

COUNTRY PAPER 1.

FISHERIES MONITORING, CONTROL AND SURVEILLANCE IN THE SULTANATE OF OMAN

by

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INTRODUCTION

This paper discusses the status of fisheries in Oman and the factors affecting the utilization and conservation of living aquatic resources. It deals with the role of government institutions concerned with protection of these important resources, and the departments, activities, laws and regulations designed to ensure well managed and controlled fisheries. The paper deals also with violations and how to control them, and reviews some basic issues encountered in fisheries management, monitoring and surveillance in Oman.

The Sultanate of Oman is one of the most important countries in the Arab world with regard to fishing and fisheries production. The coastline extends over 1 700 km, and the fisheries sector is considered as the most important non-oil source of national income. The fisheries sector plays a vital role in Oman's economy, with an average annual production of 119 000 t.

The fisheries sector in Oman has witnessed rapid progress since 1976, when the Directorate General of Fisheries was established under the Five-Year Plan. During this period, as the competent authority responsible for the control of artisanal and industrial fisheries in Oman, the Department of Fisheries Affairs of the Directorate General of Fisheries has been responsible for the implementation of the Marine Fishing Law and Protection of Living Aquatic Resources, and its Executive Regulation and all the Ministerial Decrees and Circulars issued within the frame of the marine fishing law.

Aims of this paper

The primary aims of this paper are to:

- Provide information regarding the fisheries sector in Oman.
- Review fisheries status and assess the fisheries monitoring, control and surveillance (MCS) system.
- Define areas where enhancement and strengthening is required.
- Discuss ways for improvement and development of fisheries MCS and for establishment of a sound database that can assist in realization of future aims of fisheries development.

Contents of the paper

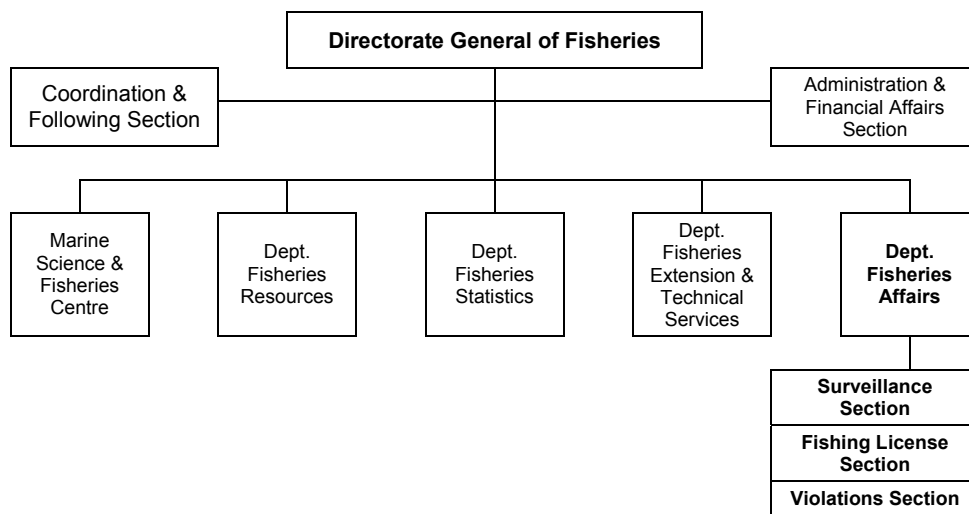
1. Fisheries control and surveillance in Oman.
2. The legal framework of fisheries.
3. Fisheries control, protection and development.

4. Types of violations.
5. Conclusion.

FISHERIES CONTROL AND SURVEILLANCE

Fisheries management

The Department of Fisheries Affairs of the Directorate General of Fisheries is responsible for follow-up and implementation of the provisions of fisheries control and surveillance laws and regulations. The following organizational chart of the Directorate General of Fisheries Resources shows the sections of the Department of Fisheries Affairs:



Sections and activities of the Department of Fisheries Affairs

Fishing Licence Section

- Issuance and renewal of fishing licences.

Surveillance Section

- Surveillance of industrial fishing vessels to check location, depth, and fishing equipment.
- Surveillance of coastline to check the validity of fishing licences as well as licences of boats and vessels.
- Monitoring of fisheries companies and factories.
- Monitoring of border checkpoints.
- Monitoring of landings.

Violations Sections

- Ensure compliance with Marine Fishing Law and its Executive Regulations, and inspection of fishing licences and equipment.
- Record violations and follow up actions on the same.
- Represent the Directorate General of Fisheries Resources before criminal courts with regard to violations of marine fishing law.
- Follow up the execution of judgements issued by criminal courts.

