FISHERY COUNTRY PROFILE	Food and Agriculture Organization of the United Nations	FID/CP/LIB
PROFIL DE LA PÊCHE PAR PAYS	Organisation des Nations Unies pour l'alimentation et l'agriculture	April 2005
RESUMEN INFORMATIVO SOBRE LA PESCA POR PAISES	Organización de las Naciones Unidas para la Agricultura y la Alimentación	

LIBYAN ARAB JAMAHIRIYA

GENERAL ECONOMIC DATA

Area:	1 775 500 km²
Shelf area (to 200 m):	50 000 km² (Approx.)
Length of coastline:	1 970 km
Population (2003, prelim. est.):	5.6 million
GDP at purchasers' value (2002):	US$19.1 billion
PCI (2002 est.):	US$3 537
Agricultural GDP (2002 est.):	US$1 billion

FISHERIES DATA

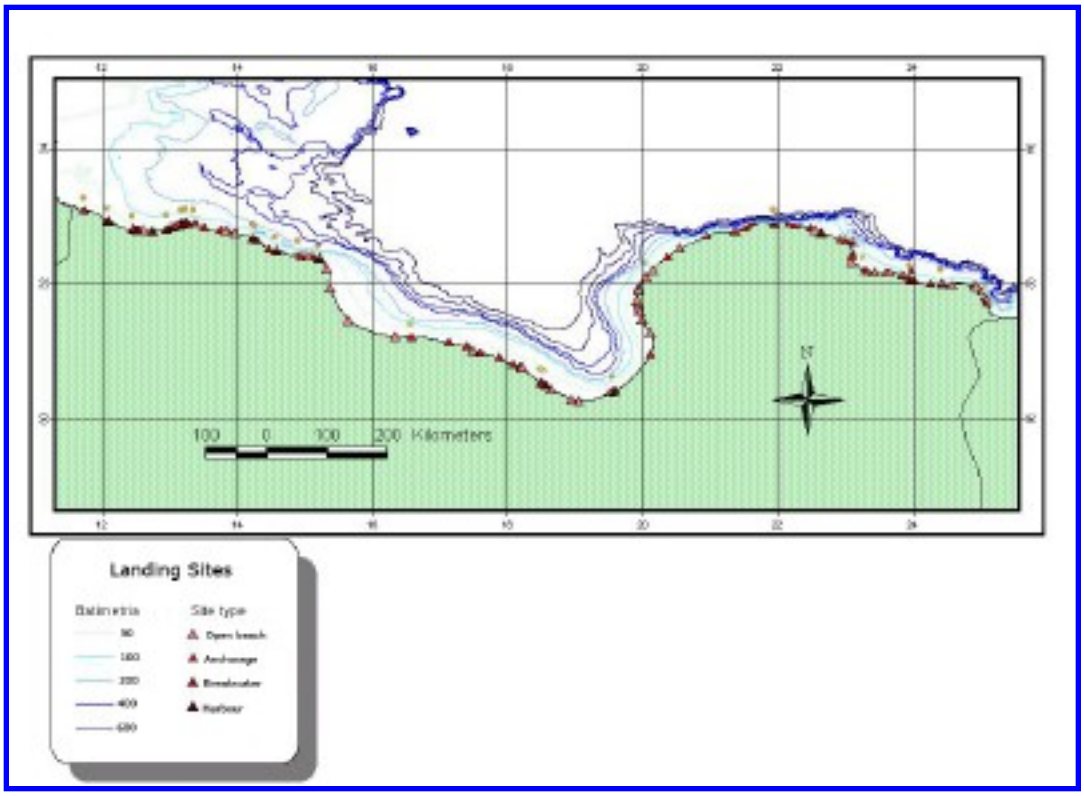
Commodity balance (2001):

	Production	Imports	Exports	Total supply	Per capita supply
	tonnes live weight				kg/year
Fish for direct human consumption	33 339	8 081	1 405	38 537	7.2
Fish for animal feed and other purposes	1 500	-	-	-	

