERIES |
| ABRAHAM K | RSA | 9 | <25 | 85 | 1975 | 9 | 2 | LOUW'S FISHING CC |
| ALRA | RSA | 9 | <25 | 100 | 1970 | 14 | 1 | TAKALANI FISHING CC |
| ASKALA | RSA | 9 | <25 | --- | 1980 | 10 | 1 | ASKALA FISHING CC |
| BENMAR H | RSA | 9 | <25 | 110 | 1980 | 10 | 1 | J HORN |
| CHRISTA | RSA | 9 | <25 | 65 | 1975 | 9 | 1 | LAMBERTSBAY FISHING |
| GYS B | RSA | 9 | <25 | --- | 1985 | 6 | 1 | HENBASE 2655 CC |
| INKALA | RSA | 9 | <25 | 53 | 1980 | 6 | 2 | PATERNOSTER VISSERYE BPK |
| JAPIE | RSA | 9 | <25 | --- | 1999 | 6 | 1 | HENTIQ 2349 (PTY) LTD |
| JIDY AYM | RSA | 9 | <25 | --- | 1986 | 11 | 1 | SKOTSHE KLOOF FISHERY CC |
| MALGAS | RSA | 9 | <25 | 120 | 1977 | 10 | 1 | MALGAS VISSERYE BK |
| MARY JANE | RSA | 9 | <25 | 120 | 1998 | 5 | 1 | GJ ALFRED ONDERNEMINGS EDMS BPK |
| MILLIE | RSA | 9 | <25 | --- | 1978 | 6 | 1 | TIGER REEF FISHING CC |
| NICO S | RSA | 9 | <25 | --- | 1980 | 16 | 1 | SA COMMERCIAL FISHERMENS CORP |
| OOM MAANS | RSA | 9 | <25 | 58 | 1975 | 10 | 1 | NOORDBAY FISHERMEN CO-OP |
| PONDO | RSA | 9 | <25 | --- | 1980 | 5 | 1 | PENINSULA FISHING ENTERPRISES (PTY) LTD |
| POPPIE TOL | RSA | 9 | <25 | 80 | 1980 | 10 | 1 | DJ LAUBSCHER |
| SPIKES | RSA | 9 | <25 | 80 | 1970 | 10 | 1 | KAMFER D |
| EVA ADF234KB | RSA | 8 | <25 | --- | 1980 | 4 | 1 | DAVID VOLLENHOVEN |
| FAHREN F | RSA | 8 | <25 | 300 | 1995 | 10 | 1 | MUDGE POINT FISHING CC |
| JENNY | RSA | 8 | <25 | 85 | 1974 | 7 | 1 | MAASDORP IC |
| MASIPHUMELELE | RSA | 8 | <25 | 140 | 1999 | 14 | 1 | KOMICX PRODUCTS PTY LTD |
| MOONRAKER | RSA | 8 | <25 | --- | 1992 | 10 | 1 | CP BODENSTEIN |
| SWIFT 2000 | RSA | 8 | <25 | 180 | 2000 | 8 | 2 | RELMAR INVESTMENTS PTY LTD |
| WATERBERG | RSA | 8 | <25 | --- | 1985 | 8 | 1 | PAJ VAN STADEN |
| AMA C204 | RSA | 7 | <25 | 180 | 1986 | 7 | 2 | JGJ OTTO |
| MOBY DICK TWO | RSA | 7 | <25 | 230 | 1981 | 8 | 2 | D M GILLION |
| TROMPIE II | RSA | 7 | <25 | 180 | 1987 | 7 | 2 | JW HENN |
| VA-TI-KA-KI | RSA | 7 | <25 | 180 | 1982 | 8 | 1 | DYER EILAND VISSERYE (PTY) LTD |
| WAGGIES | RSA | 7 | <25 | 400 | 1988 | 9 | 1 | ANDRE NAGENER |

| Vessel | Flag | Length (M) | GRT (Tons) | Horse Power (KW) | Year Built | Crew | Rights Fished | Owners |
|---|---|---|---|---|---|---|---|---|
| WARLORD | RSA | 7 | <25 | --- | 1988 | 10 | 1 | GEELBEK VISSERYE |
| ASTRID | RSA | 6 | <25 | 170 | 1985 | 8 | 1 | FRANK SYME |
| BELLARIA | RSA | 6 | <25 | --- | 1981 | 5 | 1 | GH GILLION |
| BLUEFIN | RSA | 6 | <25 | 23 | 1990 | 6 | 2 | COMBINED ABALONE PROCESSORS PTY LTD |
| CHRISTENE W | RSA | 6 | <25 | --- | 1989 | 6 | 1 | CAPTAINS FISHING CC |
| DE JAPIE | RSA | 6 | <25 | 170 | 1994 | 6 | 1 | SJ GROENEWALD |
| FURNANDY | RSA | 6 | <25 | --- | 1986 | 6 | 1 | FJ HENN |
| GERDA N | RSA | 6 | <25 | --- | 1965 | 5 | 1 | NICOLAAS JULIES |
| KIKA | RSA | 6 | <25 | --- | 1992 | 5 | 1 | RAAFF DIVE OPERATIONS CC |
| LUCIA ANN | RSA | 6 | <25 | 170 | 1994 | 6 | 2 | C SWARTZ |
| MARIAH | RSA | 6 | <25 | 180 | 1986 | 6 | 2 | EUGENE LE ROUX FAMILIE TRUST |
| MIDNITE | RSA | 6 | <25 | 180 | 1992 | 6 | 2 | EUGENE LE ROUX FAMILIE TRUST |
| RENEE | RSA | 6 | <25 | 75 | 1970 | 6 | 1 | BUFFELJACHT COMMUNITY FORUM |
| ROSEMARY | RSA | 6 | <25 | 120 | 1995 | 6 | 1 | HAWSTON VISSERSMAATSKAPPY |
| SEA PEARL | RSA | 6 | <25 | --- | 1992 | 6 | 1 | CS MATODES |
| SEA PEARL TWO | RSA | 6 | <25 | 90 | 1992 | 6 | 1 | MFV SEA PEARL TWO (PTY) LTD |
| SEEVALK | RSA | 6 | <25 | 170 | 1995 | 6 | 1 | AIR FRESH FISHERIES CC |
| SOPHIA S | RSA | 6 | <25 | 180 | 1986 | 6 | 2 | CW SWART |
| SPYDER | RSA | 6 | <25 | 170 | 1985 | 7 | 1 | GAVEN CARLSE |
| ST VERN | RSA | 6 | <25 | 120 | 1982 | 5 | 2 | STEPHEN JOHN MAREE |
| ST365 | RSA | 6 | <25 | --- | --- | 2 | 1 | MORESA VISVEREENIGING (PTY) LTD |
| ST4 | RSA | 6 | <25 | --- | --- | 5 | 1 | SOETWATER FISHING CC |
| STRANDWOLF | RSA | 6 | <25 | --- | 1982 | 6 | 1 | HELDERBERG KOMMERSIELE VISSERMANS VERENIGING |
| UNITY | RSA | 6 | <25 | --- | 1995 | 6 | 1 | BOAT ROCK FISHING CC |
| ZANITER II | RSA | 6 | <25 | --- | 1986 | 6 | 1 | IS DU TOIT |
| ADELEMA | RSA | 5 | <25 | 120 | 1980 | 4 | 1 | VALERIE BENEDICTTA HESS |
| AMBER | RSA | 5 | <25 | --- | 1976 | 4 | 1 | JONATHAN CHARLES BURGESS |
| BETHEL | RSA | 5 | <25 | 80 | 1987 | 5 | 2 | DUDLEY GILLION |
| CARMEN | RSA | 5 | <25 | 120 | 1991 | 4 | 2 | WJ FISHER |
| CHAD LEE | RSA | 5 | <25 | --- | 1980 | 5 | 2 | CR ADAMS FISHING CC |
| CHARLES GLASS | RSA | 5 | <25 | 180 | 1996 | 5 | 2 | CHARLES FISHER |
| CLEO | RSA | 5 | <25 | --- | 1985 | 4 | 2 | CR KENNEDY |
| CONDOR | RSA | 5 | <25 | --- | 1989 | 5 | 1 | JOHN FREDERICK BAILLIE |
| CONSTANCE | RSA | 5 | <25 | --- | 1975 | 4 | 1 | WB PRINCE |
| DAG EN NAG | RSA | 5 | <25 | --- | 1980 | 4 | 1 | J M WESSELS |
| EARLYNN | RSA | 5 | <25 | 170 | 1992 | 5 | 2 | JIP GILLION |
| IRMA C8 | RSA | 5 | <25 | --- | 1989 | 4 | 1 | CHRISTOPHER JOHN FISHER |
| JACKPOT | RSA | 5 | <25 | 120 | 1992 | 5 | 1 | BUFFELSJAG ABALONERS CC |
| JADE 2 | RSA | 5 | <25 | 60 | 1985 | 4 | 2 | AK GILLION |
| JANEEN | RSA | 5 | <25 | 120 | 1985 | 4 | 2 | WJ OKKERS |
| JAY RENE | RSA | 5 | <25 | --- | 1979 | 4 | 1 | HJ DEES |
| JEANNETTA | RSA | 5 | <25 | 120 | 1986 | 4 | 2 | HERBERT GERALD BAILEY |
| JOLEEN TOO | RSA | 5 | <25 | --- | 1995 | 5 | 1 | RONALD RICHARD HENDRICKS |
| LADY LUCK | RSA | 5 | <25 | 120 | 1986 | 5 | 2 | JOSEPH JONATHAN PRINCE |

| Vessel | Flag | Length (M) | GRT (Tons) | Horse Power (KW) | Year Built | Crew | Rights Fished | Owners |
|---|---|---|---|---|---|---|---|---|
| LEA II | RSA | 5 | <25 | 120 | 1994 | 4 | 2 | O ERWEE |
| LETITIA ANN | RSA | 5 | <25 | 120 | 1995 | 5 | 1 | JT DUNSDON |
| LYDIA | RSA | 5 | <25 | 180 | 1992 | 5 | 1 | C E P WINDVOGEL |
| MABEL | RSA | 5 | <25 | --- | 1986 | 5 | 2 | LCN DYNAARD |
| MADELEIN | RSA | 5 | <25 | 180 | 1991 | 5 | 2 | ARTHUR SOLOMON KLEINSMIDT |
| MAGADELEEN | RSA | 5 | <25 | --- | 1987 | 5 | 1 | SWAIN H |
| MARIO | RSA | 5 | <25 | 120 | 1993 | 5 | 1 | NICHOLAS MICKEA MARSHALL |
| MELISSA | RSA | 5 | <25 | 120 | 1995 | 5 | 1 | HAWSTON VISSERSMAATSKAPPY |
| MORIA | RSA | 5 | <25 | 120 | 1988 | 4 | 1 | TREVOR F GILLION |
| MYRNA LEE | RSA | 5 | <25 | 140 | 1969 | 4 | 1 | BASIL A STEWART |
| NERO | RSA | 5 | <25 | 140 | 1994 | 4 | 2 | JA NOWERS |
| NIKITA | RSA | 5 | <25 | 120 | 1995 | 5 | 1 | HAWSTON VISSERSMAATSKAPPY |
| NVT | RSA | 5 | <25 | --- | 1986 | 4 | 2 | AJ DAY |
| PEARLY SHELL | RSA | 5 | <25 | 120 | 1995 | 5 | 1 | HAWSTON VISSERSMAATSKAPPY |
| RACHELLE | RSA | 5 | <25 | 100 | 1992 | 4 | 2 | GF SWARTZ |
| SEA PIRATE | RSA | 5 | <25 | 100 | 1991 | 4 | 2 | PHILIP ABRAM DANIEL FIGAJI |
| SEA SWAN | RSA | 5 | <25 | 120 | 1987 | 4 | 2 | DANIEL M GILLION |
| SHALOM | RSA | 5 | <25 | 170 | 1994 | 5 | 1 | NATHANIEL N GILLION |
| SPOTTY | RSA | 5 | <25 | --- | 1984 | 4 | 1 | SIYAZAKHA FISHING CC |
| ST 365 | RSA | 5 | <25 | 22 | 1983 | 2 | 1 | MORESA VISVERENIGING PTY LTD |
| ST VALENTINE | RSA | 5 | <25 | --- | 1992 | 5 | 1 | E RAAFF |
| ST23 | RSA | 5 | <25 | --- | 1983 | 2 | 1 | FOOD CORP (PTY) LTD |
| ST358 | RSA | 5 | <25 | --- | 1983 | 4 | 1 | FOOD CORP (PTY) LTD |
| ST359 | RSA | 5 | <25 | --- | 1983 | 2 | 1 | FOOD CORP (PTY) LTD |
| ST360 | RSA | 5 | <25 | --- | 1983 | 2 | 1 | FOOD CORP (PTY) LTD |
| ST361 | RSA | 5 | <25 | --- | 1983 | 2 | 1 | FOOD CORP (PTY) LTD |
| ST363 | RSA | 5 | <25 | --- | 1983 | 2 | 1 | FOOD CORP (PTY) LTD |
| SUE-ANN | RSA | 5 | <25 | 80 | 1980 | 4 | 2 | ANDRE PETER JOHNSON |
| TROMPIE I | RSA | 5 | <25 | 80 | 1984 | 5 | 1 | MICHAEL WILLIAM HENN |
| TUNIS | RSA | 5 | <25 | 120 | 1985 | 5 | 2 | DANIEL CHARLES MAREE |
| VIKING II | RSA | 5 | <25 | 120 | 1989 | 5 | 2 | JM MAG FISHING CC |
| WENDY | RSA | 5 | <25 | 120 | 1982 | 4 | 2 | NIGEL PATRICK MAREE |
| WILLIAM HENRY | RSA | 5 | <25 | --- | 1998 | 5 | 1 | H KRIEL |
| WOLFIE | RSA | 5 | <25 | --- | 1995 | 5 | 1 | AT FIGAJIE |
| ZULFA | RSA | 5 | <25 | --- | 1987 | 2 | 1 | F ALBERTYN |
| ADF252 | RSA | 4 | <25 | --- | 1985 | 3 | 1 | THANDANI FISHERIES CC |
| ADF253 | RSA | 4 | <25 | --- | 1985 | 3 | 1 | THANDANI FISHERIES CC |
| BEIDA | RSA | 4 | <25 | 40 | 1990 | | 1 | ANTHONY YUSUF |
| BOY BOY | RSA | 4 | <25 | --- | 1990 | 4 | 1 | EDMUND WOODWARD |
| CINDY | RSA | 4 | <25 | 50 | 1992 | 4 | 2 | RB GILLION |
| DTS 2451E | RSA | 4 | <25 | --- | --- | 3 | 1 | AFRICAN MARINE PRODUCTS |
| J ARRIES | RSA | 4 | <25 | --- | 1966 | 3 | 1 | JACOB ARRIES |
| PEGGY | RSA | 4 | <25 | --- | --- | 4 | 1 | SOETWATER FISHING CC |
| PNA 10KB | RSA | 4 | <25 | --- | 1998 | 3 | 1 | T & N VISSERYE BK |

| Vessel | Flag | Length (M) | GRT (Tons) | Horse Power (KW) | Year Built | Crew | Rights Fished | Owners |
|---|---|---|---|---|---|---|---|---|
| PNA 115KB | RSA | 4 | <25 | --- | 1998 | 3 | 1 | T & N VISSERYE BK |
| PNA 16KB | RSA | 4 | <25 | --- | 1998 | 3 | 1 | T & N VISSERYE BK |
| PNA 205KB | RSA | 4 | <25 | --- | 1998 | 3 | 1 | T & N VISSERYE BK |
| PNA 222KB | RSA | 4 | <25 | --- | 1998 | 3 | 1 | T & N VISSERYE BK |
| PNA 404KB | RSA | 4 | <25 | --- | 1998 | 3 | 1 | T & N VISSERYE BK |
| PNA 568 | RSA | 4 | <25 | --- | --- | 3 | 1 | FLORIS JOHANNES JACOBUS BRAND |
| PNA 569 | RSA | 4 | <25 | --- | --- | 3 | 1 | FLORIS JOHANNES JACOBUS BRAND |
| PNA 570 | RSA | 4 | <25 | --- | --- | 3 | 1 | FLORIS JOHANNES JACOBUS BRAND |
| PNA 571 | RSA | 4 | <25 | --- | --- | 3 | 1 | FLORIS JOHANNES JACOBUS BRAND |
| PNA 579 | RSA | 4 | <25 | --- | --- | 3 | 1 | OCEAN UKHOZI FISHERIES CC |
| PNA 580 | RSA | 4 | <25 | --- | --- | 3 | 1 | OCEAN UKHOZI FISHERIES CC |
| PNA 581 | RSA | 4 | <25 | --- | --- | 3 | 1 | OCEAN UKHOZI FISHERIES CC |
| PNA 582 | RSA | 4 | <25 | --- | --- | 3 | 1 | OCEAN UKHOZI FISHERIES CC |
| PNA 583 | RSA | 4 | <25 | --- | --- | 3 | 1 | OCEAN UKHOZI FISHERIES CC |
| PNA 584K | RSA | 4 | <25 | --- | --- | 3 | 1 | OCEAN UKHOZI FISHERIES CC |
| PNA 587 K | RSA | 4 | <25 | --- | 1998 | 3 | 1 | T & N VISSERYE BK |
| PQ 1021 | RSA | 4 | <25 | --- | 1985 | 3 | 1 | THANDANI FISHERIES CC |
| PQ 570 | RSA | 4 | <25 | --- | --- | 3 | 1 | DESEEDA SEA PRODUCTS |
| VIKING | RSA | 4 | <25 | 50 | 1970 | 4 | 2 | MAREE LE ROUX FAMILIE TRUST |
| VR 41 | RSA | 4 | <25 | --- | 1985 | 3 | 1 | THANDANI FISHERIES CC |
| VR 44 | RSA | 4 | <25 | --- | 1985 | 3 | 1 | THANDANI FISHERIES CC |
| WIDOWS 1 | RSA | 4 | <25 | --- | 1998 | 4 | 1 | HOUT BAY FISHERMANS WIDOWS ASSOCIATION |
| WIDOWS 2 | RSA | 4 | <25 | --- | 1998 | 4 | 1 | HOUT BAY FISHERMANS WIDOWS ASSOCIATION |

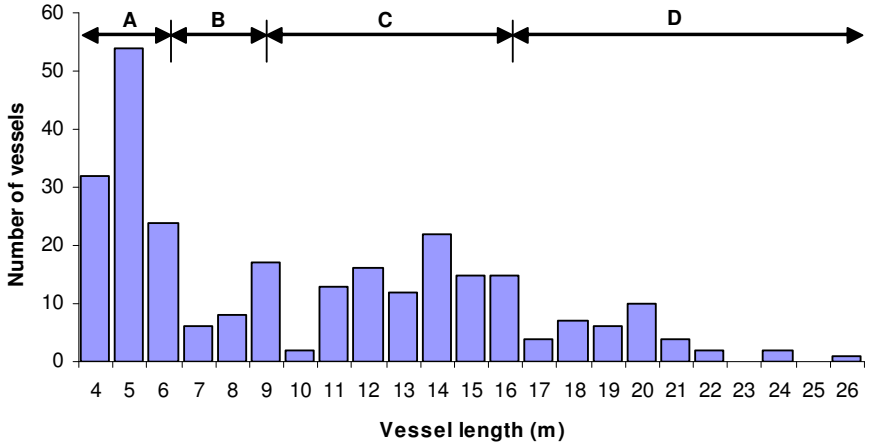


**Figure 2.16.** Length distribution of vessels in the full commercial west coast rock lobster fishing fleet, where size classes are: A = row boats, motorised dinghies and small ski-boats; B = large ski-boats and "chukkies"; C = small trap boats; D = Large trap boats.

Four distinct length modes could be discerned for the vessels fishing for rock lobster in 2003, depicted in Figure 2.16. The smallest craft in the fleet were 4 m rowing dinghies, from which hoop-nets are deployed. These dinghies operate close inshore, near to where they are

launched; or a "mother vessel" transports them to fishing grounds more distant. In the same size class (Group "A"; 4 – 6 m) were larger dinghies, motorised dinghies, and small ski-boats, all of which deploy hoop-nets. The next size class (Group "B"; 6 – 9 m) included larger ski-boats and "chukkies". Chukkies are traditional west coast rock lobster "deck-boats" which are dying out of the fishery (there are probably only about 10 or so chukkies still in operation). This group makes use of both hoop-nets and traps. The third and fourth size classes reflect the two types of trap-boat in the offshore fishery. Those that are classed as small (Group "C"; 10 – 16 m) generally deploy less than 50 traps, whilst the larger vessels (Group "D") can deploy more than 50 rock lobster traps per trip. The characteristics of the vessels in the four groups are summarised in Table 2.17.

**Table 2.17.** A comparison of mean characteristics of four groups of vessel types nominated to fish in the full commercial sector of the South African west coast rock lobster fishery by medium term rights holders.

| Characteristic | Average for Group A | Average for Group B | Average for Group C | Average for Group D |
|---|---|---|---|---|
| Length (m ± Std Dev) | 5 ± 1 | 8 ± 1 | 14 ± 2 | 20 ± 2 |
| GRT (tons ± SD) | <25 | <25 | ± 25 | 73 ± 26 |
| Horsepower (kW ± SD) | 120 ± 47 | 144 ± 87 | 135 ± 53 | 290 ± 102 |
| Crew (± SD) | 4 ± 1 | 9 ± 3 | 11 ± 5 | 18 ± 5 |
| Construction Year (± SD) | 1988 ± 7 | 1984 ± 9 | 1969 ± 18 | 1965 ± 13 |

As with the other commercial fisheries discussed so far, the South African west coast rock lobster offshore fleet is aging, with the average age of the nominated trap-boats being about 30 years. Seventy-five percent of these 10 m-plus vessels were also active in other fisheries; mainly tuna pole (32%) and abalone (28%) but also traditional linefish and hake longline (14% each), amongst others. The issue of limiting dedicated trap-boats to operate in the rock lobster fishery alone is currently (2005) being addressed in the long-term rights allocation policy for west coast rock lobster.

The offshore rock lobster fleet operate from a number of fishing harbours, from Port Nolloth in the Northern Province, to Hermanus on the south coast of the Western Cape Province (Figure 2.17). The vessels return to their fishing harbours every day to weigh their catch. The crew employed on the vessels are therefore usually local, living in the region of the fishing harbour. The benefit derived from the wages of the crew on the rock lobster vessels thus goes directly to the local community. The number of crewmembers working on the vessels listed in Table 2.16 was 2430, which is close to MCM's estimate of 2500 vessel-based workers in the offshore fishery.

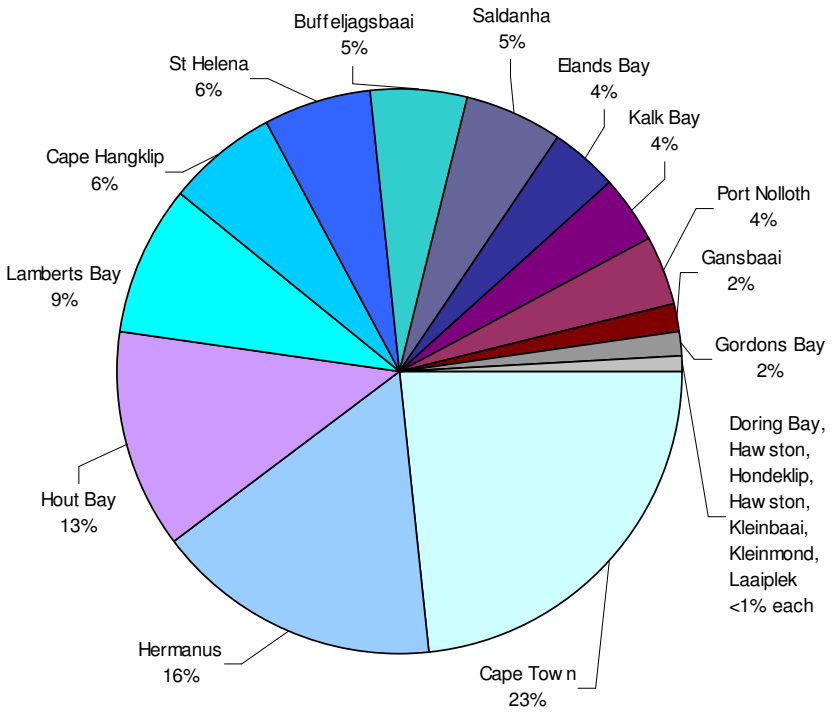


**Figure 2.17.** Fishing harbours at which the South African full commercial (offshore) fleet landed their west coast rock lobster catches during the medium term rights allocation period (2001 – 2005).

## 2.6 Tuna pole & line

Tuna catches were first reported in South Africa in 1910, by recreational anglers. However, the catches were sporadic, and for 50 years, it was believed that there were too few tunas in South African waters to warrant developing a commercial fishery. Eventually, mounting evidence to the contrary prompted an exploratory tuna-directed fishing survey in 1960, using longlines. It soon became clear that tuna occurred in commercially exploitable volumes from Port Elizabeth in the Eastern Cape Province to Lambert's Bay, on the west coast of the Western Cape Province.

The first attempt to exploit the tuna resource locally was based on longlining, following the example of the Japanese tuna fleet that was fishing in South African waters at the time. This initial approach was not a great commercial success.

In 1979, an aggregation of yellow-fin tunas (*Thunnus albacares*) was found off Cape Point, which were taking baited hooks. A range of fishing boats attempted to cash in on this new resource, attracted from fisheries as diverse as the demersal, pelagic and west coast rock lobster fisheries. Almost 5000 tons of yellow-fin tuna were caught that year. However, the aggregation did not re-occur the following year, and most of the opportunist vessels lost interest. Nevertheless, the potential for commercial fishing for tuna using pole and line had been established, and a few of the larger vessels went searching for tuna further a field.

They discovered aggregations of albacore (*Thunnus alalunga*) west of Cape Town, over the South Bank fishing grounds and in the region of the Vema and Tripp Seamounts. Two thousand tons of tuna were caught in 1980, precipitating the development of the tuna pole fishery in this area. Catches steadily increased until 7300 tons of tuna were taken in 1990. The following year Namibia gained independence, excluding the South African tuna pole fleet from the Tripp Seamount, which is in its sovereign waters. Joint ventures between South African and Namibian fishing companies led to a recovery in annual catches in the following year. Catches have fluctuated around 6000 tons since then. There are three main fishing areas in this fishery; in Namibian waters around the Tripp seamount, over the south bank fishing grounds off the west coast of South Africa, and off Cape Columbine. The fishery is seasonal, with most catches being taken from November to May.

The first attempt to manage the tuna pole fishery was introduced during the allocation of medium term fishing rights in 2002. Management in this fishery is by virtue of effort control, through the allocation of a Total Allowable Effort (TAE) allocation. The effort allocation is measured in terms of "men", as each crewmember on a vessel is effectively one "fishing unit". The rights holder must nominate a vessel/s to fish on their behalf. In this manner, the right is linked to a vessel. A maximum of 3600 "men" (i.e. crewmembers) are allowed to participate in the fishery at present, and this number must be divided up amongst a maximum permissible number of 200 fishing vessels.

The TAE of 3600 men was calculated to allow for an average catch of about 6000 tons. The International Convention for the Conservation of Atlantic Tunas (ICCAT) has, since 2003, set the global TAC for albacore at 29 200 tons. This amount is divided amongst four major fishing nations active in the region, namely Taiwan, South Africa, Brazil and Namibia. Although no country-specific quotas are allocated at present, these countries have been instructed by the ICCAT to formalise such an agreement. The country allocations will be based on past performance in the fishery; therefore, it is vital that South Africa does not under-utilise the resource.

### 2.6.1 Rights holders

Unfortunately, the tuna pole fishery was never fully subscribed during the medium term rights period (2002 – 2005). During this time, 150 rights-holders nominated 164 vessels to operate in the fishery, with an associated effort allocation of 2734 men (Table 2.18). This means that some 24% of the TAE was not utilised.

**Table 2.18.** Medium term rights holders in the South African tuna pole fishery, and their effort allocations for 2003.

| RIGHTS HOLDER | VESSEL ALLOCATION | MEN ALLOCATION |
|---|---|---|
| ACTIVEST SIXTEEN (PTY) LTD | 1 | 20 |
| ADELETTE FISHING CC | 1 | 19 |
| AFRICAN TUNA TRADERS CC | 1 | 8 |
| ALASKA FISHING CC | 1 | 18 |
| ANG JERRY FISHING CC | 1 | 20 |
| ATV-S FISHING (PTY) LTD | 1 | 14 |
| AX FISHING CC | 1 | 17 |
| BALELO (PTY) LTD | 1 | 12 |
| BALELO+ SANTOS FISHING CC | 1 | 16 |
| BATSATA FISHING (PTY) LTD | 1 | 19 |
| BATSILVA CC | 1 | 16 |
| BAYANA BAYANA FISHING CC | 1 | 20 |

| RIGHTS HOLDER | VESSEL ALLOCATION | MEN ALLOCATION |
|---|---|---|
| BAYVIEW FISHING (PTY) LTD | 1 | 20 |
| BELL WALTER OXLEY | 1 | 16 |
| BIG BLUE FISHING AND CHARTERS | 1 | 6 |
| BIZ AFRIKA 1504 (PTY) LTD | 1 | 20 |
| BLUE VENTURE FISHING (PTY) LTD | 1 | 23 |
| BORDEAUX MARINE OPERATIONS CC | 1 | 16 |
| BRAVEHEART FISHING CC | 1 | 5 |
| BROSS INVESTMENTS (PTY) LTD | 1 | 20 |
| BROTHERS FISHING CC | 1 | 15 |
| BUSBY FISHING (PTY) LTD | 1 | 12 |
| C&K FISHING | 1 | 25 |
| CARPENSIS FISHING (PTY) LTD | 1 | 16 |
| CLARK WILLIAM BRIAN | 1 | 16 |
| CLIPPER FISHING CC | 1 | 20 |
| COMPMATIX TEN (PTY) LTD | 1 | 12 |
| CTEL FISHING CC | 1 | 16 |
| CYRIL BURREL FISHING CC | 1 | 25 |
| DA LUZFISHERIES CC | 1 | 16 |
| DA SILVA AGOSTINHO | 1 | 13 |
| DA SILVA INVESTMENTS (PTY) LTD | 1 | 19 |
| DAVID OLIVIER & PARTNERS CC | 1 | 12 |
| DAVID SMITH FISHING CC | 1 | 24 |
| DE FARIA JOAO MANUEL FERNANDES | 1 | 20 |
| DE FREITAS FISHING CC | 1 | 18 |
| DE VASCONCELOS VIEIRA ANNA LUCIA | 1 | 16 |
| DEWMIST INVESTMENTS CC | 1 | 12 |
| DMA FISHING ENTERPRISES (PTY) LTD | 5 | 87 |
| DOUGLAS H FISHING CC | 1 | 20 |
| ED HAWK FISHING CC | 1 | 20 |
| ESTRELA DOMARFISHINGCC | 1 | 16 |
| FERNANDES FISHING CC | 1 | 18 |
| FERNANDES JOAD MANUEL DA COSTA | 1 | 20 |
| FERNANDES JOSE MANUEL DA COSTA | 1 | 20 |
| FERREI RA MANUEL RODRIGUES FERREIRA | 1 | 12 |
| FERREIRA JOHNNY PEDRO | 1 | 12 |
| FERREIRA LUISA TEIXEIRO | 1 | 16 |
| FERRO FISHING (PTY) LTD | 1 | 16 |
| FISKORN CC | 1 | 16 |
| FLOR D' MAR FISHING ENTERPRISES | 1 | 15 |
| G & K FISHERIES | 1 | 12 |
| GEROMBE FISHING ENTERPRISES CC | 1 | 21 |
| GOLDFISH FISHING TRUST | 1 | 20 |
| GOMES FISHING (PTY) LTD | 1 | 15 |
| GOMES HORACIO DE NASCIMENTO DA SILVA | 1 | 25 |
| GOMES MANUEL EUGENIO DA SILVA | 1 | 16 |
| GRADWELL FISHERIES CC | 1 | 22 |
| GRANT FISHING CC | 1 | 20 |
| GRIFFITHS HENDRIK CORNELIUS LEONARD | 1 | 25 |
| HELENA JOSE BRAS | 1 | 18 |
| HENTIQ 2349 (PTY) LTD | 1 | 17 |
| I FORTUNE AND CREW (PTY) LTD | 1 | 15 |
| IMG ADMIMISTRATORS CC | 2 | 14 |
| IMIFUNO FISHING (PTY) LTD | 1 | 10 |
| IMIZAMOYETHU FISHING (PTY) LTD | 1 | 12 |
| INTLANZI FISHING (PTY) LIMITED | 1 | 24 |

| RIGHTS HOLDER | VESSEL ALLOCATION | MEN ALLOCATION |
|---|---|---|
| INYANGA FISHING (PTY) LTD | 1 | 10 |
| JJ DA MATA & SONS FISHING CO (PTY) | 2 | 30 |
| JOC FISHING CC | 1 | 12 |
| JOENARDO FISHING CC | 2 | 30 |
| JORGE DE OLIMFISHINGCC | 1 | 18 |
| JOVILLE FISHING CC | 1 | 20 |
| KENTUCKY FISHING CC | 2 | 42 |
| KNOBEL BRIAN | 2 | 44 |
| LANGEBERG FISHING CC | 1 | 15 |
| LAUBSCHER PIERRE JAN | 1 | 6 |
| LIMARCO NINE CC | 1 | 8 |
| LOUW XAVIER ERNESTO | 2 | 38 |
| MAJORSHELF 166 (PTY) LT0 | 2 | 34 |
| MANUEL DE OLIM FISHING CC | 1 | 12 |
| MARION DAWN FISHINGCC | 1 | 12 |
| MARTINS EDUARDO | 1 | 14 |
| MCCALLUM THOMAS BUDGE | 1 | 10 |
| MENEZES JOSE ELEUTERIO | 1 | 14 |
| MFV WESTERDAM CC | 1 | 17 |
| MIACOR TRADING CC | 1 | 20 |
| MJM CASULA FISHING CC | 1 | 20 |
| MONIZ FISHERIES | 1 | 20 |
| MONSOM TRADING 108 CC | 1 | 12 |
| MONTIDAN FISHERIES (PTY) LTD | 1 | 25 |
| MOREIRA & SON FISHING CC | 1 | 12 |
| MUZZELL MICHAEL THOMAS | 1 | 13 |
| NATI SI NAKO FISHING | 1 | 16 |
| NEW MEXICO CC | 1 | 18 |
| NGONYAMA FISHING TRUST | 1 | 19 |
| NORTE PESCA FISHING CC | 1 | 20 |
| PAARMAN FISHERIES CC | 1 | 25 |
| PALZET VISSERYE BK | 1 | 18 |
| PENGLIDES ALEXANDER | 1 | 18 |
| PREMIER FISHING SA (PTY) LTD | 4 | 94 |
| PRETORIUS JOHN BEVAN | 1 | 4 |
| PYPER JAN VULCAN HERMAN | 1 | 12 |
| RADIANT FISHING CC | 1 | 15 |
| RIETGANS VISSERYE CC | 1 | 24 |
| RODRIGUES JOSE MARCELINO | 1 | 8 |
| S0UTH ROCK FISHING CC | 1 | 20 |
| SA TUNA EXPORTERS (PTY) LTD | 1 | 22 |
| SANCHO SIDONIO JOSE RODRIGUES | 1 | 17 |
| SAO GABRIEL FISHING CC | 1 | 19 |
| SCEPTRE FISHING (PTY) LTD | 1 | 10 |
| SCHMIDT UWE WILFRIED | 1 | 6 |
| SCOTSHE KLOOF FISHERY CC | 1 | 11 |
| SEASWAS FISHING CC | 1 | 16 |
| SILVA FISHING ENT CC | 1 | 16 |
| SIMPSON DENIS ROBERT | 1 | 10 |
| SMITH ERIC WALTER | 1 | 22 |
| SOLIPROPS 1083 CC | 1 | 15 |
| SOUTH AFRICAN SEA PRODUCTS LTD | 1 | 9 |
| SOUTH WEST TRAWLERS CC | 1 | 20 |
| SOUTHERN POINT OCEAN FRESH PROC | 1 | 7 |
| SOWDEN RALPH CUBITT | 1 | 15 |

| RIGHTS HOLDER | VESSEL ALLOCATION | MEN ALLOCATION |
|---|---|---|
| SQUIDDER FISHING INVESTMENTS (PTY) LTD | 1 | 18 |
| STARLIGHT FISHING | 1 | 18 |
| TAMARAN FISHING CC | 1 | 25 |
| TELO BROTHERS (PTY) LTD | 1 | 10 |
| TERN FISHINGTRUST | 1 | 16 |
| THATO FISHING CC | 2 | 30 |
| THE FISHINGTRUST | 1 | 28 |
| THE SILVA FAMILY TRUST | 1 | 20 |
| THE VOYAGER FISHING TRUST | 1 | 8 |
| TIERKOP INVESTMENTS CC | 1 | 20 |
| TRADE FACTOR ELEVEN (PTY) LTD | 1 | 15 |
| TRADE FACTOR SIXTEEN (PTY) LTD | 1 | 20 |
| TRADEFACTOR FIFTEEN (PTY) LTD | 1 | 15 |
| TRANSAT COMPANY (PTY) LTD | 1 | 18 |
| TRAUTMAN FISHING ENTERPRISES CC | 1 | 26 |
| TRAWL INVESTMENTS CC | 1 | 20 |
| TUCKER JAMES DAVID | 1 | 18 |
| TWOLINETRADING 163 (PTY) LTD | 1 | 8 |
| UKULIMA FISHING (PTY) LTD | 1 | 12 |
| UMKHONTO FISHING (PTY) LTD | 1 | 10 |
| VIA COMDEUS FISHING CC | 1 | 16 |
| VIEIRA & SONS FISHING CC | 1 | 17 |
| VON BONDE GERHARD SKELTON | 1 | 8 |
| WAVECREST SEA ENTERPRISES (PTY) LTD | 1 | 17 |
| WINDHOEK FISHING CC | 1 | 20 |
| YELLOW STAR TRADING 1114 (PTY) LTD | 1 | 25 |
| YOUNG WAYS FOURTEEN CC | 1 | 11 |
| ZINGARA TRUST | 1 | 25 |
| **TOTAL** | **165** | **2734** |

Most of the medium term tuna pole rights holders were from the Western Cape Province (82%), although 8% were based in the Eastern Cape Province. Almost a quarter of the rights holding entities were individuals. Forty-three percent were closed corporations, 28% were proprietary limited companies, and the rest were held by trusts (5%). One rights holder was a very large company (with reported turnovers of more than R100 million) and one was a large company (R10 – 100 million turnover). For the most part though, the tuna pole resource was fished by medium (41%) and small (58%) scale operators. The majority of the rights holders (75%) employed between 10 – 50 people. Only 4% had more than 50 employees, while 21% employed less than 10 people. Excluding the shore-based staff of the very large company (Premier Fishing, which has rights in other fisheries), approximately 3100 people were employed in the tuna pole fishery in 2003, of which 2734 were vessel-based crewmembers.