FISHERIES IN THE SULTANATE OF OMAN

Fisheries in the Sultanate are divided into industrial and artisanal (traditional) fisheries.

Artisanal fisheries

The artisanal fishing sector uses vessels and boats not exceeding 10 t capacity. It is considered as the most important sector exploiting fisheries resources and the main pivot for development of fisheries activities in Oman.

Industrial fisheries

By “industrial fisheries” are meant the fishing activities of industrial fishing fleets in the interest of licensed Omani fisheries companies, for which certain quotas are allocated. These fleets work on the high seas in defined fishing areas away from areas allocated for artisanal fishing.

IMPORTANCE OF THE FISHERIES SECTOR IN TERMS OF FISH QUANTITIES AND VALUE

Total fish production during 1997 was 119 000 t, of which 34 600 t (29%) came from the industrial fishing sector and 84 000 t (71%) from the traditional sector.

Table 1. Distribution of traditional fishermen by region (1993 - 1997)

Year	Musandam	Batinah	Muscat	Sharqia	Wusta	Dhofar	Total
1993	1 150	5 680	2 480	5 336	1 935	3 125	19 706
1994	1 150	5 680	2 480	5 336	1 935	3 125	19 706
1995	2 944	8 547	3 022	5 314	2 443	2 219	24 489
1996	3 038	8 837	3 151	5 571	2 629	1 345	25 575
1997	3 064	9 027	3 252	5 757	2 701	2 395	26 047

The commercial fishing sector is currently represented by six companies: Oman Fisheries Company; Oman Sea Company; Gulf of Oman Fishing International Company; Protein Products International Company; Sadah Sea Products Company; and Dhofar Fisheries Products Company. Their annual production during 1995-1997 was estimated at 28 700 t from demersal and pelagic species. Oman Fisheries Company is considered the most important company of the six, and it was established by Royal Decree No.79/1987, issued on 8/12/87.

The current activities of these companies are concentrated on demersal and large pelagic species of high economic value, especially tuna (Table 2).

Table 2. Quotas allocated to commercial fisheries companies in Oman

Company	Demersal quota	Large pelagic fishes quota (tuna)
Oman Fisheries Company	20 000	30 000
Oman Sea Company	2 000	5 000
Gulf of Oman Fishing International Company	2 000	5 000
Protein Products International Company	2 000	5 000
Sadah Sea Products Company	2 000	5 000
Dhofar Fishing Products Company	–	3 000

THE LEGAL FRAMEWORK OF FISHERIES

Due to the important role of the fisheries sectors in the national economy, the Government of Oman is giving care and concern to control and conservation of fisheries resources to ensure their optimal utilization. One result of this care and attention was the issuing of the Marine Fishing and Protection of Living Aquatic Resources Law, in May 1981, in accordance with Royal Decree No. 53, and this was followed by the issuance of Executive Regulations for the law, in 1982, later amended by a Ministerial Decree in 1994.

Significance of the Law on Marine Fishing and Protection of Living Aquatic Resources

The Law contains different chapters dealing with the organization and protection of fisheries resources, the most important of which are mentioned below.

Regulation of fisheries

This chapter of the law deals with regulations and conditions related to licences; fees; specifications of fishing vessels; permitted equipment and gear; substances harmful to the growth, reproduction or migration of living aquatic resources; etc.

Fisheries protection and development

This chapter deals with protection of living aquatic resources during their breeding and reproductive seasons, including provisions regarding prohibition of construction of dams or other barriers that block the movement of living aquatic resources, using methods and tools harmful to the eggs or young of living aquatic resources, etc.

Handling, marketing and processing

This chapter deals with the conditions and specifications of means used for fish transport, specifications of fish markets, and sanitary conditions for fish processing and marketing.

Protection and development of living aquatic resources

The provisions of this part of the Executive Regulation stipulate that all juvenile fish should be returned to the sea if found among the catch. It also prohibits the catching of turtles, crustaceans and shellfish species of economic importance, during their breeding and reproduction seasons.

Control of fishing activities

The provisions of this part determine areas where fishing is prohibited, e.g., areas adjacent to petroleum or military facilities, and bans the use of mechanical fishing gears and trawlers unless a permit is obtained for the same.

Preservation, transport and marketing of living aquatic resources

This part deals with the issuance of licences for processing, transport and marketing of living aquatic resources, and specifies sanitary conditions for selling the same in the market.

FISHERIES SURVEILLANCE, CONTROL AND PROTECTION

According to the authorization given to the Ministry of Agriculture and Fisheries by the Marine Fishing Law and its Executive Regulation, the Ministry has responsibility for the management, conservation and protection of fisheries.

