FISHERY COUNTRY PROFILE	Food and Agriculture Organization of the United Nations	FID/CP/OMA
PROFIL DE LA PÊCHE PAR PAYS	Organisation des Nations Unies pour l'alimentation et l'agriculture	April 2001
RESUMEN INFORMATIVO SOBRE LA PESCA POR PAISES	Organización de las Naciones Unidas para la Agricultura y la Alimentación	

THE SULTANATE OF OMAN

GENERAL ECONOMIC DATA

Area:	about 3 000 000 km^2
Shelf area:	about 58 000 km^2
Length of coastline:	about 1 700 km
Population (1998):	2.3 million
GDP at purchasers value [1] (1998):	US$ 1 4107 million
PCE per head [1] (1998):	US$ 6 132
Agricultural GDP [1] (1998):	US$ 270 million

FISHERIES DATA

Commodity balance (1998):

	Production	Imports	Exports	Total supply	Per caput supply
	ton liveweight				kg/year

Fish for direct human consumption	77 168	[2] 16 700	33 847	60 021	26
Fish for animal feed and other purposes	29 000	[2] 1 000	1 000	29 000	[3] 75

Estimated employment (1998)	
Primary sector	30 718
Artisanal sector	26 944
Industrial sector	3 774
Secondary sector (about 73% expatriate.)	3 148
Processing & ice plants (registered figure, but the real figure may be much greater)	844
Fish transport (trucks)	2 304
Gross value of fisheries output (at ex-vessel prices) 1998	RO 54 416 000
Trade (1998)	
Value of imports	RO 113 000
Value of exports	RO 28 127 000

THE STRUCTURE AND CHARACTERISTICS OF THE INDUSTRY

Marine fisheries

Fisheries activities in the Sultanate of Oman can currently be classed as (a) traditional, (b) industrial and (c) government-sponsored projects.

In the traditional fisheries sector, it is estimated that there are some 26 944 fishermen utilizing some 13 109 boats. Boats in the traditional fisheries are of four major types: skiffs, *houris*, *shashas* and launches. Skiffs are constructed of either fibreglass or aluminum, and range in length from 4 to 8 m; *houris* are wooden vessels of between 3 and 10 m, and *shashas* are locally-designed vessels made of palm fronds, of 3 to 4 m. All are powered by outboard engines. Launches are wooden vessels 12 m or more in length and are powered by inboard diesel engines. Of the traditional fishery boat, 8 percent of are *shashas*, 7 percent are *houris*, 3 percent are launches and 3 percent are aluminium skiffs. Fibreglass skiffs account for the remaining 79 percent.

The purchase of new boats and engines is often subsidized through the Fishermen Encouragement Fund, which has increased subsidies steadily since its establishment in 1978.

Most fishermen use a mixture of three fishing methods according to target species and season, including handlines, traps and gill nets. Different gears are used for catching the same species, thus traps, pen gill nets and handlines are all used for catching demersal species.

The total catch of the traditional sector in 1998 was 88 560 tons, and the most important species included tunas, kingfish, large jacks (large pelagics); sardine, small jacks (small pelagics); emperors, groupers, seabreams (demersals); and cuttlefish, lobster, shrimp and abalone (crustaceans). Sharks are also included in traditional catches.

In the industrial sector, there are five fishing companies licensed to harvest 28 000 tons of demersal species and 50 000 tons of large pelagics annually.

In 1998, the industrial fishing fleets included 18 demersal trawlers (average catch: 73 ton/trawler) and 39 tuna fishing vessels (average catch: 113 ton/vessel). Demersal industrial trawlers are allowed to operate in sea areas located between latitude 20° 00¢ N and longitude 55° 45¢ E. Fishing operations are restricted to areas deeper than 50 m or at least 10 nautical miles from shore, whichever is further. Fishing operations are prohibited on the eastern side of Masirah Island and in marine areas around Ras Al-Had between longitudes 45° 00¢ and 55° 00¢ E.

Tuna industrial fishing vessels are allowed to operate in marine areas located between 24° 45¢ N and 54° 00¢ E at distances not less than 20 nautical mile from the coastline.

The total annual catch of trawlers in 1998 was estimated at 17 608 tons (13 198 tons demersal species, 4 410 tons pelagics.

In general, the five industrial Omani fishing companies do not own vessels, although one of them owns two demersal fishing vessels (trawlers) that are registered outside Oman, and another company owns 25 percent of a demersal fishing vessel that is also registered outside Oman.

Tuna fishing companies depend completely on foreign fishing vessels. Three out of the five companies used to sell their fishing quotas to foreign companies, allowing foreign trawlers to fish in their concession areas against a royalty payment of 20 percent of the actual catch in kind, cash or a combination of both. The two other companies exploit their own quotas.