### 2.6.2 Vessels

Before the allocation of medium term fishing rights, tuna pole fishing fell within the general linefish sector of the South African fishing industry. A diverse group of vessels made up the early tuna pole fleet. As the tuna pole fishery developed, so three distinct groups became apparent. The first consisted of larger vessels (>20 crew) with onboard freezer capabilities that could spend a number of days at sea, targeting the albacore that frequented the Tripps and Vema Seamounts. The second group consisted of smaller vessels (<20 crew) that targeted the albacore at the South Bank region. They carried ice onboard, and could overnight at sea. The

last group consisted of a collection of even smaller craft (<10 crew) that fished for the albacore which occurred inshore, off Cape Columbine.

Few of these vessels were dedicated tuna pole boats. The seasonal nature of the fishery led the participants to believe that it could not sustain a year-round industry. Almost all participants had rights in other fisheries. One of the aims of the medium term rights allocation process was to formalise the tuna pole industry, unpacking it from the general linefish fishery and dictating (through permit conditions) the types of vessels that could operate in the fishery. The vessels that were employed in the fishery during the medium term rights period (2002 -2005) are listed in Table 2.19.

**Table 2.19.** Vessels nominated to fish on behalf of the medium term rights holders in the tuna pole fishery (2002 – 2005).

| Vessel | Flag | Length (M) | GRT (Tons) | Horse Power (KW) | Year Built | Crew | Rights Fished | Owners |
|---|---|---|---|---|---|---|---|---|
| ABE SHAPIRO | RSA | 18 | 65 | 164 | 1958 | 18 | 1 | SOLIPROPS 1083 CC |
| ABRAHAM T | RSA | 21 | 100 | 308 | 1962 | 20 | 1 | DE FARIA JOAO MANUEL FERNANDES |
| ADELETTE | RSA | 19 | 66 | --- | 1964 | 19 | 1 | ADELETTE FISHING CC |
| ALASKA | RSA | 20 | 68 | 500 | 1964 | 18 | 1 | ALASKA FISHING CC |
| ALLAN LEES | RSA | 21 | 88 | --- | 1961 | 20 | 1 | BAYVIEW FISHING (PTY) LTD |
| ALTAIR | RSA | 14 | --- | 130 | 1996 | 16 | 1 | DMA FISHING ENTERPRISES (PTY) LTD |
| ANG JERRY | RSA | 14 | 25 | --- | 1957 | 15 | 1 | ANG JERRY FISHING CC |
| ANTARES | RSA | 12 | --- | 130 | 1986 | 12 | 1 | DMA FISHING ENTERPRISES (PTY) LTD |
| ANTOINETTE | RSA | 14 | 243 | 138 | 2004 | 12 | 1 | GOLD MEDELLION INVESTMENT CC |
| ARCHER | RSA | 15 | 42 | 145 | 1952 | 16 | 1 | FERRO FISHING (PTY) LTD |
| ARIZONA | RSA | 20 | 75 | 287 | 1997 | 24 | 1 | INTLANZI FISHING (PTY) LTD |
| ATU-S | RSA | 28 | 189 | 400 | 1981 | 14 | 1 | ATV-S FISHING (PTY) LTD |
| BENGUELA PRIDE | RSA | 22 | 84 | 335 | 1964 | 18 | 1 | DE FREITAS FISHING CC |
| BLUE DOLPHIN | RSA | 20 | 91 | 394 | 1966 | 20 | 1 | MJM CASULA FISHING CC |
| BOGENFELS | RSA | 15 | 44 | 130 | 1948 | 19 | 1 | NGONYAMA FISHING TRUST |
| BRAVEHEART | RSA | 7 | --- | --- | 1988 | 5 | 1 | BRAVEHEART FISHING CC |
| CHRIS TRAUTMAN | RSA | 16 | 47 | 150 | 1957 | 12 | 1 | TRAUTMAN FISHING ENTERPRISES CC |
| CHRISTIE SUE | RSA | 19 | 73 | 240 | 1962 | 18 | 1 | NASCIMENTO FISHING CC |
| CHRISTO REI | RSA | 23 | 116 | 515 | 1991 | 25 | 1 | CYRILL BURREL FISHING CC |
| CLAREMONT | RSA | 20 | 69 | 224 | 1954 | 19 | 1 | DA SILVA INVESTMENTS (PTY) LTD |
| COMET | RSA | 20 | 84 | 365 | 1959 | 20 | 1 | TICIVA SEVEN (PTY) LTD |
| CONQUEST | RSA | 18 | 59 | 186 | 1988 | 16 | 1 | CLARK WILLIAM BRIAN |
| CONQUISTADOR | RSA | 18 | 46 | 240 | 1952 | 20 | 2 | SCEPTRE FISHING (PTY) LTD |
| CONSORTIUM ALPHA | RSA | 22 | 100 | 535 | 1970 | 18 | 1 | TRANSAT COMPANY (PTY) LTD |
| CONSTANTIABERG | RSA | 18 | 56 | 172 | 1967 | 14 | 2 | SOUTH AFRICAN SEA PRODUCTS LTD |
| CORSAIR | RSA | 14 | --- | 800 | 1967 | 8 | 1 | TWOLINE TRADING 163 (PTY) LTD |
| COUNTRY LADY | RSA | 11 | --- | --- | 1986 | 8 | 1 | VAN BREDA HJ |
| COVI TWO | RSA | 18 | 42 | 174 | 1981 | 16 | 1 | VIA COMDEUS FISHING CC |
| CRAIG | RSA | 17 | 68 | 224 | 1994 | 25 | 1 | C&K FISHING (PTY) LTD (K. KINGMA) |
| CYRIL BURREL | RSA | 17 | 47 | 180 | 1958 | 18 | 1 | DEWMIST INVESTMENTS CC |
| DAAN VILJOEN | RSA | 21 | 61 | 228 | 1960 | 17 | 1 | VIEIRA & SONS FISHING CC |
| DEEP C | RSA | 7 | --- | --- | 1982 | 6 | 1 | BIG BLUE FISHING AND CHARTERS CC |

| Vessel | Flag | Length (M) | GRT (Tons) | Horse Power (KW) | Year Built | Crew | Rights Fished | Owners |
|---|---|---|---|---|---|---|---|---|
| DRIFTER | RSA | 30 | 293 | 693 | 1973 | 25 | 1 | YELLOW STAR TRADING 1114 (PTY) LTD |
| EILAND URK | RSA | 19 | 66 | 340 | 1964 | 15 | 1 | REIS SANTOS & SILA LTD |
| EL PESCADOR | RSA | 14 | --- | 160 | 1955 | 10 | 1 | PLUSCOR FIVE (PTY) LTD |
| ELANDSBERG | RSA | 16 | --- | --- | 1997 | 12 | 1 | DE FLORENCA JJ |
| ELBE | RSA | 17 | 44 | 190 | 1951 | 22 | 1 | SMITH ERIC WALTER |
| ELLIS S | RSA | 19 | 74 | 164 | 1958 | 21 | 1 | GEROMBE FISHING ENTERPRISES CC |
| ENDURANCE | RSA | 16 | 49 | 240 | 1952 | 16 | 1 | BALELO AND SANTOS FISHING CC |
| ESTRELA DO MAR | RSA | 22 | 139 | --- | 1975 | 16 | 1 | ESTRELA DOMAR FISHING CC |
| FISHING SPECIALIST | RSA | 7 | --- | --- | 1990 | 6 | 1 | GEOFFREY MALCOM GENRICKS |
| FISKORN | RSA | 19 | 43 | 175 | 1951 | 16 | 1 | LAURENCO DA LUZ |
| FV ALLISON | RSA | 22 | 163 | --- | 1988 | 19 | 1 | LIMITED LIABILITY CORP |
| GAMBIT | RSA | 14 | 25 | 105 | 1999 | 16 | 1 | KNOBEL BRIAN |
| GARY | RSA | 11 | --- | 98 | 1975 | 12 | 1 | G&K FISHERIES CC |
| GRANT | RSA | 15 | 37 | 145 | 1962 | 20 | 1 | GRANT FISHING CC |
| GYPSEY ROSE | RSA | 14 | --- | 115 | 1989 | 12 | 1 | COOKE RB |
| HELENA ROSSOUW | RSA | 15 | 37 | 1 | 1960 | 16 | 1 | FJ VIEIRA |
| HISPANIOLA | RSA | 17 | 63 | 300 | 1953 | 17 | 1 | SANCHO SIDONIO JOSE RODRIGUES |
| JAMIE JAY | RSA | 14 | 23 | 100 | 1996 | 16 | 1 | TUCKER JAMES DAVID |
| JIDY AYM | RSA | 9 | --- | --- | 1986 | 11 | 1 | SKOTSHE KLOOF FISHERY CC |
| JOLENE | RSA | 12 | --- | 130 | 1980 | 12 | 1 | DMA FISHING ENTERPRISES (PTY) LTD |
| JONATHAN | RSA | 15 | 33 | 224 | 1968 | 12 | 1 | JOC FISHING CC |
| KARIBA | RSA | 20 | 72 | 275 | 1959 | 16 | 1 | SILVA FISHING ENTERPRISE CC |
| KENTUCKY | RSA | 21 | 80 | 317 | 1959 | 20 | 1 | KENTUCKY FISHING CC |
| KINGFISHER | RSA | 16 | 38 | 130 | 1965 | 20 | 1 | GOLDFISH FISHING TRUST |
| KINGFISHER | RSA | 12 | --- | --- | 1972 | 13 | 1 | MUZZELL MICHAEL THOMAS |
| KINGKLIP | RSA | 16 | 44 | 199 | 1948 | 15 | 1 | SIBANGE FISHING (PTY) LTD |
| KIRSTENBERG | RSA | 20 | 64 | 172 | 1968 | 17 | 1 | HENTIQ 2349 (PTY) LTD |
| LADY ELLA | RSA | 11 | --- | --- | 1966 | 8 | 1 | GERHARD SKELTON VON BONDE |
| LADYSMITH | RSA | 15 | 41 | 170 | 1954 | 15 | 1 | BROTHERS FISHING CC |
| LANGEBERG | RSA | 16 | 43 | 142 | 1962 | 15 | 1 | LANGEBERG FISHING CC |
| LE MARSH | RSA | 17 | 61 | 200 | 1995 | 20 | 1 | MONTIDAN FISHERIES (PTY) LTD |
| LEINSAAT | RSA | --- | --- | --- | --- | --- | 1 | IKWEZI FISHING (PTY) LTD |
| LEISHA | RSA | 9 | --- | 136 | 1968 | 4 | 1 | PRETORIUS JOHN BEVAN |
| LILLIAN | RSA | 17 | 37 | 150 | 1951 | 10 | 1 | MFV LILLIAN VESSEL CO (PTY) LTD |
| LUDERITZ STAR | RSA | 18 | 60 | --- | 1953 | 17 | 1 | WAVECREST SEA ENTERPRISES (PTY) LTD |
| MALAGAS TWO | RSA | 21 | 97 | 315 | 1968 | 22 | 1 | KENTUCKY FISHING CC |
| MANICWA | RSA | 17 | 58 | 186 | 1989 | 25 | 1 | H C L GRIFFITHS |
| MARTHINO | RSA | 19 | 83 | --- | 1955 | 20 | 1 | NORTE PESCA FISHING CC |
| MONNICKENDAM | RSA | 20 | 91 | 325 | 1962 | 23 | 1 | BLUE VENTURE FISHING (PTY) LTD |
| MY GIRL | RSA | 7 | --- | 115 | 1980 | 6 | 1 | SCHMIDT UWE WILFRIED |
| MYMOENA | RSA | 14 | --- | --- | 2000 | 12 | 1 | MARION DAWN FISHING CC |
| NEW MEXICO | RSA | 19 | 75 | 272 | 1958 | 18 | 1 | NEW MEXICO CC |
| NICOLETTE | RSA | 19 | 87 | 300 | 1960 | 25 | 1 | BROSS INVESTMENTS (PTY) LTD |
| OCEAN SPIRIT | RSA | 19 | 66 | --- | 1963 | 12 | 1 | JAN VULCAN HERMAN PYPER |

| Vessel | Flag | Length (M) | GRT (Tons) | Horse Power (KW) | Year Built | Crew | Rights Fished | Owners |
|---|---|---|---|---|---|---|---|---|
| OCEANA AMYTHEST | RSA | 20 | 92 | 300 | 1969 | 18 | 1 | STARLIGHT FISHING CC |
| OCEANA CLIPPER | RSA | 18 | 68 | 261 | 1956 | 20 | 1 | CLIPPER FISHING CC |
| OCEANA PLANET | RSA | 19 | 86 | 268 | 1959 | 16 | 1 | BORDEAUX MARINE OPERATIONS CC |
| OCEANA ROCKET | RSA | 20 | 84 | 300 | 1959 | 20 | 1 | FERNANDES JOAO MANUEL DA COSTA |
| OCEANA TOPAZ | RSA | 20 | 86 | --- | 1967 | 20 | 1 | DOUGLAS H FISHING CC |
| OSPREY | RSA | 13 | --- | 436 | 1978 | 12 | 1 | BUSBY FISHING (PTY) LTD |
| OTTERDAM | RSA | 16 | 51 | 250 | 1957 | 15 | 1 | FLOR D' MAR FISHING ENTERPRISES |
| OUBAAS FRITZ | RSA | 23 | 92 | 350 | 1960 | 16 | 1 | MICTEL FISHING CC |
| OUMA | RSA | 16 | 51 | 240 | 1959 | 15 | 1 | VIRISSMO FISHING (PTY) LTD |
| PAUL | RSA | 20 | 88 | 425 | 1962 | 16 | 1 | BATSATA FISHING (PTY) LTD |
| PAULINE BRIDGET | RSA | 15 | 42 | 82 | 1953 | 16 | 1 | CAPENSIS FISHING (PTY) LTD |
| PENKOP TWO | RSA | 21 | 98 | 309 | 1965 | 20 | 1 | MONIZ FISHERIES (PTY) LTD |
| PIETRO-LEANJA | RSA | 20 | 90 | --- | 1991 | 26 | 1 | TRAUTMAN FISHING ENTERPRISES CC |
| PLETTENBERG | RSA | 16 | 38 | --- | 1952 | 12 | 1 | GOMES FISHING (PTY) LTD |
| RADIANT STAR | RSA | 15 | 26 | 172 | 1974 | 15 | 1 | RADIANT FISHING CC |
| RAPTOR | RSA | 17 | 67 | 272 | 1994 | 25 | 1 | ZINGARA TRUST |
| RED HAWK TWO | RSA | 19 | 80 | 365 | 1952 | 16 | 1 | RED HAWK FISHING CC |
| RIETGANS | RSA | 18 | 64 | 260 | 1962 | 22 | 1 | RIETGANS VISSERYE CC |
| RIJGER | RSA | 19 | 59 | 228 | 1957 | 20 | 1 | DE SOUSA FISHING |
| RIVIERGANS | RSA | 19 | 73 | 235 | 1959 | 16 | 1 | LAURENCO DA LUZ |
| ROOIBERG | RSA | 17 | 47 | 240 | 1958 | 20 | 2 | HELENA JOSE BRAS |
| SAILFISH | RSA | 18 | 55 | 317 | 1966 | 20 | 1 | JOVILLE FISHING CC |
| SANDVELD ONE | RSA | 19 | 72 | 340 | 1988 | 3 | 1 | PALZET VISSERYE BK |
| SANTA MONICA | RSA | 29 | 225 | 550 | 1964 | 22 | 1 | SA TUNA EXPORTERS (PTY) LTD |
| SAO GABRIEL | RSA | 20 | 90 | 268 | 1962 | 19 | 1 | SAO GABRIEL FISHING CC |
| SEAGULL | RSA | 13 | --- | 60 | 1948 | 12 | 1 | ACTIVEST TWENTY-TWO (PTY) LTD |
| SEASWAS | RSA | 21 | 61 | 228 | 1960 | 16 | 1 | SEASWAS FISHING CC |
| SHAROLIN DAWN | RSA | 19 | 68 | 250 | 1962 | 20 | 1 | JOSE MANUEL DA COSTA FERNANDES |
| SHARON | RSA | 17 | 73 | 235 | 1994 | 28 | 1 | JURASSIC FISHING INDUSTRIES (PTY) LTD |
| SHELL FISH | RSA | 19 | --- | --- | 1982 | 24 | 1 | SMITH DC |
| SILVER FERN | RSA | 18 | 32 | 205 | 1952 | 14 | 1 | JJ DA MATA & SONS FISHING COMPANY (PTY) LTD |
| SILVER MARLIN | RSA | 21 | 98 | 250 | 1964 | 20 | 1 | SOUTH ROCK FISHING CC |
| SKIPNESS | RSA | 15 | 40 | 130 | 1951 | 14 | 1 | MENEZES JOSE ELEUTERIO |
| SNEEUBERG | RSA | 18 | 64 | 252 | 1966 | 20 | 1 | THE SILVA FAMILY TRUST |
| SOUTH WEST GANNET | RSA | 16 | 46 | 250 | 1956 | 16 | 1 | BATSILVA CC |
| SOUTH WEST HERON | RSA | 19 | 45 | 142 | 1953 | 16 | 1 | EASY CHOICE TWELVE (PTY) LTD |
| SOUTH WEST LAPWING | RSA | 18 | 61 | 230 | 1956 | 17 | 1 | AX FISHING CC |
| SOUTH WEST PETREL | RSA | 15 | --- | 142 | 1951 | 13 | 1 | AGOSTINHO DA SILVA FISHING (PTY) LTD |
| SOUTHERN CROSS | RSA | 28 | 225 | --- | 1964 | 20 | 1 | SOUTH WEST TRAWLERS CC |
| SOUTHERN FIGHTER | RSA | 19 | 62 | 220 | 1995 | 22 | 1 | PREMIER FISHING SA (PTY) LTD |
| SOUTHERN KNIGHT | RSA | 14 | 25 | 272 | 1997 | 16 | 1 | PREMIER FISHING SA (PTY) LTD |
| SOUTHERN REAPER | RSA | 14 | --- | 103 | 1996 | 18 | 1 | PREMIER FISHING SA (PTY) LTD |
| SOUTHERN STAR | RSA | 17 | 59 | 224 | 1995 | 22 | 1 | PREMIER FISHING SA (PTY) LTD |
| SOUTHERN TIGER | RSA | 22 | 72 | 240 | 1944 | 20 | 1 | BAYANA BAYANA FISHING CC |

| Vessel | Flag | Length (M) | GRT (Tons) | Horse Power (KW) | Year Built | Crew | Rights Fished | Owners |
|---|---|---|---|---|---|---|---|---|
| SOUTHWEST CORMORANT | RSA | 15 | 39 | 175 | 1948 | 10 | 1 | DORMAKORP VIER (EDMS) BPK |
| SPES NOVA | RSA | 16 | 45 | 261 | 1954 | 15 | 1 | TRADE FACTOR FIFTEEN (PTY) LTD |
| SPINDRIFT | RSA | 11 | --- | --- | 1982 | 8 | 1 | GEOFFREY MALCOM GENRICKS |
| SQUIDDER | RSA | 14 | 25 | 205 | 2001 | 16 | 1 | SQUIDDER FISHING INVESTMENTS (PTY) LTD |
| ST ANNE | RSA | 14 | --- | --- | 1956 | 12 | 1 | ST ANNE FISHING CC |
| STARFISH | RSA | 23 | 85 | 305 | 1963 | 25 | 1 | GOMES HORACIO DE NASCIMENTO DA SILVA |
| SUSAN JANET | RSA | 18 | 63 | --- | --- | 15 | 1 | REIS SANTOS & SILA LTD |
| SWELLENDAM | RSA | 18 | 78 | 240 | 1959 | 20 | 1 | HACKY FISHING (PTY) LTD |
| SWORDFISH | RSA | 19 | 78 | 390 | 1981 | 22 | 1 | MANUEL DE OLIM FISHING CC |
| TAJ MAHAAL | RSA | 12 | 24 | 125 | 1997 | 15 | 1 | I_FORTUNE AND CREW (PTY) LTD |
| TERN | RSA | 14 | --- | 90 | 1994 | 16 | 1 | TERN FISHING TRUST |
| THANE | RSA | 18 | 71 | 220 | 1995 | 22 | 1 | TAMARAN FISHING CC |
| THE DON | RSA | 17 | 65 | 238 | 1995 | 25 | 1 | DMA FISHING ENTERPRISES (PTY) LTD |
| THERESE | RSA | 11 | --- | 216 | 1978 | 10 | 1 | SIMPSON, DENIS ROBERT |
| TIERKOP | RSA | 17 | 42 | 147 | 1957 | 36 | 1 | TIERKOP INVESTMENTS CC |
| TIGERFISH | RSA | 6 | --- | --- | 1998 | 7 | 1 | SOUTHERN POINT OCEANIC FRESH PROCURERS (PTY) LTD |
| TIGERREEF | RSA | 16 | 32 | 170 | 1948 | 12 | 1 | MOREIRA & SON FISHING CC |
| TINA | RSA | 17 | 53 | 215 | 1980 | 15 | 1 | JOENARDO FISHING CC |
| TOMREN | RSA | 15 | 29 | --- | 1946 | 12 | 1 | FERREIRA JONNY PEDRO |
| TRIAD | RSA | 17 | 68 | 272 | 1996 | 25 | 1 | PAARMAN FISHERIES (PTY) LTD |
| TRIDENT | RSA | 16 | 55 | 175 | 1997 | | 1 | KNOBEL BRIAN |
| VALHALLA | RSA | 18 | 57 | 217 | 1955 | 15 | 1 | JOENARDO FISHING CC |
| VAN HUNKS | RSA | 14 | --- | 190 | 1995 | 15 | 1 | SOWDEN RALPH CUBITT |
| VLAEBERG | RSA | 18 | 42 | 205 | 1952 | 16 | 1 | JJ DA MATA & SONS FISHING COMPANY (PTY) LTD |
| VOYAGER | RSA | 14 | --- | 85 | 1996 | 8 | 1 | HARE JD |
| WAVE BREAKER | RSA | 8 | --- | --- | 1997 | 11 | 1 | PIENAAR AH |
| WESKUS ONE | RSA | 20 | 66 | 255 | 1965 | 18 | 2 | JORGE DE OLIM FISHING CC |
| WESTERDAM | RSA | 20 | 67 | 250 | 1960 | 17 | 1 | MFV WESTERDAM CC |
| WESTERN STAR | RSA | 12 | --- | 130 | 1982 | 12 | 1 | WESTERN STAR ENTERPRISES FISHING (PTY) LTD |
| WICKED LADY | RSA | 7 | --- | 180 | 1982 | 6 | 1 | LAUBSCHER PIERRE JAN |
| WILMAG | RSA | 15 | 38 | 170 | 1950 | 10 | 1 | TELO BROTHERS (PTY) LTD |
| WINBURG | RSA | 15 | 36 | 170 | 1955 | 16 | 1 | GOMES FISHING (PTY) LTD |
| WINDHOEK | RSA | 20 | 69 | --- | 1984 | 20 | 1 | WINDHOEK FISHING CC |
| WITCH OF ENDOR | RSA | 11 | --- | --- | 1970 | 8 | 1 | LIMARCO NINE CC |
| ZAY-AAN | RSA | 15 | 47 | 165 | 1997 | 20 | 1 | TRAWL INVESTMENTS CC |
| ZILDORA | RSA | 19 | 70 | 251 | 1964 | 18 | 1 | MFV ZILDORA VESSEL COMPANY (PTY) LTD |

According to the Economic and Sectoral Study of the South African Fishing Industry (ESS, 2000) nearly 40% of the vessels fishing for tuna using pole and baited hooks before 2000 had less than 10 crewmembers (i.e. smaller vessels). After the medium term rights were allocated, this percentage had dropped to 11%, with most (73%) of the vessels carrying between 15 – 20 crewmembers. This change reflects the exclusion of "part-time" or opportunistic fishers from the fishery, and the development of a more homogenized tuna pole fleet (Figure 2.18). The characteristics of this fleet are summarized in Table 2.20.

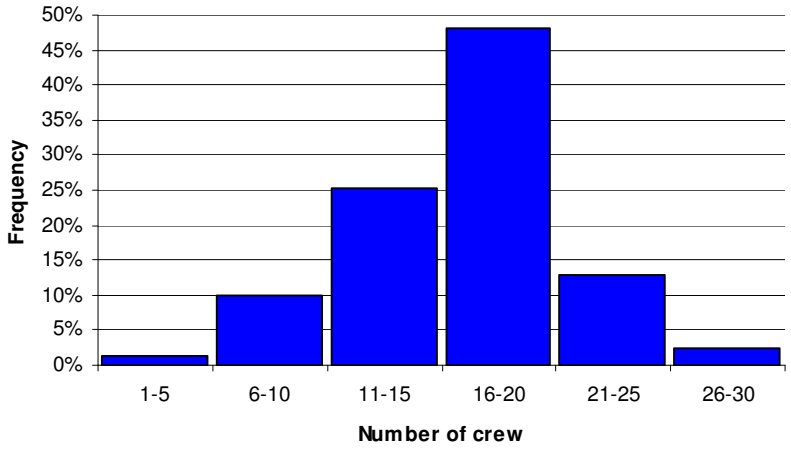


**Figure 2.18.** The number of crew on the vessels operating in the South African tuna pole fishery.

**Table 2.20.** A summary of some mean characteristics for the vessels nominated to fish in the South African tuna pole fishery.

| Characteristic | Average for Fleet |
|---|---|
| Length (m ± Std Dev) | 17 ± 4 |
| GRT (tons ± SD) | 70 ± 42 |
| Horsepower (kW ± SD) | 236 ± 117 |
| Crew (± SD) | 17 ± 5 |
| Construction Year (± SD) | 1970 ± 16 |

Fifty-eight percent of the vessels in the tuna pole fleet operated in more than one fishery. In addition to the tuna pole fishery, most of them fished in the long-line fisheries (38%), west coast rock lobster fishery (30%) and the squid fishery (19%).

The majority of the tuna pole vessels were based in the Western Cape (87%), operating out of Cape Town and Hout Bay mostly, but also Saldanha Bay, Gordon's Bay and Hermanus. Some of the vessels were based in the Eastern Cape (12%) at St Francis Bay and Port Elizabeth, and a few vessels (1% of the total) were based in the Northern Cape Province, in Port Nolloth (Figure 2.20).

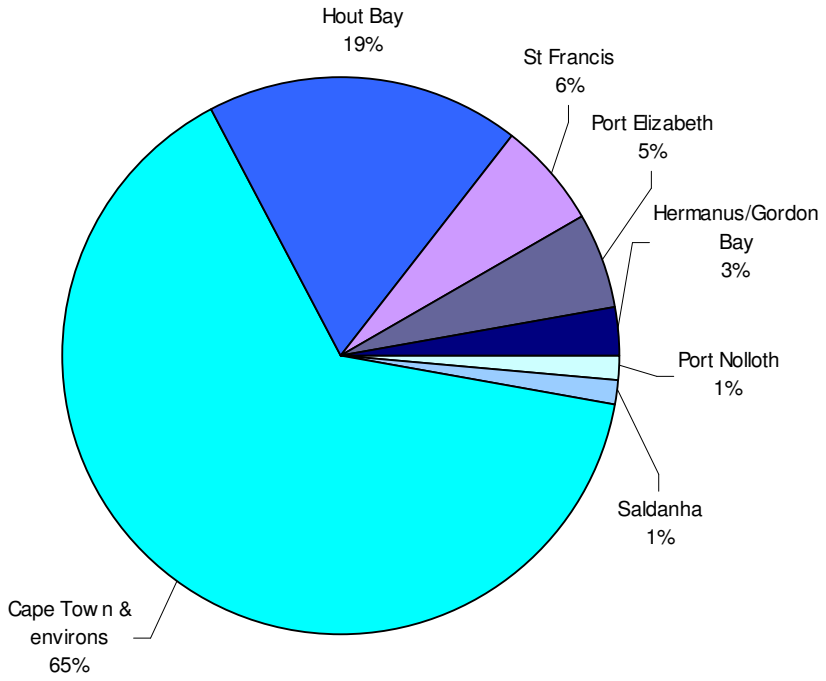


**Figure 2,20.** Fishing harbours from which the South African tuna pole fleet operated during the medium term rights allocation period (2002 – 2005).

## 2.7 Large pelagic longline

Until the end of 2003, the longline vessels targeting large pelagic fishes (primarily tuna, swordfish and some sharks) in South African waters were Japanese and Taiwanese. The Japanese longline fleet had been granted access to South Africa's territorial waters since the 1970s, through bi-lateral fishing agreements with the Apartheid government. The agreements with Japan (and Taiwan, at the time) were re-negotiated in 1990, and awakened local interest in the activities of these foreign vessels in South African waters. The first local experimental tuna-longlining permit was issued to a joint venture between a local company and a Japanese longliner by the authorities in 1995. The experiment confirmed that South African-based tuna longlining operations could be profitable, and revealed a lucrative by-catch of large swordfish (*Xiphias gladius*). On the strength of this, a further 30 experimental tuna longline permits were issued in 1997. Twenty were granted to existing tuna pole permit holders, and 10 went to new entrants.

South Africa did not renew its bilateral licensing agreements with Japan and Taiwan in 2003. This action effectively reserved the large pelagic fishes that occur in South African waters for local fishermen only.

The tuna longline experiment formally became the large pelagic fishery in 2004, when the first commercial fishing rights were allocated. The fishery is managed by the TAE approach, where the number of "fishing units" is limited to 30 tuna-directed and 20 swordfish-directed longline vessels. This dichotomy resulted from the tuna longline experiment, where two groups of users emerged; those who wished to target tunas and those who wished to target

swordfish. This is a precautionary TAE, which will remain in place until enough catch data is available to model the fishery with some degree of certainty.

The swordfish TAE is based on the fishing performance of the vessels that targeted swordfish in the experimental fishery (i.e. 23 vessels landed 1090 tons in 2002). The ICCAT is the regional fisheries management organisation responsible for the swordfish resource in the southern Atlantic Ocean. The current (2005) country quota that ICCAT has apportioned to South Africa is only 1070 tons; less than 7% of the regional TAC for this species (15 956 tons in 2005).

At the end of 2005, the right to target pelagic sharks will be withdrawn from the South African fishing industry. The existing pelagic shark longline fishery will be consolidated into the large pelagic fishery. Although there will be no shark-directed rights available, they can be fished by the holders of a large pelagic right, as by-catch.

### 2.7.1 Rights holders

The rights holders in the swordfish-directed longline fishery were, for the most part, active participants in other South African fisheries (79%), mainly in other longline operations and/or tuna pole fishing. They were all propriety companies (71%) or closed corporations (29%, Table 2.20). Of the 14 rights-holding entities, two were very large companies (>R100 million turnover, >100 employees), five were medium-sized (R1-10 million turnover, 10-50 employees) and the rest were small operations (<R1 million turnover, <10 employees).

The medium term rights holders in the tuna-directed sector of the fishery appear to be mostly (73%) new entities to the South African fishing industry. Very little detail is currently available on these companies. Of the eight companies that were active elsewhere in the South African fishing industry, only one was a large company, four were medium and three were small businesses. The rest were probably small to medium-sized operations (Table 21).

**Table 2.21.** Rights holders in the South African large pelagic longline fishery, and their effort allocations for the 2004/2005 season.

| Name of Applicant | Allocation 2004/2005 | Species directed |
|---|---|---|
| ATV-S Fishing (Pty) Ltd | 1 vessel | Swordfish |
| Christie Leonie Fishing (Proprietary) Limited | 1 vessel | Swordfish |
| Combined Fishing Enterprises CC | 1 vessel | Swordfish |
| Eagle Creek Investments 250 (Pty) Ltd | 1 vessel | Swordfish |
| Erongo Fishing (Pty) Ltd | 1 vessel | Swordfish |
| Hacky Fishing (Pty) Ltd | 1 vessel | Swordfish |
| Henque 4102 CC | 1 vessel | Swordfish |
| Interfish (Pty) Ltd | 1 vessel | Swordfish |
| MJM Casula Fishing CC | 1 vessel | Swordfish |
| P & H Forward Fishing CC | 1 vessel | Swordfish |
| Premier Fishing SA (Pty) Ltd | 1 vessel | Swordfish |
| Sceptre Fishing Pty Ltd | 1 vessel | Swordfish |
| South Seas Trawling Company (Pty) Ltd | 1 vessel | Swordfish |
| Viking Fishing Company (Deep Sea) (Pty) Ltd | 1 vessel | Swordfish |
| A Penglides (Pty) Ltd | 1 vessel | Tuna |
| Agulhas Fishing CC | 1 vessel | Tuna |
| Alric Fishing CC | 1 vessel | Tuna |

| Name of Applicant | Allocation 2004/2005 | Species directed |
|---|---|---|
| Azanian Fishing (Pty) Ltd | 1 vessel | Tuna |
| Chestnut Hill Investments 167 (Pty) Ltd | 1 vessel | Tuna |
| Chestnut Hill Investments 178 ((Pty) Ltd | 1 vessel | Tuna |
| Chestnut Hill Investments 192 (Pty) Ltd | 1 vessel | Tuna |
| Chestnut Hill Investments 195 (Pty) Ltd | 1 vessel | Tuna |
| Clifton Dune Investments 114 (Pty) Ltd | 1 vessel | Tuna |
| Combined Fishing Enterprises CC | 1 vessel | Tuna |
| Dusty Moon Investments 44 ((Pty) Ltd | 1 vessel | Tuna |
| Eagle Creek Investments 237 (Pty) Ltd | 1 vessel | Tuna |
| Estrela Do Mar Fishing (Pty) Ltd | 1 vessel | Tuna |
| Evethu Fishing ((Pty) Ltd | 1 vessel | Tuna |
| Ferro Fishing ((Pty) Ltd | 1 vessel | Tuna |
| Four Arrows Investments 148 (Pty) Ltd | 1 vessel | Tuna |
| Glowing Wonder 33 CC | 1 vessel | Tuna |
| Hanill Import & Export CC | 1 vessel | Tuna |
| I Africa Fishing CC | 1 vessel | Tuna |
| Impala Fishing (Pty) Ltd | 1 vessel | Tuna |
| J & L Fishing CC | 1 vessel | Tuna |
| Lamberts Bay Longline Operators (Pty) Ltd | 1 vessel | Tuna |
| Little Swift Investments 77 (Pty) Ltd | 1 vessel | Tuna |
| Ngumzamo Fishing CC | 1 vessel | Tuna |
| Quick Leap Investments 155 (Pty) Ltd | 1 vessel | Tuna |
| Sea Point Fishing (Pty) Ltd | 1 vessel | Tuna |

Ninety percent of the rights holders in the large pelagic fishery are from the Western Cape Province (of which 80% are based in and around Cape Town), and 10% are from the Eastern Cape (Port Elizabeth and Port St Francis).

### 2.7.2 Vessels

Marine and Coastal Management has sanctioned a number of joint ventures between local rights holders and foreign fishing companies, as a means to allow smaller operators access to the large pelagic fishery, which otherwise would not have the capital to acquire purpose-built longline vessels. In consequence, a number of the vessels in the 2003 tuna longline fleet were foreign flagged (76%), hailing mainly from South Korea and the Philippines. The fleet consisted of 17 vessels at the time, although nine of the 26 rights holders still aimed to acquire (build, buy, or enter into an agreement) a vessel to fish for their tuna longline right (Table 2.22). The allocation of a TAE for 30 tuna-directed vessels means that the fishery was significantly under-subscribed at the time.

