



The Midwater Trawl Industry

By Cathy Blatt

With horse mackerel catches off the Namibian coast exceeding 400 000 tons yearly from 1990 to 1996, the midwater trawl industry is the largest fishery in Namibian waters.

Despite a decrease in the total biomass to one million tons in June 1996 compared to the 1,5 million tons in June 1995, the juvenile stock estimated at 700 000 tons was the same as the year before. A quota of 310 000 tons of horse mackerel was allocated to the midwater trawl industry in 1996 and 250 000 tons in 1997.

At the beginning of the pelagic fishing season, landbased factories are permitted to catch about 90 000 tons of juvenile horse mackerel to be processed into fishmeal. Calculated at a conversion factor of 4,25 tons of wetfish for 1 ton of fishmeal, concern has been expressed as to whether processing juvenile horse mackerel into fishmeal, with yields far below the average achieved from mature fish, is wise and sustainable resource management.

There was uncertainty as to whether the general decrease in size recorded over the last five years was due to larger fish having migrated to other regions or having been removed by fishing. However, the good catches in relation to oil content and weight and the acoustic data as interpreted by the *Fridtjof Nansen* research vessel indicate an increase in biomass and a return of horse mackerel to the northern and central fishing grounds rather than a decline of the adult horse mackerel stock as had been suggested. The stock thus remains relatively strong.

The problem is how to land a low value product of about US \$340 a ton (compared to about US \$1 000 per ton for hake), burdened by high operating costs, on a profitable basis to enable reinvestment of profits into the industry for the purchase of high capacity freezing midwater trawlers.

Before Independence in 1990 and the declaration of a 200 nautical miles exclusive economic fishing zone, horse mackerel was targeted by Eastern Block countries. Fuel tankers, quenching a never-ending thirst for gas oil, accompanied the large number of Russian trawlers. With the demise of the Soviet Union and the discontinuation of subsidies, trawlers were deprived of their support system and a number entered into joint venture or charter agreements with local companies. Given the high operating costs, only four of the original 24 right holders remain actively involved in catching and processing, namely Namsov, Kuiseb, Arechanab and Diaz. The lower catches for 1995 and 1996 can be contributed to cash flow difficulties and lower catch capabilities rather than a reduced resource. Of the more than 30 midwater trawlers fishing in 1991 only 12 remain for the catching effort.

Namibia did not have a midwater fleet of its own. The *Sunfish*, the *Namibian Star*, *Starfish II* and *Mars*, recently purchased by Namsov, are the foundation stones towards a Namibian fleet. The *Sunfish*, a relatively new trawler built in 1992 at Nikolaev in the Ukraine, has been upgraded to reduce fuel consumption and improve catch efficiency. Replaced compressors have increased freezing capacity by 35% and new electronic devices were fitted to improve the ability to find fish in deeper waters.

Whereas the Walvis Bay-based pelagic industry had established its own infrastructure of quays and landing jetties before independence, all catches by foreign midwater trawl fleets were trans-shipped at sea or transported directly to home ports. Therefore the midwater trawl industry, apart from investing in a fleet of its own, also needs to establish the enabling infrastructure.

Port charges, quota fees and fuel levies

Without its own infrastructure, trawlers are compelled to use the commercial harbour at Walvis Bay for crew changes, bunkers, stores and supplies and to discharge frozen horse mackerel and fishmeal. In terms of the Customs Act 91 of

1964, all fish products landed are to be declared. The Namibian Port Authority (NamPort) classifies horse mackerel as normal frozen cargo and clears it as an international import at the prevailing costs set in the official harbour tariffs. The discharge itself is costly as two separate processes are involved: offloading carrying with it stevedoring charges by NamPort and transporting the pallets a few metres further by Walvis Bay Cold Storage. These procedures increase the number of operators and handling charges.

Until recently the quota fee for foreign midwater trawlers operating off the Namibian coast was N\$62,55 per ton plus a N\$10,00 Fund levy with a rebate of N\$15,60 per ton for catches landed in Namibia either for cold storage or further processing. By Namibianising the fleet these costs could be reduced considerably. The quota fee for a Namibian vessel is N\$31,30 plus the Fund levy and for a Namibian-based vessel N\$46,90 plus Fund levy. Though the quota fee is considerably less than the quota fee for hake, the total amount is high considering the large tonnage of catches. The total quota fee plus N\$10,00 Fund levy per ton of wetfish amount to N\$403,09 for every ton of fishmeal produced.

In an effort to minimise the burden on the fishing industry after poor catches in recent years, Government this year announced that it would waive payment of quota fees on the uncaught portion of quotas if more than 20% of the total allowable catch allocation to a specific fishery was not landed. This measure was implemented retrospectively from January 1995. This resulted in N6,5 million being written off for uncaught horse mackerel in 1995, and another N\$26,4 million against the 1996 quota fees.

An estimated 240 litres of fuel are used to land one ton of hake and 200 litres of fuel for one ton of horse mackerel. Considering horse mackerel is a low value product, the high fuel costs for the old Russian trawlers (burning between ten and 21 tons of gas oil a day at US\$250 per ton), coupled with a duty levy towards a fuel fund plus quota fees have made it difficult to operate on a profitable basis. The use of heavy oil fuel blends has increased maintenance costs for trawlers that have been converted to use cheaper oil blends. Thus the industry finds itself in the extraordinary position of paying customs duties applicable to foreign vessels for goods landed on the one hand and paying local fuel prices when bunkering on the other hand. (This is because under Namibian customs legislation they are considered Namibian as they operate out of Namibia, yet they fly under a foreign flag.)