The fisheries surveillance activities of the Ministry include:

- Surveillance on board fishing vessels.
- Landings surveillance.
- Coastal surveillance.

- Surveillance at border checkpoints.
- Surveillance of companies and factories.

Besides the Ministry of Agriculture and Fisheries, there are other government bodies assisting in and contributing to surveillance activities, and there is continuous coordination between them and the Ministry. These governmental bodies include:

- **Royal Oman Police** The Coastguard patrol vessels assist in fisheries surveillance operations through continuous patrolling trips, and reports are sent to them regarding violating vessels so that they can take necessary actions towards the seizure of violators at sea.
- **Royal Navy of Oman** The Royal Navy of Oman performs regular patrolling operations and the Ministry is informed of any violations detected of fishing laws and regulations in Omani territorial waters.
- **Royal Air Force of Oman** Aircraft of the Royal Air Force of Oman are used to monitor, locate and track fishing fleets and detects violations, and reports on the same are sent to the Ministry.

Surveillance of commercial fishing vessels

The control of commercial fisheries includes the issuance of vessel sailing permits, which contain information regarding the vessel, fishing area, fishing gear and equipment, and types of resources to be harvested, in addition to deployment of one or more of the Ministry's surveillance officers on board each demersal fishing vessel.

Controlling the number of fishing vessels and duration of fishing trips

The number of fishing vessels and the duration of each fishing trip has been determined by the Ministry of Agriculture and Fisheries in order to organize and control production.

- The maximum duration of a fishing trip for demersal fishing vessels is 35 days.
- The maximum duration of a fishing trip for large pelagic fishing vessels is 60 days.

Control of fish species that may be thrown back to the sea and fisheries resources not allowed to be harvested

Originally, 16 fish species were specified as species that could be thrown back to the sea if found among the catch during fishing operation.

Thereafter, a Ministerial Decision (No. 42/98) was issued amending Article 17 of the Executive Regulations, and according to this no fish species can be returned to the sea if it comes in the catch.

Industrial fishing vessels are not allowed to harvest lobster, abalone, shrimps, cuttlefish, octopus, whales and other marine mammals, sea turtles and kingfish, in line with the Sultanate policy favouring the protection of such resources from overexploitation.

The harvest of some of the abovementioned species is restricted to artisanal fishermen only.

Control of fishing nets and equipment

With regard to demersal fishing vessels, the stretched mesh size for the main net, including the wings, shall not be less than 210 mm and for the codend the mesh size shall not be less than 110 mm, and no doubling of nets is allowed.

Large pelagic fishing vessels are allowed to use longlines only.

Control of landing operations:

It is obligatory for each fishing vessel to submit, at the end of each fishing trip, a production report showing type and quantity of catch, and each vessel should comply with the standard weight of each box (20 kg).

Quantities stated in production reports are verified by the relevant officials of the ministry, and in the event of any discrepancies in weights, the difference shall be deducted from the company's allocated quota.

Control of permitted fishing areas for industrial fishing vessels

Industrial fishing vessels are restricted to fishing in specified fishing areas, as mentioned hereunder.

- Demersal fishing vessels should fish in areas between latitude 21°00"N and longitude 55°45"E, at least 10 n.mi. from the coastline and in depths not less than 50 m.
- Large pelagic fishing vessels should fish in areas between latitude 24°45"N and longitude 54°00"E, and at least 20 n.mi. from the shore.

Control of artisanal fisheries***Coastal fisheries control***

Coastal fisheries control covers all surveillance activities carried out in different coastal areas in order to ensure that fishers comply with the provisions of the Marine Fishing Law and its Executive Regulations. Surveillance operations are carried out by surveillance teams of the Department of Fisheries Affairs. Article 21 of the Executive Regulations divides the fishing grounds into six main areas:

- (i) Governorate of Musandam with its administrative boundaries.
- (ii) Batinah Region: from Wilayat Shinas to Wilayat Barka.
- (iii) Muscat Governorate from Wilayat AlSeeb to the coast of Makalah Waber at Wilayat Qurayat.
- (iv) Sharqiya Region from the end of Makalah Waber coast to Ruwais coast.
- (v) Al-Wusta Region from the end of Ruwias coast to Wilayat Al-Jazir.
- (vi) Governorate of Dhofar from Sharbatat coast to the border with the Republic of Yemen.

Control of fish resources not allowed to be harvested during certain seasons

The Marine Fishing Law prohibits the catching of fish species of high economic value during their breeding and reproductive seasons (Article 14 of Marine Fishing Law). This includes lobster and abalone. Also, Article 12 of the Executive Regulations stipulates that all fishermen shall immediately return to the sea all live juvenile fish found among shrimps and fish catches.