**Table 2.22.** Vessels nominated to fish in the tuna-directed, large pelagic longline fishery in 2004-2005.

| Vessel | Flag | Length (m) | GRT (tons) | Horse Power (kW) | Year Built | Crew | Rights fished | Owners |
|---|---|---|---|---|---|---|---|---|
| AMANDO | RSA | 17 | 61 | 224 | 1990 | 21 | FERRO FISHING ((PTY) LTD | FERRO FISHING (PTY) LTD |
| BARBARA LOUISE II | RSA | 36 | --- | --- | 1964 | 19 | CHESTNUT HILL INVEST. 178 ((PTY) LTD | LAST HORIZON FISHING (PTY) LTD |
| CECIL G WHITE | RSA | 25 | --- | --- | 1958 | 17 | SEA POINT FISHING (PTY) LTD | SEA POINT FISHING |

| Vessel | Flag | Length (m) | GRT (tons) | Horse Power (kW) | Year Built | Crew | Rights fished | Owners |
|---|---|---|---|---|---|---|---|---|
| DONG WON 117 | S. KOREA | 50 | --- | 414 | 1998 | 30 | IMPALA FISHING (PTY) LTD | HANLLL SHIPPING |
| DONG WON 216 | S. KOREA | 47 | --- | 446 | 1999 | 30 | LAMBERTS BAY LONGLINE OP. (PTY) LTD | HANLLL SHIPPING |
| DONG WON 217 | S. KOREA | 50 | --- | 471 | 1989 | 24 | A PENGLIDES (PTY) LTD | HANLLL SHIPPING |
| DONG WON 619 | S. KOREA | 43 | --- | 389 | 1999 | 23 | I AFRICA FISHING CC | HANLLL SHIPPING |
| DONG WON 622 | S. KOREA | 47 | --- | 457 | 1990 | 30 | HANILL IMPORT & EXPORT CC | HANLLL SHIPPING |
| DONG WON 630 | S. KOREA | 48 | --- | 385 | 1988 | 30 | AZANIAN FISHING (PTY) LTD | HANLLL SHIPPING |
| DONG WON 632 | S. KOREA | 50 | --- | 461 | 2000 | 30 | GLOWING WONDER 33 CC | HANLLL SHIPPING |
| ORYONG 353 | S. KOREA | 47 | --- | 422 | 1999 | 30 | COMBINED FISHING ENTERPRISES CC | HANLLL SHIPPING |
| ORYONG 355 | S. KOREA | 48 | --- | 476 | 1988 | 30 | AGULHAS FISHING CC | HANLLL SHIPPING |
| ORYONG 371 | S. KOREA | 47 | --- | --- | 1999 | 30 | J & L FISHING CC | HANLLL SHIPPING |
| SANDALENE | RSA | 20 | --- | --- | 1962 | 18 | ESTRELA DO MAR FISHING (PTY) LTD | SANDALENE FISHING |
| SUNTAI NO 1 | PHILIPPINES | 55 | 620 | 1000 | 1985 | 27 | EYETHU FISHING ((PTY) LTD | TAIYO A&F CO., LTD. |
| SUNTAI NO 3 | PHILIPPINES | 55 | 619 | 1000 | 1984 | 27 | NGUMZAMO FISHING CC | TAIYO A&F CO., LTD. |
| TONINA 3 | S. KOREA | 50 | --- | 450 | 1998 | 30 | ALRIC FISHING CC | HANLLL SHIPPING |
| TBA | | | | | | | CHESTNUT HILL INVEST. 167 (PTY) LTD | |
| TBA | | | | | | | CHESTNUT HILL INVEST. 192 (PTY) LTD | |
| TBA | | | | | | | CHESTNUT HILL INVEST. 195 (PTY) LTD | |
| TBA | | | | | | | CLIFTON DUNE INVEST. 114 (PTY) LTD | |
| TBA | | | | | | | DUSTY MOON INVEST. 44 ((PTY) LTD | |
| TBA | | | | | | | EAGLE CREEK INVEST. 237 (PTY) LTD | |
| TBA | | | | | | | FOUR ARROWS INVEST. 148 (PTY) LTD | |
| TBA | | | | | | | LITTLE SWIFT INVEST. 77 (PTY) LTD | |
| TBA | | | | | | | QUICK LEAP INVEST. 155 (PTY) LTD | |

This was also the case for the swordfish directed fishery, where 14 vessels made up the fleet, with a TAE of 20 vessels allocated in 2004. Of these vessels, two were operating under a foreign flag (Australia and Belize, Table 2.23).

**Table 2.23.** Vessels nominated to fish in the swordfish-directed, large pelagic longline fishery in 2004-2005.

| Vessel | Flag | Length (m) | GRT (tons) | Horse Power (kW) | Year Built | Crew | Rights fished | Owners |
|---|---|---|---|---|---|---|---|---|
| SHIAN FENG CHANG 18 | RSA | 27 | 151 | 375 | 1973 | 20 | COMBINED FISHING ENTERPRISES CC | ALL HOOKED UP FISHING (PTY) LTD |
| MFV ATV-S | RSA | 28 | 189 | 400 | 1981 | 14 | ATV-S FISHING (PTY) LTD | ATV-S FISHING (PTY) LTD |
| CHRISTIE LEONIE | RSA | 21 | 91 | 250 | 1962 | 24 | CHRISTIE LEONIE FISHING (PTY) LTD | CHRISTIE LEONIE FISHING (PTY) LTD |
| BETA | RSA | 20.90 | --- | --- | 2004 | 20 | HENQUE 41 02 CC | CYRIL BURREL FISHING |
| CHRISTINA DEBORA | RSA | 34.80 | --- | --- | 1981 | 18 | ERONGO FISHING (PTY) LTD | ERONGO FISHING (PTY) LTD |
| MFV HRAUNSVIK | BELIZE | 30.00 | --- | --- | 1982 | 16 | INTERFISH (PTY) LTD | ESPADA FISHING (PTY) LTD |

| Vessel | Flag | Length (m) | GRT (tons) | Horse Power (kW) | Year Built | Crew | Rights fished | Owners |
|---|---|---|---|---|---|---|---|---|
| SWELLENDAM | RSA | 18 | 78 | 240 | 1959 | 20 | HACKY FISHING (PTY) LTD | HACKY FISHING (PTY) LTD |
| MFV PRINS WILLEM I | RSA | 28.00 | --- | --- | 1968 | 20 | SOUTH SEAS TRAWLING CO(PTY) LTD | MFV PRINS WILLEM VESSEL CO. (PTY) LTD |
| BLUE DOLPHIN | RSA | 20 | 91 | 394 | 1966 | 20 | MJ M CASULA FISHING CC | MJ M CASULA FISHING CC |
| SOUTHERN SAINT | RSA | 50 | --- | --- | 1958 | 31 | PREMIER FISHING SA (PTY) LTD | PREMIER FISHING SA (PTY) LTD |
| PETRIE HEIN | RSA | 21.00 | --- | --- | 1995 | 14 | P & H FORWARD FISHING CC | PYPER |
| SAXON | RSA | 24.00 | --- | --- | 1999 | 20 | SCEPTRE FISHING PTY LTD | SAXON OFFSHORE FISHING CO. (PTY) LTD |
| CASABLANCA | RSA | 36.30 | --- | --- | 1975 | 20 | VIKING FISHING CO (DEEP SEA) (PTY) LTD | VIKING FISHING CO (DEEP SEA) (PTY) LTD |
| CONNECT | AUST. | --- | --- | --- | --- | --- | EAGLE CREEK INVEST. 250 (PTY) LTD | ??? |

On first appraisal, it appears that the vessels operating in the tuna-directed fishery were substantially larger than in the swordfish-directed fishery (Table 2.24). On closer investigation, it becomes apparent that the size is not fishery-related, but rather flag-related, with the South Korean and Philippine vessels being an average 49±3 m in length, whilst the South African vessels averaged 25±6 m (excluding the 50 m Southern Patriot). This is also true for the age of the vessels, with the average year of construction for the South Korean and Philippine vessels being1993 (±3 years) whilst average year in which the South African vessels (across both fisheries) were built was 1975, with a standard deviation of 15 years.

**Table 2.24.** A summary of some mean characteristics for tuna-directed and swordfish-directed vessels in the large pelagic longline fleet.

| Characteristic | Tuna-directed | Swordfish-directed |
|---|---|---|
| Length (m ± Std Dev) | 43 ± 12 | 28 ± 9 |
| GRT (tons ± SD) | 433 ± 322 | 120 ± 48 |
| Horsepower (kW ± SD) | 507 ± 228 | 332 ± 80 |
| Crew (± SD) | 26 ± 5 | 20 ± 4 |
| Construction Year (± SD) | 1988 ± 14 | 1977 ± 15 |

The vessels all have to land their catch in South Africa. Each rights holder has a designated landing harbour at which the nominated vessel must land its catch (Figure 2.21). Ninety-two percent of the catch was landed in the Western Cape in 2003, mainly in Cape Town. Two vessels landed their catch in the Eastern Cape, at Port Elizabeth, and one landed in Port Nolloth, in the Northern Cape.

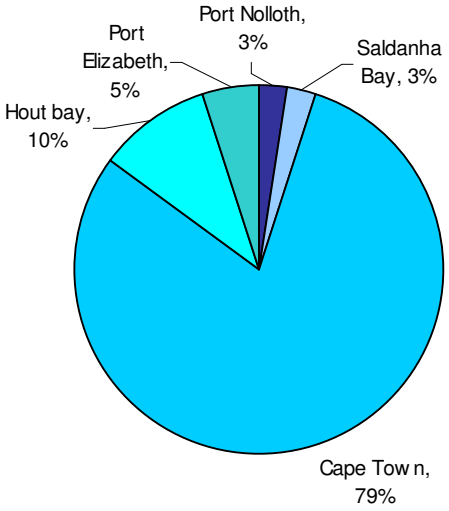


**Figure 2.21.** Nominated fishing harbours at which the vessels in the South African large pelagic longline fleet are required to land their catch.

At present, some 700 crewmembers are employed on the vessels operating in the large pelagic longline industry. Probably in the region of half this number are South Africans.

# 3. NAMIBIA

## 3.1 Introduction

The defining feature of the history of the Namibian fishing industry was the peculiar status the country enjoyed prior to its independence in 1990. Following the First World War the former colony of German South West Africa became a League of Nations Mandated Territory, administered by South Africa. As a result, its zone of exclusive economic authority could not be extended to 200 nautical miles when the rest of the world's maritime nations extended their EEZs. Although the South African Territorial Waters Act (87, 1963) extended direct control to 5 nm with a further 6 nm contiguous fishing zone, Namibia's offshore waters remained effectively open access. The consequence was heavy uncontrolled fishing by foreign (including South African) fleets. Major commercial species were exploited unsustainably and consequently collapsed. The post-independence Namibian Government attempted to rectify the problem by introducing a management programme to rebuild these resources and to shift control of processing from foreign to domestic hands. Stocks initially appeared to recover rapidly, though the small pelagic fishes have remained problematic; the pilchard stock in particular has experienced problems in recent years.

The Namibian fishery can be traced back to the early 19$^{th}$ century, when sealing and whaling off the Namibian coastline were recognised seasonal activities. An artisanal snoek-directed line fishery supplying dried fish also seems to date back to the 19$^{th}$ century. However, the early commercial industry was chiefly directed at pilchard. These and other small pelagic fishes constituted the bulk of the domestic industry prior to independence. Although higher value fish were caught in Namibian waters, the domestic fleet initially focussed primarily on pilchards (*Sardinops ocellatus*), and later anchovies (*Engraulis capensis*), both purse-seined, and further off shore on horse mackerel (*Trachurus capensis*) captured using a mid-water trawl.

In addition to small pelagics, a local rock-lobster fishery had developed by the 1930s. Cape rock lobster (*Jasus lalandii*) were caught and locally processed; tinned and frozen lobster tails being exported largely to the USA. Historically, this and fishmeal from the small pelagics were the two major products of the Namibian fishing industry. However, catches prior to 1970 were often considerably larger than they are currently, indicating that the rock lobster stock was mined unsustainably and seriously depleted.

Post 1990, the structure of the Namibian fishing industry has changed profoundly. Horse mackerel has become the most important species in Namibia in volume terms (57% of the total landed catch) while hakes (*Merluccius* spp) became the most important financially (roughly 65% by value).

After independence, the Namibian Government has stipulated three objectives for its fishery policies: (a) rebuilding fish stocks by basing management policies on sound research; (b) Use of taxes and levies to induce Namibianisation; and (c) use of fishing rights allocation to empower previously disadvantaged Namibians. Fishing rights of five, seven and 10 years were allocated in 1994. In 2001, these were changed to seven, 10, 15 and 20-year rights, to encourage investment. The number of years awarded to the rights holder depends on the amount of Namibian ownership, local investment in onshore facilities and vessels, local employment, and the introduction of innovative fishing related-activities (technology, markets, etc.).

In addition, Namibian fisheries policy has targeted on-shore handling and processing: hake quotas for freezer trawlers and wetfish vessels are allocated independently with an emphasis on the latter.

Unlike South Africa and Angola, the majority of Namibian fisheries are commercial, industrial scale operations. Those that target marine resources from the Benguela Current Large Marine Ecosystem include the hake demersal trawl and longline fishery, monk and sole demersal trawl fishery, small pelagic purse seine fishery, the large pelagic fishery, the horse mackerel mid-water trawl fishery, deep-sea trawl fishery, red crab fishery and the west coast rock lobster fishery.

## 3.2 Small pelagics

The first reported small pelagic fish catching and processing operation in Namibia dates back to 1922. This was seven years after the South African occupation of what was then known as “German South West Africa”, when a factory ship with a few smaller catcher vessels began targeting pilchards from Walvis Bay. These fish were canned, reduced to fish oil, or ground into fishmeal. This venture failed financially. Nevertheless, after the end of the Second World War, interest in the harvesting and processing of pilchards in Walvis Bay was rekindled.

Experimentation with canning, oil and fishmeal production began in 1947, and three processing plants were ordered for Walvis Bay in 1948. The following year the authorities passed the sealing and fishing ordinance. This ordinance replaced Proclamation 18 of 1922, which had previously controlled the fishing industry in Namibia. The new ordinance required registration and licensing of all fishing vessels and processing plants, and introduced controls on total catch, closed seasons, etc. Even so, there were 100 vessels operating in the fishery four years later, and vessel numbers had to be restricted to a maximum of 24 vessels per company. At the same time, a maximum processing capacity was imposed on the processing plants. A closed season was also introduced, precluding fishing during the post-spawning period when fish would be in poor condition and oil yields low. Calculations of Total Allowable Catches (TAC) for pilchard at this stage were based on a foreign (Californian) model that was fined-tuned iteratively over time.

Catches were controlled until 1959; thereafter pressure rose for an increased TAC. From approximately 225 000 tons in the 1950s, it was increased to approximately 650 000 tons in the mid-1960s. The TAC continued rising and actual catches rose to over one million tons in 1967 and to over 1.5 million tons in 1968. This period also saw the return of some factory vessels for the processing of pilchards, though these disappeared again in 1970.

Pilchard Catch per Unit Effort peaked in the early 1960s, dropping steadily thereafter as recruitment fell and off-takes increased. When the decline became obvious, fishing companies were encouraged to diversify out of pilchard and into other small pelagic fishes, particularly anchovy. Mesh sizes were also effectively changed as 11 cm anchovy nets were introduced, introducing the problem of a juvenile pilchard by-catch.

Anchovy catches increased from 2650 tons in 1966 to more than 244 000 tons in 1971. A management strategy to reduce the anchovy population was implemented in the belief that it would encourage recovery of the sardine stock, and catches averaging 170 000t per annum were taken during the 1970s and 1980s, peaking at 376 000 tons in 1987. However, these catches decreased substantially during the 1990s and virtually no anchovy is currently caught off Namibia. The anchovy fishery originally emerged to provide material for fishmeal and oil plants after the decline of the anchovy catch. However, anchovies present fewer

opportunities for adding value than either pilchards or horse mackerel, and remain a lower value product.

The stock of small pelagic fish such as the pilchard and anchovy is naturally cyclical. Excessive fishing effort combined with a natural downturn in recruitment can easily cause a stock collapse. Despite the government's commitment to sustainable fishing, the pilchard stock collapsed in 1993/4/5 and again in 1999 (as it had done after the heavy over-fishing of the late 1960s). By 2002, Namibia's pilchard TAC was down to zero and the country was forced to import pilchard from Angola and South Africa in order to keep its canneries operational. The Namibian pilchard stocks then experienced a period of apparent recovery, with the TAC being set at 20 000 tons in 2003 and increased to 25 000 tons in 2004.

The Namibian small pelagic fishing industry is controlled by the setting and monitoring of pilchard TAC. Closed seasons and by-catch restrictions are implemented as additional management measures.

### 3.2.1 Rights holders

The Namibian small pelagic fish (pilchard) TAC is divided amongst 22 rights holders (Table 3.1). Compared to the South African small pelagic industry, quota is allocated relatively evenly amongst the rights holders (Figure 3.1). Only one company (GAB Fishing Enterprises, a joint venture company) had an allocation of more than 2000 tons for 2003; 50% of the rights holders received portions of between 1000 – 1500 tons, 36% received between 500 – 1000 tons, and two companies received less than 500 tons. There was no apparent relationship between allocations and the duration of rights; 32% were for seven years, 32% were for 10 years and 36% were for 15 years. No 20-year rights were awarded, which is reserved for companies that have completed 15 years in the industry, and employ more than 5000 employees in onshore processing operations.

**Table 3.1.** Rights holders in the Namibian pelagic purse seine fishery, and their allocations of small pelagic fishes in 2003. Asterisks indicate rights holders with processing facilities.

| RIGHTS HOLDERS | DURATION OF RIGHT (Years) | PILCHARD ALLOCATION (Tons) |
|---|---|---|
| Auob-Eigelaar Joint Venture | 7 | 1089 |
| Buccaneer Fishing Company (Pty) Ltd | 10 | 563 |
| Champion Ladies Fishing Company | 7 | 655 |
| Coenraad & AC van Dyk (Pty) Ltd | 15 | 503 |
| *Consortium (Evista) Fisheries Ltd | 10 | 1122 |
| Dun-Al Fishing (Pty) Ltd | 15 | 1063 |
| *Etosha Fishing Corporation (Pty) Ltd | 15 | 4920 |
| *GAB Fishing Enterprises | 7 | 2125 |
| *GENMIR Marine Resources | 7 | 1464 |
| Hentjies Bay People Fishing Co. (Pty) Ltd | 15 | 1017 |
| Hesko Fisheries (Pty) Ltd | 10 | 559 |
| Marine Development Co. (Pty) Ltd | 15 | 1017 |
| Matutura Fishing Co. (Pty) Ltd | 15 | 1017 |
| Meyiga Fishing Industries | 7 | 964 |
| Mukorob Fishing (Pty) Ltd | 10 | 1017 |
| Namib Fisheries Limited | 10 | 1158 |
| Okahulo Fisheries | 7 | 563 |
| Oshakati Fishing Co. (Pty) Ltd | 15 | 1017 |
| Otjiwanda Fishing | 7 | 240 |

| RIGHTS HOLDERS | DURATION OF RIGHT (Years) | PILCHARD ALLOCATION (Tons) |
|---|---|---|
| Sarusas Development | 10 | 1076 |
| Silence Holdings (Pty) Ltd | 10 | 536 |
| Theart, JMC (Windhoek) (Pty) Ltd | 15 | 412 |
| **Total** | | **24 097** |

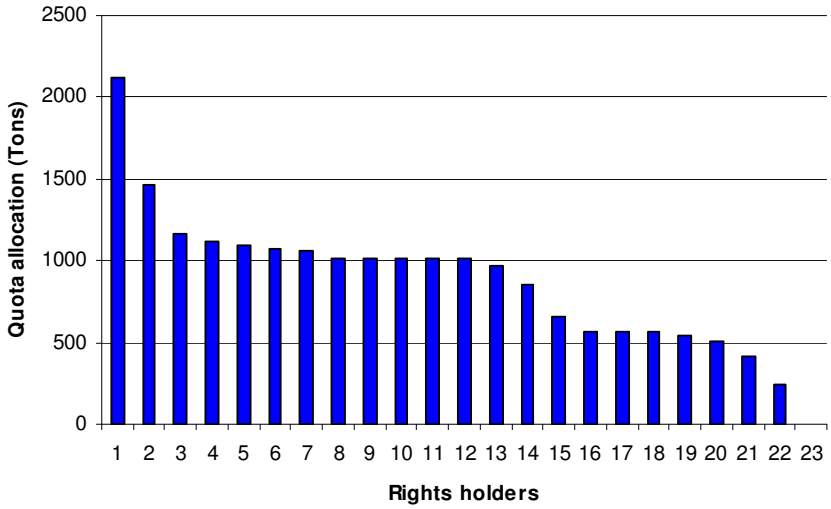


**Figure 3.1.** Pilchard quota allocations for the Namibian small pelagic purse seine fishery in 2003.

Five of the rights holders active in the fishery in 2003 were joint venture companies. These were GAB (Namsea, Namfish and Anibib), Auob-Eigelaar (Auob Fisheries and Eigelaars Belange), Champion Ladies (Champion Fishing and Ladies Fishing), Genmir Marine Resources (Gendev Namibia and Mirabilis Marine Resources), and Meyiga Fishing Industries (Namchild and Edelweiss Visserye). The rest were private companies. Two of the companies involved in the GAB joint venture (Namfish – Namibian Fishing Industries Limited and Namsea – Namibian Sea Products Limited) are listed on the Namibian Stock Exchange.

Of the four rights holding companies reported to have small pelagic fish processing facilities in 2003 (Fishing Industry Handbook, 2004) only two factories are currently (2005) active. These are the Etosha Fishing Corporation and United Fishing Enterprises (part of the Namsea group) factories. The small pelagic fish processing factories employed some 3000 people before the closure of the pilchard fishery in 2000. When two of the factories reopened in 2003, they only re-employed approximately 900 (mostly seasonal) workers. Recently (2005), United Fishing Enterprises announced their intention to implement further retrenchments of staff.

### 3.2.2 Vessels

The number of vessels participating in the small pelagic purse seine fishery has been declining steadily over the last few years. Some 45 vessels were active in the fishery in 1990; only 14 purse seine vessels were fishing for small pelagic fishes in 2003 (Table 3.2).

**Table 3.2.** The Namibian small pelagic purse seine fishing fleet active in 2003.

| Vessel | Flag | Length (m) | GRT (tons) | Horse Power (kW) | Year Built | Total crew | Namibian crew | Rights fished | Owners |
|---|---|---|---|---|---|---|---|---|---|
| Advance | Namibia | 46 | 457 | 1140 | 1966 | 12 | 12 | 10 | Etosha Fishing Corporation (Pty) Ltd |
| Atlanta | Namibia | 39 | 431 | 800 | 1966 | 12 | 12 | 6 | Namib Fisheries Limited |
| Atlantic Harvester | Namibia | 48 | 614 | 2481 | 1975 | 13 | 13 | 6 | Atlantic Harvesters of Namibia (Pty) Ltd |
| Christa List | Namibia | 47 | 561 | 960 | 1966 | 14 | 14 | 2 | Consortium Evista Fisheries (Pty) Ltd |
| Coronella | Namibia | 47 | 501 | 1577 | 1966 | 12 | 11 | 6 | Eigelaars Belange (Pty) Ltd |
| Havsnurp | Namibia | 43 | 415 | 1050 | 1966 | 14 | 12 | 4 | GENDEV of Namibia Ltd |
| Hesko Two | Namibia | 42 | 392 | 850 | 1966 | 15 | 15 | 6 | Hesko Fisheries (Pty) Ltd |
| Hoddevik | Namibia | 43 | 362 | 750 | 1953 | 12 | 12 | 6 | Silence Holdings (Pty) Ltd |
| Morgenster | Namibia | 37 | 300 | 820 | 1967 | 11 | 11 | 8 | Etosha Fishing Corporation (Pty) Ltd |
| Prowess | Namibia | 46 | 531 | 1492 | 1960 | 12 | 12 | 10 | Etosha Fishing Corporation (Pty) Ltd |
| St Padarn | Namibia | 43 | 119 | 1000 | 1967 | 12 | 12 | 4 | Namsea/Namfish/Sar usc. Joint Venture |
| Torsver | Namibia | 46 | 564 | 2100 | 1965 | 14 | 14 | 6 | GENDEV of Namibia Ltd |
| Verdi | Namibia | 51 | 570 | 750 | 1966 | 10 | 10 | 4 | Namib Fisheries Limited |
| Veslemari | Namibia | 45 | 382 | 1500 | 1966 | 13 | 13 | 6 | Namsea/Namfish/Sar usc. Joint Venture |

The Namibian vessels were almost twice the size of their South African counterparts, but had similar crew complements (Table 3.3). All the crewmembers of the small pelagic fleet were Namibian nationals. Therefore, some 175 Namibians were employed as seagoing crew on the purse seine vessels.

**Table 3.3.** A summary of some mean characteristics for vessels making up the Namibian small pelagic fish purse seine fleet.

| CHARACTERISTIC | TOTAL FLEET |
|---|---|
| Length (m ± Std Dev) | 45 ± 4 |
| GRT (tons ± SD) | 443 ± 132 |
| Horsepower (kW ± SD) | 1234 ± 535 |
| Crew (± SD) | 13 ± 2 |
| Construction Year (± SD) | 1966 ± 5 |
| % Local Flag | 100% |

All the vessels were locally owned and were operated under Namibian flags. Ten of the vessels were owned by or were in joint ventures with fish processing operations; four were

independent operators. All of the vessels operate out of Walvis Bay. In the 1960's the fishery was localised around Walvis Bay, but it now extends from north of Luderitz to just south of the Cunene River.

## 3.3 Mid-water Trawl (Horse Mackerel)

By volume, the mid-water trawl fishery for adult horse mackerel is the largest sector in the Namibian fishing industry. The fish was first targeted in this manner in the early 1960's; when annual catches in the region of 50 000 tons were first recorded. By the 1980's this volume had risen by an order of magnitude to 500 000 tons per annum, taken mainly by foreign fishing vessels from Cuba and Eastern European countries. After Namibian independence, the TAC was set at 465,000 tons, and has in subsequent years varied between 200,000 - 400,000 tons. It should be noted that the TAC includes both the mid-water trawl and purse seine fisheries. Horse mackerel catches in the mid-water trawl fishery stabilised within the 300 000 – 350 000 tons per annum range.

The demand for horse mackerel began with an emphasis on dried and salted fish; however, the proportion processed in this way fell until by 2000 only a small proportion was salted and dried on shore, mainly for the Congo/Kinshasa market. Currently most of the landings are processed directly on board and exported as a whole, round, frozen product to other African countries. The main reason for the discontinuation of the drying industry was that the market had experienced an economic downturn and no longer demanded the same quantities as in the previous period. Today there is no large-scale production of dried and salted horse mackerel in either South Africa or Namibia; however, the recent availability of alternative cheap fish (e.g. blue shark) has allowed some revival of commercial fish drying.

In 2003, Namibian horse mackerel exports suffered from a crisis in the Nigerian market, which absorbs about 50% of the total African small pelagic production. This resulted in a 30% decrease in horse mackerel prices (Eurofish, 2004).

Management measures for horse mackerel include an age-structured production model to assess the biomass stock, by-catch and minimum size restrictions, closed areas and minimum cod end mesh sizes are being implemented. A global TAC of 350 000 tons of horse mackerel was set for Namibia's 2003 fishing season.

### 3.3.1 Rights holders

There are currently 13 rights holders in the Namibian mid-water trawl fishery (Table 3.4). All of the participants have 10-year rights, except Namsov Fishing Enterprises, which has a 15-year right. Namsov also has the largest portion, with more than 23% of the total allocation in 2003. The top five companies own 62% of the horse mackerel allocation. The rest is divided into portions of about 5.5% (three rights holders) or 4.5% (four rights holders), and one rights holder with about 4.0% of the allocation. All of the rights holding companies are based in Walvis Bay, except Mediva Fisheries, who are based in Windhoek. Dorsal Fishing (Pty) Ltd is a new entrant to the fishery.

**Table 3.4.** Rights holders in the Namibian mid-water trawl fishery, and their allocations for horse mackerel in 2003 - 2004.

| RIGHTS HOLDERS | DURATION OF RIGHT (Years) | HORSE MACKEREL ALLOCATION (Tons) |
|---|---|---|
| Arechanab Fishing & Development | 10 | 35828 |
| Atlantic Harvesters of Namibia (Pty) Ltd | 10 | 15603 |
| Atlantic Sea Products (Pty) Ltd | 10 | 19423 |
| CeroCIC (Pty) Ltd | 10 | 16455 |
| Diaz Fishing Company (Pty) Ltd | 10 | 15488 |
| Emeritus Fishing (Pty) Ltd | 10 | 13672 |
| Erongo Seafoods (Pty) Ltd | 10 | 23807 |
| GENDEV of Namibia Ltd | 10 | 19423 |
| Kuiseb Fishing Enterprises (Pty) Ltd | 10 | 53821 |
| Mediva Fisheries (Pty) Ltd | 10 | 21923 |
| Namsov Fishing Enterprises (Pty) Ltd | 15 | 81922 |
| Omgwe Fishing (Pty) Ltd | 10 | 19423 |
| *Dorsal Fishing (Pty) Ltd | 10 | 15000 |
| **Total** | | **351,788** |

*New Entrant, since 2003

Since most of the processing of mid-water trawled horse mackerel occurs at sea, on board the large trawlers, there is not much direct, shore-based employment in this fishery (apart from the management and support staff of the rights holding companies). Namsov attempted to introduce onshore canning of horse mackerel in Walvis Bay, but the venture was not successful. More recently, they have attempted to develop a filleted product for local processing.

### 3.3.2 Vessels

With the recent problems experienced in the Namibian small pelagic fishery, and the subsequent targeting of horse mackerel by some of the small pelagic fleet, it is becoming increasingly difficult to determine which vessels are dedicated mid-water trawlers, targeting exclusively in the Namibian adult horse mackerel resource. Table 3.5 lists the mid-water trawl vessels reported to be active in the fishery in 2003 -2004, from the Namibian Ministry of Fisheries and Marine Resources. Comparing the list of vessels in Table 3.5 to the MFMR's vessel catch statistics for 2003 -2004, it is probable that a further six vessels were active in the fishery; these being the Acrux, Eysk, Foros, Kapital Bogomolov, Sniper and White Shark.

**Table 3.5.** The Namibian horse mackerel mid-water trawl fishing fleet in 2003 - 2004.

| Vessel | Flag | Length (m) | GRT (tons) | Horse Power (kW) | Year Built | Total crew | Namibian crew | Rights fished | Owners |
|---|---|---|---|---|---|---|---|---|---|
| Aleksey Generalov | Russia | 110 | 5638 | 2700 | 1972 | 75 | 75 | 1 | Not reported |
| Anouma | Mauritius | 101 | 3989 | 2856 | 1979 | 55 | 15 | 1 | Not reported |
| Desert Jewel | St Vincent | 104.5 | 4407 | 5152 | 1983 | 79 | 22 | 1 | Erongo Seafoods (Pty) Ltd |
| Desert Rose | St Vincent | 104.5 | 4407 | 5152 | 1989 | 66 | --- | 3 | Erongo Seafoods (Pty) Ltd |

| Vessel | Flag | Length (m) | GRT (tons) | Horse Power (kW) | Year Built | Total crew | Namibian crew | Rights fished | Owners |
|---|---|---|---|---|---|---|---|---|---|
| Feolent | Cyprus | 94 | 4410 | 5200 | 1981 | 74 | 20 | 1 | Sea Traffic Ltd |
| Fortis | Russia | 102 | 3834 | 2856 | 1976 | 65 | --- | 1 | Not reported |
| Galatis | Belize | 102 | 3870 | 2856 | 1976 | 68 | 12 | 1 | Not reported |
| Hunter | Russia | 55 | 1895 | 882 | 1986 | 40 | --- | 1 | Not reported |
| Juno Endeavour | St Vincent | 107 | 7765 | 5300 | 1989 | 80 | --- | 4 | Frozen Foods International Ltd |
| Juno Warrior | St Vincent | 107 | 7765 | 5298 | 1989 | 80 | --- | 3 | Frozen Foods International Ltd |
| Marlin Two | St Vincent | 86 | 3834 | 3824 | 1978 | 65 | --- | 1 | Daneswood Ltd |
| Mars | Russia | 103 | 3382 | 5146 | 1982 | 75 | --- | 1 | Namsov Fishing Enterprises (Pty) Ltd |
| Namibian Star | St Vincent | 104 | 4407 | 5152 | 1989 | 75 | 15 | 1 | Namsov Fishing Enterprises (Pty) Ltd |
| Nikko Maru One | Namibia | 65.2 | 1418 | 2134 | 1987 | 50 | 50 | 1 | Trans Namibia Fishing (Pty) Ltd |
| North Wind | St Vincent | 110 | 5640 | 5140 | 1978 | 75 | --- | 1 | Murmansk Trawl Fleet Company |
| Olenitsa | Germany | 62.25 | 1895 | | 1986 | 40 | --- | 1 | Not recorded |
| Rubicon | Belize | 102 | 3870 | 5200 | 1977 | 68 | 20 | 2 | Not recorded |
| Starfish Two | St Vincent | 104 | 4407 | 5252 | 1992 | 75 | --- | 2 | Namsov Fishing Enterprises (Pty) Ltd |
| Sunfish | St Vincent | 104 | 4407 | 5152 | 1991 | 75 | 15 | 3 | Namsov Fishing Enterprises (Pty) Ltd |
| T Navigator | Belize | 102 | 4069 | 2856 | 1983 | 68 | 12 | 1 | Not recorded |
| Venus One | St Vincent | 103 | 4407 | 5152 | 1989 | 75 | 10 | 1 | Namsov Fishing Enterprises (Pty) Ltd |

The defining characteristic of the Namibian mid-water trawl fleet is the presence of leased Russian or formerly Russian vessels. These large vessels have been introduced to the fishery in an attempt to cut harvesting costs by achieving scales of economy. The average length of the vessels operating in the 2003 -2004 season was about 100 m; the largest vessel was 110 m and the smallest was 55 m (Figure 3.2). Twenty percent of the vessels listed in Table 3.5 were still registered in Russia; the majority (almost 62%) were registered under the popular “Flags of Convenience” for fishing vessels (i.e. Belize and St Vincent & the Grenadines). Only one vessel was registered in Namibia.

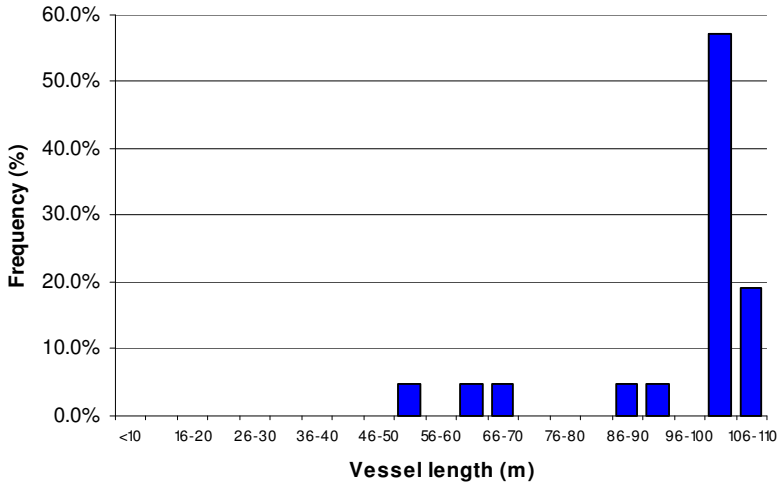


**Figure 3.2.** Length-frequency distribution of the vessels in the Namibian horse mackerel mid-water trawl fishery in 2003 - 2004.

The mid-water trawl fleet is made up of relatively modern vessels; the average year of construction was 1984, compared to an average of 1976 for the entire Namibian fishing fleet, across all fisheries.

**Table 3.6.** A summary of some mean characteristics for vessels making up the Namibian horse mackerel mid-water trawl fleet.

| Characteristic | Total Fleet |
|---|---|
| Length (m ± Std Dev) | 97 ± 16 |
| GRT (tons ± SD) | 4273 ± 1571 |
| Horsepower (kW ± SD) | 4163 ± 1390 |
| Crew (± SD) | 25 ± 21 |
| Construction Year (± SD) | 1984 ± 6 |
| % Local Flag | 5% |

The size of the crew varied considerably, ranging from 40 to 80 members (mean = 68 crewmembers, Table 3.6). The total number of sea-going crew employed by the mid-water trawl industry was in excess of 1425 people during the 2003 -2004 season; however, only about 19% were Namibian nationals. The issue of the “Namibianisation” of this fishery is being addressed, with rights holders undertaking to train and employ more Namibian crewmembers on these vessels.

## 3.4 Hake demersal trawl and longline

The hake fishery is currently the most valuable in the Namibian fishing industry. Like the South African hake fisheries, it is based on two species; the shallow water *Merluccius capensis* and the deeper water *M. paradoxus.* The shallow water species is more common in Namibia, with the presence of *M. Paradoxus* in the trawl catches increasing to the south. In South Africa, the deep-water species is more commonly trawled. A third species, the Angolan hake *M. polli* occurs north of the Kunene River, and is occasionally present in Namibian trawl catches in the north (Figure 3.3).

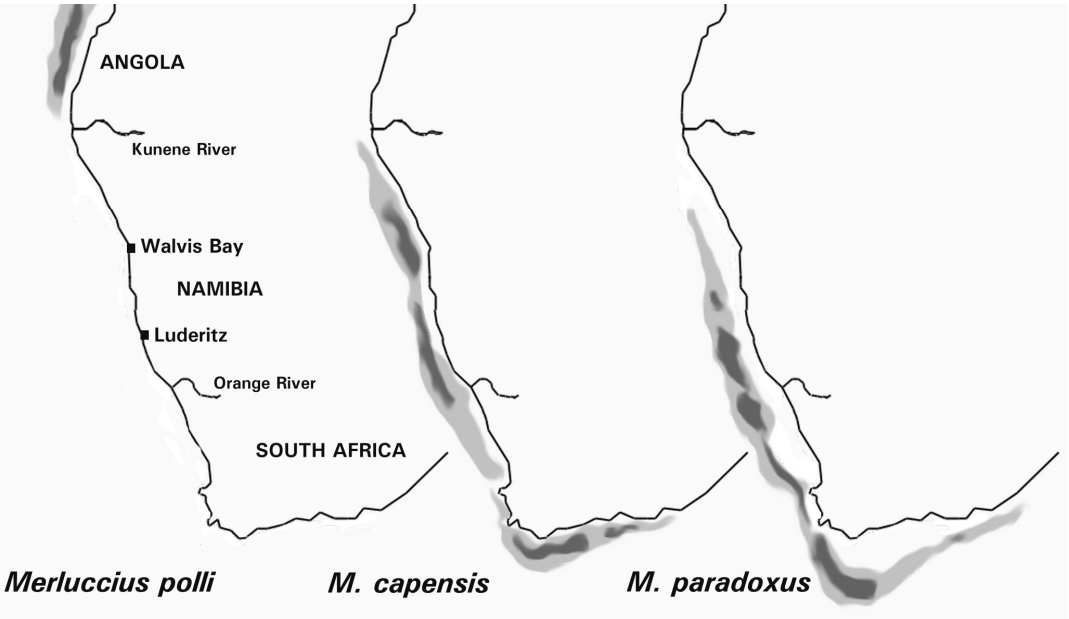


**Figure 3.3.** Approximate distribution of the three hake species in the BCLME.

Prior to independence in 1990, the fishery was largely in the hands of South African vessels and foreign distant water fleets. The fishery was ostensibly managed by the ICSEAF from 1972 until 1990. Hake catches peaked in the early 1970s, with the ICSEAF figures suggesting a harvest of 820 000 tons in 1972, of which only 5000 tons was caught by local vessels. This level of exploitation was unsustainable, and by the late 1970's the stock had declined sharply. Even so, during the 1980's approximately 200 000 - 350 000 tons of hake were taken from the Namibian waters per annum.