Estimated employment (2003):	
(i) Primary sector:	11 500 full-time and part-time fishers
(ii) Secondary sector:	3 500 (landing site services, marketing, administration, canneries)
Gross value of fisheries output	
(2003, est.):	US$100 million
Trade (2003):	
(i) Value of imports:	US$40 628 000
(ii) Value of exports:	US$10 476 000

STRUCTURE AND CHARACTERISTICS OF THE FISHING INDUSTRY

Marine fisheries



The catch sector in the Jamahiriya is composed of four major activities: artisanal coastal fishing, *lampara* fishing, coastal trawling, and tuna fishing. Sponge fishing, is a minor area of production. Most of the catch is taken by artisanal boats working with nets (trammel nets and gillnets) or hooks (longlines and handlines), and by the *lampara* fleet fishing for small pelagic. A total of 1 866 active artisanal crafts were counted during the national landing site survey conducted in the year 2000. These crafts are based at 135 beach, anchorage, and harbour landing sites along the coastline, with heavier concentrations through the western stretches. Seventy-six landing sites are permanent (all year operation) bases, and 59 seasonal. Artisanal fleet units include 1 300 craft of £10 m LOA, whereas 566 are of >10 m LOA. Approximately two-thirds of the smaller craft are motorized, usually with outboard engines in the 10-35 hp range. The larger units are decked vessels and are all fitted with inboard engines.

The *lampara* fleet is composed of around 135 motorized vessels ranging up to 18 m in length. During active fishing times, mostly in the summer, each unit teams up with one or two smaller lamp boats, known as *dhgaissa*, which are non-motorized and are towed along on nightly trips to and from the fishing grounds. *Lampara* fishing is concentrated along the western section of the coastline, between Misurata and the Tunisian border.

Tuna fishing is carried out mainly using industrial fishing fleet (nine longliners & six purse seiners) and tonnaras (a set of nets which extend 3-5 km out from the coast). Tonnara fishing was more common in the past with as many as 18 stations reportedly in operation before the Second World War. Five stations now remain, only two of which were active during the 2003 season (May - July). These are located at Zreq and Dzirah, 200 km east of Tripoli City.

The industrial fishing fleet (excluding tuna fishing fleet) is composed of 123 units, which are steel and wood stern trawlers. Lengths vary from 13 to 33 m LOA, and engine power ranges from 165 to 950 hp. and mostly are owned privately, either by individuals or partnerships.

According to SCESS proposal for the fleet segmentation, the following fleet segments were identified for Libya:

Table 1. Fleet segments

Sponge harvesting was a major activity during the 1950s and 1960s, especially along the eastern part of the coast between Benghazi and Tubruk. After a period of drastic decline owing to disease outbreaks in the beds and the withdrawal of labor from the fishery, sponge harvesting is slowly beginning to pick up again.

Total production from Libyan waters was reported to be 50 000 mt (latest official figure) in

2000, with an estimated value of US$ 100 million. This production consisted of around 21 000 mt of small pelagic (sardine, mackerel, horse mackerel, and bogue,..), some 2 000 mt of bluefin tuna and about 24 000 mt mixed demersal species (mainly red mullet, breams, groupers, amberjack, common denntex, triggerfish, common panndora, octopus, cuttlefish, squid, shark)) and 3 000 mt of other fishes.

The following table shows the location of main landing sites, which harbor more than 15 fishing units and an estimated quantity of fish landed in mt (the fish landed estimate comes from a sampling survey carried out in 2004).