One of these two companies uses its own demersal fleet of two foreign-flag vessels,

managed and operated by foreign crew, while the other uses a demersal fishing vessel owned partially by them (25 percent), which is also operated and managed by foreign crew.

In respect of government-sponsored projects, the government has already completed the construction of ten fishing harbours along the Omani coast, and a harbour construction plan is still current, covering all landing sites. Some land areas at the harbour sites have been allocated for private sector activities, including the establishment of ice plants, cold stores, fish freezing, processing and packaging facilities, workshops, fishing gear stores, fuel depots and other relevant facilities for development of fisheries in general, and many of these facilities has already been established.

Inland fisheries

There are no inland fisheries of commercial significance in Oman.

Utilization of the catch

Fish caught by the industrial fishing fleets is frozen at sea in whole round form. The 80 percent retained by the foreign demersal fishing vessels is usually transhipped for the Korean and Japanese markets. A part of the Omani companies' share of 20 percent of the catch is usually sold in the local market and a part is usually exported to other Gulf countries, Jordan, Europe and elsewhere. The artisanal catch is usually sold fresh. Shark meat and small quantities of the large pelagics are dried or salted for sale in the interior region. Significant quantities of fresh fish are transported in refrigerated trucks or trucked in ice to neighbouring countries, or collected directly from fishermen by trading vessels from Iran and some Gulf countries. A very small part of this production is sold in fresh filleted form; whole fish finds ready acceptance. Most sardine landed in the south of the country is sun dried and fed to cattle.

State of the industry

Over the last ten years, the industry has made significant progress. Production from the artisanal sector has been improved through government subsidy programmes provided by the Fishermen Encouragement Fund, which provides subsidies are provided for fishermen to buy modern fishing boats, fishing gear and equipment, including depth finders, fish finders, communication systems, winches, longlines, traps, fish handling gear and fish preservation boxes.

Development of the industry has been supported through the government-constructed ports, roads, radio communication network, and workshops, in addition to ice plants and other necessary facilities established throughout Oman.

About 80 percent of fish resources are being exploited by the artisanal sector, while 20 percent is being exploited by the industrial sector. There are some indications that some demersal stocks are overexploited.

The fishing sector is considered second in importance in the Omani economy. Although its total contribution to GNP is little less than 1 percent, fisheries are considered one of the main natural resources of the country and one of the important economic sectors, as it is estimated that more than one quarter of Oman's population depend on fisheries as a source of living. Fish is considered a major and growing food item. As the fisheries resources are renewable, they are capable of much greater exploitation to meet both local and export market demand. Not least, the fisheries sector is expected to absorb a grater proportion of the national workforce in future.

DEVELOPMENT PROSPECTS

Serious concerns have repeatedly been raised about the sustainability of the demersal stocks and the welfare of the traditional fishery sector, especially in the light of frequent reports in the last decade of illegal industrial trawling in closed areas, use of illegal mesh size, under-reporting of catch, high and illegal discards by industrial vessels, falling traditional-sector catches, and falling traditional -sector income

For specific fisheries, in response to a request from the Ministry of Agriculture and Fisheries, FAO executed a fish resources assessment survey project using the R/V *Rastrelliger* during the period 15 November 1989 to 15 November 1990. The survey covered demersal fish resources, small pelagic fish resources and mesopelagic resources (lanternfish). The survey covered an area of 90 000 km² and all the EEZ of the Sultanate. The depth coverage ranged generally from 15 to 200 m. The survey did not cover the large pelagic fish resources, sharks, crustaceans and molluscs. This survey continued earlier work, including the surveys carried in the period 1975-1976 and 1983-1984 by the R/V *Dr. Fridtjof Nansen* and the Regional Fisheries Survey (UN Programme) in the period 1976-1979.

The R/V *Rastrelliger* survey of 1989-1990 estimated the biomass of small pelagics as 252 000 tons (the *Fridtjof Nansen* survey estimated 600 000 tons). The greatest abundance was found to be in Masirah - Ras al Madrakah region (189 000 tons), and a lesser abundance in Muscat - Ras Al-Had (9 000 tons). The four small pelagic species mainly found in the Omani EEZ were Indian oil sardine (*Sardinella longiceps*), Indian scad (*Decapterus russelli*), horse mackerel (*Trachurus indicus*) and bigeye scad (*Selar crumenophtalmus*).