Post-independence conservatism led Namibia to reduce its global hake TAC to 55 000 tons in 1991. The TAC was subsequently steadily increased, with the 1999 – 2000 TAC being set at 210 000 tons. In 1999 the annual TAC (January – December) was replaced by a seasonal TAC (May – April). Recently, the TAC has been adjusted downwards, and was set at 180 000 tons for the 2003 – 2004 season. Once Namibia gained control of the fishery, demersal hake rapidly replaced the small pelagic fishery as the dominant sub-sector of the Namibian fishing industry. Unfortunately, falling prices (caused by small sized fish and a strong currency) have weakened the industry in the recent past.

The hake fishery is managed through access limitation (i.e. limited number of fishing rights), TAC allocation (through the individual quota property rights system), area and by-catch restrictions, mesh size regulations and the implementation of selectivity devices. Other management tools include a system of fees and levies, as well as monitoring, control and surveillance activities.

### 3.4.1 Rights holders

The hake demersal trawl and longline industry is the largest in the Namibian fishing industry, in terms of rights holder participation. The 38 hake rights holders make up nearly a quarter of all rights holders in the Namibian fishing industry. Some of these rights holding entities are joint ventures between a number of companies, further increasing the level of participation (Table 3.7). Just after Independence, only 17% of the hake resource was in Namibian hands;

recently Nichols (2004[1]) reported that some 96% of the hake quota was controlled by Namibian entities.

**Table 3.7.** Joint venture entities holding hake demersal trawl fishing rights, and their associated companies (Elago, 2004[2]). .

| Rights holder | Joint Venture Participants |
|---|---|
| Atab Fisheries | Tulongeni Fishing<br>Bravo Fisheries<br>Afromark Marine (Pty)Ltd<br>Atlan Fishing Co. |
| Cadilu Fishing & Group | Cadilu<br>Ombaye Fishing (Pty) Ltd |
| Ekikimbo Fishing | Northern Fishing (Pty)Ltd<br>Camill Fishing |
| Hatutungu Fishing Co. | Liambezi Fisheries<br>Global Fishing Enterprises CC<br>Blue Sea Fishing (Pty)Ltd<br>BDO Eleven (Pty)Ltd<br>Kaiseb Fishing industries (Pty)Ltd<br>Ngatukondje Pamue Fishing Co |
| Morcar Fishing | Caroline Fishing<br>Moria Fishing CC |
| Namboty Group of Co. | Ongodivi Marine Products<br>Yambula Namibia (Pty)Ltd<br>Tukanda Fishing company<br>Bethanien Fishing<br>Millenium Fishing Namibia<br>Nam-sino Fisheries (Pty)Ltd |
| Omankete Investment | Maria Fishing<br>Kunene Aquatic Enterprises<br>Namibian Kakwaya Fishing<br>Omusati Development Trust<br>Tega Fishing (Pty)Ltd (Atlantic Fishing)<br>Ekango Fishing (Pty)Ltd<br>Ambassador Fishing (Pty)Ltd<br>Etaka Fishing (Pty)Ltd<br>Tweya Fishing (Pty)Ltd |
| Omaru Consortium | Aonin Fishing/Rundu Fishing<br>Old Man Fishing Co |
| Ompagona Fishing | Part of JV that forms Etale Fishing |
| Ozohi Fishing | Part of JV that forms Etale Fishing |
| The Rainbow Fishing | Cato Fishing Co. (Pty)Ltd<br>Old Pensioners Company |

[1] Nichols, P. 2004. Marine Fisheries Management in Namibia. In Sumaila, U.R., Boyer, D., Skogen, M. and Steinshamn S.I. Eds. *Namibia´s Fisheries: Ecological, Economic and Social Aspects*. pp 319-332. Eburon, Delft.

[2] Elago, P.N. 2004. Duration of Fishing Rights and Investment: An Empirical Study of Investment in Namibian Fisheries. Directorate of Policy, Planning and Economics, Ministry of Fisheries and Marine Resources, Windhoek. pp 57

In 1992, Namibia began policy of Namibianisation of their domestic fisheries, including the promotion of land-based infrastructure and employment. In the hake demersal trawl fishery, this policy was promoted through the apportionment of hake trawl quotas as either "wetfish" (60% of TAC) or "freezer fish" (40%). As well as receiving the greater portion of the TAC, the wetfish sub-sector also paid lower levies. The rights holders and their wetfish and/or freezer apportionments are listed in Table 3.8. The quota allocated to the rights holders for freezer and wetfish are compared in Figure 3.4.

**Table 3.8.** The rights holders in the Namibian demersal trawl fishery, and their hake allocations for wetfish and freezer vessels in 2003 - 2004.

| RIGHTS HOLDERS | DURATION OF RIGHT (Years) | WETFISH ALLOCATION (Tons) | FREEZER ALLOCATION (Tons) |
|---|---|---|---|
| Agatha Bay Fishing | 15 | 1987 | 563 |
| Ark Fishing Industries (Pty) Ltd | 7 | --- | 4338 |
| ATAB Fisheries Consortium (Pty) Ltd | 15 | 2450 | 803 |
| Benguella Sea Products (Pty) Ltd | 7 | 1379 | 787 |
| Cadilu Fishing Company (Pty) Ltd & Group | 15 | 2508 | 6036 |
| Consortium (Evista) Fisheries Ltd | 10 | 6702 | 2928 |
| Diaz Fishing Company (Pty) Ltd | 10 | 3370 | --- |
| Ehanga Holdings (Pty) Ltd | 15 | 2013 | 563 |
| Ekikimbo Fishing (Pty) Ltd | 7 | 2483 | 1809 |
| Empire Fishing Company (Pty) Ltd | 15 | 2028 | 563 |
| Epata / GEFI SARH (Demersal Fishing) | 7 | --- | 5000 |
| Erongo Seafoods (Pty) Ltd | 10 | 1071 | 583 |
| Hatutungu Fishing Company (Pty) Ltd | 15 | --- | 2735 |
| Helgoland Fishing Company | 15 | --- | 2588 |
| Namib/Karibib Fisheries Ltd (Tunacor) | 15 | 6088 | 2099 |
| Kuiseb Fishing Products (Pty) Ltd | 15 | 8628 | 1175 |
| Lalandii (Pty) Ltd | 7 | 4565 | 2918 |
| Marco Fishing (Pty) Ltd | 15 | 2028 | 583 |
| Mbashe Fishing (Pty) Ltd | 7 | 1007 | 583 |
| Morcar Fishing (Pty) Ltd | 7 | 1339 | 870 |
| Namboty Group of Companies | 15 | 631 | 424 |
| NamCoast Fishing (Pty) Ltd | 15 | 1850 | 480 |
| Namibian Marine Resources (Pty) Ltd | 7 | 2705 | 1468 |
| Namibian Fishermen's Association (Pty) Ltd | 15 | 1534 | 563 |
| National Fishing Corporation Ltd (Fishcor) | 15 | 6744 | 3354 |
| Nautilus Fishing Enterprises | 15 | 2012 | 583 |
| Neoplan Fishing & Marine Products (Pty) Ltd | 10 | 1527 | 583 |
| NovaNam Fishing Industries | 15 | 17847 | 8158 |
| Omankete Investments (Pty) Ltd | 10 | 3513 | 1254 |
| Omaru Consortium | 7 | 3396 | --- |
| Ompagona Fishing Company (Pty) Ltd | 10 | 1527 | 563 |
| Omuhuka Trawling (Pty) Ltd | 15 | 2117 | 583 |
| Oryx Fisheries | 15 | --- | 5028 |
| Overberg Fishing Company (Pty) Ltd | 15 | --- | 5440 |
| Ozohi Fishing (Pty) Ltd | 10 | 1527 | 583 |
| South Namibian Hake Fishing Association | 15 | --- | 2600 |
| The Rainbow Fishing Company (Pty) Ltd | 7 | --- | 4115 |
| Walvis Bay Small Boat Owners Association | 15 | 1813 | 583 |
| **Total** | | **98,389** | **73,886** |

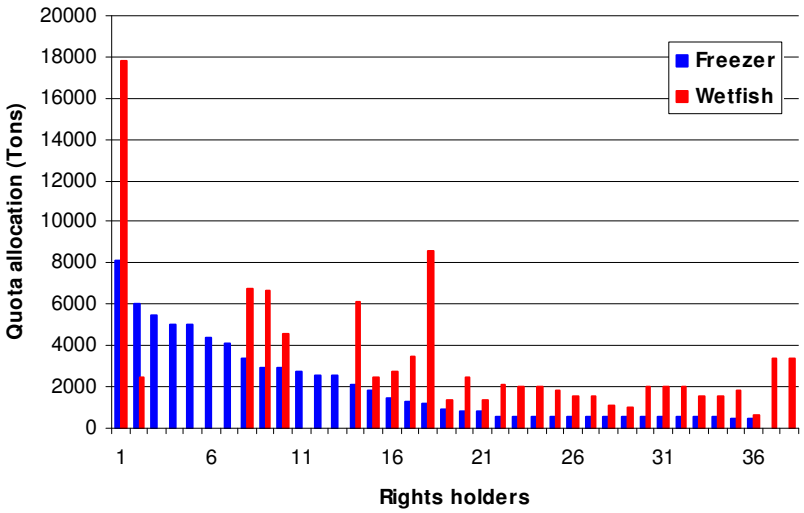


**Figure 3.4.** A comparison of rights holder quota allocations for freezer vessels and wetfish vessels in 2003 - 2004, for the Namibian hake demersal trawl and longline fishery.

The Namibian government's wetfish/freezer fish policy is a contentious one within the hake demersal trawl industry, and there have been calls to review it. Although the operational costs of the wetfish and freezer vessels are apparently similar, there is greater risk involved in the wetfish operation, as well as the added cost of processing on shore. These costs are defrayed somewhat by larger quotas and a higher value, better quality export product. However, the recent decline in catches, the smaller size of the fish being caught, overcapacity of both wetfish vessels and land-based processing factories, combined with the strength of the Namibian dollar, has led to severe financial tension in the wetfish sub-sector (Japp, pers comm.[3]).

The hake rights holding entities were mostly based in the Walvis Bay / Swakopmund region (52%, Figure 3.5), followed by Windhoek (31%), with only 15% from Luderitz.

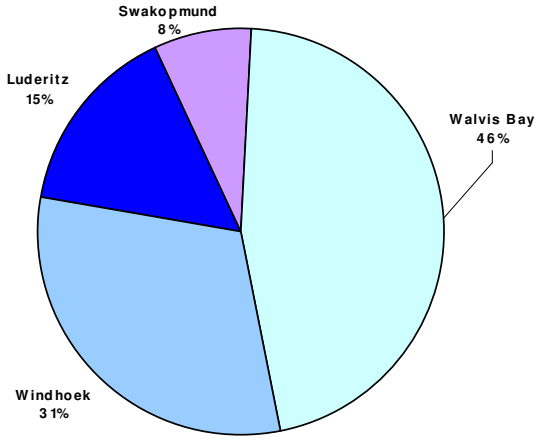


**Figure 3.5.** Demographics of hake demersal trawl rights holders in Namibia, 2003 – 2004.

[3] Dr David Japp, Fisheries & Oceanographic Support Services CC, Cape Town, South Africa

This demographic is not reflected by the processing sector. Of the 15 factories recorded in the 2004 survey as servicing the hake industry, 60% were located in Luderitz and 40% were in Walvis Bay. An estimated 3750 permanent staff and an additional ± 1000 seasonal staff (total 4750) were employed by the hake processing factories in 2004. Recent developments (since the 2004 survey) indicate an industry in trouble and undergoing a process of restructuring. The closure of the Blue Ocean Products factory in Walvis Bay resulted in at least 200 jobs lost, and the liquidation and subsequent buy-out of the Lalandii factory in Luderitz by the NovaNam Group of companies will probably result in more jobs being shed.

### 3.4.2 Vessels

Of the 140 or so vessels fishing in the Namibian demersal hake fishery in 2003 – 2004, approximately 69% were based in Walvis Bay, and 31% in Luderitz. The hake fleet consists of freezer, wetfish and longline vessels, which occur in slightly different proportions in the two ports (Figure 3.6). Analysis of hake fishing effort by Japp (pers comm.) indicates that the freezer vessels generally steam south from Luderitz and Walvis Bay to fish at latitudes of between 24 – 28 °S. The wetfish and longline vessels tend to fish closer to their home port as they need to return to port to offload and process their catch on land. The Luderitz vessels head south towards the South African border, whilst the Walvis Bay wetfish and longline vessels fish between latitudes 19 – 22 °S.

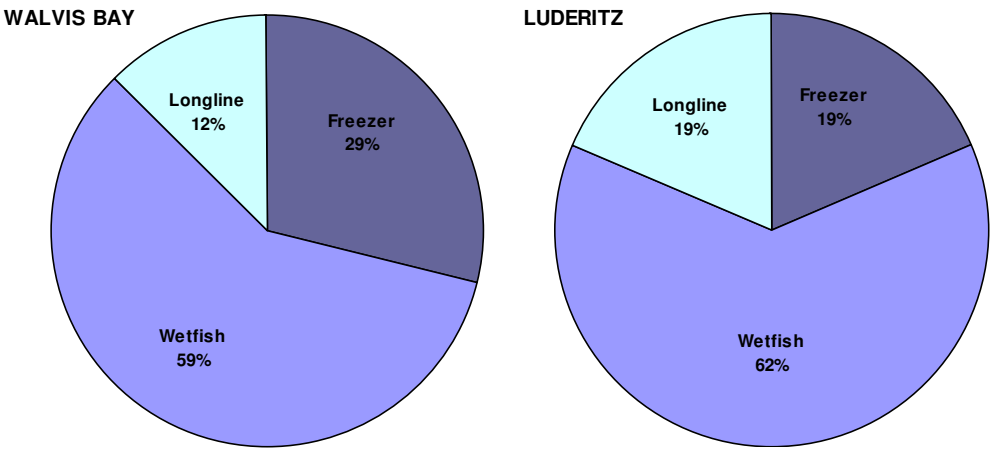


**Figure 3.6.** The percentage of freezer, wetfish and longline vessels making up the demersal hake fishing fleet in Walvis Bay and Luderitz.

During the 2003 -2004 fishing season approximately 36 freezer trawlers, 84 wetfish trawlers and 20 longline vessels were active in the hake demersal fishery (Table 3.9). Unlike South Africa, there is no dedicated hake quota allocation for longliners in Namibia. Longline vessels are allowed access to the hake fishery by fishing against a wetfish quota allocation.

**Table 3.9.** The Namibian hake demersal trawl and longline fishing fleet in 2003 - 2004.

| Vessel | Type | Flag | Length (m) | GRT (tons) | Horse Power (kW) | Year Built | Total crew | Nam. Crew | Right fished | Owners |
|---|---|---|---|---|---|---|---|---|---|---|
| **FREEZER TRAWLERS** | | | | | | | | | | |
| Aldubaran | F | Namibia | 25 | 212 | 960 | 1985 | 16 | 14 | 2 | Hesko Fisheries (Pty) Ltd |
| Alvamar Siete | F | Namibia | 63 | 1002 | 1466 | 1987 | 54 | 44 | 4 | Welwithcia Property Holdings |
| Blue Sea One | F | Namibia | 67 | 1380 | 1940 | 1977 | 46 | 46 | 1 | Blue Sea Fishing Co. |
| Campa Del Infanzon | F | Namibia | 73 | 1780 | 2700 | 1974 | 61 | 42 | 2 | Overberg Fishing Co. (Pty) Ltd |
| Conbaroya Quarto | F | Namibia | 57 | 1269 | 3300 | 1988 | 65 | 55 | 1 | Coastal Marine Industries |
| De Giosa T | F | Namibia | 65 | 1399 | 2133 | 1970 | 61 | 52 | 1 | Oryx Fisheries |
| Echalar | F | Namibia | 72 | 1745 | 3000 | 1974 | 59 | 43 | 1 | Overberg Fishing Co. (Pty) Ltd |
| Emanguluko | F | Namibia | 31 | 483 | 1850 | 1990 | 4 | 4 | 1 | Cap Frio Fisheries (Pty) Ltd |
| Emanguluko | F | Namibia | 31 | 483 | 1850 | 1990 | 27 | 23 | 1 | Glomar Fisheries (Pty) Ltd |
| First Lady Kovambo | F | Namibia | 90 | 3900 | 3600 | 1979 | 60 | 53 | 2 | Irvin & Johnson Limited |
| Frans Aupa Indongo | F | Namibia | 61 | 821 | 1600 | 1974 | 42 | 34 | 2 | Calo Fishing Co (Pty) Ltd |
| Green Sea | F | Namibia | 66 | 1272 | 2140 | 1969 | 48 | 38 | 1 | Blue Sea Fishing Co. |
| Helgoland | F | Namibia | 27 | 182 | 775 | 1988 | 16 | 15 | 1 | Helgoland Fishing Co. |
| Kalahari | F | Argentina | 72 | 1758 | 2700 | 1974 | 54 | 44 | 1 | Kalahari Trawling (Pty) Ltd |
| Katima | F | Namibia | 51 | 830 | 1200 | 1973 | 38 | 31 | 2 | Karibib Fisheries Ltd |
| Ludwani | F | Namibia | 36 | 350 | 1470 | 1983 | 18 | 18 | 1 | Caroline Fishing |
| Mar Del Cabo | F | Namibia | 88 | 1655 | 2000 | 1965 | 56 | 47 | 5 | Venture Fishing ( (Pty) Ltd |
| Maracaibo | F | Namibia | 27 | 270 | 750 | 1979 | 21 | 17 | 1 | Voorbok Fishing Co. (Pty) Ltd |
| Merlus One | F | Namibia | 74 | 1758 | 1471 | 1974 | 69 | 60 | 2 | Merlus Fishing (Pty) Ltd |
| Ocean Victory Two | F | South Africa | 82 | 2246 | 2200 | 1974 | 85 | 85 | 1 | Sea Harvest Corporation (Pty) Ltd |
| Ocean Wave | F | Namibia | 38 | 339 | 1324 | 1974 | 26 | 26 | 1 | Blue Ocean Products (Pty) Ltd |
| Ohamba | F | Namibia | 40 | 634 | 1700 | 1974 | 30 | 27 | 1 | Seaflower Whitefish Corp. |
| Okombahe | F | Namibia | 27 | 245 | 750 | 1978 | 20 | 17 | 3 | Overberg Fishing Co. (Pty) Ltd |
| Oshakati | F | Namibia | 50 | 850 | 1200 | 1974 | 38 | 31 | 3 | Karibib Fisheries Ltd |
| Overberg Two | F | Namibia | 33 | 486 | 867 | 1994 | 28 | 23 | 1 | Overberg Fishing Co. (Pty) Ltd |
| Pemba Bay | F | Spain | 44 | 562 | 1496 | 2002 | 40 | 34 | 4 | Copemat, S.A. |

| Vessel | Type | Flag | Length (m) | GRT (tons) | Horse Power (kW) | Year Built | Total crew | Nam. Crew | Right fished | Owners |
|---|---|---|---|---|---|---|---|---|---|---|
| Pescapuerta Cuarto | F | Spain | 73 | 1627 | 2000 | 1985 | 46 | 40 | 2 | Karibib Fisheries Ltd |
| Rainbow | F | Argentina | 81 | 1774 | 2014 | 2002 | 70 | 36 | 1 | Canida Fishing Co. |
| Ribadavia | F | Namibia | 67 | 1676 | 2700 | 1974 | 54 | 45 | 2 | Pescanova Fishing Industries (Pty) Ltd |
| Ribadeo | F | Namibia | 72 | 1582 | 2700 | 1973 | 51 | 42 | 2 | Pescanova Fishing Industries (Pty) Ltd |
| Rolmar Dos | F | Namibia | 41 | 631 | 1700 | 1974 | 30 | 21 | 1 | Orchidea Fishing Co. |
| Rosendo Da Vila | F | Namibia | 70 | 1285 | 2000 | 1967 | 56 | 38 | 3 | Cadilu Fishing Co. (Pty) Ltd & Group |
| Southern Aquarius | F | Namibia | 54 | 1154 | 3000 | 1974 | 48 | 48 | 2 | Gendor Fishing (Pty) Ltd |
| Torra Bay | F | Namibia | 60 | 1558 | 2000 | 1998 | 64 | 55 | 5 | Torra Bay Fishing (Pty) Ltd |
| Ukhozi | F | South Africa | 28 | 302 | 625 | 1980 | 29 | 29 | 1 | Protea Fishing Company (Pty) Ltd |
| Ulzama | F | Spain | 33 | 264 | 1100 | 1992 | 20 | 11 | 1 | Pesquera Vasco Gallera SA |
| Vezilifa | F | Namibia | 70 | 1903 | 2206 | 1973 | 65 | 54 | 7 | Capensis Fishing Company |
| Whitby | F | Namibia | 27 | 193 | 800 | 1977 | 15 | 14 | 1 | Gendor Fishing (Pty) Ltd |
| **WETFISH TRAWLERS** | | | | | | | | | | |
| Alicia | W | South Africa | 42 | 453 | 1104 | 1975 | 22 | 18 | 2 | CMI Trawling Ltd |
| Almaz | W | Russia | 48.1 | 754 | 1350 | 1989 | 26 | 26 | 2 | Juzhnyy Rybopromslovyy Flot. |
| Amaro | W | Namibia | 31.33 | 378 | 1000 | 1988 | 20 | 17 | 1 | Amaro Fishing (Pty) Ltd |
| Arbat | W | Russia | 55 | 1400 | 1618 | 1979 | 35 | 18 | 3 | Hangana Seafood (Pty) Ltd |
| Baldur Ama | W | Namibia | 45.55 | 489 | 1268 | 1978 | 20 | 20 | 1 | Benguella Sea Products (Pty) Ltd |
| Bardi | W | Namibia | 48 | 909 | 2350 | 1979 | 25 | 24 | 2 | Prestige Fishing (Pty) Ltd |
| Begonia | W | Namibia | 44 | 686 | 1500 | 1981 | 22 | 21 | 1 | Hangana Seafood (Pty) Ltd |
| Carina | W | South Africa | 42 | 453 | 1104 | 1975 | 21 | 17 | 2 | C M I Trawling (Pty) Ltd |
| Chantal | W | Namibia | 34 | 250 | 2000 | 1974 | 18 | 17 | 1 | Corvima Investments |
| Congasa | W | Namibia | 40 | 513 | 1200 | 1981 | 25 | 21 | 3 | Coastal Marine Industries |
| Cyndan | W | Namibia | 24 | 114 | 570 | 1976 | 12 | 11 | 1 | Walvisbay Small Boat Owners Ass. |
| Dantago | W | Namibia | 27 | 257 | 746 | 1978 | 18 | 17 | 2 | Atlantic Sea Products (Pty) Ltd |
| DAR 314 | W | Namibia | 23 | 178 | 570 | 1988 | 10 | 9 | 1 | Namibia Marine Products (Pty) Ltd |
| Diaz | W | Namibia | 54 | 683 | 2000 | 1972 | 21 | 18 | 1 | Diaz Fishing Company (Pty) Ltd |
| Diaz Two | W | Namibia | 58 | 609 | 1550 | 1967 | 21 | 18 | 1 | Diaz Fishing Company (Pty) Ltd |

| Vessel | Type | Flag | Length (m) | GRT (tons) | Horse Power (kW) | Year Built | Total crew | Nam. Crew | Right fished | Owners |
|---|---|---|---|---|---|---|---|---|---|---|
| Empire | W | Namibia | 48 | 498 | 1200 | 1976 | 23 | 21 | 2 | Empire Fishing Company (Pty) Ltd |
| Empire Two / Kamanjab | W | Namibia | 53 | 609 | 1550 | 1968 | 23 | 21 | 1 | Empire Fishing Company (Pty) Ltd |
| Equihennois | W | Namibia | 35 | 581 | 1104 | 1987 | 24 | 23 | 3 | Lalandii (Pty) Ltd |
| Erica | W | Namibia | 44 | 686 | 1500 | 1981 | 22 | 22 | 2 | Hangana Seafood (Pty) Ltd |
| Etale Star | W | Namibia | 47.1 | 741 | 1800 | 1977 | 24 | 23 | 2 | Etale Fishing Co (Pty) Ltd |
| Fengur | W | Iceland | 26 | 184 | 585 | 1984 | 11 | 11 | 3 | Karibib Fisheries Ltd |
| Fisher Bank | W | Namibia | 48 | 838 | 1472 | 1972 | 22 | 22 | 2 | Hangana Seafood (Pty) Ltd |
| Geyzer | W | Mauritius | 55 | 899 | 1620 | 1979 | 27 | 27 | 1 | Hangana Seafood (Pty) Ltd |
| Goelette | W | Namibia | 43 | 690 | 2000 | 1974 | 21 | 17 | 1 | Pescanova Fishing Industries (Pty) Ltd |
| Harvest Nicola | W | Namibia | 35 | 581 | 1104 | 1999 | 24 | 23 | 3 | Lalandii (Pty) Ltd |
| Harvest Veronica | W | South Africa | 35 | 544 | 976 | 1966 | 25 | 25 | 1 | Sea Harvest Corporation (Pty) Ltd |
| HEL 153 | W | Namibia | 23 | 177 | 570 | | 10 | 8 | 4 | Cadilu Fishing Co. (Pty) Ltd & Group |
| HEL 154 | W | Namibia | 26 | 177 | 570 | 1990 | 10 | 9 | 2 | Cadilu Fishing Co. (Pty) Ltd & Group |
| Holmatindur | W | Namibia | 47 | 802 | 2000 | 1974 | 32 | 28 | 1 | Seaflower Whitefish Corp. |
| Hurinis | W | Namibia | 37 | 784 | 1200 | 1987 | 32 | 32 | 1 | Atlantic Sea Products (Pty) Ltd |
| Kanus | W | Namibia | 46 | 790 | 1454 | 1975 | 24 | 24 | 1 | Skeleton Coast Trawling (Pty) Ltd |
| Karas | W | Namibia | 43 | 880 | 2000 | 1974 | 21 | 17 | 1 | Skeleton Coast Trawling (Pty) Ltd |
| Keetmans | W | Namibia | 41 | 576 | 1500 | 1979 | 21 | 17 | 1 | Skeleton Coast Trawling (Pty) Ltd |
| Khomas | W | Namibia | 40 | 842 | 1700 | 1974 | 21 | 17 | 1 | Skeleton Coast Trawling (Pty) Ltd |
| Khorixas | W | Namibia | 48 | 790 | 2000 | 1912 | 21 | 17 | 2 | Skeleton Coast Trawling (Pty) Ltd |
| KM 0861 | W | Russia | 23 | 117 | 354 | 2001 | 10 | 10 | 1 | Obedinyonnaya Morskaya Comp |
| KM 0863 | W | Russia | 23 | 117 | 354 | 2001 | 10 | 10 | 1 | Obedinyonnaya Morskaya Comp |
| KOL 184 | W | Namibia | 24 | 106 | 570 | 1979 | 10 | 8 | 1 | Agatha Bay Fishing |
| Kolmanskop | W | Namibia | 34 | 341 | 1350 | 1980 | 21 | 17 | 1 | Skeleton Coast Trawling (Pty) Ltd |
| Kombat | W | Namibia | 40 | 641 | 1454 | 1976 | 20 | 20 | 1 | Skeleton Coast Trawling (Pty) Ltd |
| Komukandi | W | Namibia | 46 | 790 | 1454 | 1975 | 23 | 19 | 1 | Skeleton Coast Trawling (Pty) Ltd |
| Kowares | W | Namibia | 46 | 790 | 1454 | 1975 | 23 | 19 | 1 | Skeleton Coast Trawling (Pty) Ltd |
| Kvazar | W | Russia | 50 | 744 | 852 | 1999 | 17 | 17 | 1 | Yuzhnyy ryboprornyslovyy flot |

| Vessel | Type | Flag | Length (m) | GRT (tons) | Horse Power (kW) | Year Built | Total crew | Nam. Crew | Right fished | Owners |
|---|---|---|---|---|---|---|---|---|---|---|
| Merlus One | W | Namibia | 73.65 | 1758 | 1471 | 1974 | 69 | 60 | 1 | Merlus Fishing (Pty) Ltd |
| Namib Five | W | Namibia | 23 | 155 | 570 | 1977 | 10 | 8 | 2 | Karibib Fisheries Ltd |
| Namib One | W | Namibia | 24 | 115 | 600 | 1976 | 10 | 9 | 2 | Karibib Fisheries Ltd |
| Namib Three | W | Namibia | 24 | 132 | 600 | 1982 | 11 | 11 | 1 | Voorbok Fishing Co. (Pty) Ltd |
| Namib Two | W | Namibia | 24 | 102 | 600 | 1980 | 10 | 9 | 2 | Karibib Fisheries Ltd |
| Neavera | W | Namibia | 55 | 837 | 1800 | 1972 | 21 | 19 | 2 | Nautilus Fishing Enterprises |
| Nemanskiy | W | Russia | 57 | 747 | 798 | 1987 | 17 | 17 | 1 | Yuzhnyy ryboprornyslovyy flot |
| Nicole | W | Namibia | 25 | 208 | 578 | 1986 | 11 | 11 | 1 | Foodcon (Pty) Ltd |
| Nicole | W | Namibia | 25 | 208 | 578 | 1986 | 11 | 11 | 1 | Foodcon (Pty) Ltd |
| Northern Phoenix | W | Namibia | 54.97 | 841 | 1600 | 1982 | 25 | 23 | 1 | City Fishing (Pty) Ltd |
| Ocean Tide | W | Namibia | 42 | 558 | 1125 | 1972 | 25 | 23 | 1 | Blue Ocean Products (Pty) Ltd |
| Ocean Wave | W | Namibia | 38 | 339 | 1324 | 1974 | 26 | 26 | 2 | Blue Ocean Products (Pty) Ltd |
| Ohamba | W | Namibia | 40 | 634 | 1700 | 1974 | 30 | 27 | 1 | Seaflower Whitefish Corp. |
| Omuhuka | W | Namibia | 42 | 453 | 1500 | 1972 | 25 | 21 | 1 | Omuhuka Trawling (Pty) Ltd |
| Oshakati | W | Namibia | 50 | 850 | 1200 | 1974 | 38 | 31 | 1 | Karibib Fisheries Ltd |
| Otter Bank | W | Namibia | 48 | 838 | 1576 | 1987 | 22 | 21 | 2 | Hangana Seafood (Pty) Ltd |
| Pescapuerta Cuarto | W | Spain | 73 | 1627 | 2000 | 1985 | 46 | 40 | 1 | Karibib Fisheries Ltd |
| Poble De Campello | W | Namibia | 28 | 346 | 1160 | 1989 | 20 | 17 | 1 | Poble De Campello (Pty) Ltd |
| Proton | W | Russia | 50 | 739 | 3490 | 1988 | 17 | 17 | 2 | Yuzhnyy ryboprornyslovyy flot |
| Rex | W | Namibia | 50 | 491 | 2000 | 1973 | 34 | 32 | 1 | Seaflower Whitefish Corp. |
| Rolmar | W | Namibia | 43 | 447 | 950 | 1981 | | | 1 | Orchidea Fishing Co. |
| Shearwater Bay | W | Namibia | 34 | 354 | 1800 | 1982 | 24 | 23 | 2 | Marco Fishing (Pty) Ltd |
| Ulzama | W | Spain | 33 | 264 | 1100 | 1992 | 20 | 11 | 1 | Pesquera Vasco Gallera SA |
| UST200 | W | Namibia | 25 | 102 | 600 | 1980 | 10 | 9 | 2 | Karibib Fisheries Ltd |
| UST201 | W | Namibia | 25 | 102 | 600 | 1980 | 10 | 9 | 2 | Karibib Fisheries Ltd |
| UST78 | W | Namibia | 24 | 107 | 600 | 1979 | 10 | 9 | 2 | Namib / Karibib |
| UST81 | W | Namibia | 24 | 107 | 570 | 1978 | 13 | 12 | 1 | Agatha Bay Fishing |
| UST83 | W | Namibia | 24 | 107 | 600 | 1979 | 10 | 9 | 2 | Namib / Karibib |

| Vessel | Type | Flag | Length (m) | GRT (tons) | Horse Power (kW) | Year Built | Total crew | Nam. Crew | Right fished | Owners |
|---|---|---|---|---|---|---|---|---|---|---|
| Victory | W | United Kingdom | 29 | 510 | 1286 | 1998 | 16 | 10 | 1 | Hangana Seafood (Pty) Ltd |
| Vieirasa Tres | W | Namibia | 62 | 1135 | 2000 | 1965 | 26 | 22 | 3 | Cadilu Fishing Co. (Pty) Ltd & Group |
| Wiron Five | W | Namibia | 32 | 441 | 1200 | 1984 | 24 | 24 | 2 | Lalandii (Pty) Ltd |
| Wiron Six | W | Namibia | 32 | 444 | 1180 | 1984 | 25 | 21 | 2 | Pamwe Fishing (Pty) Ltd |
| WLA 308 | W | Namibia | 24 | 132 | 570 | 1982 | 10 | 9 | 2 | Karibib Fisheries Ltd |
| Yoko-Tani | W | Namibia | 28 | 268 | 960 | 1986 | 11 | 11 | 1 | Hesko Fisheries (Pty) Ltd |
| Za Lesye | W | Russia | 31 | 193 | 224 | 1979 | 10 | 10 | 1 | Vlak Co. Ltd |
| Zambezi | W | Namibia | 43 | 375 | 1500 | 1973 | 26 | 25 | 2 | Neoplan Fishing & Marine Prod. (Pty) Ltd |
| Zambia | W | Namibia | 43.31 | 650 | 1350 | 1973 | 25 | 25 | 1 | Etale Fishing Co (Pty) Ltd |
| Zamora | W | Namibia | 47 | 650 | 1500 | 1973 | 19 | 18 | 1 | Hangana Seafood (Pty) Ltd |
| Zeila | W | Namibia | 43 | 672 | 1606 | 1975 | 19 | 17 | 1 | Hangana Seafood (Pty) Ltd |
| Zenica | W | Namibia | 43.25 | 672 | 1151 | 1974 | 23 | 23 | 2 | Etale Fishing Co (Pty) Ltd |
| Zogi | W | Namibia | 43 | 672 | 1500 | 1975 | 19 | 18 | 1 | Hangana Seafood (Pty) Ltd |
| Zula | W | Namibia | 24 | 188 | 625 | 1985 | 11 | 11 | 1 | Hesko Fisheries (Pty) Ltd |
| **LONGLINERS** | | | | | | | | | | |
| Benguella King | L | Namibia | 31.14 | 165 | 496 | 1964 | 25 | 25 | 2 | Benguella Sea Products (Pty) Ltd |
| Beta | L | Namibia | 21.78 | 107 | 495 | 1971 | 25 | 25 | 2 | Agatha Bay Fishing |
| Blomeha | L | Namibia | 29 | 164 | 800 | 1970 | 19 | 17 | 2 | Marco Fishing (Pty) Ltd |
| Boston Wayfarer | L | Namibia | 28 | 174 | 528 | 1963 | 13 | 13 | 1 | Hangana Seafood (Pty) Ltd |
| Cato | L | Namibia | 28 | 149 | 720 | 1962 | 25 | 25 | 1 | Swordfish Namibia (Pty) Ltd |
| Cheetah | L | Namibia | 29 | 109 | 335 | 1967 | 18 | 18 | 2 | Khoi-Khoi Enterprises |
| Christiaan Beyers | L | Namibia | 23 | 117 | 450 | 1965 | 25 | 23 | 1 | Marine Corporation Namibia (Pty) Ltd |
| Christine | L | Namibia | 21 | 100 | 346 | 1969 | 20 | 20 | 1 | Seaflower Whitefish Corporation Ltd |
| Elenga Bay | L | Namibia | 24 | 279 | 624 | 2001 | 26 | 24 | 1 | Marco Fishing (Pty) Ltd |
| Greenland | L | Namibia | 33 | 219 | 552 | 1965 | 20 | 17 | 4 | Booventure Fishing company (Pty) Ltd |
| Holmatindur | L | Namibia | 47 | 802 | 2000 | 1974 | 32 | 28 | 1 | Seaflower Whitefish Corp. |
| Leandra | L | Namibia | 19.91 | 100 | 388 | 1999 | 25 | 25 | 1 | Benguella Sea Products (Pty) Ltd |
| Palinurus | L | South Africa | 44 | 424 | 1035 | 1961 | 22 | 11 | 1 | Palinurus Fishing Vessel Company |

| Vessel | Type | Flag | Length (m) | GRT (tons) | Horse Power (kW) | Year Built | Total crew | Nam. Crew | Right fished | Owners |
|---|---|---|---|---|---|---|---|---|---|---|
| Penduka Bay | L | Namibia | 20 | 133 | 470 | 2002 | 25 | 23 | 1 | Marine Corporation Namibia (Pty) Ltd |
| Rolmar | L | Namibia | 43 | 447 | 950 | 1981 | 20 | 20 | 2 | Orchidea Fishing Co. |
| Spencer Bay | L | Namibia | 33 | 318 | 460 | 1981 | 26 | 24 | 1 | Namibia Seafood Industries (Pty) Ltd |
| Tangeni Bay | L | Namibia | 35 | 305 | 624 | 1980 | 30 | 27 | 1 | Tangeni Investments (Pty) Ltd |
| Vondeling | L | South Africa | 20 | 91 | 342 | 1963 | 25 | 25 | 1 | Vondeling Fishing |
| Voorbok | L | Namibia | 20 | 106 | 504 | 1968 | 25 | 25 | 1 | Namibian Fishermens Association (Pty) Ltd |
| West Coast Two | L | Namibia | 37 | 265 | 600 | 1973 | 30 | 28 | 1 | Epupa Fishing (Pty) Ltd |

The characteristics of the three types of vessels are summarised in Table 3.10. At first glance, it appears that size is a defining characteristic of the three types of vessels. However, closer analysis of these characteristics (e.g. vessel length, in Figure 3.7) shows that two distinct types of freezer vessels were present in the hake fishing fleet. There was group of smaller vessels (mean length = 32 ± 5 m), comparable in size to the smaller wetfish and longline vessels, and a group of larger freezer vessels, almost twice the size (mean length = 67 ± 11 m). The wetfish trawlers were a relatively diverse group, most ranging in length from 20 – 60 m. The longline vessels were more homogenous, with 80% of the vessels falling in the 15 – 35 m length range.

