

COUNTRY PAPER 9.

FISHERIES STATUS IN ERITREA: PERSPECTIVES OF FISHERIES MCS

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BACKGROUND

The Red Sea waters of Eritrea cover about 56 000 km² of continental shelf, with a coastline of roughly 1 200 km. There are around 356 islands, 20% of which are in the Dahalak Archipelago, with average water depth of 35 m.

The Eritrean fisheries sector has experienced three phases of development. In the late 1950s to early 1970s, there was high exploitation rates undertaken by domestic and Israeli companies. Later, in the late 1970s and 1980s, there was decline in the exploitation of the fishery resources due to the closure of the Suez Canal and the continuous war for liberation from Ethiopia. Since independence there has been continuous endeavour to reconstruct the fisheries sector in order to get the maximum possible benefit.

ERITREAN FISHERIES RESOURCES

Similar to the resources of other oceans and seas in the world, the Eritrean Red Sea area is also rich in various types of fishery resources. Those currently exploited include:

- High-value reef fishes such as snappers, groupers and emperors.
- Small demersal fish species like lizard fishes and threadfin bream.
- Large pelagic species, including mackerels, tunas, jacks, etc.
- Sharks.
- Crustaceans, including lobster and shrimp.
- Others, including aquarium fishes, snails, trochus shells, sea cucumbers, etc.

There are also plenty of small pelagic fish, especially sardines and anchovies, which are not currently utilized.

Table 1. Historical records of catches

Year	Catch (t)	Year	Catch (t)
1960	22 000	1979	407
1962	8 500	1992	399
1964	22 200	1993	416
1966	20 700	1994	426
1968	11 400	1995	3 670
1970	18 500	1996	3 212
1972	3 700	1997	978
1974	2 430	1998	1 562

Source: Ministry of Fisheries, Research and Training Division, Information Management Unit, Massawa.

Table 2. Ornamental fish exports

Year	Number of consignments	Value (US\$)
1995	758	2 172
1996	40 254	58 714
1997	36 964	98 980
1998	7 907	36 858

Source: Ministry of Fisheries, Research and Training Division, Information Management Unit, Massawa.

The volumes of catch reported for 1960-1979 in Table 1 derive from industrial fisheries, which were active during that time, mainly operating on small pelagic fish like anchovies and sardines. In contrast, the very small catches recorded in 1992-1998 came primarily from artisanal fisheries using larger wooden boats with inboard engines (*sambukes*) and smaller boats with outboard engines (*houries*) which catch mainly reef fishes such as snappers, groupers, emperors, etc., and large pelagic fishes like jacks, mackerels, tunas, etc.

Although there is no comprehensive information available on the potential of Eritrean marine fisheries resources, short-term studies indicate the potential annual maximum sustainable yields (MSY) shown in Table 3.

Based on these MSY estimates, the Government of Eritrea has been working hard to build up its infrastructure for developing methods of both increasing the catch and strengthening its management programmes to ensure sustainable utilization of the resources.

Table 3. Estimated potential MSY for Eritrean fisheries

Type of Resource	Estimated MSY (t)
Demersal Fishes	36 000
Pelagic fishes	30 000
Reef fishes	5 000
Sharks	5 000
Crustaceans	500

Source: Hansen, B. 1983. Report on the rehabilitation of fishermen at Massawa, LWF/EEC in agreement with DANIDA, Copenhagen

FISHERIES DEVELOPMENT

With the aim of maximizing wild catches from the sea, the Government of Eritrea has made a number of bilateral agreements. In 1996, there was an agreement with the Saudi Fisheries Company to fish in Eritrean waters. In 1998 there was a joint venture with a Chinese company. Moreover, starting in the middle of 1999, there was an agreement with Egyptian companies for fishing in Eritrean Red Sea waters.

Several development programmes address building the nation's capability to catch, process, and export fisheries resources. There are a number of ongoing projects to provide modern fishing

vessels for fishermen, and to build up jetties, landing facilities, ice plants and processing installations.

Eritrean fisheries development is not restricted to catching wild fish. It also aims at increasing fisheries production from aquaculture. Hence extensive aquaculture programmes are being introduced.

FISHERIES MANAGEMENT

Although the current status of the Eritrean fisheries resources is thought to be that of underexploitation, the Government of Eritrea believes it necessary to establish a strong management body to ensure wise utilization of the resources in a sustainable manner. To this end, it brought into effect the Eritrean Fisheries Proclamation, adopted the FAO Code of Conduct for Responsible Fisheries, and set up an enforcement body for the laws and regulations.

The Eritrean Fisheries Proclamation encompasses the following legal notices:

- (i) The Fishery Product Proclamation
- (ii) The Foreign Fishing Vessel Regulations
- (iii) The National Fishing Vessel Regulations
- (iv) The Fishery Product Hazard Analysis Critical Control Points (HACCP) Regulations
- (v) The Potable Water Regulations

All agreements between foreign fishing entities for utilization of the fisheries resources are made in accordance with the management strategies adopted.

The Fisheries MCS Division of Eritrea emerged right after the establishment of the Ministry of Fisheries, to enforce planned management strategies for the wise utilization of the fisheries resources. At first all its staff were ex-fighters, but as this body must have appropriately trained manpower to carry out its mandates, efforts have been made to develop the knowledge and number of the staff. This has been done by offering in-service training to personnel, covering artisanal and industrial fishery activities; the general biology, ecology and oceanography of the marine environment; seamanship and navigation; and by hiring expatriates to provide comprehensive knowledge of MCS practices. From three staff in 1993, there were 30 in 1994, and 56 in 1999.

The current responsibility of the Inspectors is limited to MCS at sea by being onboard fishing vessels. In this manner the MCS division supervises the type and amount of fish caught; type of gear deployed; the mesh size of nets used; depth, duration and location of fishing; fishing operations of vessels; and ascertains that vessels have necessary and functioning equipment as specified in agreements. The division also collects fisheries data on the catch and effort of artisanal fishing vessels. The information is then sent to the Information Management Unit of the Ministry to be systematically stored, analysed and disseminated to all bodies needing that information for future planning and decision making.

Considering the long coastline of Eritrea, with hundreds of islands, the presence of illegal fishing vessels highlights a need for enhancing the MCS division. Hence a great effort is going into further training its personnel and equipping it with all the necessary facilities. This will enable it to undertake patrolling the sea by itself, rather than patrolling having to rely on the facilities of the Eritrean Naval Force, as has been the case for the last eight years, and to resolve any dispute that could arise in the fishing activities, through establishment of its own system.

CONCLUSION

The MCS system as a sole enforcement body of fisheries management has received proper attention and is expected to strengthen its operations in parallel with the fisheries development programmes to ensure sustainable utilization of the fisheries resources.