The R/V *Rastrelliger* survey estimated the demersal biomass over the entire Omani continental shelf area to be 565 000 tons, a figure about 36 percent higher than the previous estimates from the R/V. *Fridtjof Nansen* survey in 1983-84. Total potential yield of all species (commercial and non-commercial) was estimated to be 126 000 tons, of which 67 000 tons constituted the potential yield of the commercial fish species and 59 000 the potential yield for the non-commercial species. Of the 11 fish families of commercial interest, the most common species were the barracudas, croakers, emperors, groupers, grunts, jacks and scads, seabreams, snappers, threadfin breams, cuttlefish and ribbon fish.

The most abundant species in the non-commercial category were the rays, lizardfishes, sea catfishes, gurnards, sharks and porcupine fishes, which accounted for about 36 percent of the total biomass. All these species, except the porcupine fishes, could have some commercial market value.

With regard to distribution, 17 percent of the total biomass (96 000 t) was distributed in the Gulf of Oman, while 83 percent (469 000 t) was found in the Arabian Sea.

The biomass of the mesopelagic fish (lanternfish) was estimated to be 4 490 000 tons, (400 000 t in Gulf of Oman and 490 000 t in the Arabian Sea). Based on various assumptions, it has been estimated that the potential annual yield of the lanternfish stock could approach that of its standing stock biomass.

Sand lobsters are an incidental part of trawlers catches, but the artisanal fishermen catch two species of spiny lobster, *Panulirus homarus* (scalloped crayfish) and *P. versicolor* (painted lobster). *P. versicolor* is found almost exclusively north of Ras Al-Hadd, whilst the more important *P. homarus* is found to the south, with the biggest areas of concentration being Masirah, Al-Halaniyat Islands and Marbat. Studies, including length/frequency

measurement, are being conducted in Masirah Island.

The overall resource is not large. There is also a small fishery for abalone.

Five species of marine turtle are to be found in Oman. They are loggerhead, green turtle, ridley turtle, leatherback and hawk bill. Masirah Island is probably the most important breeding area for marine turtle in the world. At present there is no commercial exploitation.

In the exploitation of these resources it is the intention of the Government of the Sultanate of Oman to complete construction of necessary fisheries infrastructure and exploit the resources at levels guaranteeing their sustainability and in a way that protects and maintains overexploited resources.

Within its strategy towards development of fisheries resources, the Government will endeavour to Omanize the industrial fishing fleet and vessel crews, create a modern artisanal fishing sector by training Omani youth, equip them with advanced fishing boats and equipment, and associate them with Omani fishing companies to market their production.

It is also Government policy to raise the quality of Omani fish and encourage the private sector to invest in fisheries facilities in realizing this policy. Assistance may be through technical and economic feasibility studies, soft loans, research support and completion of infrastructure.

Demand

With a relatively low population in relation to available resources, an already high per caput consumption level, much of any increase in production will need to be exported. Markets are already being developed in the region and in Europe, including Syria, Jordan, Lebanon and the Gulf Cooperation Council countries, and the only serious problem foreseen concerns the abundance of small pelagic fish.

RESEARCH

Fisheries research in Oman is carried out by Marine Science and Fisheries Centre (MSFC) of the Directorate General of Fisheries, which was established in 1986. The research programmes of MSFC have been designed to provide data and information necessary for decision making regarding development and management of marine resources in Oman. Such information should serve also the private sector companies involved in fishery production, processing, export, aquaculture and other fisheries activities.

MSFC is entrusted with the role of providing such research, and has already carried out a number of fisheries research projects and programmes covering many areas, such as fisheries resources assessment and survey, marine biology and environment, food technology, aquaculture, etc. The research projects and programmes of MSFC have recently been re-oriented in the light of the priority of studying the problems facing both artisanal and industrial fishing sectors, with an emphasis placed on stock assessment projects.

In 1991, a Fisheries Research Fund (FRF) was established for the development of fisheries research. FRF provides finance for fisheries research projects, for the period up to December 2000, FRF approved 18 research projects with an estimated budget of RO 3.0 million. Important results in the aquaculture area have been realized through FRF, and these results have been utilized by the private sector in preparation of economic and technical feasibility studies for aquaculture projects in Oman. These projects should be implemented in the period 2001-2005. The expected results of the current research

activities will contribute towards the establishment of scientific, economic, marketing, technical and environmental databases that will assist in directing private sector investments in the fisheries sector.

AID

The Government has declared the development of fisheries to be a major priority, and it is the intention to place particular emphasis on improving the capabilities of the traditional fishing sector in order to convert the sector to a modern-traditional sector, utilizing the most advanced fishing gears and technologies, depending on Omani youth, who will be given the appropriate training.

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1		All values converted at an exchange rate of US$ = rial Omani 386
2		Estimated division (but the total quantity, i.e. 17 700 tons, is actual)
3		For cattle and camels