**Table 3.10.** A summary of some mean characteristics for the freezer trawlers, wetfish trawlers and longline vessels making up the Namibian demersal hake fleet in 2003 – 2004.

| Characteristic | Freezer Fleet | Wetfish Fleet | Longline Fleet |
|---|---|---|---|
| Length (m ± Std Dev) | 55 ± 20 | 40 ± 13 | 30 ± 9 |
| GRT (tons ± SD) | 1071 ± 759 | 529 ± 343 | 229 ± 173 |
| Horsepower (kW ± SD) | 1814 ± 771 | 1242 ± 567 | 636 ± 374 |
| Crew (± SD) | 43 ± 20 | 21 ± 10 | 24 ± 5 |
| Construction Year (± SD) | 1980 ± 10 | 1980 ± 11 | 1974 ± 14 |
| % Local Flag | 82% | 81% | 90% |

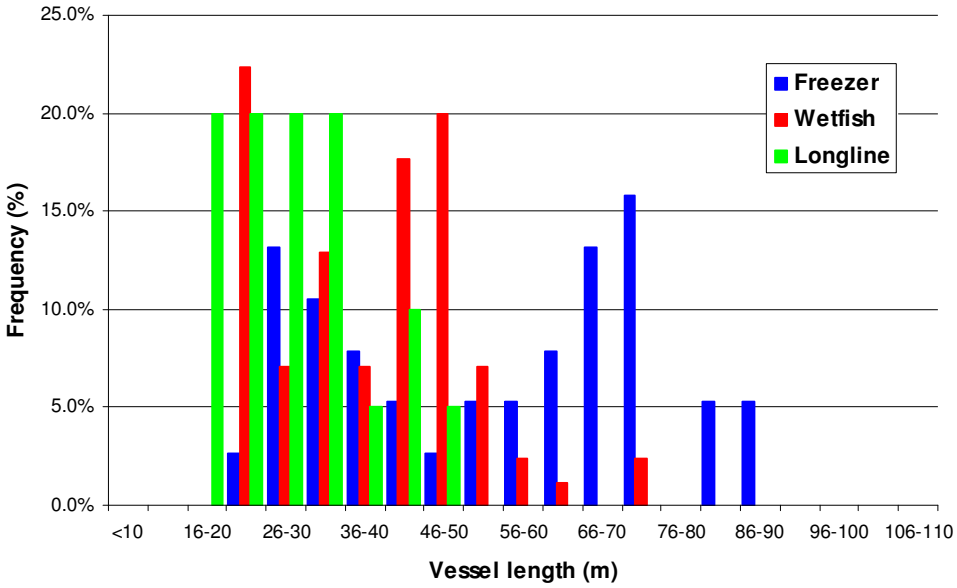


**Figure 3.7.** Length-frequency distribution of the freezer trawler, wetfish trawler and longline vessels in the Namibian demersal hake fishery in 2003 - 2004.

The process of Namibianisation is well advanced in the hake fleet. At least 81% of the trawlers and 90% of the longliners were registered as Namibian vessels (Table 3.9). Most (± 85%) of the approximately 3822 crewmembers employed on the vessels in 2003 – 2004 were Namibians (Table 3.11).

**Table 3.11.** Namibian employment on the three types of vessels in the demersal hake fishery in 2003 -2004.

| Vessel type | Total crew | Namibian crew | % Namibian crew |
|---|---|---|---|
| Freezer trawler | 1630 | 1356 | 83.2% |
| Wetfish trawler | 1727 | 1455 | 84.3% |
| Longliner | 465 | 423 | 91.0% |
| **Total** | **3822** | **3234** | **84.6%** |

## 3.5 Monk and sole demersal trawl

The Namibian monkfish fishing grounds stretch from the Orange River in the south to the Kunene River in the north. Fishing normally takes place at depths of 300 to 400 m. Two species are caught; *Lophius vomerinus* (which makes up about 94% of the catch) and *L. vaillanti* (~ 6%).

Until 1994, monkfish were caught off Namibia as part of the by-catch from the hake demersal trawl fishery. Although monkfish catches have been reported off Namibia since the 1960's, the first documented catch statistics date back to ICSEAF records, beginning in 1974.

Namibia-specific catches date back to 1981 (Maartens and Booth, 2001[4]) and catches were in the 1000 – 3000 ton per annum range until after independence. In 1991 catches began to rise, tripling to more than 9000 tons over the following three years. In 1994 the Namibian government decided to open a monkfish-directed fishery, with a hake by-catch. Provision for a sole directed fishery was included in the new monkfish legislation.

The monkfish fishery was initially effort-controlled, through power restrictions on the vessels (≤ 800 HP) and by limiting the number of vessels operating in the fishery. With the subsequent increase in boats targeting monkfish the catches increased to more than 12000 tones in 1994, with the hake demersal trawlers still taking as much as 30% of the total monkfish landed as by-catch.

Approximately 12000 tones of monkfish were landed on average between 1994 and 1997. Record landings of around 17000 tones where attained during 1998 with landings decreasing again to around 14000 in 1999. In 2001 the management procedure for monkfish was changed from an effort controlled fishery to a quota managed fishery. Initially the quota for the 2001 fishing season was set at 13000 tons but was adjusted to 12000 tons for the 2003 - 2004 and 2004 – 2005 fishing seasons. The TAC is a global one, and must be shared between the monkfish-directed and the hake-directed fisheries. Other control measures include a minimum trawling depth (XXX m) and minimum mesh size of 75 mm for the trawl net's cod-end. Even so, the majority of the fleet uses a mesh size of either 110 or 120mm.

### 3.5.1 Rights holders

There are nine rights holders in the demersal trawl monk and sole fishery (Table 3.12). The total quota allocated to the rights holders from the global monkfish TAC was about 11 400 tons (95%) for 2003 – 2004.

**Table 3.12**. The rights holders in the monk and sole demersal trawl fishery, and their monkfish allocations for the 2003 – 2004 fishing season.

| RIGHTS HOLDERS | DURATION OF RIGHT (Years) | MONKFISH ALLOCATION (Tons) |
|---|---|---|
| Belinda Fishing Namibia (Pty) Ltd | 15 | 416 |
| Frebeca Fishing (Pty) Ltd | 7 | 5351 |
| Helgoland Fishing Co. | 15 | 1100 |
| National Fishing Corporation Ltd (Fishcor) | 15 | 492 |
| Nexus Fishing Co (Pty) Ltd | 7 | 1278 |
| Overberg Fishing Co. (Pty) Ltd | 15 | 851 |
| Oviwana Fishing (Pty) Ltd | 10 | 722 |
| Twafika Fishing Enterprises (Pty) Ltd | 10 | 634 |
| Voorbok Fishing Co. (Pty) Ltd | 15 | 599 |
| **Total** | | **11,443** |

The quota allocations were not evenly distributed between participants, with Frebeca Fishing (Pty) Ltd receiving 47% of the total monkfish-directed allocation (Figure 3.8). Frebeca Fishing is a joint venture company consisting of Freddie's Fisheries (Pty) Ltd, Benguella Sea Products (Pty) Ltd, and Caroline Fishing (Pty) Ltd. There are two other joint venture rights holding entities. These are the Nexus Fishing Company (Cato Fishing (Pty) Ltd, Masilahi

[4] Maartens, L. and A.J. Booth. 2001. Quantifying commercial catch and effort of monkfish *Lophius vomerinus* and *L. vaillanti* off Namibia. In Payne, A.I.L. et al (Eds). A decade of Namibian Fisheries Science. *S. Afr. J. Mar. Sci.* **23**: 291 - 306

Fishing (Pty) Ltd and Black Rock Fishing (Pty) Ltd) and the Oviwana Fishing (Pty) Ltd (Ovitoto Fishing (Pty) Ltd, Oshiwana Fishing (Pty) Ltd and Atlantic Sea Products (Pty) Ltd) joint ventures.

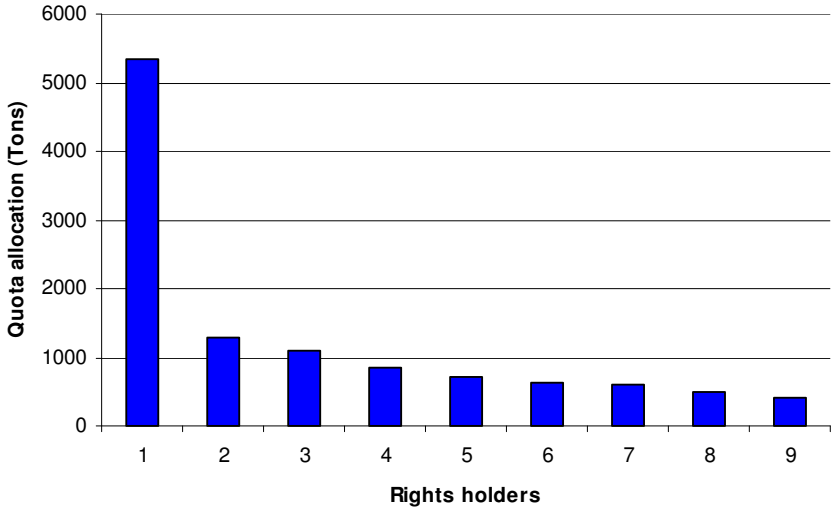


**Figure 3.8.** A comparison of rights holder quota allocations for monkfish in the Namibian monk and sole fishery, for the 2003 – 2004 season.

Almost all of the rights holding entities are based in Walvis Bay (78%); one rights holder's offices (the National Fishing Corporation) are located in Luderitz, and another in Windhoek (Oviwana Fishing). All of the catch from the monk and sole fishery is landed at Walvis Bay

### 3.5.2. Vessels

On average, 18 demersal trawlers were active in the monk and sole fishery at any one time during the 2003 – 2004 season. Most of the monkfish quota was caught by freezer trawlers (representing 89% of the fleet). The fish is processed (headed and gutted) and frozen at sea. However, the Frebeca joint venture used two wetfish trawlers, in addition to freezer trawlers, to catch its quota (Table 3.13). The catch from these vessels was processed by Calidu Fishing (Pty) Ltd, a multi-species (although primarily hake) processing factory. The Frebeca group also has a dedicated shore-based monkfish trimming and packing factory, called Benguella Sea Products. The frozen monkfish tails are exported to Europe.

**Table 3.13.** The Namibian monk and sole demersal trawl fishing fleet in 2003 - 2004.

| Vessel | Vessel type | Flag | Length (m) | GRT (tons) | Horse Power (kW) | Year Built | Total crew | Nam. crew | Rights fished | Owners |
|---|---|---|---|---|---|---|---|---|---|---|
| Aldubaran | Freezer | Namibia | 25 | 212 | 960 | 1985 | 16 | 14 | 1 | Hesko Fisheries (Pty) Ltd |
| Amaro | Wetfish | Namibia | 31 | 378 | 1000 | 1988 | 20 | 17 | 2 | Amaro Fishing (Pty) Ltd |
| Arthur M | Freezer | Namibia | 23 | 180 | 770 | 1988 | 17 | 17 | 1 | Nexus Fishing Co (Pty) Ltd |
| Atlantic Fisherman | Freezer | Namibia | 21 | 99 | 570 | 1965 | 18 | 17 | 1 | Belinda Fishing Namibia (Pty) Ltd |
| Benguella Truimph | Freezer | Namibia | 25 | 127 | 510 | 1956 | 10 | 10 | 1 | Bellevanti Fishing |

| Vessel | Vessel type | Flag | Length (m) | GRT (tons) | Horse Power (kW) | Year Built | Total crew | Nam. crew | Rights fished | Owners |
|---|---|---|---|---|---|---|---|---|---|---|
| Bianca | Freezer | Namibia | 31 | 256 | 1500 | 1973 | 12 | 12 | 1 | Benguella Sea Products (Pty) Ltd |
| Boston Jaguar | Freezer | Namibia | 28 | 174 | 528 | 1966 | 13 | 12 | 1 | Nexus Fishing Co (Pty) Ltd |
| Helgoland | Freezer | Namibia | 27 | 182 | 775 | 1988 | 16 | 15 | 1 | Helgoland Fishing Co. |
| Letitia | Freezer | Namibia | 26 | 160 | 750 | 1968 | 14 | 14 | 1 | Benguella Sea Products (Pty) Ltd |
| Lisinda | Freezer | Namibia | 30 | 187 | 800 | 1973 | 18 | 18 | 1 | Benguella Sea Products (Pty) Ltd |
| Loraine | Freezer | Namibia | 31 | 188 | 584 | 1967 | 12 | 12 | 1 | Benguella Sea Products (Pty) Ltd |
| Ludwani | Wetfish | Namibia | 36 | 350 | 1470 | 1983 | 18 | 18 | 1 | Caroline Fishing |
| Lynette | Freezer | Namibia | 30 | 277 | 1030 | 1973 | 18 | 18 | 1 | Benguella Sea Products (Pty) Ltd |
| Maracaibo | Freezer | Namibia | 27 | 270 | 750 | 1979 | 21 | 17 | 1 | Voorbok Fishing Co. (Pty) Ltd |
| Okombahe | Freezer | Namibia | 27 | 245 | 750 | 1978 | 20 | 17 | 2 | Overberg Fishing Co. (Pty) Ltd |
| Overberg Two | Freezer | Namibia | 33 | 486 | 867 | 1994 | 28 | 23 | 1 | Overberg Fishing Co. (Pty) Ltd |
| Oviwana | Freezer | Namibia | 23 | 182 | 775 | 1988 | 16 | 16 | 1 | Oviwana Fishing (Pty) Ltd |
| Twafika | Freezer | Namibia | 38 | 486 | 1020 | 1990 | 17 | 16 | 2 | Twafika Fishing Enterprises (Pty) Ltd |

The demersal trawl vessels targeting monkfish were significantly smaller than the hake-directed demersal trawlers. The monkfish freezer vessels were nearly half the length of their hake counterparts. The majority (61%) of the monkfish-directed trawlers had a horsepower rating of 800 kW or less, dating back to the time when the fishery was Effort-controlled (Table 3.14).

**Table 3.14.** A summary of some mean characteristics for the demersal trawl vessels making up the Namibian monk and sole fishing fleet in 2003 – 2004.

| Characteristic | Total Fleet | <801 kW Horse Power vessels | >800 kW Horse Power vessels |
|---|---|---|---|
| Length (m ± Std Dev) | 29 ± 5 | 27 ± 4 | 33 ± 5 |
| GRT (tons ± SD) | 247 ± 113 | 182 ± 48 | 350 ± 109 |
| Horsepower (kW ± SD) | 857 ± 279 | 688 ± 114 | 1121 ± 255 |
| Crew (± SD) | 17 ± 5 | 16 ± 4 | 19 ± 5 |
| Construction Year (± SD) | 1978 ± 11 | 1975 ± 11 | 1984 ± 9 |
| % Local Flag | 100% | 100% | 100% |
| Number of vessels | 18 | 11 | 7 |

The number of vessel-based employees in the monk and sole fishery in 2003 -2004 was approximately 305 crewmembers, of which 93% were Namibian nationals. Total employment (land and vessel-based) resulting from the monk and sole fishery alone is probably in the region of 350 people, but this is difficult to estimate due to the cross-linkages with employment in the hake fishery.

## 3.6 Cape (West Coast) rock lobster

The Namibian rock lobster industry began in the early 1920's, when the first factories were established at Lüderitz. Commercial catches were initially recorded in 1958, when the first limitation on rock lobster fishing was applied under ICSEAF management. By this time, about 4040 tons of rock lobster was being harvested per year. By the 1960's the figure had risen to 8860 tons per year. Exploitation at this level was not sustainable and the catch began to drop off considerably. The situation was allegedly compounded in the mid 1970's by adverse environmental conditions which had an effect on lobster growth and recruitment, leading to a further decline in catches.

Catches continued to drop into the 1980's. After independence, the Namibian government set a generous TAC of 1200 tons for rock lobster (in 1991), but only about 375 tons were caught. The following year the TAC was drastically cut to 100 tons. Over the next 10 years the TAC was gradually increased until 400 tons was reached in 2001, as the stocks recovered. Nevertheless, the rights holders have struggled to fill their quotas. The rock lobsters have not recovered as quickly as anticipated; In the White Paper of 1991[5] the Ministry expected the stock to reach an annual TAC of 500 tons over a period of five years and 2000 – 3000 tons annually in the long term. The rock lobster TAC for the 2003 – 2004 fishing season was 405 tons.

Apart from the TAC allocations, other management measures include effort restrictions, closed areas and closed seasons.

### 3.6.1 Rights holders

The rock lobster TAC is apportioned between 21 rights holders. Quota allocations for the 2003 – 2004 season are recorded in Table 3.15. Three entities (14% of the rights holders) had 48% of the allotted TAC for the year (Figure 3.9). These entities were the Seaflower Lobster Corporation, Atushe Lobster Company (Pty) Ltd and Aloe Fishing Company (Pty) Ltd. Seaflower is the largest lobster factory in Luderitz, processing some 66% of the entire annual catch. It is also one of the original lobster operations in Luderitz, and is a subsidiary of the National Fishing Corporation, a government owned entity. Atushe and Aloe are joint ventures consisting of four companies each. One of the companies making up the Atushe joint venture is Lalandii, also one of the original lobster operations in Namibia, and the only other lobster factory in Luderitz in 2004[6], processing 33% of the annual catch.

**Table 3.15**. The rights holders in the Namibian west coast rock lobster fishery, and their quota allocations for 2003 - 2004.

| RIGHTS HOLDERS | DURATION OF RIGHT (Years) | ROCK LOBSTER ALLOCATION (KG) |
|---|---|---|
| Aloe Fishing Co. (Pty) Ltd | 10 | 40000 |
| Andrews, S | 15 | 12000 |
| Atushe Lobster Co. (Pty) Ltd | 15 | 65000 |
| Blohema Fishing (Pty) Ltd | 15 | 12000 |
| Epoko Fishing Co. (Pty) Ltd | 15 | 12000 |

[5] The White Paper on Fisheries Policies. 1991. "Towards the Responsible Development of the Fishing industry in Namibia."

[6] Lalandii has subsequently gone into liquidation, and has been bought out by the NovaNam group; the factory is now (2006) run by Pomona Lobster Packers (Pty) Ltd, a joint venture company made up of nine rock lobster rights holders.

| RIGHTS HOLDERS | DURATION OF RIGHT (Years) | ROCK LOBSTER ALLOCATION (KG) |
|---|---|---|
| Golden Horizon Fishing JV | 15 | 12000 |
| Kakoro, H | 15 | 12000 |
| Lawrence, JA | 15 | 12000 |
| Luderitz Pioneers (Pty) Ltd | 15 | 10000 |
| Martins Den Fisheries | 15 | 12000 |
| Omulonga Fishing Co. (Pty) Ltd | 15 | 12000 |
| P.R.I.M. Fishing | 15 | 12000 |
| Plaatjie, A | 15 | 12000 |
| R & FO Fishing (Pty) Ltd | 15 | 12000 |
| R.P.M.G. Fishing | 15 | 12000 |
| Schoombe, D | 15 | 12000 |
| Schroeter, JA | 15 | 12000 |
| Seaflower Lobster Corporation Ltd | 15 | 88000 |
| Shoremillkol (Pty) Ltd | 15 | 10000 |
| Victor, D | 15 | 12000 |
| Von Ast, RI | 15 | 12000 |
| **Total** | | **405,000** |

The rest of the rights holders shared similar quota allocations. Besides Aloe and Atushe, there were three other joint venture entities holding rights in the fishery. They are listed in Table 3.16.

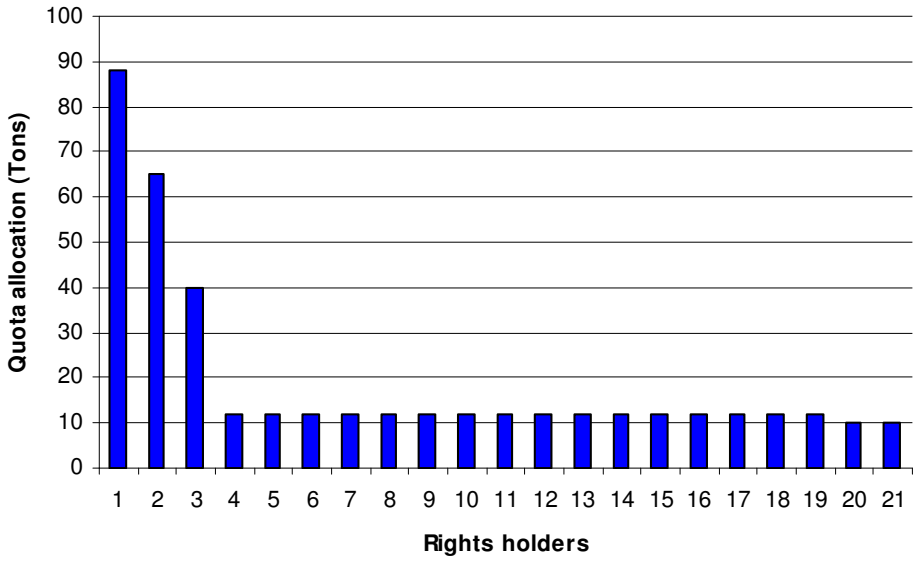


**Figure 3.9.** A comparison of rights holder quota allocations for Namibian rock lobster in the 2003 – 2004 season.

**Table 3.16.** Joint venture entities holding west coast rock lobster fishing rights, and their associated companies (Elago, 2004[7]).

| Rights holder | Joint Venture Participants |
|---|---|
| Aloe Fishing | Seafood distributors |
| | Kosis Fishing |
| | Sea Products |
| | Seagull Fishing |
| Atushe Lobster Company | Lalandii |
| | Jeselto |
| | Bogenfels |
| | Omungua |
| Golden Horizons | Season Fisheries |
| | New Generation |
| | New Horizon Fishing |
| R & F.O. Fishing | Rasco Fishing |
| | F.O. Fishing |
| Shoremillkol (Pty)Ltd | Kolmanskop |
| | Millenium Fishing |
| | Shoreline Fishing |

Almost all of the west rock lobster rights are long-term (15 years). Only Aloe Fishing Company (Pty) Ltd was awarded a medium term (10 year) right.

All of the Namibian rock lobster rights holding entities were located in Luderitz, from which the lobster fleet operates. Approximately 175 people derived shore-based employment from the two lobster factories in Luderitz. For the most part, whole, raw or cooked lobsters are exported frozen from the factories to Japan. Logistical issues limit the type of product that can be exported from Luderitz; for example, the ability to export the animals live to international markets would substantially increase the value of the fishery.

### 3.6.2 Vessels

Like the South African rock lobster fishery, the Namibian rock lobster resource is targeted using rigid traps deployed from trap-boats, as well as hoop-nets from dinghies. However, unlike South Africa, where the fishery is divided into an inshore (hoop-net) and offshore (trap) sub-sector, these activities are not mutually exclusive in Namibia. Although the vessels operate from Luderitz, the fishing grounds are some distance away. There are three fishing areas, based on their location to Luderitz; south, which is about 12 hours steaming from port, central (± 3 hours) and north (4 – 7 hours). The trap-boats carry (or more commonly, tow) 2 – 4 dinghies with them to the fishing grounds. The traps are deployed offshore, and then the dinghies are towed inshore, where they deploy their hoop-nets. The Namibian rock lobster trap-boat fishing fleet for the 2003 – 2004 season is listed in Table 3.17. A summary of the fleet is presented in Table 3.18. The dinghies are not included in the Table.

[7] Elago, P.N. 2004. Duration of Fishing Rights and Investment: An Empirical Study of Investment in Namibian Fisheries. Directorate of Policy, Planning and Economics, Ministry of Fisheries and Marine Resources, Windhoek. pp 57

**Table 3.17.** The Namibian rock lobster trap-boat fishing fleet in 2003 - 2004.

| Vessel | Flag | Length (m) | GRT (tons) | Horse Power (kW) | Year Built | Total crew | Namibian crew | Rights fished | Owners |
|---|---|---|---|---|---|---|---|---|---|
| Archer | South Africa | 15 | 42 | 145 | 1952 | 16 | 16 | 1 | Ferro Fishing (Pty) Ltd |
| Arctic | South Africa | 40 | 614 | 1343 | 1978 | 36 | 36 | 1 | Eyethu Fishing (Pty) Ltd |
| Bluefish | Namibia | 19 | 66 | 178 | 1986 | 10 | 10 | 1 | Seaflower Lobster Corporation Ltd |
| Capt. Hendrick Witbooi | Namibia | 14 | 25 | | 2001 | 10 | 10 | 1 | Not recorded |
| Eric John | Namibia | 15 | 41 | 150 | 1953 | 12 | 12 | 1 | Seafood Distributors (Pty) Ltd |
| Ghoerieman | Namibia | 14 | 20 | 115 | 1979 | 10 | 10 | 3 | Seafood Distributors (Pty) Ltd |
| Goldfish | Namibia | 19 | 66 | 176 | 1983 | 11 | 11 | 1 | Seaflower Lobster Corporation Ltd |
| Helen | Namibia | 19 | 75 | 183 | 1961 | 11 | 11 | 3 | Seaflower Lobster Corporation Ltd |
| Heroes Day | Namibia | 13 | 32 | 180 | 2003 | 12 | 12 | 1 | P.R.I.M. Fishing |
| Kwaggaskop | Namibia | 15 | 42 | 137 | 1955 | 3 | 3 | 1 | Shoreline Fishing (Pty) Ltd |
| Lady Mbako | Namibia | 15 | 32 | 215 | 2002 | 12 | 12 | 3 | Not recorded |
| Lil Meha | Namibia | 19 | 25 | 240 | 2003 | 12 | 12 | 1 | Luderitz Lobster Consortium |
| Marlene | Namibia | 19 | 64 | 335 | 1962 | 10 | 10 | 1 | Lalandii (Pty) Ltd |
| Moira | Namibia | 18 | 60 | 187 | 1964 | 11 | 11 | 1 | Seaflower Lobster Corporation Ltd |
| Moonfish | Namibia | 17 | 50 | 239 | 1965 | 3 | 3 | 1 | Seaflower Lobster Corporation Ltd |
| Oceana Marlin | Namibia | 19 | 66 | 178 | 1984 | 11 | 11 | 1 | Seaflower Lobster Corporation Ltd |
| Patience | Namibia | 13 | 12 | 90 | 1999 | 12 | 12 | 2 | Not recorded |
| Skipper Hansen | Namibia | 21 | 77 | 299 | 1964 | 10 | 8 | 2 | Prestige Fishing (Pty) Ltd |
| Sonia | Namibia | 18 | 60 | 335 | 1964 | 12 | 12 | 1 | Lalandii (Pty) Ltd |
| South West Albatross | Namibia | 18 | 69 | 180 | 1963 | 11 | 11 | 3 | Seaflower Lobster Corporation Ltd |
| South West Fulmar | Namibia | 18 | 64 | 174 | 1962 | 2 | 2 | 3 | Plaatjie, A |
| South West Kingfisher | Namibia | 19 | 64 | 178 | 1962 | 11 | 11 | 2 | Seaflower Lobster Corporation Ltd |
| South West Malagas | Namibia | 19 | 64 | 174 | 1962 | 2 | 2 | 3 | Luderitz Lobster Consortium |
| South West Penguin | Namibia | 18 | 96 | 170 | 1963 | 11 | 11 | 1 | Seaflower Lobster Corporation Ltd |
| South West Plover | Namibia | 19 | 65 | 180 | 1956 | 12 | 12 | 1 | Luderitz Lobster Consortium |
| South West Sea Hawk | South Africa | 53 | 446 | 330 | 1953 | 8 | 8 | 1 | Smith, GW |
| South West Seafarer | Namibia | 15 | 38 | 195 | 1951 | 10 | 10 | 1 | Schroeter, JA |
| South West Seagull | Namibia | 19 | 59 | 178 | 1964 | 3 | 3 | 1 | Seaflower Lobster Corporation Ltd |
| Southern Horizon | South Africa | 14 | | 140 | 1990 | 10 | 10 | 1 | Premier Fishing SA (Pty) Ltd |
| Therona | Namibia | 14 | 37 | 140 | 1946 | 12 | 12 | 1 | Fourie, SJ |
| Tina | South Africa | 17 | 53 | 215 | 1980 | 15 | 15 | 1 | Joenardo Fishing CC |

| Vessel | Flag | Length (m) | GRT (tons) | Horse Power (kW) | Year Built | Total crew | Namibian crew | Rights fished | Owners |
|---|---|---|---|---|---|---|---|---|---|
| Tina Two | Namibia | 6 | 5 | 170 | 1990 | 4 | 4 | 1 | Not recorded |
| Tomren | South Africa | 15 | 29 | | 1946 | 13 | 12 | 1 | Ferreira, JP |
| Weskus Eight | Namibia | 20 | 67 | 228 | 1968 | 12 | 12 | 1 | Lalandii (Pty) Ltd |
| Weskus Five / Koichab | Namibia | 20 | 65 | 228 | 1967 | 12 | 11 | 1 | Lalandii (Pty) Ltd |
| Weskus Four/ Konkiep | Namibia | 20 | 66 | 228 | 1965 | 12 | 12 | 1 | Lalandii (Pty) Ltd |
| Weskus Seven | Namibia | 19 | 67 | 228 | 1968 | 12 | 11 | 1 | Lalandii (Pty) Ltd |
| Weskus Six | Namibia | 20 | 66 | 228 | 1967 | 12 | 12 | 1 | Lalandii (Pty) Ltd |
| Zanzibar | Namibia | 19 | 68 | 295 | 1960 | 4 | 4 | 1 | Calo Fishing Co (Pty) Ltd |

**Table 3.18.** A summary of some mean characteristics for vessels making up the Namibian rock lobster trap boat fishing fleet.

| Characteristic | Total Fleet | Namibian vessels only |
|---|---|---|
| Length (m ± Std Dev) | 19 ± 8 | 18 + 4 |
| GRT (tons ± SD) | 79 ± 114 | 54 + 21 |
| Horsepower (kW ± SD) | 231 ± 200 | 201 + 57 |
| Crew (± SD) | 11 ± 6 | 10 + 4 |
| Construction Year (± SD) | 1971 ± 17 | 1971 + 17 |
| % Local Flag | 85% | 100% |

The summary presented in Table 3.18 is skewed by the presence of two large South African vessels (Artic = 40 m; South West Seahawk = 53 m) in the fishery. Removing these vessels presents a more accurate picture of an average-sized Namibian trap boat. Most of the vessels were between 13 – 20 m.

The total number of crew on the vessels active in the rock lobster fishery during the 2003 – 2004 fishing season was estimated to be about 440 members. Almost all of the crewmembers were Namibian (± 99%).

## 3.7 Deep-sea red crab

The red crab (*Chaceon maritae*) is a deep sea species found on the continental shelf off Namibia, from north of Luderitz all the way up the west coast of Africa to Cote d'Ivoire. The Namibian fishing grounds are located between latitudes 17°15' to 21°00' South, in waters from 500 to 800 m deep.

The deep-sea red crab fishery first started in Namibian waters in 1973, when three Japanese vessels began to target the resource. Their success attracted other operators, and by the end of 1974 the fleet had grown to 17 vessels. Catches peaked at approximately 10 000 tons in 1983, but this level of exploitation was unsustainable, and the annual landings declined to 3000 tons in 1991. Management of the species by Total Allowable Catch limitations was introduced in 1989, but the initial TACs of 6000 tons were unrealistically high. Catches remained below 3000 tons per annum, and the TAC was adjusted downwards to 2000 tons

in 1997. Although there have been some minor fluctuations, the TAC has remained at this level to date (2005).

The TAC is based on length-based cohort analysis from catches and biomass surveys and growth rates established by tag, release and recapture. The deep-sea red crab fishery is also managed by the use of minimum size limits (≥ 85 mm carapace width) and the exclusion of fishing at depths shallower than 400 m. The stock is shared with Angola and Namibia, who have initiated joint research activities and stock assessments. The females in particular migrate between the Namibian and Angolan fishing grounds, probably to spawn. Although some trawling of the species occurs in Angola, the Namibian stock may only be fished using traps. A rights holder who catches red crab in both territorial waters has noted that the Namibian crabs are on average larger than the Angolan crabs, indicating that the Angolan stock is overexploited; probably through illegal fishing.

### 3.7.1 Rights holders

The Namibian deep-sea red crab fishery was developed, and has since been exploited by Japanese fishing companies from 1973. A local company entered the fishery with two vessels in 1976, but withdrew in 1979. After independence, when Namibia's current system of fishing rights was instituted, the two traditional Japanese companies (AMSTAI and Oshimada Fishing) took on local shareholders and were awarded red crab quota under the new dispensation. Aquamarine Fishing, a Namibian company, was also awarded quota, in 1993 (Table 3.19). Of the three rights holders active in the fishery in 2003 -2004, two had 10-year rights and one had a seven-year fishing right.

**Table 3.19**. The rights holders in the red crab trap fishery, and their quota allocations for the 2003 – 2004 fishing season.

| RIGHTS HOLDER | RED CRAB ALLOCATION (Tons) |
|---|---|
| AMSTAI (Pty) Ltd | 762 |
| Aquamarine Fishing of Namibia | 571 |
| Oshimada Fishing (Pty) Ltd | 667 |
| **Total** | **2,000** |

Two of the rights holding entities were based in Windhoek; the third was located in Walvis Bay. There are no shore-based processing operations associated with the fishery, as all processing is carried out at sea, on the large factory ships. Products include claws and sections from the larger crabs, legs from medium sized crabs, and crab flakes from the smaller crabs. All the products are exported frozen to Japan.

### 3.7.2. Vessels

The red crab is targeted by large vessels using Japanese-style (beehive) baited traps attached to demersal long-lines. About 400 - 500 traps are attached per line, and they are deployed for between 24 - 120 hours per set. The size of the fleet has decreased over the years, from a high of 17 vessels in the 1970's, five in the 1980's, three in the 1990's to only two actively fishing vessels in the 2003 – 2004 season (Table 3.20).

**Table 3.20.** The Namibian red crab trap fishing fleet in 2003 - 2004.

| Vessel | Flag | Length (m) | GRT (tons) | Horse Power (kW) | Year Built | Total crew | Namibian crew | Rights fished | Owners |
|---|---|---|---|---|---|---|---|---|---|
| Crab Queen One | Namibia | 49 | 619 | 1000 | 1989 | 34 | 25 | 2 | Aquamarine Fishing (Taiyo Namibia (Pty) Ltd) |
| Fukuzen Maru No. 2 | Namibia | 56 | 443 | 1176 | 1976 | 8 | 8 | 1 | Luderitz Lobster Consortium |

Both vessels were of Japanese origin, sailing under the Namibian flag. They operated out of Walvis Bay. Almost 79% of the 42 sea-going crewmembers were Namibian nationals.

## 3.8 Large pelagics

Of all the commercial fisheries in Namibia, the large pelagic fishing industry is the most difficult to summarise. It is a relatively new, multi-species fishery, in which tunas, swordfish and pelagic sharks are targeted, by pelagic longliners and pole & line vessels (also called bait-boats). The Namibian-controlled large pelagic fishery only started in 1991, after independence, although foreign longliners had been catching tuna in Namibian waters under South African licence for many years prior. The fishery has been evolving since its inception. Initially, tuna was the target species (mainly the southern albacore, *Thunnus alalunga*) using pole & line vessels, a method developed by Portuguese tuna fishermen who had been active in the region prior to independence. During the 1990's a combined fleet of about 30 local and foreign-owned pole & line vessels caught between 1000 – 3500 tons of tuna per annum using this method.

In 1993, a new sub-sector of the tuna fishery began to take shape, where foreign pelagic longliners started targeting big-eye tuna (*Thunnus obesus*) in Namibian waters, for the high-value sashimi market. The catches for this component of the tuna fishery were also highly variable, ranging from 15 - 750 tons per year (Table 3.21).

The Namibian tuna fishery developed into the "large pelagic" fishery when swordfish and pelagic sharks were included. The swordfish component developed from an experimental fishery that was initiated in 1996, using pelagic longliners. Although initial catches were poor (± 50 tons over three years), they increased to 730 tons in 1999. In 2003, swordfish catches dropped to about 190 tons for the year (Table 3.22).

**Table 3.21.** Annual catches for the various groups of fish making up the large pelagic fishery in Namibia, since independence (from Fishbase- South East Atlantic Capture Fisheries, FAO 2005).

| Species | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Albacore | - | 2,241 | 3,524 | 3,075 | 1,861 | 1,521 | 1,199 | 1,429 | 1,162 | 2,418 | 3,419 | 2,962 |
| Big-eye tuna | - | - | - | 751 | 352 | 63 | 46 | 16 | 423 | 589 | 640 | 312 |
| Sharks | - | - | - | - | - | - | - | - | - | - | - | 794 |
| Swordfish | - | - | - | - | - | - | - | - | 730 | 469 | 751 | 744 |

The fourth component of the Namibian large pelagic fishery is that of the pelagic sharks. Blue and mako sharks are targeted in the main, using pelagic longliners. From Table 3.21 it is clear that recently sharks have become the largest component of the Namibian pelagic longliner catches; almost double the amount of the tuna and swordfish catches combined.

**Table 3.22.** A comparison of total catch for the fishes making up the large pelagic fishery, by longline and pole and line vessels, in 2003 (from NFI, 2006[8]).

| Component | Longline catches (tons) | Pole and line catches (tons) |
|---|---|---|
| Tuna | 982 | 2,389 |
| Sharks | 1,853 | 682 |
| Swordfish | 178 | 13 |
| Other | 152 | 109 |

During the 2004 – 2005 season, the pelagic longline fleet targeted mainly sharks and swordfish (± 40% each of the total catch), with yellow fin tuna, big-eye tuna and marlin making up the rest of the catch. The pole & line fleet catch was made up almost entirely of albacore (long-fin tuna), which is mainly caught in the vicinity of the Tripp Seamount, with peak catches in March and April.

Namibia has been a full member of the International Convention for the Conservation of Atlantic Tuna (ICCAT) since 1999, and all participants in the large pelagic fishery are required to abide by ICCAT regulations. Approximately 4000 tons of tuna were allocated to Namibia from the global tuna TAC for the south Atlantic region. In 2002, the Namibian government managed to secure an ICCAT country quota of 890 tons for swordfish, escalating to 1140 tons in 2006.