In submissions to the President's Economic Advisory Council in August 1997 the industry compared the Namibian fuel price of N\$1,465 per litre against international bunkering prices of approximately N\$0,85 per litre and appealed for permission to bunker at high sea or in the port of Walvis Bay at international fuel prices. The Ministry recently announced a significant reduction in the fuel levy from N\$0,59 to N\$0,25 as a relief measure. However, this reduction is not expected to come into effect within the next 12 months.

A casualty in the horse mackerel industry is TNP Fishing, which at the time of writing was in provisional liquidation. The company had been instrumental in introducing frozen horse mackerel into the Zimbabwean market. Horse mackerel was not known in Zimbabwe before 1993. This most welcome low priced high protein food resulted in a decrease in the price of chicken and beef in Zimbabwe. Namibia



Over 88 000 tons of Namibian frozen horse mackerel reach the Democratic Republic of Congo (formerly Zaire) per year in the most adventurous manner. Reefers offloading Namibian horse mackerel at Matadi, 1 000 km up the Congo river.

Pelagics, a subsidiary of TNP in conjunction with VOF, representing Cornelis Visserij Maatschappij, Parlevliet and Van der Plas, had commissioned the *Tetman Hette* on an experimental basis off the Namibian coast in 1995 and 1996. Despite good catches of 1 800 tons within three weeks the *Tetman Hette* returned to Mauritania claiming that the overhead costs of port charges, stevedoring and coldstorage, constituted 20% of the income per ton of horse mackerel which made the exercise unprofitable.

Horse mackerel products and markets

Russian-built trawlers catch an average of 110 tons of horse mackerel a day, of which about 70 tons are frozen and the remaining 40 tons converted into fishmeal at the same conversion factor as for fishmeal processed on land at 4,25 tons of wetfish for one ton of fishmeal. The conversion rate for processing fishmeal at sea had previously been 5,556 tons. The reduction forms part of the relief measures announced by the Ministry.

Namsoy had experimented at substantial costs in canning horse mackerel but market resistance compelled them to abandon this project. It is believed that Baader Lübeck has developed a horse mackerel filleting machine and, provided that the dark layer of fatty flesh below the skin responsible for limited shelf life can be removed, a tastier commodity can result. Namibian horse mackerel contains 3 to 8% body weight fat and is in direct competition with the larger and more oily Mauritanian horse mackerel. Research efforts are exploring the possibility of value added products such as deep skinning, heading and gutting and butterfly cuts.

Namsoy grades horse mackerel into sizes of 16 cm plus and 20 cm plus and freezes 10 kg blocks which are packed three blocks per carton weighing 33 kg. These 10 kg blocks are a convenient weight and size for traders to carry on their bartering rounds. The traditional West African markets continue to be the main targets for horse mackerel but involve a high element of risk mainly as a result of a shortage of foreign exchange. Fish shipped to West Africa is trans-shipped from fishing vessels to refrigerated cargo vessels (reefers) with a capacity varying between 1 000 and

3 000 tons. The reefers can navigate the Congo River as far as Matadi. From there the blocks are transferred to smaller boats and sold along the entire route up to Kinsasha. A total of 88 000 tons per year reach the Democratic Republic of Congo (DRC, until recently Zaire) in this adventurous and enterprising manner.

Arechanab Fishing and Development Company at Arandis, beyond the coastal fog belt, processes almost 400 tons of horse mackerel a month into 130 tons of dried product. Erongo Sea Products purchased a 49% shareholding in Arechanab Fishing and Development Company in 1994, introducing management and technical know-how to both the company and the dry fish factory. The company is now looking to increase its manufacturing capacity. Butterfly-style (headed and gutted) horse mackerel is salted, dried and packed in 8,5 kg cartons and exported to DRC, Angola, Zimbabwe and South Africa. Namibians, although not traditionally seafish eaters, are discovering salted and dried fish as indicated by improved sales in Namibia.

Low cost protein has vast potential as a food source in Africa, provided it can be produced more cost effectively. With Africa's high population growth rate and recurring droughts, Namibian horse mackerel could well be the Cinderella of the future, meeting the demands of an ever increasing need for Africa to feed its people.

With the Trans-Caprivi and Trans-Kalahari highways soon to be completed, Namibia is in an ideal situation to supply horse mackerel to the entire SADC region and beyond. Before this happens, however, major adjustments need to be made to allow continued reinvestment. The present cost structure inhibits the purchasing of more cost-effective vessels. Currently shareholders benefit between 12% and 14% of the gross profit from which it is expected to raise capital for future investments. Most investors and/or providers of capital consider this margin unattractive for a capital-intensive industry. If a solution to the high production costs for a low profit margin product is not found, Namibia might well find itself in the position of having a strong horse mackerel stock but not the vessels to harvest this potentially rich resource.



Top: Drying fish at Arechanab.

Middle: Dried horse mackerel ready for sale.

Bottom: About 40 tons of every 110 tons of horse mackerel are processed aboard into fish meal.