Provisions of Article 16 of the Executive Regulations of the Marine Fishing Law prohibit the throwing of any shark part into the sea or on the shore. It also prohibits the separation of shark fins and tails.

Article 19 of the Executive Regulations prohibits the collection or export of oysters, shells and/or coral unless a licence is obtained from the competent authority.

Control of the use of prohibited fishing nets and equipment

Chapter Five of the Executive Regulations of the Marine Fishing Law deals with regulations regarding the use of some kinds of fishing gear, and equipment for the protection and development of living aquatic resources. They also protect the marine environment against the use of specific fishing gear and equipment, e.g., gillnets and monofilament nets.

Control of the employment of expatriates in artisanal fisheries

Article 46 of the Executive Regulations of the Marine Fishing Law forbids the employment of expatriate labourers in the traditional fishing sector, with the exception of large wooden fishing vessels, where two expatriates are allowed to be employed, one as a marine equipment mechanic and the other as a diesel technician.

Control of border checkpoints

This includes the inspection of fish consignments intended for export to ascertain that the consignment contains only species permitted at that season. Also, inspection is carried out to ascertain the hygienic and sanitary condition of fish and to check the validity of the licences for fish transport and marketing.

Inspection of fisheries companies and factories:

The inspectors of the Ministry pay inspection visits to companies working in the field of fish export, import or processing and to manufacturers of fishing boats and equipment, to ascertain compliance with relevant fisheries laws and regulations.

Violations in the fisheries sector

Industrial fishing sector

Typical problems found in the sector include:

- Straying outside the designated fishing area.
- Non-adherence to the stipulated duration of fishing trip.
- Using illegal nets and equipment.
- Discarding species of little market value.

Total violations recorded for industrial fishing vessels in the period 1990-1997 were about 275, i.e., about 40 violations annually, with a maximum of in 1993, when a total of 142 violations were committed by the Oman Fisheries Company fleet. Tables 3 and 4 show the number and type of violations detected among commercial fishing fleets.

Table 3. Number of violations by commercial fishing vessels

Year	Oman Fisheries	Oman Sea	Gulf of Oman Fishing International	Protein Products International	Sadah Sea Products
1990	7	3	1	2	2
1991	6	1	–	–	–
1992	8	1	1	–	–
1993	142	21	–	3	2
1994	13	1	3	–	–
1995	26	4	8	–	–
1996	4	–	–	–	–
1997	13	–	2	–	–
Total	220	31	5	5	4

Table 4. Types of violation

Year	Company	Type of violation		
		Discarding marketable fish	Use of illegal nets	Fishing in unauthorized area
1994	Oman Fisheries Co.	+	+	+
	Oman Sea Co.	+	+	+
	Gulf of Oman Co.	+	+	+
1995	Oman Fisheries Co.	+	+	+
	Oman Sea Co.	+	+	+
	Gulf of Oman Co.	+	+	+
1996	Oman Fisheries Co.		+	+
1997	Oman Fisheries Co.		+	+
	Gulf of Oman Co.		+	+

Artisanal fisheries sector

Violations in this sector include:

- Harvesting of fish resources in closed seasons.
- Use of prohibited fishing nets and gear.
- Harvesting of egg-carrying (berried) lobsters and catching of undersize fish species.
- Export of prohibited shark fins.
- Employment of expatriates in fishing activities.
- Use of unlicensed fishing boats.
- Non-compliance with requirements for vessel identification number plates on both sides of the boat.
- Failure to have a valid fishing licence and fishing practice licence.
- Fishing in unauthorized fishing areas.
- Non-provision of marine safety aids.
- Exporting fish and shark fins abroad during closed seasons.

Conclusions and recommendations

From this review, it is clear that the Sultanate of Oman has taken important steps with regard to fisheries management. However, and despite the achievements realized, there is still scope for more work to be done concerning fisheries control and surveillance. The most important challenges facing the relevant authorities in this field include processing and collating the vast quantities of information and data needed for the establishment of a database to assist in decision making, in addition to insufficiency of available observers. This is considered an important missing link in the surveillance and control system, which weakens capabilities, and reduces the results that can be expected. Therefore the enhancement of fisheries supervisory bodies is a necessary element in any fisheries development plan in Oman.

It is important to provide the best and optimal ways and means for fisheries management control and surveillance, and hence it is recommended that this workshop discuss optimal factors for modernization of fishing gear and fishing methods, and development of fisheries management, control and surveillance.