Aside from the ICCAT country quota allocations for tuna and swordfish, other management strategies in the Namibian large pelagic fishery include an ICCAT catch documentation scheme, gear restrictions (pelagic longline and pole & line fishing only) and effort limitation through controlling longliner vessel access to the fishery. In addition, pole & line vessels must add value to their catch through onshore processing. While longline caught tuna is exported fresh, pole & line caught tuna is used for canning. Canning took place in Walvis Bay between 1993 and 1997 but was discontinued, and is now canned abroad.

### 3.8.1 Rights holders

All the entities that hold fishing rights for large pelagic fishes in Namibia are listed in Table 3.23. The MFMR rights register lists the rights holders as large pelagic, longline and pole & line. This is reflected in the Table. The majority of the rights holders were based in Walvis Bay (76%); the rest are in Luderitz 24%) during the 2004 season. The duration of the large pelagic fishing rights are summarised in Figure 3.10.

**Table 3.23**. The rights holders in the large pelagic fishery, and their fishing methods.

| Right holder name | Longline | Pole & line |
|---|---|---|
| African American Trading Co. (Pty) Ltd | ✔ | |
| Agatha Bay Fishing | ✔ | |
| Blohema Fishing (Pty) Ltd | ✔ | ✔ |
| Epupa Fishing (Pty) Ltd | ✔ | |

[8] Namibian Fishing Industry website, www.nfi.com.na/recent_stats.html

| Right holder name | Longline | Pole & line |
|---|---|---|
| Etosha/Oontangu Joint Venture | ✔ | |
| Inter Namibia Enterprises | ✔ | ✔ |
| Khoi-Khoi Enterprises | ✔ | |
| Khoisan Fishing CC | ✔ | |
| Marine Corporation Namibia (Pty) Ltd | ✔ | |
| Mercury Tuna Corporation | ✔ | |
| Namibia Marine Products (Pty) Ltd | ✔ | |
| Namibia Seafood Industries (Pty) Ltd | ✔ | ✔ |
| Namibia Seafood Industries Sashimi (Pty) Ltd | ✔ | |
| Namibian Tuna Fishing (Pty) Ltd | ✔ | ✔ |
| National Fishing Corporation Ltd (Fishcor) | ✔ | |
| National Pelagic Industries (Pty) Ltd | ✔ | |
| Ondjaba Fisheries | ✔ | |
| Oshazinga GRD Joint Venture | ✔ | |
| Possessions Fishing | ✔ | |
| Prestige Fishing Co | ✔ | ✔ |
| Smokeries Fishing | ✔ | ✔ |

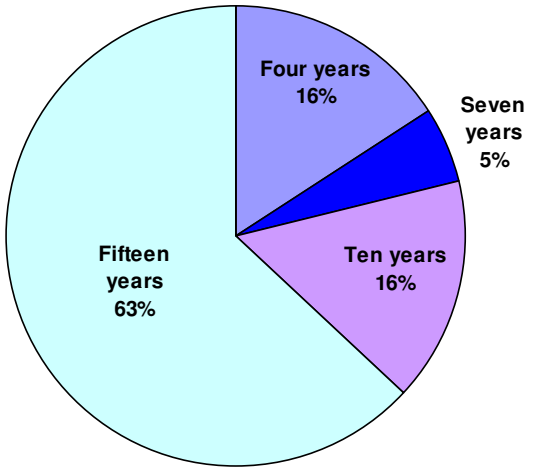


**Figure 3.10.** The percentage of large pelagic rights holders with four, seven, ten and fifteen-year fishing rights, during the 2003 – 2004 fishing season.

### 3.8.2 Vessels

The longline and pole & line vessels that were linked to the Namibian large pelagic rights holders are listed in Table 3.24. Recent trends in the large pelagic industry have shown a move away from the pole & line vessels by Namibian large pelagic rights holders, to the more economical pelagic longliners. The pole & line vessels operating in Namibian waters are mostly foreign (some 20 vessels, mainly South African) fishing under some form of catch agreement with the local rights holders. Table 3.23 does not include the foreign pole & line tuna fishing fleet.

**Table 3.24.** The Namibian large pelagic longline and pole & line fishing fleet as registered with the MFMR in 2003 - 2004.

| Vessel | Vessel-type | Flag | Length (m) | GRT (tons) | Horse Power (kW) | Year Built | Total crew | Nam. crew | Rights fished | Owners |
|---|---|---|---|---|---|---|---|---|---|---|
| Agriao | Longline | South Africa | 24 | 171 | 825 | 1999 | 20 | 10 | 1 | Not recorded |
| Atlantic Challenger | Longline | Namibia | 21 | 91 | 239 | 1966 | 25 | 25 | 1 | Seaflower Lobster Corp. Ltd |
| Baltik | Longline | Namibia | 29 | 137 | 800 | 1964 | 20 | 20 | 1 | Not recorded |
| Blue Dolphin | Longline | South Africa | 20 | 91 | 394 | 1966 | 20 | 20 | 1 | MJM Casula Fishing CC |
| Byr | Longline | Namibia | 35 | 465 | 720 | 1972 | 17 | 11 | 1 | Not recorded |
| Carrizo Dous | Longline | Spain | 26 | 92 | 286 | 1999 | 16 | 13 | 1 | Marcelino Martinez Otero |
| Cecil G White | Longline | Namibia | 25 | 115 | 454 | 1950 | 14 | 11 | 1 | Smokeries Fishing |
| Daan Viljoen | Longline | South Africa | 21 | 61 | 228 | 1960 | 17 | 17 | 1 | Vieira & Sons Fishing CC |
| Endeavour | Longline | South Africa | 16 | 66 | 240 | 1985 | 25 | --- | 1 | Knobel Brian |
| Hesko | Longline | Namibia | 25 | 204 | 574 | 1975 | 17 | 17 | 1 | African American Trading Co. (Pty) Ltd |
| Intersea Twenty-One | Longline | Namibia | 20 | 127 | 320 | 1976 | 18 | 4 | 1 | New Mexico CC |
| Itxaropena Berria / Lucas | Longline | Namibia | 20 | 146 | 480 | 1993 | 16 | 11 | 1 | Mark Twenty One (Pty) Ltd |
| Jui Hsuan Three | Longline | Taiwan | 33 | 228 | 600 | 1981 | 22 | --- | 1 | Not recorded |
| Kentucky | Longline | South Africa | 21 | 80 | 317 | 1959 | 20 | 20 | 1 | Kentucky Fishing CC |
| Liper | Longline | Namibia | 26 | 149 | 575 | 1993 | 25 | 22 | 1 | Namibian Tuna Fishing (Pty) Ltd |
| Mal Amanhado | Longline | MAR | 29 | 171 | 820 | 1998 | 21 | 11 | 1 | De Gama, Jose Antonio Quintal |
| Marino Primero | Longline | Namibia | 20 | 135 | 240 | 1991 | 24 | 23 | 1 | Helgoland Fishing Co. |
| Mito Maru Sixty-Five | Longline | Japan | 48 | 379 | 950 | 1990 | 22 | --- | 1 | Yokota Chiro |
| Oceana Amythest | Longline | South Africa | 20 | 92 | 300 | 1969 | 18 | 18 | 1 | Starlight Fishing CC |
| Oceana Rocket | Longline | South Africa | 20 | 84 | 300 | 1959 | 20 | 20 | 1 | Fernandes Joao Manuel Da Costa |
| Oceana Topaz | Longline | South Africa | 20 | 86 | | 1967 | 20 | 20 | 1 | Douglas H Fishing CC |
| Oubaas Fritz | Longline | South Africa | 23 | 92 | 350 | 1960 | 16 | 16 | 1 | Mictel Fishing CC |
| Pakamani | Longline | South Africa | 21 | 117 | 375 | 1975 | 25 | 25 | 1 | Pakamani Fishing (Pty) Ltd |
| Petrie – Hein | Longline | South Africa | 20 | 99 | 335 | 2001 | 22 | 3 | 1 | Pyper PJ |
| Principe | Longline | Namibia | 25 | 174 | 700 | 1983 | 18 | 16 | 1 | Khoisan Fishing CC |
| Radiant Star | Longline | South Africa | 15 | 26 | 172 | 1974 | 15 | 15 | 1 | Radiant Fishing CC |

| Vessel | Vessel-type | Flag | Length (m) | GRT (tons) | Horse Power (kW) | Year Built | Total crew | Nam. crew | Rights fished | Owners |
|---|---|---|---|---|---|---|---|---|---|---|
| Rijger | Longline | South Africa | 19 | 59 | 228 | 1957 | 20 | 20 | 1 | De Sousa Fishing |
| Sandalene | Longline | South Africa | --- | 79 | --- | 1963 | 16 | 4 | 1 | Estrela Domar Fishing CC |
| Sandveld One | Longline | South Africa | 19 | 72 | 340 | 1988 | 6 | 3 | 1 | Palzet Visserye CC |
| Sandveld Three | Longline | South Africa | 19 | 72 | 220 | 1958 | 18 | 18 | 1 | Palzet Visserye CC |
| Sao Miguel | Longline | Namibia | 22 | 121 | 495 | 1971 | 12 | 10 | 2 | Marco Fishing (Pty) Ltd |
| Silver Marlin | Longline | South Africa | 21 | 98 | 250 | 1964 | 20 | 20 | 1 | South Rock Fishing CC |
| Southern Cross | Longline | South Africa | 28 | 225 | --- | 1964 | 20 | 20 | 1 | South West Trawlers CC |
| Thor | Longline | United Kingdom | 31 | 194 | 800 | 2001 | 13 | 9 | 1 | Venesba Fishing |
| West Coast One | Longline | Namibia | 22 | 98 | 1323 | 1982 | 26 | 21 | 2 | Epupa Fishing (Pty) Ltd |
| Kory Maru Eighteen | Pole & line | Japan | 56 | 696 | 1000 | 1984 | 23 | --- | 1 | Not recorded |
| Kory Maru Twenty | Pole & line | Japan | 49 | 379 | 1500 | 2000 | 24 | --- | 1 | Not recorded |
| Nelita C | Pole & line | Namibia | 19 | 66 | 228 | 1965 | 21 | 20 | 1 | Blohema Fishing (Pty) Ltd |
| Santa Monica | Pole & line | South Africa | 29 | 225 | 550 | 1964 | 22 | 22 | 1 | SA Tuna Export. (Pty) Ltd |
| Starfish | Pole & line | South Africa | 23 | 85 | 305 | 1963 | 25 | 25 | 1 | Gomes Horacio De Nascimento Da Silva |
| Sun Tai Three | Pole & line | Philippines | 55 | 619 | 1000 | 1984 | 27 | --- | 2 | Not recorded |

The Namibian longline and pole & line vessels are compared in Table 3.25. It is clear from Figure 3.11 that the pole & line fleet consisted of two distinct groups during the 2003 – 2004 season. The first group were large Asian flagged vessels of approximately 50 m in length; the second group consisted of smaller, southern African flagged vessels ranging in length from 19 – 29 m.

Most (95%) of the pelagic longline vessels were between 15 – 35 m in length. The one large (> 45 m) longline vessel operating in the fishery was a Japanese vessel. Total vessel-based employment for the longline fleet was about 805 crewmembers, of which 70% were Namibian citizens. It is more difficult to estimate the total number of pole & line crewmembers, without the details of the South African based vessels in the fishery, and their Namibian crew component. For the Namibian based vessels, there were approximately 140 crewmembers, of which 42% were Namibian nationals. Assuming that the South African fleet consisted of vessels similar to the southern African flagged pole & line vessels in Table 3.24 (average crew = 22 members), there must have been at least an additional 400 crewmembers employed in the large pelagic fishery.

**Table 3.25.** A summary of some mean characteristics for longline and pole & line vessels making up the Namibian large pelagic fishing fleet in 2003 - 2004.

| Characteristic | Total Fleet | Longline | Pole & line |
|---|---|---|---|
| Length (m ± Std Dev) | 27 ± 12 | 26 ± 9 | 36 ± 17 |
| GRT (tons ± SD) | 167 ± 146 | 142 ± 100 | 308 ± 264 |
| Horsepower (kW ± SD) | 540 ± 337 | 509 ± 301 | 698 ± 480 |
| Crew (± SD) | 20 ± 5 | 19 ± 5 | 24 ± 3 |
| Construction Year (± SD) | 1976 ± 15 | 1977 ± 15 | 1975 ± 16 |
| % Local Flag | 33% | 36% | 14% |

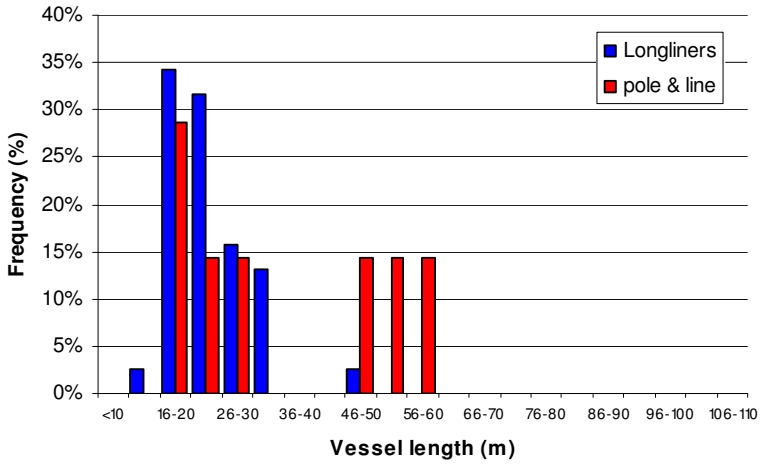


**Figure 3.11.** Length-frequency distribution of the longline and pole & line vessels in the Namibian large pelagic fishery in 2003 - 2004.

Most (85%) of the pelagic longline vessels operated out of Walvis Bay during the 2003 – 2004 season, whilst all of the pole & line vessels made use of Luderitz as their primary landing harbour.

## 3.9 Deep-sea trawl

A fishing company was awarded an experimental licence to carry out trawling for deep-water fishes in the Namibian EEZ in 1994. By 1995, two deep-water fishing grounds based on aggregations of orange roughy (*Hoplostethus atlanticus*) had been found (at Hotspot and Rix) and more than 5000 tons of the fish were landed. The following year two more sites were found, which subsequently became known as the Johnies and Frankies fishing grounds (Figure 3.12). Over the next three years the annual catch escalated to a peak of 18 516 tons, making this the second-largest orange roughy fishery in the world[9]. At this time the Namibian government introduced a TAC for the orange roughy, initially set at 12 000 tons, and opened the fishery up to new entrants. The following year (1998), the catch began to drop off. The Namibian government realised that the fishery could not sustain such high levels of exploitation, and began reducing the TAC, from 6000 tons for 1998 to 1875 tons in 2001. Nevertheless, by 2000 catches had declined to less than1000 tons for the year. After 2001,

[9] Lack, M., Short, K. and Willock, A. 2003. *Managing risk and uncertainty in deep-sea fisheries: lessons from Orange Roughy*. TRAFFIC Oceania and WWF Endangered Seas Programme.

the TAC fluctuated around 2600 tons, until the 2005 – 2006 fishing season, when it was reduced again, to 2050 tons. Generally, the rights holders have been significantly under catching their quota in recent years[10].

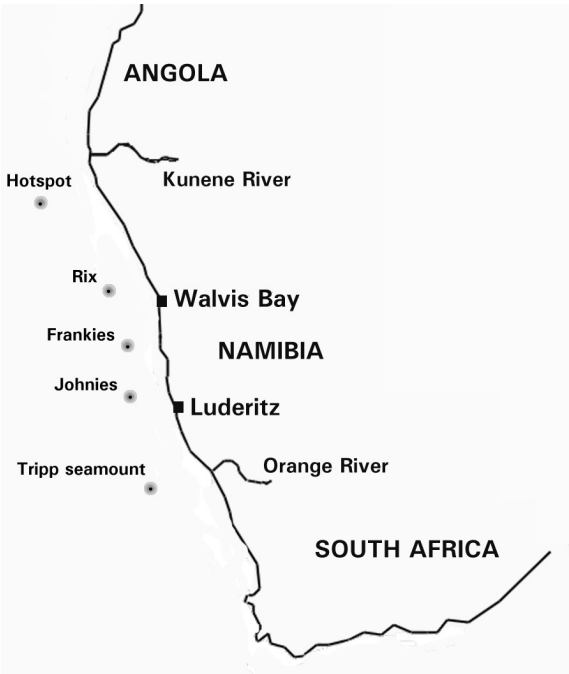


**Figure 3.12.** The Namibian deep-sea trawl fishing grounds.

Each of the four fishing grounds is managed separately, as a Quota Management Area (QMA). One of the fishing grounds (Frankies) has been closed to trawling since 1999. Orange roughy and alfonsino are sometimes caught around the Tripp Seamount, but it is not included as a QMA. Based on the experience of orange roughy fisheries in other countries, Namibia's approach to the management of its four fishing grounds can be considered to be more precautionary than most. Total allowable catches for the species are based on the total estimated biomass of the stock. Biomass is estimated using acoustic and swept-area surveys and CPUEs derived from catch reporting. Additional management tools include effort control by limiting vessel access to the fishery to only five trawlers.

Most of the trawling is done between water depths of 600 and 900m. Fishing takes place both by day and night. The fish are head-and-gutted at sea and frozen for hand filleting in Walvis Bay. Onshore processing (mainly the production of high quality fillets for the USA and Japanese markets) approximately doubles the value of the catch, and is very labour intensive, providing much needed employment in Walvis Bay.

Another deep water species, alfonsino (*Beryx splendens*) is sometimes caught during deep sea trawls (± 10% of total catch). Initial catches of this species were relatively high, reaching nearly 3000 tons in 1995 & 1996. Anticipating the potential for another deep-sea fishery, the Namibian government introduced a TAC of 10 000 tons for alfonsino in 1997; however the

[10] Address to the Fisheries and Marine Resources Sector by Dr. Abraham Iyambo, Minister of Fisheries and Marine Resources, On 13 April 2005, Walvis Bay. (www.grnnet.gov.na/News/Archive/2005/april/week3/dr_rpt.htm).

species rapidly became so scarce that it was not viable to target, and alfonsino is now regulated as a by-catch of orange roughy.

### 3.9.1 Rights holders

Gendor Fishing (Pty) Ltd, the founders of the deep-sea trawling industry in Namibia, had sole access to the orange roughy resource until the Namibian government declared the experimental fishery to be a commercial fishery in 1997. Of the 39 applications for deep-sea trawl fishing rights received by the MFMR in 1997, only five rights were awarded. Gendor was given 50% of the orange roughy TAC for three years, as a reward for developing the fishery. The rest of the TAC was divided up between two rights holders. The other two rights holders were given exploratory rights, but no quota. This meant they could fish for orange roughy anywhere within Namibian waters, but outside of the four declared QMAs. If they discovered a new fishing ground, they would be rewarded with 50% of the quota for the new fishing ground for three years. The two exploratory orange roughy fishing rights have not yet been activated (Table 3.26).

**Table 3.26**. The rights holders in the Namibian deep-sea trawl fishery, and their quota allocations for the 2003 – 2004 fishing season.

| RIGHTS HOLDERS | DURATION OF RIGHT (Years) | ORANGE ROUGHY ALLOCATION (Tons) |
|---|---|---|
| Atlantic Sea Products (Pty) Ltd | 10 | 588 |
| Consortium Fisheries (Pty) Ltd | 10 | Not allocated |
| Continental Deep Sea (Pty) Ltd | 10 | Not allocated |
| Gendor Fishing (Pty) Ltd | 10 | 940 |
| Glomar Fisheries (Pty) Ltd | 10 | 770 |
| **Total** | | **2,298** |

All the deep-sea trawl rights holders were awarded their rights for a period of 10 years. The companies that were fishing for orange roughy in 2003 - 2004 were all based in Walvis Bay. Atlantic Sea Products also had horse mackerel fishing rights; Gendor and Glomar were only involved in deep-sea trawling. Gendor was listed on the Namibian stock exchange, but de-listed in 2002. Onshore processing of the orange roughy catch takes place at Gendor's Deep Ocean Processors (Pty) Ltd factory.

### 3.9.2 Vessels

During the first two years of the experimental phase of the deep-sea fishery, Gendor used only one vessel, but introduced two more vessels in the third year. When the fishery was opened up to other rights holders in 1997, another vessel was added to the fleet. The maximum permissible number of five vessels operating in the fishery was reached in the following year. Based on the MFMR vessel database, six vessels were used to catch orange roughy for the deep-sea trawl rights holders during the 2003 - 2004 fishing season (Table 3.27), but not necessarily at the same time.

**Table 3.27.** The Namibian deep-sea trawl fishing fleet as registered with the MFMR in 2003 - 2004.

| Vessel | Flag | Length (m) | GRT (tons) | Horse Power (kW) | Year Built | Total crew | Nam. crew | Rights holder | Vessel owners |
|---|---|---|---|---|---|---|---|---|---|
| Bel Ocean Two | Mauritius | 57 | 1899 | 3342 | 1990 | 38 | 5 | Atlantic | Blue Ocean Products (Pty) Ltd |
| Dantago | Namibia | 27 | 257 | 746 | 1978 | 18 | 17 | Atlantic | Atlantic Sea Products (Pty) Ltd |
| Emanguluko | Namibia | 31 | 483 | 1850 | 1990 | 27 | 23 | Glomar | Glomar Fisheries (Pty) Ltd |
| Southern Aquarius | Namibia | 54 | 1154 | 3000 | 1974 | 48 | 48 | Gendor | Gendor Fishing (Pty) Ltd |
| Ulzama | Spain | 33 | 264 | 1100 | 1992 | 20 | 11 | Gendor | Pesquera Vasco Gallera SA |
| Whitby | Namibia | 27 | 193 | 800 | 1977 | 15 | 14 | Gendor | Gendor Fishing (Pty) Ltd |

The deep-sea trawl vessels deploy their nets at depths in excess of 600 m, over rough terrain. Usually, vessels operating in this type of fishery need to be large and powerful, with state of the art fishing and locating equipment, and onboard freezer storage facilities. However, the variability of the characteristics of the vessels summarised in Table 3.28 point to the Namibian deep-sea fleet being made up of non-specific trawlers from other fishing sectors consisting of a range of sizes and power (27 – 57 m, 746 – 3342 kW) . Dantago (Atlantic Sea Products) is not a freezer vessel.

**Table 3.28.** A summary of some mean characteristics of the trawlers making up the Namibian deep-sea trawl fishery in 2003 -2004.

| Characteristic | Total Fleet |
|---|---|
| Length (m ± Std Dev) | 39 ± 14 |
| GRT (tons ± SD) | 709 ± 684 |
| Horsepower (kW ± SD) | 1807 ± 1134 |
| Crew (± SD) | 28 ± 13 |
| Construction Year (± SD) | 1984 ± 8 |
| % Local Flag | 67% |

The number of crewmembers employed on the deep-sea trawl vessels in 2003 – 2004 was 166, of which 118 (71%) were Namibian nationals. All the vessels operated out of Walvis Bay.

# 4. ANGOLA

## 4.1 Introduction

The Angolan coastline is 1650 km long, with two diverging currents, the south-flowing Angola Current and north-flowing Benguela Current, which create a strong upwelling system that supports high primary production in the region. However, over-fishing and changes in environmental conditions have strongly reduced the fisheries potential. The country has three fishing zones; the southern zone (from Lobito to the mouth of the Cunene River) is by far the most productive, with an abundance of horse mackerel, sardines, tunas and a range of demersal species. The northern fishing zone extends from Luanda to the mouth of the Congo River, and the central fishing zone stretches from Luanda to Benguela[11] .

Like its southern neighbour Namibia, Angola's marine fishing industry has been strongly affected by politics of the country.

The early 1960s saw the first activities of the liberation movements in Angola. These initially targeted the coffee plantations in the north, but over the next decade became increasingly disruptive to the country, and eventually contributed to the deposition of President Salazar in Portugal, and the end of Portuguese rule. This was so significant a watershed event that it seems sensible to make it the first break in the history of the fishing industry. The second break comes with independence in 1975, and the third with the conclusion of the recent civil war.

There has been a tradition of fishing recorded in the north of Angola, but comparatively little was evident in the south and central littorals until Portuguese settlers established the beginnings of the industry in the early 19th century. The product was almost entirely sun-dried and salted, the fishing was largely inshore, and vessels were powered by sail or oars.

The industry began to evolve in the 1930s when the scattered small-scale operators were grouped into regional associations (*Sindicatos*, and subsequently *Gremios*). These groupings induced early attempts at more sophisticated processing, including fishmeal, fish-oil and canning. The bulk of the catch was small pelagic fishes: particularly sardine and horse mackerel, although large pelagics such as tuna and demersal fishes such as hake were also targeted. Real development of the industry only began after the Second World War. Catches rose sharply, climbing from 26 100 tonnes in 1938, 113 000 tonnes in 1948 to 420,000 tonnes in 1956. The fish stock fell sharply in the late 1950s. In response a technical agency was established (*Instituto das Industrias de Pesca de Angola*) to help manage the resource and the industry.

It is worth noting that during the late 1940s the Namibian/South African industries were using large vessels to access offshore fishing grounds. Demersal trawl and pelagic purse seine fleets were already in place: by contrast Angola was doing some surface seining with motor-drifters, but much of the catch was still harvested inshore using sail and oars.

Improved technology and access to foreign markets not only stimulated the output of the industry, but also the adoption of new processing methods. At the end of the Second World War just under half of the commercial catch was sun-dried and a similar amount ground into fishmeal and fertilizer. Five percent was consumed fresh and roughly one percent was

[11] http://www.fao.org/fi/fcp/en/AGO/profile.htm

canned. By the late 1950's the sun-dried component had fallen to 16% and 81% was being processed into fishmeal and fish-oil.

The growing importance of fishmeal production followed the trend established in South Africa/Namibia. By this time though, these two countries were already shifting into higher value, value-added products. In part Angola's problem was that its domestic market and transport infrastructure did not encourage more sophisticated product lines. The tinned product would have had to compete with similar items from Portugal itself, while the domestic market was too small for frozen and chilled fish to be significant. There was, however, already an export market in bulk-tinned tuna to the USA, the product being re-canned in North America.

At this stage, the difficulties facing the evolution of the industry were partly geographic. The southern coastal strip has low rainfall and fresh water was a constraining factor on the development of the smaller ports.

During the Liberation war period (1962 – 1975), the fishing industry was comparatively unaffected. The management of the stock allowed the resource to be exploited at a sustained high level and both harvesting and processing technologies became more sophisticated. The "chata"-based artisanal fisheries also expanded. The deepwater fisheries were increasingly exploited, and the proportion of the recorded landed catch made by small pelagics declined. At the end of the period the change in government was accompanied by an exodus of skills, and recorded catches immediately fell.

Post independence (1976 – to present), the fishing industry experienced a number of problems, including falling stocks and the decay of land-based processing facilities. Two factors influenced stocks directly: a large foreign trawler fleet that often went far too close to the coast, and heavy exploitation of shared stocks in Namibian waters. The resource was heavily exploited by a fleet from the Soviet Union, and then (until late 2004) by vessels from the European Union (EU), particularly Spain. Japanese vessels (including two vessels that targeted deep-sea red crab) also obtained access to Angolan waters. The terms of the agreements with Eastern European and E.U. fleets were problematic. Monitoring was poor and the contracts offered little incentive for these fleets to conserve the resource since there were no effective catch limits. The EU framework Agreement between the Community and Angola was adopted in 1987 and renewed regularly until 2004. In exchange for fishing rights, the E.U. paid an annual fixed fee, typically between €10 million and €5 million (Table 4.1).

Both the domestic fleet and the onshore processing facilities had deteriorated markedly after independence, and the state has attempted to rehabilitate the industry's capital base. It was helped by foreign assistance. In the late 1980s, the EEC funded the reconstruction of the Dack Doy shipyards and two canning plants in Tombua. Spain agreed to help rehabilitate the Angolan fishing industry in exchange for fishing rights. It also sold Angola thirty-seven steel-hull boats for US$70 million. A further fourteen fishing boats were ordered from Italy. There have also been attempts to expand the inshore small-commercial (semi-industrial) sector. This sector was protected by legislation that allowed it exclusive access to inshore waters; however its viability continues to be threatened by incursions into these waters by large commercial vessels.

**Table 4.1.** Summary of Protocols to the European Community/Angola Fisheries Agreement (1989-2004)[12].

| PROTOCOL | TYPE | FISHING OPPORTUNITIES | TOTAL EC CONTRIBUTION (€) | OF WHICH TARGETED ACTIONS (€) |
|---|---|---|---|---|
| 3/8/2002 - 2/8/2004 | Mixed | 22 prawn vessels<br>4,200 GRT/month for demersal fishing<br>15 seiners<br>18 surface longliners<br>2 licences for experimental pelagic fishing | 31,000,000 | 11,050,000 |
| 3/5/2000 - 2/8/2002 | Mixed | 22 prawn vessels<br>3,750 GRT/month for demersal fishing<br>18 seiners<br>25 surface longliners<br>2 licences for experimental pelagic fishing | 13,975,000 | 4,025,000 |
| 3/5/1999 - 2/5/2000 | Mixed | 22 prawn vessels<br>2,000 GRT/month for demersal fishing<br>1,750 GRT/month for bottom longliners<br>18 seiners<br>25 surface longliners<br>2 licences for experimental pelagic fishing | 12,000,000 | 1,700,000 |
| 3/5/1996 - 2/5/1999 | Mixed | 22 prawn vessels<br>2,000 GRT/month for demersal fishing<br>9 seiners<br>12 surface longliners<br>2 licences for experimental pelagic fishing | 15,333,333 | 5,000,000 |
| 3/5/1994 - 2/5/1996 | Mixed | 22 prawn vessels<br>1,900 GRT/month for demersal fishing<br>900 GRT/month for bottom longliners<br>4 seiners<br>5 surface longliners | 9,750,000 | 2,800,000 |
| 3/5/1992 - 2/5/1994 | Mixed | 22 prawn vessels<br>1,800 GRT demersal fishing<br>27 freezer seiners<br>5 surface longliners | 18,500,000 | 4,600,000 |
| 3/5/1990 - 2/5/1992 | Mixed | 24 prawn vessels<br>28 ocean-going freezer tuna vessels<br>5 wet tuna vessels<br>600 GRT/month for expt. demersal fishing | 17,970,000 | 2,120,000 |
| 3/5/1989 - 2/5/1990 | Mixed | From 39 to 22 prawn vessels*<br>28 ocean-going freezer tuna vessels<br>1,200 GRT/month for expt. demersal fishing<br>2 surface longliners for experimental fishing | 10,045,000 | 1,060,000 |

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

[12] Source: http://europa.eu.int/comm/fisheries/doc_et_publ/factsheets/facts/en/pcp4_2s01.htm

The Angolan fishing sector is currently divided into four groups, as described in Articles 1/55 – 1/60 of the *Lei dos Reicursos Biologicos Aquaticos* (Table 4.2).

**Table 4.2.** Definitions of the four types of participant in the Angolan marine fishing sector.

| TYPE | PARAMETERS |
|---|---|
| **Subsistence** | • Non-commercial<br>• Catch intended for family consumption, occasional surplus is allowed to be sold |
| **Artisanal** | • Commercial<br>• Vessel up to 14 meters in length<br>• Propulsion system: paddles, sail, onboard and outboard engine<br>• Fishing gear: hand lines, gill nets, entangling nets<br>• On-board refrigeration: rarely ice on board |
| **Semi-industrial** | • Commercial<br>• Vessel up to 20 meters in length<br>• Propulsion system: inboard engine<br>• Fishing gear: mechanical trawling, hand lines, drifting longlines, entangling nets, seine nets and others<br>• On-board refrigeration: ice on board |
| **Industrial** | • Commercial (either catch-specific species with a high commercial value, or large quantities of fish with a lower commercial value)<br>• Vessel over 20 meters long<br>• Propulsion system: engine<br>• Fishing gear: mechanical<br>• On-board refrigeration: ice and other processing methods on board. |

Only the semi-industrial and industrial fishing sectors will be considered in this report, in line with the commercial-scale fishing operations described for South Africa and Namibia. The sub-sectors of the fishing industry that will be discussed include the demersal trawl fishery (specifically hake), pelagic trawl (targeting sardinellas and horse mackerel) and pelagic purse seine fisheries (specifically sardinellas, pilchards and horse mackerel), the crustacean fishery (deep-sea red crab and prawns) and the tuna fishery.

## 4.2 Crustacean Fisheries

Angola's commercial crustacean fishing sector is comprised of three fisheries; the offshore prawn trawl, inshore prawn trawl and deep-sea crab trap fisheries. The offshore prawn trawl and deep-sea crab fishing operations are defined as industrial-scale, whilst the inshore prawn trawl operations are semi-industrial.

### 4.2.1 Deep-sea red crab

The deep-sea red crab, *Chaceon maritae* is found on soft mud substrata at depths of between about 300 and 1000 m off Angola. The directed fishery is concentrated mainly in the southernmost fishing grounds, but the species occurs throughout Angolan waters. It is also taken as by-catch in the offshore prawn trawl fishery in the central and northern fishing grounds. The deep-sea red crab fishery was initiated in 1986. The species is targeted by a

single Japanese vessel using traps, but is occasionally taken as by-catch in the demersal and prawn trawl fisheries. All indications are that the Angolan deep-sea red crab resource is part of a single stock that is shared with Namibia. Thus, it is also likely that the Angolan resource is declining along with that of Namibia. In the 1980's, the Angolan stock was estimated to have a biomass of 91 000 tons; by the late 1990's this estimate had declined to 18 000 tons[13].

The Angolan deep-sea red crab resource is managed by allocating an annual TAC and by applying limitations on the crab by-catch associated with the offshore prawn fishery. In addition, input controls such as a restriction on effort (i.e. limited number of vessels), a minimum size limit and the prohibition of fishing at depths of between 200 m to 500 m are also in place. The resource is assessed using a production model based on CPUE data from the daily catch records of vessels targeting the crab, as well as vessels taking crab as a by-catch in the prawn fishery. These records are submitted as monthly reports. Estimates of natural mortality from a number of different sources are used as inputs to the model.

#### 4.2.1.1 Rights holders

Carangol S.A.R.L is the only company that has the right to target the deep-sea red crab in Angolan waters. Not much information is available for this firm, other than that it is an Angolan company with strong Japanese ties and a relationship to Oshimada Fishing (Pty) Ltd, one of the Namibian deep-sea red crab fishing operations. The company received an allocation of 690 tons for 2004, of which about 409 tons was caught. Although the catch is landed in Walvis Bay, Namibia, the fishing vessel must first report to Namibe for inspection before leaving Angolan waters, so that the catch reports can be verified. Approximately 134 tons were landed in 2002, and 121 tons were recorded in 2003[14]. Carangol S.A.R.L employed 30 staff in 2004; all were Angolan nationals, 26 were men and four were women.

#### 4.2.1.2 Vessels

Carangol S.A.R.L. operates a large ex-tuna boat that has been modified to deploy traps (called *Gaiola* or baskets locally) to depths of 1000 m. Carangol No. 1 is registered as an Angolan vessel, and is 49 m long, with a gross registered tonnage (GRT) of 407 tons, a power output of 1460 kW and is operated by 25 crewmembers.

A significant portion of the processing of the red crab is carried out on board the vessel. The product is then packed in Walvis Bay and shipped to China, where it is canned for the Japanese market. The entire product from the Angolan red crab fishery is consumed in Japan[15].

### 4.2.2 Offshore prawn trawl

The offshore or deep-water prawn fishery is probably the most valuable of all the Angolan fisheries. It was initiated by a single Spanish trawler in 1966. The success of this operation attracted a fleet of foreign (mainly Spanish) trawlers, and by 1972 at least 52 vessels were targeting prawns in Angolan waters. Catches peaked a year later, when more than 12 000 tons of prawns were caught. However, soon after this peak was achieved, the changing

[13] Neto, V. 1997 – Fisheries resources of Angola. In *Report on Symposium on Science in Africa*. American Association for the Advancement of Science Annual Meeting, 16 February, Seattle, USA: 63-67.

[14] Aukland, R. and C. Ninnes. 2004. An Assessment of the State of Commercial Fisheries Catch Data in the BCLME Region. BCLME Project LMR/CF/03/02.

[15] www.melma.com

political climate in Angola led to a major change in the prawn fleet; by 1977 the Spanish vessels had withdrawn from Angolan waters, to be replaced by a fleet of Cuban trawlers. The Cuban trawlers dominated the prawn trawl fleet until 1979. Since 1989, European Community (EC) trawlers have targeted Angolan prawns under the European Community/Angola Fisheries Agreement. Initially 39 European Union trawlers had access to the fishery, but by 1992 this number had been reduced to 22 vessels. All the EU vessels operating in the fishery were Spanish trawlers. A number of locally flagged trawlers have also entered the fishery.

Trawling for offshore prawn usually takes place in the central and northern fishing zones. The annual catch for the prawn trawl fishery fluctuated between 3500 – 7000 tons during the 1990's. The offshore prawn trawl catch is made up of two species; the deepwater rose prawn *Parapenaeus longirostris*, and the striped red prawn *Aristeus varidens*. The rose prawn occurs at depths of between 50 – 400 m, and is found on the upper slopes and continental shelf of the Western Atlantic Ocean as far south as French Guiana, and to Angola in the Eastern Atlantic. The striped red prawn is an East Atlantic species, found from Rio de Oro (24° N) to 18° S (off Namibia), on the continental slopes at depths of between 400 – 800 m.

Catches of the deepwater rose prawn are usually significantly higher than the striped red prawn, although this pattern was reversed in 1994 – 95. There are indications that the prawn resource is decreasing, and in 2000 a global TAC of 2400 tons was introduced for the offshore prawn trawl fishery (1600 t for rose prawn, 800 t for striped red prawn). By 2003, the TAC was reduced to 1200 tons for the deepwater rose prawn, and 500 tons for the striped red prawn. The fishery is managed on the basis of trawl survey estimates and CPUE trends, which are used in a simplified Beverton and Holt model to recommend TACs for rose prawn and striped red prawn. Other forms of control include the prohibition of fishing within certain inshore areas to protect juveniles, a closed season and effort control through limited vessel access to the fishery.

#### 4.2.2.1 Rights holders

The offshore prawn fishery TAC of 1700 tons for 2004 was divided up almost equally between the Angolan rights holders (889 tons) and EU prawn trawlers (811 tons) operating in the fishery (until end 2004). Unfortunately, the quota allocation per rights holder is not available. The rights holders are listed in Table 4.3.

Of the four rights holding companies, only one was privately owned. The rest are described as "mixed", with private and State ownership. In terms of Angolan shareholding, only the private company was solely owned by Angolans. Total local ownership of the Angolan-based offshore prawn rights-owning companies in 2004 amounted to about 62%. Two of the companies were based in Luanda Province, and one each in Namibe and Kwanza-Sul Provinces.

**Table 4.3.** The rights holders in the Angolan offshore prawn fishery, for the 2004 fishing season.

| Company | Type of Enterprise | Town | Province | % Local shareholding |
|---|---|---|---|---|
| Bismar Lda | Private | Samba | Luanda | 100 |
| Angesp S.A.R.L | Mixed | Tombwa | Namibe | 53 |
| Espang | Mixed | Porto Amboim | Kwanza Sul | 50 |
| Pescamar | Mixed | Ingombota | Luanda | 51 |

The total number employed directly by the offshore prawn trawl rights holders was 721 people in 2004, of which 633 were Angolan men, 16 were Angolan women, and 72 were foreign men.

#### 4.2.2.2 Vessels

In addition to the 22 EU trawlers operating in the offshore prawn fishery, the above rights holders operated a further 23 vessels. Most of these trawlers have Angolan flags, except for the four Spanish vessels fishing for Pescamar (Table 4.4).

**Table 4.4.** The Angolan offshore prawn trawl fishing fleet in 2004.

| Name of Vessel | Flag | Length (m) | GRT (tons) | Horse Power (kW) | Crew | Hull | Rights holder |
|---|---|---|---|---|---|---|---|
| Bismar one | Angola | --- | 362 | --- | 18 | Steel | Bismar Lda |
| Bismar two | Angola | --- | 362 | --- | 18 | Steel | Bismar Lda |
| Bsimar three | Angola | --- | 362 | --- | 18 | Steel | Bismar Lda |
| Congelmar Primeiro | Angola | 39 | 414 | 1200 | 16 | Steel | Angesp S.A.R.L |
| Congelmar Segundo | Angola | 39 | 448 | 1200 | 16 | Steel | Angesp S.A.R.L |
| Dande | Angola | --- | 254 | --- | 19 | Steel | Pescamar |
| Katumbo | Angola | --- | 254 | --- | 19 | Steel | Pescamar |
| Maposa Octavo | Angola | 41 | 386 | 1200 | 16 | Steel | Angesp S.A.R.L |
| Maposa Quarto | Angola | 41 | 450 | 1170 | 16 | Steel | Espang |
| Maposa Segundo | Angola | 41 | 450 | 1170 | 16 | Steel | Espang |
| Maposa Sétimo | Angola | 41 | 448 | 1200 | 16 | Steel | Angesp S.A.R.L |
| Maposa Sexto | Angola | 41 | 386 | 1170 | 16 | Steel | Espang |
| Navijosa Noveno | Angola | 41 | 450 | 1170 | 16 | Steel | Espang |
| Navijosa Quito | Angola | 41 | 448 | 1170 | 16 | Steel | Espang |
| Navijosa Sexto | Angola | 41 | 414 | 1200 | 16 | Steel | Angesp S.A.R.L |
| Palmeirinhas | Angola | --- | 271 | --- | 21 | Steel | Pescamar |
| Pegago Segundo | Angola | 41 | 450 | 1200 | 16 | Steel | Angesp S.A.R.L |
| Pegago Terceiro | Angola | 41 | 446 | 1170 | 16 | Steel | Espang |
| Pescamar four | Spain | --- | 147 | --- | 18 | Steel | Pescamar |
| Pescamar one | Spain | --- | 147 | --- | 18 | Steel | Pescamar |
| Pescamar three | Spain | --- | 147 | --- | 18 | Steel | Pescamar |
| Pescamar two | Spain | --- | 163 | --- | 19 | Steel | Pescamar |
| Pinzon Primeiro | Angola | 39 | 414 | 1200 | 16 | Steel | Angesp S.A.R.L |
| **Mean (±SD)** | **---** | **41 ± 1** | **351 ± 113** | **1187 ± 16** | **18 ± 2** | **---** | **---** |

Angola's prawn trawler fleet was quite homogeneous in 2004; the large steel-hulled vessels had an average length of 41 m, an average GRT of 351 tons and a power rating of about 1190 kW. Each vessel had a crew complement of about 18 members, and the total number of ship-based employees in the Angolan sector of the fishery at the time was about 400 people.

The catch is frozen on board the trawlers, and the product is exported primarily to Europe.

### 4.2.3 Inshore prawn trawl

Angola also has a semi-industrial prawn fishery, targeting coastal species such as the pink prawn *Penaeus duorarum* and the Caramote prawn *Penaeus kerathurus*. The pink prawn has a distribution ranging from Mauritania to Angola. It inhabits muddy or sandy substrates at depths of between 10 m and 100 m. The Caramote prawn prefers more sandy bottoms with detritus and sea-grass beds, occurring at depths of between 5 – 50 m. These species are more usually by targeted by artisanal fishermen along the West African Coast, using a range of methods; from traps, stow-nets, conical nets, beach seines and trawl nets towed by two people, to demersal trawl nets towed by vessels.

#### 4.2.3.1 Rights holders

A TAC of 51 tons was set for the inshore (a.k.a. coastal) prawn fishery in 2004, allocated amongst six rights holders (Table 4.5). According to the Angolan Marine Resources Law, all semi-industrial rights holders must be Angolan. Of the rights holders for which information was available, all were privately owned, and all were based in Imgombota, Luanda Province.

The total number employed directly by the four rights holders who provided information for the study was 49 people, all of which were Angolan males.

**Table 4.5.** The rights holders in the Angolan inshore (coastal) prawn fishery, for the 2004 fishing season.

| Company | Type of Enterprise | Town | Province | % Local shareholding | Allocation (Tons) |
|---|---|---|---|---|---|
| Copinol Lda | Private | Imgombota | Luanda | 100 | 13 |
| Organizacoes Canelas | Private | Imgombota | Luanda | 100 | 13 |
| Horacio Da Silva Baptista | --- | --- | --- | --- | 10 |
| IDS, Lda | Private | Imgombota | Luanda | 100 | 5 |
| Luonze, Lda | --- | --- | --- | --- | 5 |
| Pescamboim Lda | Private | Imgombota | Luanda | 100 | 5 |
| **Total** | | | | | **51** |

#### 4.2.3.2 Vessels

The inshore prawn trawl vessels operating in 2004 were typical of the semi-industrial sector of the Angolan fishing industry. The wood or glass fibre vessels were less than 20 m in length, with a mean GRT of about 51 tons and a power rating of about 260 kW (Table 4.6. The average number of crew per vessel was 12 members, and the total number employed on the vessels was 62 people.

**Table 4.6.** The Angolan inshore (coastal) prawn trawl fishing fleet in 2004.

| Name of Vessel | Flag | Length (m) | GRT (tons) | Horse Power (kW) | Crew | Hull | Rights holder |
|---|---|---|---|---|---|---|---|
| Porto Santo | Angola | 17 | 48 | 285 | 13 | Wood | Organizacoes Canelas |
| Pungo | Angola | 13 | 48 | 200 | 12 | Wood | IDS, Lda |

| Name of Vessel | Flag | Length (m) | GRT (tons) | Horse Power (kW) | Crew | Hull | Rights holder |
|---|---|---|---|---|---|---|---|
| Vencedor | Angola | 17 | 76 | 360 | 12 | Glass fibre | Copinol Lda |
| Victoria | Angola | 15 | 41 | 265 | 10 | Wood | Horacio Da Silva Baptista, Lda |
| **Mean (±SD)** | **---** | **17 ± 3** | **51 ± 15** | **258 ± 72** | **12 ± 2** | --- | --- |

## 4.3 Small pelagic fisheries

Small pelagic fishes in Angolan waters are targeted by two commercial fisheries; a purse seine fishery targeting *Sardinella spp.*, juvenile horse mackerel, sardines and other small pelagics, and a pelagic (or mid-water) trawl fishery, targeting adult horse mackerel.

The round sardinella *Sardinella aurita* and Madeiran sardinella *S. maderensis* are found along the entire Angolan coastline. The juveniles occur predominantly inshore, along the northern coast. In the Eastern Atlantic, the Madeiran sardinella is distributed from the Mediterranean to Angola; very rarely into Namibia. The round sardinella has a far more extensive distribution; from Argentina northwards to Cape Cod, USA in the Western Atlantic and from the Black Sea southwards to Saldanha Bay, South Africa in the Eastern Atlantic. The round sardinella is usually found further offshore than the Madeiran sardinella, which is coastal, preferring slightly higher sea temperatures and is often found near river mouths. The two species appear to be of roughly equal abundance in Angolan waters, except in the south where the round sardinella predominates.

The bulk of the horse mackerel catch in Angola is made up of the Cunene horse mackerel *Trachurus trecae*, although some Cape horse mackerel *Trachurus trachurus capensis* is caught in the southern fishing grounds. The distribution of Cunene horse mackerel is limited to the Eastern Atlantic, from Morocco southwards to Angola, although the species is sometimes caught in Namibian waters. The Cape and Cunene horse mackerel stocks are probably separated by the dynamic Angola/Benguela Current Front, which moves seasonally between latitudes of about 14 - 17 $^{o}$S, with an average location at about 16 $^{o}$S. Like the Cape horse mackerel, the Cunene horse mackerel is found throughout the water column, from depths of 30 m down to 250 m. The vertical distribution of the species is strongly correlated to size. Juveniles (13 - 19 cm TL) occur at depths of 30 - 34 m; between 50 and 200 m there is no significant difference in length, but the fish caught at depths of 200 - 250 m usually fall within the range of 29 - 34 cm TL (i.e. adults). The juveniles of both species are more abundant inshore; usually within the 100 m depth contour.

The pilchard *Sardinops sagax* (also targeted in the Namibian and South African small pelagic fisheries) makes up a small part of the Angolan purse seine fishery, mainly in the southern fishing area.

The small pelagic fisheries are managed by TAC, with no distinction between the two sardinellas or two horse mackerel species. Until recently, catch statistics have been too unreliable to use in population modelling, and stock abundance estimates have been based on acoustic surveys carried out by research vessels; usually in conjunction with Namibia.

Both the purse seine and pelagic trawl fisheries in Angola appear to be in crisis; in 2004 the authorities banned the purse seine vessels from catching pilchards, whilst the pelagic/mid-water trawl fishery was closed for the duration of the season.

### 4.3.1 Small pelagic purse seine

The purse-seine fishery off Angola started in the 1950s, predominantly targeting juvenile Cunene horse mackerel. By 1955 horse mackerel catches of around 100 000 tons per year had been achieved, and this rate was sustained over the next decade. By 1972 catches had increased to 261 000 tonnes, but declined significantly after Angolan Independence from Portugal, to less than 46 000 tons in 1976. With the introduction of foreign mid-water and demersal trawlers into Angolan waters, horse mackerel catches increased, to a record 380 000 tonnes in 1978, and almost 300 000 tons in 1979. Since 1980 to the present, catches have fluctuated between 50 000 and 150 000 tons, with a massive spike of 375 000 tons caught in 2001[16]. The Cape horse mackerel is sometimes caught along with the Cunene horse mackerel in the southern fishing area; on average over the last 20 years, this species has made up about 27% of the total horse mackerel catch in Angola[7].

By the early 1980s, the proportion of the horse mackerel catch taken by purse-seiners averaged about 30% of the total annual catch, with the mid-water trawlers taking about 60% and a demersal trawler by-catch of about 10%. By 1998 this ratio had changed, to 12% purse seine, 66% mid-water trawl, and 22% demersal trawl. In 2003, the purse seine portion of the total horse mackerel catch had further decreased to just 4%, with mid-water trawl taking 88% and demersal trawl taking 8% of the total horse mackerel catch.

The bulk of the rest of the Angolan purse seine harvest is made up of the two species of sardinellas. Over the last decade or so, approximately 25 000 – 50 000 tons were caught per year. However, between 1955 and 1973, sardinella catches fluctuated between 60 000 and 100 000 tons, with one report claiming a record 300 000 tons caught during one year in the 1970's.

During the 1970's as much as 30 000 tons of pilchards could be harvested by the purse seine fishery in a year. More recently, pilchard catches have become almost non-existent in the Angolan purse seine fishery.

#### 4.3.1.1 Rights holders

Records supplied by the Angolan Ministry of Fisheries list 70 small pelagic fish rights holders active in the purse seine fishery in 2004, sharing a total allocation of 95 000 tons (Table 4.7). In addition, the artisanal fishery was allocated 40 000 tons, and a further 40 300 tons was held in reserve.

**Table 4.7.** The Angolan small pelagic fish rights holders in the purse seine fishery, during the 2004 fishing season.

| Company | Type of Enterprise | Towns | Province | % Local share | Allocation (Tons) |
|---|---|---|---|---|---|
| Angesp S.A.R.L | Mixed | Tombwa | Namibe | 53 | 25,500 |
| Empromar Kuroka U.E.E | State | Tombwa | Namibe | 100 | 17,000 |
| Midato, Lda | Private | Tombwa | Namibe | 100 | 5,000 |
| RJ Industrial, Lda | Private | Tombwa | Namibe | 100 | 5,000 |

[16] BENEFIT, 2004. Formal Report: Benefit / NRF / BCLME Stock Assessment Workshop. University of Cape Town, Cape Town.

| Company | Type of Enterprise | Towns | Province | % Local share | Allocation (Tons) |
|---|---|---|---|---|---|
| Mar Santos, Lda | --- | --- | --- | --- | 3,000 |
| Coapescas | Private | Samba | Luanda | 100 | 2,000 |
| Frumar, Lda | --- | --- | --- | --- | 2,000 |
| Naipe Lda | Private | Benguela | Benguela | 100 | 1,800 |
| Fernando Antunes | --- | --- | --- | --- | 1,500 |
| Glorva Pescas, Lda | --- | --- | --- | --- | 1,500 |
| Jagmar, Lda | Private | Baia Farta | Benguela | 100 | 1,500 |
| Joao Brito | Private | Lobito | Benguela | 100 | 1,250 |
| Ouropesca | Private | Samba | Luanda | 100 | 1,000 |
| Pescaria Tentativa | Private | Baia Farta | Benguela | 100 | 1,000 |
| Sede Lda | Mixed | Baia Farta | Benguela | 30 | 1,000 |
| Sicopal, Lda | --- | --- | --- | --- | 1,000 |
| Soc. Agroalimentar | --- | --- | --- | --- | 1,000 |
| Vimar & Filhos | Private | Baia Farta | Benguela | 100 | 880 |
| Joaquim JM Da Silva | --- | --- | --- | --- | 850 |
| Marta Fernandes & Filhos | Private | Baia Farta | Benguela | 100 | 800 |
| Edipesca-Luanda-UEE | State | Sambizanga | Luanda | 100 | 600 |
| Edipesca-Namibe-UEE | State | Sambizanga | Luanda | 100 | 600 |
| Fernando G Solinho | --- | --- | --- | --- | 600 |
| Grupo Ze Luis | --- | --- | --- | --- | 600 |
| Man Silva Lda | Private | Cacuaco | Luanda | 100 | 600 |
| Organizacoes Tromba Rija | --- | --- | --- | --- | 600 |
| Socipesca Lda | Private | Baia Farta | Benguela | 100 | 600 |
| Sopesnor Lda | Mixed | Cabinda | Cabinda | 60 | 520 |
| Alvaro P Eugenio | --- | --- | --- | --- | 500 |
| Antonio CG Da Gloria | --- | --- | --- | --- | 500 |
| Antonio F Melo | Private | Benguela | Benguela | 100 | 500 |
| Antonio JS De Viera | --- | --- | --- | --- | 500 |
| Arnaldo Vasconcelos | Private | Benguela | Benguela | 100 | 500 |
| Pescaria Monolo | --- | --- | --- | --- | 500 |
| Soconinfa Lda | Private | Ingombota | Luanda | 100 | 500 |
| Traineira M. Rui | Private | | | 100 | 500 |
| Trirumo | Private | Ingombota | Luanda | 100 | 500 |
| Valdemar Santos | Private | Benguela | Benguela | 100 | 500 |
| Vego ACI Lda | Private | Ingombota | Luanda | 100 | 500 |
| Pescuio | Private | Benguela | Benguela | 100 | 450 |
| Salgec, Lda | --- | --- | --- | --- | 450 |
| Sebastiao V Santos | Private | Benguela | Benguela | 100 | 450 |
| Enviatur, Lda | Private | Samba | Luanda | 100 | 400 |
| Jose LCH De Sousa | --- | --- | --- | --- | 400 |

| Company | Type of Enterprise | Towns | Province | % Local share | Allocation (Tons) |
|---|---|---|---|---|---|
| Vinten e Filhos | --- | --- | --- | --- | 400 |
| APT Organizacoes | --- | --- | --- | --- | 300 |
| Carlos Alberto | --- | --- | --- | --- | 300 |
| Carlos MS Diego | --- | --- | --- | --- | 300 |
| Cassiano Jose Henriques | Private | Ingombota | Luanda | 100 | 300 |
| Chimuandos, Lda | --- | --- | --- | --- | 300 |
| Cipriano Tiago | --- | --- | --- | --- | 300 |
| Henri Mar | Private | Ingombota | Luanda | 100 | 300 |
| Jorge M Conduto | --- | --- | --- | --- | 300 |
| Jose Benedito Dos Santos De Oliveira | Private | Ingombota | Luanda | 100 | 300 |
| Jose Liberato Falcao Mestre | Private | Ingombota | Luanda | 100 | 300 |
| Jose M Dos Santos Nunes | --- | --- | --- | --- | 300 |
| Jusi, Lda | --- | --- | --- | --- | 300 |
| Lucrecio Da Cruz | Private | Ingombota | Luanda | 100 | 300 |
| Orgal Lda | Mixed | Cabinda | Cabinda | 60 | 300 |
| Organizacoes Suca Lda | Private | Ingombota | Luanda | 100 | 300 |
| Organizacoes WW Danelia Lda | Private | Samba | Luanda | 100 | 300 |
| Pajanu Lda | Private | Ingombota | Luanda | 100 | 300 |
| Pesca So-Comercio E Industria | Private | Sambizanga | Luanda | 100 | 300 |
| Pesco Comercial | --- | --- | --- | --- | 300 |
| Rito Pesca | Private | Samba | Luanda | 100 | 300 |
| Rui De Jesus Castro | Private | Ingombota | Luanda | 100 | 300 |
| Sopesal Lda | Private | Baia Farta | Benguela | 100 | 300 |
| Sopil | Private | Samba | Luanda | 100 | 300 |
| Pescaria Santo Antonio | --- | --- | --- | --- | 250 |
| Marbelas, Lda | --- | --- | --- | --- | 200 |
| Sociedade De Pesca PPM Lda | --- | --- | --- | --- | 200 |

Of the purse seine rights holders for which information was available in this study (some 59% of the total number), more than 51% were based in Luanda Province, and most of the rest were from Benguela Province. A small number of rights holders were from Namibe (four) and Cabinda Provinces (two; Figure 4.1).

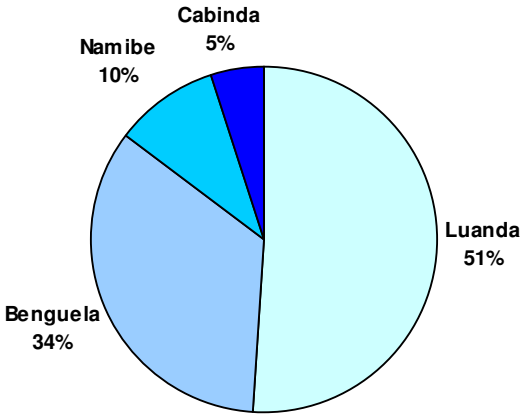


**Figure 4.1.** The proportion of small pelagic purse seine rights holders per coastal Province in Angola in 2004.

In terms of shareholding, Angolans owned 66% of the small pelagic fish allocation in the purse seine fishery. The rights holder with the largest quota (27% of the rights holder allocation), Angesp SARL, was a mixed company, made up of State and private shareholders. Empromar Kuroka U.E.E had the second largest quota (18%), and was wholly State owned. The third highest quota went to R & J - Industrial Comercial and Midato Lda (5.1% each), both privately owned operations. Most (83%) of the rights holding entities were privately owned, 7% were State owned and 10% were a mixture of State and private ownership. The top 10% of the purse seine rights holders held 63% of the rights holder allocation in 2004 (Figure 4.2).

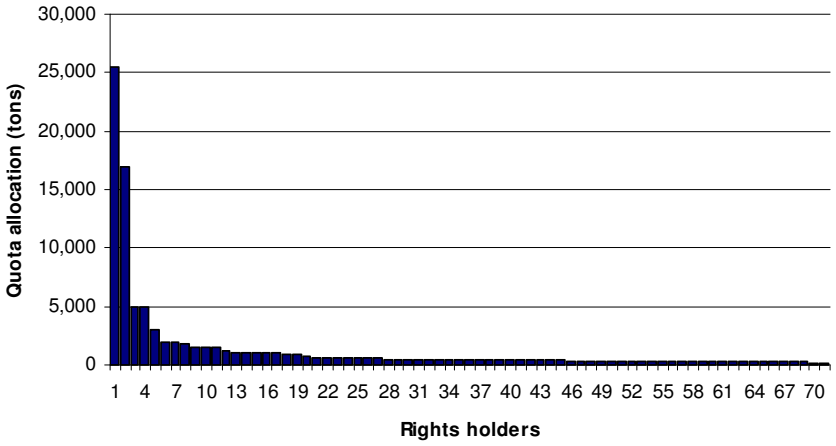


**Figure 4.2.** Small pelagic fish quota allocations for the Angolan purse seine fishery in 2004.

Employment details were available for 39 companies in the purse seine fishery. This amounted to 55% of the total local rights holders, representing 73% of the purse seine quota allocation. These operations employed 2190 Angolan males, 183 Angolan females and 17 foreign males, making up 2390 recorded shore-based employees. Total shore-based employment in the small pelagic purse-seine fishery was estimated at 3300 people in 2004.

### 4.3.1.2 Vessels

Two fleets of purse seiners were operating in the Angolan small pelagic fishery in 2004. These were made up of 25 industrial and 85 semi-industrial vessels, listed in Table 4.8.

**Table 4.8.** The Angolan small pelagic purse seine fishing fleet in 2004.

| Name of Vessel | Sector | Flag | Length (m) | GRT (tons) | Horse Power (kW) | Crew | Hull | Rights holder |
|---|---|---|---|---|---|---|---|---|
| Abrotea | Industrial | Angola | 42 | 137 | 1200 | 17 | Steel | Pestran Lda |
| Anchova | Industrial | Angola | 42 | 195 | 1200 | 15 | Steel | Fropesca U.E.E |
| Atlanta | Industrial | Namibia | 39 | 431.2 | 800 | 12 | Steel | Empesul Lda |
| Atlantic Harvester | Industrial | Namibia | 48 | 613.5 | 2481 | 13 | Steel | RJ - Industrial Comercial |
| Badelo | Industrial | Angola | 42 | 135 | 1200 | 15 | Steel | Fropesca U.E.E |
| Boga | Industrial | Angola | 38 | 135 | 1200 | 13 | Steel | Fropesca U.E.E |
| Bokkeveld | Industrial | Namibia | 22 | 151 | 300 | 12 | Steel | R & J - Industrial Comercial |
| Chris Andra | Industrial | Namibia | 50 | 613 | 1200 | 15 | Steel | Empromar Kuroka U.E.E |
| Christala List | Industrial | Namibia | 48 | 561 | 960 | 15 | Steel | R & J – Industrial Comercial |
| Coronella | Industrial | Namibia | 47 | 501 | 1577 | 11 | Steel | Empromar Kuroka U.E.E |
| Delta | Industrial | Namibia | 26 | 254 | 592 | 14 | Steel | AGL Lda |
| Espardate | Industrial | Angola | 22 | 120 | 335 | 30 | Steel | Pescaria Tentativa |
| Estrela Do Mar | Industrial | South Africa | 22 | 139 | --- | 16 | Steel | Antonio Rodrigues |
| Fiskeskier | Industrial | Namibia | 50 | 324 | 1200 | 15 | Steel | Empromar Kuroka U.E.E |
| Macoa | Industrial | Angola | --- | 196 | --- | 17 | Steel | Pestran Lda |
| Maleco | Industrial | Angola | 42 | 135 | 1200 | 13 | Steel | Fropesca U.E.E |
| Marias | Industrial | Togo | 23 | 159 | 200 | 16 | Steel | Star Fish S.A.R.L |
| Mero | Industrial | Angola | 38 | 135 | 1200 | 13 | Steel | Fropesca U.E.E |
| Rainha | Industrial | Angola | 26 | 75 | 360 | 17 | Steel | Pesinagri Lda |
| Reino Yeisk | Industrial | Namibia | 47 | 370 | 1000 | 14 | Steel | Empromar Kuroka U.E.E |
| Renoy Fish | Industrial | Namibia | 43 | 370 | 950 | 14 | Steel | Empromar Kuroka U.E.E |
| Roncador | Industrial | Angola | 42 | 135 | 1200 | 13 | Steel | Fropesca U.E.E |
| Sousa Novo | Industrial | Angola | --- | 114 | --- | 24 | Steel | Empesul Lda |
| St Pardan | Industrial | Namibia | 46 | 417 | 1000 | 15 | Steel | Empromar Kuroka U.E.E |
| Veslemari | Industrial | Namibia | 45 | 382.1 | 1500 | 13 | Steel | Empromar Kuroka U.E.E |
| Aguia Pesqueira | Semi-ind. | Angola | 31 | 38 | 680 | 16 | Wood | Jose Luis |
| Alvaro Eugenio | Semi-ind. | Angola | 26 | 43 | 520 | 20 | Wood | Pescaria Tentativa |
| Antonio Rodrigues | Semi-ind. | Angola | --- | 37 | --- | 15 | Wood | Antonio Rodrigues |
| Aurora | Semi-ind. | Angola | 20 | 45 | 360 | 10 | Wood | Ouropesca |
| Bambino | Semi-ind. | Angola | 21 | 88 | 375 | 11 | Wood | Mar Fish |
| Ben Hur | Semi-ind. | Angola | --- | 20 | --- | 9 | Wood | Carlos Viegas |

| Name of Vessel | Sector | Flag | Length (m) | GRT (tons) | Horse Power (kW) | Crew | Hull | Rights holder |
|---|---|---|---|---|---|---|---|---|
| Cecilia | Semi-ind. | Angola | 26 | 36 | 620 | 17 | Wood | Arnaldo Vasconcelos |
| Celiana | Semi-ind. | Angola | 13 | 24 | 165 | 11 | Wood | Antonio Taylor Clemente |
| Chilungavela | Semi-ind. | Angola | --- | 20 | --- | 19 | Wood | Cristo Rei |
| Coral | Semi-ind. | Angola | --- | 33 | --- | 11 | Wood | Pescol Lda |
| Devino Esp Santos | Semi-ind. | Angola | --- | 32 | --- | 11 | Wood | Valdemar Santos |
| Diana | Semi-ind. | Angola | 18 | 48 | 350 | 17 | Wood | Coapescas |
| Dom Ara | Semi-ind. | Angola | --- | 26 | --- | 8 | Wood | Jose De Costa Araujo |
| Dona Antonia | Semi-ind. | Angola | 16 | 40 | 180 | 9 | Wood | Pescaria Vintem & Filhos Lda |
| Dona Branca | Semi-ind. | Angola | --- | 10 | --- | 6 | Wood | Jose De Costa Araujo |
| Dona Margarida | Semi-ind. | Angola | 12 | 15 | 112 | 9 | Wood | Henri Mar |
| Etiopia | Semi-ind. | Angola | --- | 18 | --- | 11 | Wood | Joao Brito |
| Feliz Regresso | Semi-ind. | Angola | 22 | 30 | 425 | 12 | Wood | Sopesal Lda |
| Flor de Liz | Semi-ind. | Angola | --- | 26 | --- | 12 | Wood | Socipesca Lda |
| Goraz | Semi-ind. | Angola | --- | 25 | --- | 12 | Wood | Enviatur, Lda |
| Hady | Semi-ind. | Angola | 17 | 25 | 210 | 8 | Wood | Vego ACI Lda |
| Huila | Semi-ind. | Angola | --- | 73 | --- | 26 | Wood | Camapoca Lda |
| Interonde 1 | Semi-ind. | Angola | --- | 65 | --- | 11 | Wood | Cassongue, Lda |
| Joao Manazé | Semi-ind. | Angola | --- | 38 | --- | 15 | Wood | Aderito Areias |
| Joao Nazaré | Semi-ind. | Angola | 18 | 38 | 125 | 14 | Wood | Naipe Lda |
| Le Loango | Semi-ind. | Congo | 24 | 79 | 520 | 16 | Wood | Orgal Lda |
| Lembranca Mae | Semi-ind. | Angola | 17 | 42 | 330 | 20 | Wood | Coapescas |
| Luandra | Semi-ind. | Angola | 17 | 33 | 195 | 16 | Wood | Lucrecio Da Cruz |
| Lueje | Semi-ind. | Angola | 22 | 36 | 380 | 15 | Wood | Aderito Areias |
| Mae Catarina | Semi-ind. | Angola | --- | 27 | --- | 18 | Wood | Sogerem |
| Mae Eterna | Semi-ind. | Angola | 27 | 63 | 480 | 30 | Wood | Vimar & Filhos |
| Mae Luzia | Semi-ind. | Angola | 17 | 33 | 330 | 21 | Wood | Joao Alberto Barros |
| Mama Ximinha | Semi-ind. | Angola | 16 | 21 | 175 | 16 | Wood | Mario Nobre Da Costa |
| Mamiara | Semi-ind. | Angola | 14 | 34 | 125 | 12 | Wood | Sardipau |
| Man Silas | Semi-ind. | Angola | 22 | 91 | 240 | 27 | Wood | Coapescas |
| Mar Azul | Semi-ind. | Angola | 21 | 36 | 396 | 11 | Wood | Cassiano Jose Henriques |
| Mar Branco | Semi-ind. | Angola | 26 | 87 | 400 | 18 | Wood | Jagmar, Lda |
| Marco Polo | Semi-ind. | Namibia | 14 | 30 | 235 | 20 | Wood | AGL Lda |
| Marie Jeanne | Semi-ind. | Angola | --- | 53 | --- | 12 | Wood | Cimel, Lda |
| Mestre Joaquim | Semi-ind. | Angola | 19 | 36 | 360 | 21 | Wood | Joao Alberto Barros |
| Mestre Rui | Semi-ind. | Angola | 17 | 39 | 350 | 12 | Wood | Mestre Rui |
| Mestre Viegas | Semi-ind. | Angola | 27 | 56 | 384 | 25 | Wood | Vimar & Filhos |
| Miradouro | Semi-ind. | Angola | 17 | 26 | 174 | 14 | Wood | Sopesca Lda |

| Name of Vessel | Sector | Flag | Length (m) | GRT (tons) | Horse Power (kW) | Crew | Hull | Rights holder |
|---|---|---|---|---|---|---|---|---|
| Miruna | Semi-ind. | Angola | --- | 24 | --- | 12 | Wood | Midato, Lda |
| Morena | Semi-ind. | Angola | --- | 42 | --- | 11 | Wood | Jose De Costa Araujo |
| Na So Conceicao | Semi-ind. | Angola | 12 | 37 | 180 | 16 | Wood | Joao Brito |
| Na Sra Navegantes | Semi-ind. | Angola | --- | 26 | --- | 14 | Wood | Joao Brito |
| Nga Silva three | Semi-ind. | Angola | 26 | 67 | 400 | 12 | Wood | Man Silva Lda |
| Ngondo one | Semi-ind. | Angola | --- | 42 | --- | 12 | Wood | SPPM Lda |
| Ngondo two | Semi-ind. | Angola | --- | 10 | --- | 8 | Wood | SPPM Lda |
| Nguiza | Semi-ind. | Angola | --- | 48 | --- | 8 | Wood | Men-Comercio & Industria, SARL |
| Nova Esperanca | Semi-ind. | Angola | --- | 30 | --- | 16 | Wood | Marta Fernandes & Filhos |
| Orca | Semi-ind. | Angola | 14 | 31 | 180 | 11 | Wood | Henri Mar |
| Orlando Eugenio | Semi-ind. | Angola | --- | 50 | --- | 11 | Wood | Pesca So-Comercio Industria |
| Palanca Negra | Semi-ind. | Angola | --- | 67 | --- | 12 | Wood | Rui De Jesus Castro |
| Palmao | Semi-ind. | Angola | 20 | 88 | 425 | 12 | Wood | Mavisa-Socied De Pesca Lda |
| Pastenague | Semi-ind. | Congo | 18 | 31 | 400 | 15 | Wood | Sopesnor Lda |
| Paulo Adriana | Semi-ind. | Angola | --- | 53 | --- | 21 | Wood | Aderito Areias |
| Paulo Sergio | Semi-ind. | Angola | 20 | 60 | 425 | 18 | Wood | Jose Liberato Falcao Mestre |
| Pede a Deus | Semi-ind. | Angola | --- | 13 | --- | 12 | Wood | Jose De Castro De Pao |
| Pérola do Mar | Semi-ind. | Angola | 27 | 20 | 350 | 8 | Wood | Joao Pereira |
| Poder de Deus | Semi-ind. | Angola | 19 | 34 | 365 | 11 | Wood | Henri Mar |
| Pulo Luis | Semi-ind. | Angola | --- | 120 | --- | 10 | Wood | Pescol Lda |
| Ricardo Jorge | Semi-ind. | Angola | 14 | 25 | 200 | 12 | Wood | Joao Eduardo Ramos |
| Rosa Linda | Semi-ind. | Angola | 23 | 130 | 510 | 26 | Wood | Coapescas |
| S dos Navegantes | Semi-ind. | Angola | 16 | 33 | 160 | 9 | Wood | Jose Manuel Dos Santos Neves |
| Sa Piedade | Semi-ind. | Angola | --- | 27 | --- | 19 | Wood | Sebastiao V Santos |
| Salvador | Semi-ind. | Angola | 20 | 57 | 370 | 12 | Wood | Sopil |
| Sansao | Semi-ind. | Angola | --- | 64 | --- | 19 | Wood | Soconinfa Lda |
| Santa Rita | Semi-ind. | Angola | 14 | 32 | 275 | 10 | Wood | Rito Pesca |
| Sao | Semi-ind. | Angola | 20 | 28 | 500 | 11 | Wood | Sopesca Lda |
| Sao Jorge | Semi-ind. | Angola | 13 | 18 | 140 | 10 | Wood | Joao Alberto Barros |
| Sao Pedro | Semi-ind. | Angola | --- | 17 | --- | 9 | Wood | Socipesca Lda |
| Saturnia | Semi-ind. | Angola | --- | 32 | --- | 7 | Wood | Jose Benedito Dos Santos De Oliveira |
| Soraya | Semi-ind. | Angola | 17 | 25 | 350 | 11 | Wood | Mestre Rui |
| Suca | Semi-ind. | Angola | 27 | 66 | 400 | 11 | Wood | Organizacoes Suca Lda |
| Sucesso | Semi-ind. | Angola | --- | 76 | --- | 21 | Wood | Soconinfa Lda |
| Tanzania | Semi-ind. | Angola | --- | 42 | --- | 12 | Wood | SPPM Lda |
| Tchitula | Semi-ind. | Angola | --- | 10 | --- | 8 | Wood | Antonio F Melo |

| Name of Vessel | Sector | Flag | Length (m) | GRT (tons) | Horse Power (kW) | Crew | Hull | Rights holder |
|---|---|---|---|---|---|---|---|---|
| Trimar | Semi-ind. | Angola | 20 | 44 | 350 | 18 | Wood | Trirumo |
| Vandina | Semi-ind. | Angola | 12 | 19 | 190 | 17 | Wood | Coapescas |
| Virgem Dolorosa | Semi-ind. | Angola | 23 | 63 | 480 | 20 | Wood | Aderito Areias |
| Winnie one | Semi-ind. | Angola | --- | 24 | --- | 9 | Wood | Organizacoes WW Danelia Lda |
| Xuxu e Fofa | Semi-ind. | Angola | --- | 94 | --- | 18 | Wood | Coapescas |
| Zé Luis | Semi-ind. | Angola | --- | 17 | --- | 12 | Wood | Jose Luis |

The industrial fleet generally consisted of large (> 20 m) steel-hulled vessels; the semi-industrial vessels were smaller (usually < 20 m), with wooden hulls. The semi-industrial vessels are limited to fishing the inshore area. The characteristics of the two types of vessel are presented in Table 4.9.

**Table 4.9.** A summary of the characteristics of industrial and semi-industrial vessels in the small pelagic purse seine fishery.

| Sector | Length (m ± SD) | GRT (Tons ± SD) | Horse Power (kW ± SD) | Crew (±SD) | % Angolan Flag |
|---|---|---|---|---|---|
| Industrial vessels | 39 ± 10 | 272 ± 172 | 1039 ± 503 | 16 ± 4 | 44% |
| Semi-industrial vessels | 20 ± 5 | 42 ± 25 | 331 ± 137 | 15 ± 6 | 96% |

Almost all of the semi-industrial fleet were Angolan vessels in 2004 (96%), but only 44% of the industrial fleet was Angolan. The majority of the industrial fleet was made up of Namibian purse seiners (48%) with a South African and Togo flagged vessel making up the rest.

Approximately 382 crewmembers were employed on the industrial vessels, and 1195 were employed on the semi-industrial vessels, making up 1577 vessel-based employees in the Angolan purse seine fishery.

### 4.3.2 Small pelagic pelagic/mid-water trawl

The pelagic trawl fishery (the equivalent of the mid-water trawl fishery in South Africa and Namibia) is an industrial fishery targeting mainly adult horse mackerel. This was a fishery developed in the 1960's primarily by the Russian and other Eastern-bloc fishing nations using large steel, mid-water to pelagic, stern trawlers. These vessels initially targeted the Namibian horse mackerel, but by the early 1980's had moved into Angolan waters as well.

A moratorium was declared by the Angolan Government on catching adult horse mackerel during the 2004 season, to take pressure off the Cunene horse mackerel resource in an attempt to rebuild the stocks. For this reason, no small pelagic fish quotas were allocated to local companies active in the pelagic trawl fishery.

#### 4.3.2.1 Rights holders

The 2003 small pelagic fish rights holders operating in the pelagic trawl fishery are listed in Table 4.10. All quota allocations for 2004 were set to 0 tons, for the reasons above. Until 2004, there were 11 rights holders in the fishery, all of which were privately owned Angolan

companies, with 100% local shareholding. All rights holders were based in Luanda Province, most from Imgombota (55%) but also from Samba and Viana.

**Table 4.10.** The Angolan small pelagic fish rights holders in the pelagic / mid-water trawl fishery, during the 2004 fishing season.

| Company | Type of Enterprise | Towns | Province | % Local shares | Allocation (Tons) |
|---|---|---|---|---|---|
| Constec | Private | Samba | Luanda | 100 | 0 |
| Copeme | Private | Ingombota | Luanda | 100 | 0 |
| Gemini SARL | Private | Samba | Luanda | 100 | 0 |
| Higipesca Lda | Private | Viana | Luanda | 100 | 0 |
| Hipergesta SARL | Private | Ingombota | Luanda | 100 | 0 |
| Organizacoes B.M.F. Lda | Private | Ingombota | Luanda | 100 | 0 |
| Pelikanus & Associados | Private | Ingombota | Luanda | 100 | 0 |
| Pescamboim Lda | Private | Ingombota | Luanda | 100 | 0 |
| Pesinagri Lda | Private | Samba | Luanda | 100 | 0 |
| Supermar Lda | Private | Inbombota | Luanda | 100 | 0 |
| Takiandu | Private | Viana | Luanda | 100 | 0 |

Employment details were available for all 11 companies operating in the pelagic trawl fishery. They employed 237 Angolan males, 13 Angolan females and 26 foreign males, making up 276 shore-based employees recorded in 2003.

#### 4.3.2.2 Vessels

The 17 industrial-scale vessels that fished in the Angolan pelagic trawl fishery in 2003 are listed in Table 4.11.

**Table 4.11.** The Angolan small pelagic fish, pelagic/mid-water trawl fishing fleet in 2003.

| Name of Vessel | Flag | Length (m) | GRT (tons) | Power (kW) | Crew | Hull | Rights holder |
|---|---|---|---|---|---|---|---|
| Peleda | Congo | --- | 2811 | --- | 48 | Steel | Constec |
| Ghomi | Angola | --- | 1698 | --- | 32 | Steel | Copeme |
| Platiman | Angola | --- | 1846 | --- | 27 | Steel | Gemini SARL |
| Chang Sheng | China | --- | 3080 | --- | 68 | Steel | Higipesca Lda |
| Griol | Russia | --- | 669 | --- | 23 | Steel | Hipergesta SARL |
| T Navegator | Russia | --- | 4069 | --- | 69 | Steel | Hipergesta SARL |
| Alexsey Generalov | Russia | --- | 253 | --- | 15 | Steel | Organizacoes B.M.F. Lda |
| Nemanskly | Russia | --- | 746 | --- | 18 | Steel | Pelikanus & Associados |
| Semenovsk | Russia | --- | 1895 | --- | 35 | Steel | Pelikanus & Associados |
| Ulan | Russia | --- | 746 | --- | 18 | Steel | Pelikanus & Associados |
| Mio | Russia | --- | 1949 | --- | 45 | Steel | Pescamboim Lda |
| Ostrina | Russia | --- | 1898 | --- | 37 | Steel | Pesinagri Lda |
| Kozerog | Russia | --- | 746 | --- | 30 | Steel | Supermar Lda |
| SRTM-KI 1548 | Russia | --- | 746 | --- | 30 | Steel | Supermar Lda |
| Sniper | Angola | --- | 1895 | --- | 38 | Steel | Takiandu |
| Galatis | Belize | 102 | 3870 | 2856 | 12 | Steel | Empesco Lda |
| Hunter | Russia | 55 | 1895 | 882 | 38 | Steel | Nalshiping Lda |

Unfortunately length and power details were not available for most of the vessels in the fleet, but comparing their average GRT of 1800 tons to that of the rest of the Angolan industrial trawling fleet, it is clear that they are comparatively large vessels.

Although the local small pelagic rights holders in the pelagic trawl fishery were all Angolan companies, most of the vessels operating in the fishery were foreign flagged; mainly from Russia (65%). Only three vessels (17%) were Angolan; for the rest, one vessel each was from Belize, Congo and China.

Approximately 580 crewmembers were employed on the vessels making up the Angolan pelagic trawl fleet in 2003; the percentage that consisted of Angolan Nationals is not known, but was probably relatively low.

## 4.4 Demersal trawl

The demersal trawl fishery in Angola is of interest to this study because hake species are caught. Unlike South Africa and Namibia, whose demersal trawl fisheries are based on hake, less than 10% Angolan demersal trawl fishery is made up of these fishes. At least 50% of the catch is usually made up of *Dentex* spp (*D. macrophthalmus* and *D. angolensis*) and the red pandora *Pagellus belloti*. The rest of the fish caught in the demersal trawl include members of the Scianidae, Pomadasydiae and Serranidae families (i.e. croakers, grunters & groupers). Closer inshore, the big-eye grunt *Brachideuterus auritus* makes up a significant proportion of the catch. Part of the demersal trawl catch consists of a by-catch of deep-water prawns and to a lesser extent, the deep-water red crab. Conversely, hakes are taken as a by-catch in the deep-sea prawn trawl fisheries.

The demersal trawl fishery consists of sub-fisheries, based on the targeted species. The relatively small hake fishery is based mainly in the south, targeting the Benguela hake *Merluccius polli;* in the extreme south, the Cape hake *M. capensis* is also taken. The larger *Dentrex*-based fishery takes place in Angola's central and northern fishing grounds.

Stock abundance assessments for the different groups of fish are based on surveys carried out by fisheries research vessels, in the absence of reliable catch and effort data. These assessments are used to recommend annual TACs for both the hake species and for different groups of demersal fish. Other forms of effort control include a limitation of the number of vessels in the fishery, the prohibition of trawling close to the coast, and minimum size limits.

### 4.4.1 Rights holders

The global TAC for the Angolan demersal trawl fishery was 25 000 tons in 2004, with 1000 tons set aside for the EU demersal trawl vessels. Unfortunately, rights holder quota allocations were not supplied per sub-fishery or species group by the Angolan Ministry of Fisheries, but rather in an aggregated format. For this reason, it is not clear what types of demersal fishes the rights holders listed in Table 4.12 were targeting. The rights holders can be divided into three distinct groups based on the order of magnitude of their quota allocation; ranging from 10 – 72 tons, 100 – 950 tons and 1000 – 6050 tons. Of the demersal trawl rights holders for which information was available (62% of the total) only one company was State owned, three had both private and State shareholding, and the rest were privately owned enterprises. The State-owned operation and two of the mixed shareholder companies fell within the category of rights holders that were allocated quota of more than 1000 tons. The largest rights holder in 2004 was World Wide Internacional, a mixed State/private shareholder company with 25% of the Angolan demersal trawl quota allocation. The top 10%

of the rights holders controlled 62% of the demersal trawl quota (Figure 4.3). In terms of local versus foreign shareholding in the rights holding companies, Angolan shareholders owned 76% of the demersal trawl rights allocation.

**Table 4.12.** The rights holders in the Angolan demersal trawl fishery, during the 2004 fishing season.

| Company | Type of Enterprise | Towns | Province | % Local shares | Allocation (Tons) |
|---|---|---|---|---|---|
| World Wide Internacional | Mixed | Ingombota | Luanda | 50 | 6050 |
| Peskwanza, U.E.E | State | Porto Amboim | Kwanza Sul | 100 | 3000 |
| Organizacoes Maritima | Private | Ingombota | Luanda | 100 | 2000 |
| Herasba Lda | Private | Porto Amboim | Kwanza Sul | 100 | 1800 |
| Sede Lda | Mixed | Baia Farta | Benguela | 30 | 1000 |
| Salie Lda | Private | Ingombota | Luanda | 100 | 950 |
| IBG Trading Lda | Private | Ingombota | Luanda | 100 | 900 |
| Marinvest Lda | Private | Porto Amboim | Kwanza Sul | 100 | 800 |
| FADEPA | --- | --- | --- | --- | 620 |
| Associacao Mutualista Das Pescas | Private | Ingombota | Luanda | 100 | 480 |
| Cabipescas Lda | Private | Cabinda | Cabinda | 100 | 480 |
| Caixa De Seguranca Social FAA | Private | Ingombota | Luanda | 100 | 480 |
| Pajanu Lda | Private | Ingombota | Luanda | 100 | 480 |
| Palbaia Comercio Geral | Private | Sambizanga | Luanda | 100 | 480 |
| Staze Lda | Private | Sambizanga | Luanda | 100 | 480 |
| Supermar Lda | Private | Inbombota | Luanda | 100 | 480 |
| Yapam, Lda | Private | Ingombota | Luanda | 100 | 480 |
| Gilberto Leite, Lda | --- | --- | --- | --- | 300 |
| Loangos, Lda | --- | --- | --- | --- | 300 |
| Mapal Lda | Private | Sambizanga | Luanda | 100 | 300 |
| Star Fish S.A.R.L | Mixed | Namibe | Namibe | 60 | 280 |
| Sopesca Lda | Private | Baia Farta | Benguela | 100 | 250 |
| Jagmar, Lda | Private | Baia Farta | Benguela | 100 | 200 |
| Mavisa, Lda | --- | --- | --- | --- | 200 |
| Enviatur, Lda | Private | Samba | Luanda | 100 | 170 |
| Cassongue, Lda | Private | Samba | Luanda | 100 | 120 |
| Pescuio | Private | Benguela | Benguela | 100 | 100 |
| Socipesca Lda | Private | Baia Farta | Benguela | 100 | 72 |
| Casa Do Comercio, Lda | --- | --- | --- | --- | 70 |
| Pesinagri Lda | Private | Samba | Luanda | 100 | 70 |
| Muembeje, Lda | --- | --- | --- | --- | 50 |
| Sambuandi, Lda | --- | --- | --- | --- | 50 |
| Alfredo Moreira | Private | Samba | Luanda | 100 | 40 |
| Jose De Costa Araujo | Private | Maianga | Luanda | 100 | 40 |
| Sociedade De Pesca PPM Lda | --- | --- | --- | --- | 40 |
| Tomas Henriques | --- | --- | --- | --- | 33 |
| Jose M Dos Santos Nunes | --- | --- | --- | --- | 30 |
| Sagropec, Lda | --- | --- | --- | --- | 29 |

| Company | Type of Enterprise | Towns | Province | % Local shares | Allocation (Tons) |
|---|---|---|---|---|---|
| Golfimar Lda | --- | Sambizanga | --- | --- | 23 |
| Agnaldo Jaime | --- | --- | --- | --- | 20 |
| Antonio Taylor Clemente | Private | Samba | Luanda | 100 | 20 |
| Fazenda Kibambe | --- | --- | --- | --- | 20 |
| Jose Barros Araujo | Private | Ingombota | Luanda | 100 | 20 |
| Jose De Castro De Pao | Private | Ingombota | Luanda | 100 | 20 |
| Jose M Bernardo | --- | --- | --- | --- | 20 |
| Marbelas, Lda | --- | --- | --- | --- | 20 |
| Midato, Lda | Private | Maianga | Luanda | 100 | 20 |
| Pedro Antonio Quianica | --- | --- | --- | --- | 20 |
| Carlos A S De Barros | --- | --- | --- | --- | 15 |
| Cimel, Lda | Private | Maianga | Luanda | 100 | 15 |
| Elvira Amorim Nelumba | | | | | 15 |
| IDS, Lda | Private | Ingombota | Luanda | 100 | 15 |
| Joao Eduardo Barros | --- | --- | --- | --- | 15 |
| Mavisa-Socied De Pesca Lda | Private | Sambizanga | Luanda | 100 | 15 |
| Casimira Fatima Bengue | --- | --- | --- | --- | 10 |

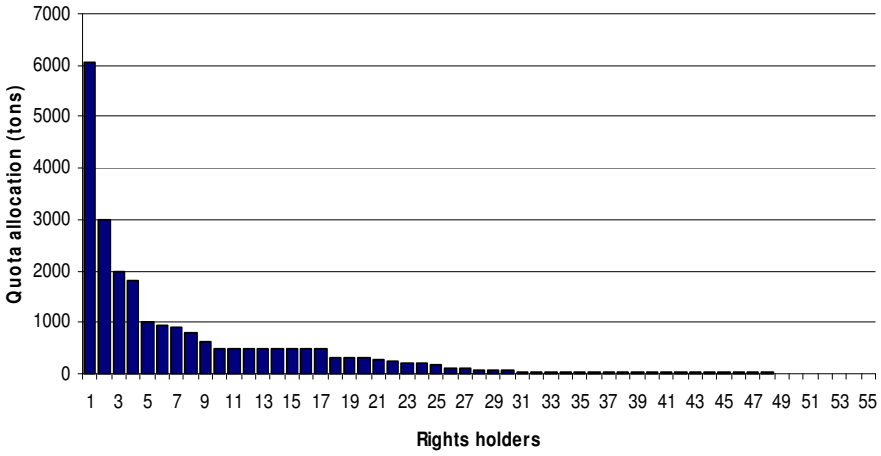


**Figure 4.3.** Rights holder quota allocations for the Angolan demersal trawl fishery in 2004.

Most of the demersal trawl rights holding operations were based in Central or North Angola (i.e. in Luanda (73%), Benguela (14 %) and Cabinda (2%) Provinces, Figure 4.4) but some operations were based in the south (i.e. Namibe), including the large State-owned rights holder Peskwanza, U.E.E.

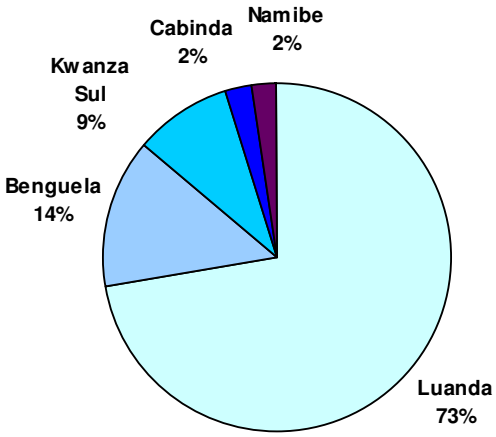


**Figure 4.4.** The proportion of demersal trawl rights holders per coastal Province in Angola in 2004.

### 4.4.2 Vessels

The Angolan demersal trawl fleet consists of large, steel-hulled, industrial scale vessels. About 86% of the 49 or so vessels recorded in the fleet in 2004 were 35 – 55 m in length. More than 50% were within the 35 – 40 m size range. The rest were very large trawlers, ranging from 62 m to 93 m in length. Most of the very large trawlers were owned by World Wide Internacional (Table 4.13).

**Table 4.13.** The Angolan demersal trawl fishing fleet, in 2004.

| Name of Vessel | Flag | Length (m) | GRT (tons) | Power (kW) | Crew | Hull | Rights holder |
|---|---|---|---|---|---|---|---|
| Baia no one | Angola | 51 | 356 | 2800 | 19 | Steel | Palbaia Comercio Geral |
| Buho no three | Honduras | 42 | 292 | 1600 | 18 | Steel | Salie Lda |
| Buho no two | Honduras | 40 | 292 | 1250 | 18 | Steel | Salie Lda |
| Catharina Elizabeth | Angola | 39 | 253 | 425 | 18 | Steel | L & J Pescas Lda |
| Cuango | Angola | 39 | 222 | 1200 | 18 | Steel | Assoc Mutualista Das Pescas |
| Dae Sung fifteen | Japan | 44 | 81 | 1000 | 16 | Steel | Organizacoes Maritima |
| Dae Sung nine | Japan | 51 | 349 | 2700 | 18 | Steel | Organizacoes Maritima |
| Dae Sung ten | Japan | 48 | 493 | 1600 | 17 | Steel | Organizacoes Maritima |
| Dae Sung two | Japan | 63 | 991 | 2200 | 21 | Steel | Organizacoes Maritima |
| Intesoro | Angola | 31 | 154 | 1100 | 16 | Steel | Mapal Lda |
| Kalandula | Angola | --- | 222 | --- | 18 | Steel | Staze Lda |
| Liao Puyu 7815 | China | 36 | 160 | 400 | 15 | Steel | Peskwanza, U.E.E |
| Liao Puyu 7816 | China | 34 | 117 | 355 | 15 | Steel | Peskwanza, U.E.E |
| Luanda eleven | Angola | 52 | 349 | 2300 | 21 | Steel | World Wide Internacional |
| Luanda five | Angola | 51 | 349 | 2700 | 21 | Steel | World Wide Internacional |
| Luanda one | Angola | 51 | 349 | 2000 | 22 | Steel | World Wide Internacional |
| Luanda six | Angola | 79 | 1947 | 2700 | 43 | Steel | World Wide Internacional |
| Luanda three | Angola | 63 | 991 | 2200 | 22 | Steel | World Wide Internacional |
| Luanda twelve | Angola | 93 | 2094 | 2700 | 50 | Steel | World Wide Internacional |
| Luanda two | Angola | 62 | 991 | 2200 | 21 | Steel | World Wide Internacional |
| Lwei no one | Angola | --- | 349 | --- | 18 | Steel | Yapam, Lda |
| Porto Amboim | Angola | 36 | 269 | 1125 | 17 | Steel | World Wide Internacional |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Seta no fifty-seven | Honduras | 39 | 192 | 1000 | 18 | Steel | IBG Trading Lda |
| Seta no fifty-six | Honduras | 39 | 192 | 1000 | 18 | Steel | IBG Trading Lda |
| Seta No three | Honduras | 35 | 239 | 1000 | 18 | Steel | Cabipescas Lda |
| Shin Myung two | Sierra Leone | 40 | 292 | 1150 | 18 | Steel | Yapam, Lda |
| Simione | Angola | 39 | 222 | 1200 | 18 | Steel | Supermar Lda |
| Sr Boa Viagem | Angola | --- | 1300 | --- | 16 | Steel | Wave Lda |
| Tanamin | Angola | --- | 211 | --- | 22 | Steel | Caixa De Seguranca Soc. |
| Xangongo | Angola | 46 | 222 | 1200 | 19 | Steel | World Wide Internacional |
| Yan Ming 6805 | China | 39 | 185 | 950 | 16 | Steel | Edipesca-Luanda-UEE |
| Yan Ming 6806 | China | 39 | 185 | 1000 | 16 | Steel | Edipesca-Luanda-UEE |
| Yan Ming 6807 | China | 34 | 185 | 450 | 16 | Steel | Marsanto Lda |
| Yan Ming 6808 | China | 34 | 185 | 450 | 16 | Steel | Marsanto Lda |
| Yan Ming 6819 | China | --- | 160 | --- | 15 | Steel | Peskwanza, U.E.E |
| Yan Ming 6820 | China | 36 | 160 | 400 | 15 | Steel | Peskwanza, U.E.E |
| Yan Ming 6821 | China | 36 | 160 | 400 | 15 | Steel | Peskwanza, U.E.E |
| Yan Ming 6822 | China | 36 | 160 | 400 | 15 | Steel | Peskwanza, U.E.E |
| Yan Ming 6823 | China | 36 | 160 | 400 | 15 | Steel | Herasba Lda |
| Yan Ming 6824 | China | 36 | 160 | 400 | 15 | Steel | Herasba Lda |
| Yan Ming 6825 | China | 36 | 160 | 400 | 15 | Steel | Herasba Lda |
| Yan Ming 6826 | China | 36 | 160 | 400 | 15 | Steel | Herasba Lda |
| Yan Ming 6827 | China | --- | 160 | --- | 15 | Steel | Visamar Lda |
| Yan Ming 6828 | China | 44 | 160 | 441 | 15 | Steel | Visamar Lda |
| Yan Ming 6829 | China | 36 | 160 | 400 | 12 | Steel | Marinvest Lda |
| Yan Ming 6829 | China | 36 | 160 | 400 | 12 | Steel | ABG Limitada |
| Yan Ming 6830 | China | 36 | 160 | 400 | 12 | Steel | Marinvest Lda |
| Yan Ming 6830 | China | 36 | 160 | 400 | 12 | Steel | ABG Limitada |
| Yan Ming 6831 | China | 43 | 284 | 400 | 16 | Steel | Pajanu Lda |
| **Mean (±SD)** | **---** | **37±20** | **364±427** | **1145±820** | **19±7** | **---** | **---** |

Only a third of the fleet were operating under the Angolan flag; the majority were Chinese vessels, with some from Japan, Honduras and one Sierra Leone vessel (Figure 4.5).

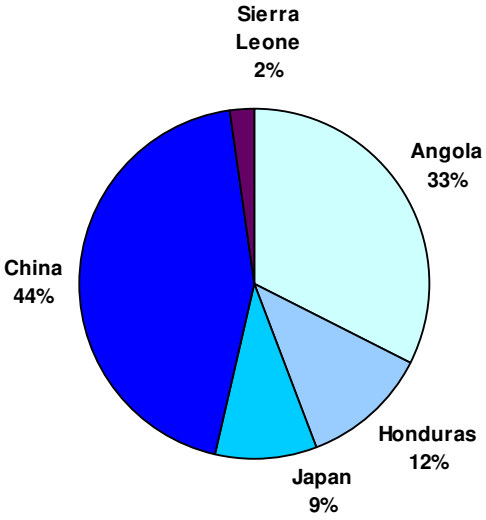


**Figure 4.5.** The proportion of Angolan versus foreign-flagged vessels operating in the demersal trawl fishery in 2004.

The average number of crewmembers on the demersal trawl vessels was 19, ranging from 12 to 50 people on the largest vessel. Total ship-based employment in the demersal trawl fishery was in the region of 890 people.

## 4.5 Large pelagics and tuna

Most of the Angolan large pelagic fishing activity takes place in the southern fishing grounds. Like South Africa and Namibia, Angola is a member of the International Convention for the Conservation of Atlantic Tuna (ICCAT). Angola has been a member of ICCAT since 1976, and regulates its large pelagic (mainly tuna) fishery according to the Convention. The ICCAT statistical database records tuna and swordfish catches by Angolan flagged vessels as far back as 1950.

A range of species are caught, including the so-called "big tunas" such as blue-fin (*Thunnus thynnus*), yellow-fin (*T. albacares*), big-eye (*T. obsesus*), and albacore (*T. alalunga*); and the "small tunas" like the skipjack (*Katsuwonus pelamis*), bonito (*Sarda sarda*), frigate tuna (*Auxis thazard*) and little tuna (*Euthynnus alleteratus*). The smaller tunas are found on the narrow coastal shelf between Lobito and Port Alexandre, where they congregate at certain times during the year. They are normally taken by pole and line vessels, but form part of the by-catch of the seiners. They are migratory, and are usually found in Angolan waters in harvestable numbers between October and January.

The large tunas are generally found further offshore, along the edge of the continental shelf. The yellow-fin tuna is targeted by local pole & line vessels, while big-eye tuna is the major constituent of the Japanese long-line fishery. The yellow-fin tunas form part of an Atlantic population, which spawn off Brazil and the Gulf of Guinea, and are most abundant in southern Angola in summer. In terms of mass of fish caught, the yellow-fin and big-eye tunas make up the bulk of the Angolan large pelagic fishery. Although some swordfish are caught in the fishery, recorded catches have been low[17].

According to the ICCAT database, tuna catches by Angolan flagged vessels averaged around 10 000 tons per year from 1950 – 1970 (all species). During the next 10 years this average dropped to about 6 700 tons. During the 1980's the average dropped further, to about 3 300 tons per year. In 1990, just 800 tons was recorded, and by 2001 the reported catches were down to about 340 tons. However, total catches, including the foreign fleet, was estimated at 3600 tons[18]. Data provided by INIP for the non-EU tuna fleet showed a total catch of 1833 tons in 2004. This was divided amongst three groups of vessels; the local *atuneiro* (literally "tunny boats"; 888 tons), semi-industrial pole & line vessels (264 tons) and the pelagic long-line fleet, dominated by Japanese-flagged vessels (681 tons).

### 4.5.1 Rights holders

All except two of the 14 large pelagic rights holders were private entities, with 100% Angolan shareholding. The other two were mixed companies, with both State and private ownership (Table 4.14). World Wide Internacional was 50% Angolan-owned, while Starfish SARL had 60% local ownership. Total local ownership of the large pelagic fishing rights was 94%. Four of the private rights holders were individuals rather than companies. No quota allocations were reported by INIP for this fishery, although it is regulated by an ICCAT allocated country TAC.

[17] ICCAT Statistical Database
[18] FAO Angola Profile, 2004

**Table 4.14.** The rights holders in the Angolan large pelagic fishery, during the 2004 fishing season.

| Company | Type of Enterprise | Towns | Province | % Local shareholding | Allocation (Tons) |
|---|---|---|---|---|---|
| Alfredo Moreira | Private | Samba | Luanda | 100 | 0 |
| Hakaros | Private | Ingombota | Luanda | 100 | 0 |
| Jose Barros Araujo | Private | Ingombota | Luanda | 100 | 0 |
| Jose M Dos Santos Neves | Private | Ingombota | Luanda | 100 | 0 |
| Kicomar Lda | Private | Sumbe | Kwanza Sul | 100 | 0 |
| Manuel Antonio Chicuma | Private | Benguela | Benguela | 100 | 0 |
| Marosa | Private | Ingombota | Luanda | 100 | 0 |
| Organizacoes Alco Lda | Private | Ingombota | Luanda | 100 | 0 |
| Pecom Lda | Private | Cacuaco | Luanda | 100 | 0 |
| Santa-Clara | Private | Sambizanga | Luanda | 100 | 0 |
| Socipesca Lda | Private | Baia Farta | Benguela | 100 | 0 |
| Star Fish S.A.R.L | Mixed | Namibe | Namibe | 60 | 0 |
| Staze Lda | Private | Sambizanga | Luanda | 100 | 0 |
| World Wide Internacional | Mixed | Ingombota | Luanda | 50 | 0 |

The rights holders mainly operated out of the ports in Luanda Province (71%), but included other central and southern provinces (Fig. 4.6).

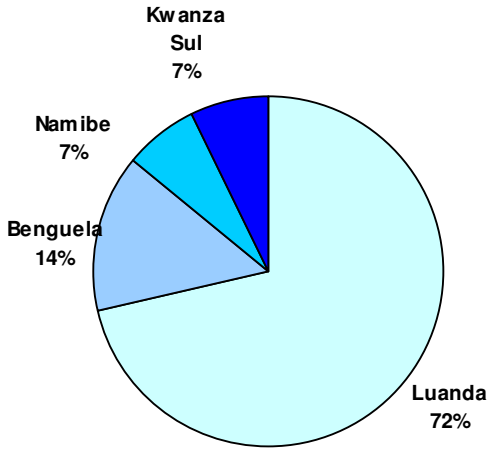


**Figure 4.4.** The proportion of large pelagic rights holders per Province in Angola in 2004.

The Angolan large pelagic rights holders employed some 706 people in their shore-based operations, of which 509 were Angolan males, 58 Angolan females and 139 were foreign males.

### 4.5.2 Vessels

The Angolan large pelagic fleet consisted of both industrial and semi-industrial scale vessels in 2004. The industrial scale vessels included seven “tunny boats” and 16 pelagic longliners; the semi-industrial fleet consisted of seven pole & line vessels (Table 4.15). In addition, 15 EU freezer tuna seiners (mainly Spain and France flagged vessels) and 18 pelagic longliners (mainly Spain and Portugal) were targeting tuna in Angolan waters in 2004.

**Table 4.15.** The Angolan demersal trawl fishing fleet, in 2004.

| Name of Vessel | Type | Fishing sector | Flag | length | GRT | Horse Power | Crew | Hull | Rights holder |
|---|---|---|---|---|---|---|---|---|---|
| Alboniga | Atuneiro | Industrial | Spain | 48 | 940 | 4400 | 25 | Steel | Kicomar Lda |
| Bermeotarrak Quatro | Atuneiro | Industrial | Spain | 74 | 1905 | 4400 | 25 | Steel | Kicomar Lda |
| Bermeotarrak Três | Atuneiro | Industrial | Spain | 62 | 911 | 450 | 25 | Steel | Kicomar Lda |
| Egaluze | Atuneiro | Industrial | Spain | 46 | 703 | 2000 | 25 | Steel | Kicomar Lda |
| Kinchuan Hsing no 31 | Atuneiro | Industrial | Taiwan | 46 | 489 | 1000 | 21 | Steel | Kicomar Lda |
| Txori Eder | Atuneiro | Industrial | Spain | 58 | 834 | 3000 | 25 | Steel | Kicomar Lda |
| Zuberoa | Atuneiro | Industrial | Spain | 77 | 1521 | 4690 | 35 | Steel | Kicomar Lda |
| Dae Sung no 1 | Pelagic longline | Industrial | Japan | 50 | 160 | 1700 | 16 | Steel | World Wide Internacional |
| Dae Sung no 16 | Pelagic longline | Industrial | Japan | 49 | 160 | 1000 | 18 | Steel | Staze Lda |
| Dae Sung no 17 | Pelagic longline | Industrial | Japan | 49 | 160 | 1000 | 16 | Steel | World Wide Internacional |
| Fukukyu Maru no 2 | Pelagic longline | Industrial | Japan | 50 | 713 | 1000 | 14 | Steel | Marosa |
| Goei Maru no 38 | Pelagic longline | Industrial | Japan | 49 | 195 | 1200 | 16 | Steel | Hakaros |
| Kiku Maru no 20 | Pelagic longline | Industrial | Japan | 49 | 160 | 1000 | 14 | Steel | Hakaros |
| Kiku Maru no 32 | Pelagic longline | Industrial | Japan | 49 | 160 | 1000 | 14 | Steel | Hakaros |
| Kiku Maru no 8 | Pelagic longline | Industrial | Japan | 48 | 160 | 1000 | 14 | Steel | Hakaros |
| Kinsai Maru 38 | Pelagic longline | Industrial | Japan | 48 | 379 | 1000 | 10 | Steel | Pecom Lda |
| Kinsai Maru 58 | Pelagic longline | Industrial | Japan | 48 | 379 | 1000 | 10 | Steel | Pecom Lda |
| Kyoshin Maru no 5 | Pelagic longline | Industrial | Japan | 50 | 660 | 1000 | 14 | Steel | Marosa |
| Mito Maru no 65 | Pelagic longline | Industrial | Japan | 48 | 577 | 1000 | 16 | Steel | Organizacoes Alco Lda |
| Shoujin Maru no 28 | Pelagic longline | Industrial | Japan | 49 | 660 | 1000 | 16 | Steel | Organizacoes Alco Lda |
| Shoujin Maru no 38 | Pelagic longline | Industrial | Japan | 49 | 660 | 1000 | 16 | Steel | Organizacoes Alco Lda |
| Shoun Maru no 21 | Pelagic longline | Industrial | Japan | 42 | 449 | 1000 | 16 | Steel | Organizacoes Alco Lda |
| Txirrine | Pelagic longline | Industrial | Spain | 42 | 855 | 1700 | 28 | Steel | Kicomar Lda |
| Dragao do Mar | Pole & line | Semi-industrial | Angola | --- | 32 | --- | 11 | Wood | Socipesca Lda |
| Marias two | Pole & line | Semi-industrial | Portugal | 21 | 49 | 600 | 5 | Wood | Star Fish S.A.R.L |
| Rainha Santa Isabel | Pole & line | Semi-industrial | Angola | 12 | 58 | 92 | 14 | Wood | Jose M Dos Santos Neves |

| Name of Vessel | Type | Fishing sector | Flag | length | GRT | Horse Power | Crew | Hull | Rights holder |
|---|---|---|---|---|---|---|---|---|---|
| Santa Clara | Pole & line | Semi-industrial | Angola | 12 | 60 | 92 | 15 | Wood | Santa-Clara |
| Santa Clara one | Pole & line | Semi-industrial | Angola | --- | 60 | --- | 11 | Wood | Alfredo Moreira |
| Tiro do Mar four | Pole & line | Semi-industrial | Angola | 19 | 33 | 320 | 9 | Wood | Manuel Antonio Chicuma |
| Zé Martinho | Pole & line | Semi-industrial | Angola | --- | 35 | --- | 9 | Wood | Jose Barros Araujo |

The characteristics of the three types of vessels used in the large pelagic fishery are compared in Table 4.16.

**Table 4.16.** A comparison of the characteristics of the three types of vessels in the large pelagic fishery.

| Type | length | GRT | Horse Power | Crew Local |
|---|---|---|---|---|
| **Atuneiro (tunny boat)** | 59 ± 14 | 1044 ± 495 | 2849 ± 1738 | 26 ± 5 |
| **Pelagic long-line** | 49 ± 3 | 406 ± 249 | 1100 ± 240 | 16 ± 4 |
| **Pole & line** | 16 ± 5 | 47 ± 14 | 276 ± 242 | 11 ± 4 |

The large, powerful tunny boats were all operated by one company, Kicomar, Lda. They were all Spain-flagged, except Kinchuan Hsing no 31, which was a Taiwanese vessel. The pelagic longliners caught fish for a number of rights holders, but were all under the Japanese flag. The relatively small, semi-industrial pole & line vessels were mostly Angolan, except Marias II, a Portuguese-flagged vessel catching tuna for Starfish SARL.

Approximately 180 crewmembers were employed on the tunny boats; 250 on the pelagic longliners, and 75 on the pole & line vessels, totalling 505 sea-going employees in the large pelagic fishery.

The fish caught by the industrial-scale tunny boats and pelagic longliners are processed and frozen at sea, and exported to Japan and Europe.

## 5. CONCLUSION

During the 2003 - 2004 fishing season, there were at least 1057 rights holders actively participating in the commercial fisheries in the BCLME region, operating some 1351 vessels, taking in excess of 1.305 million tons of fish and crustaceans from the ecosystem. The BCLME commercial fisheries are summarised in Table 5.1.

Whilst ever endeavour was made to collect as up to date information for this report as possible, the process of data collection, analysis and report writing was time-consuming. Thus, the report on the rights holders and vessels in the BCLME commercial fisheries was completed in May 2006, almost two years after the fishing season in question. This time lag may not be important in stable, mature fisheries, but in the context of the BCLME fisheries, which at the time of writing are all undergoing a process of transformation, it is significant. In the two years since the data was collected, the South African fishing industry has moved from medium-term (5 years) to long-term (10 – 15 years) rights allocations, resulting in significant restructuring of the rights holders involved. The new Angolan marine resources legislation has been promulgated and implemented, resulting in the expulsion of the EU fishing fleet and renegotiations with other foreign fishing operations in Angolan waters. In Namibia, the pressures of Namibianisation and depleted stocks are causing restructuring in the local fisheries as well. Please refer to the companion report *BCLME/LMR/SE/03/03: Transformation in the Marine Fishing Industries of the BCLME Countries* for an in-depth discussion of these issues.

For the above reasons it is vital that a “living” database of the participants in the BCLME fisheries be maintained, with accurate, up to date information. Aside from the biological data necessary to manage their fisheries, each of the three countries collects information on the participants and vessels in their fishing industries, to a varying degree of intensity. For example, South Africa currently has arguably one of the most detailed databases of fishing industry participants ever collected, after the recent long-term rights allocation process. This database is packed with socio-economic information vital to the region. The proposed regional database should not be a “hold-all”, but be designed for a specific socio-economic purpose for which selected data is supplied from the country databases at an agreed period (i.e. monthly, quarterly, annually, etc.).

The SADC Protocol on Fisheries of 1995 called for a regional fisheries database. To this end, DFID funded the Regional Fisheries Information System (RFIS) project based in Namibia. Although the database was built and tested, the project was shelved when the funding ended. This will be the fate of any regional-type database unless it has a well defined “home”, with adequate funding and infrastructure. The ratification and inception of the Interim Benguela Current Commission in 2006 provides a possible platform from which a socio-economic, regional BCLME fisheries database could develop.

**Table 5.1.** A summary of the BCLME commercial fisheries in the 2003 – 2004 fishing season, by rights holder, quota allocation and number of vessels, per country.

| Fishery | South Africa | | | Namibia | | | Angola | | |
|---|---|---|---|---|---|---|---|---|---|
| | ***Rights holders*** | ***Quota Allocated*** | ***Vessels*** | ***Rights holders*** | ***Quota Allocated*** | ***Vessels*** | ***Rights holders*** | ***Quota Allocated*** | ***Vessels*** |
| Demersal trawl & longline | 210 | 157976 | 199 | 47 | 183718 | 158 | 55 Angola + EU | 24000 Angola + 1000 EU | 49 Angola + 4 EU |
| Small pelagic purse seine | 113 | 426031 | 90 | 22 | 24097 | 14 | 70 | 95000 | 110 |
| Mid-water trawl | 17 | 31500 | 8 | 13 | 351788 | 20 | 11 | 0 | 17 |
| Large pelagic pole & longline | 190 | --- | 226 | 21 | --- | 41 | 14 Angola + EU | --- | 30 Angola +18 EU |
| Rock lobster trap | 234 | 2613.75 | 269 | 21 | 405 | 40 | | | |
| Deep-sea trawl | | | | 5 | 2298 | 6 | | | |
| Red crab trap | | | | 3 | 2000 | 2 | 1 | 690 | 1 |
| Prawn trawl | | | | | | | 10 Angola + EU | 940 Angola + 811 EU | 27 Angola + 22 EU |
| **Total** | **764** | **618120.75** | **792** | **132** | **564306** | **281** | **161** | **122441** | **278** |

UNOPS

**United Nations Office for Project Services**

The Chrysler Building
405 Lexington Avenue
New York, NY 10174 USA
Telephone: +1-212 457-4000
Fax: +1-212 457-4001
E-mail: unops.newyork@unops.org

**Enviro-Fish Africa (Pty) Ltd**

22 Somerset Street
Grahamstown
6139, South Africa
Telephone +27 046 622 8241
Fax +27 046 622 7950
Email: info@enivrofishafrica.co.za

BCLME
Benguela Current Large Marine Ecosystem Programme

**BCLME Activity Centre for Living Marine Resources**

C/o Ministry of Fisheries and Marine Resources
Strand Street
PO Box 525
Swakopmund
Namibia

ENVIRO-FISH AFRICA FEIKE UNIVERSITY OF CAPE TOWN tralac BRUCE SHALLARD AND ASSOCIATES
Strategic Fisheries Management Advisors

THE CONSORTIUM