Table 2. Main landing sites

Port name	Latitude	Longitude	Fleet Nb artisanal	Fleet Nb, industrial	Landing pelagic	Landing demersal	Total Landing
Farwah	32.08:736N	11.44:362E	128	0	28	700	728
Zaorrah	32.55:279N	12.87:204E	139	36	7200	2920	10120
Zuwagtah	32.46:800N	12.27:302E	68	0	4000	320	4488
Mina Sabratha	32.48:298N	12.27:278E	28	0	0	140	140
Ras El Wastf	32.48:129N	12.31:306E	45	0	0	315	315
Marsa Kid zeid	32.47:703N	12.34:892E	21	0	0	140	140
Mina Dila	32.47:576N	12.44:877E	39	0	0	256	256
Sidi Bil	32.47:576N	12.57:306E	58	0	2220	93	2311
Gorrah	32.52:540N	13.86:900E	59	0	0	236	236
Bab El Bahar	32.54:052N	13.16:629E	79	42	1002	2921	4883
Enadi El Bahri	32.54:597N	13.34:884E	228	0	1615	1469	3084
El Maghah	32.63:759N	13.22:547E	34	0	0	146	146
Ras Lamun	32.47:580N	13.44:831E	24	0	0	100	100
Mina Marsa al Khyra	32.48:687N	14.34:872E	49	10	903	986	1889
Zliten	32.29:051N	14.34:295E	83	0	1650	257	1907
Zeyy	32.28:250N	14.54:253E	27	0	0	155	155
Dawrah	32.25:172N	15.86:330E	24	0	0	100	100
Mina Qasr Ahmed	32.22:489N	15.13:843E	319	32	680	2000	2888
Sirt	31.112:695N	16.35:817E	38	0	0	298	298
Harawa	31.09:080N	17.37:618E	34	0	0	338	338
Mina Lawrija	30.54:603N	17.82:806E	28	0	0	99	99
Mina Ras Lanuf	30.28:254N	18.34:301E	23	9	116	680	916
Mina Bengazi	32.08:227N	20.82:899E	173	11	165	2300	2465
Susah	32.54:212N	21.57:853E	31	0	0	171	171
Derna	32.48:601N	22.39:203E	31	0	0	229	229
Tubruk	32.04:716	23.58:444E	23	4	0	520	520
Total			1453	123	20507	18079	38586

- this table does not include tuna fleet (19 units), which are harbored in Tripoli commercial port.

Twenty-four marine fishery cooperatives (*jamaias*) have been established at major fishing centers along the coast with the aim of providing supplies of essential gear and spare parts to the artisanal sector. Membership in local *jamaias* is open to all fishers who have valid boat licenses issued by the fishery authorities.

Between 1988 and 2000, the central authority for the fisheries sector was the Secretariat of Marine Wealth (SMW), a powerful administration that grouped all the administration and technical functions required to manage and develop the fisheries industry. During this period, the initiatives of the SMW backed by significant input from the state led to foster the development of the sector. As an indicator, the production grew from approximately 6 000 tonnes in 1988 to around 50 000 tonnes in 2000. In 2000 as a result of the decentralization policy, the SMW has been dissolved and some of its functions (fleet management, enforcement of regulations, management of port structures)etc) were transferred to local regional authorities (Shaabia's).

Inland fisheries

Inland fisheries in Libya are negligible. Free stocking (carp and some tilapia) was carried out in the past at Wadi Kaam (Khoms/Zliten area) and Wadi Mjinine (Tripoli area) reservoirs, and more recently carp have been stocked in Abou Dzira Lake near Benghazi. Results thus far do not indicate much potential for commercial production.

Aquaculture

Limited inland (freshwater) aquaculture has been attempted at several sites on a pilot basis over the past two decades although production remains minimal. A project to raise tilapia and other species using farmers small irrigation water reservoirs (50-200,Cub.m) at some

agriculture projects in the desert some 650 km south of Tripoli, was started in the mid-1990s. Around 150 farmers were given free fingerlings and feed plus a regular technical follow-up by experts for two years, the projects succeeded in realizing its goals in encouraging the production and consumption of fish in this area. Currently the total farmers raising tilapia in their reservoirs increased to around 250, production also increased to 200-250 tonnes per year according to some field visit reports.

A good deal of emphasis has been put on promoting mariculture since 1990. Pilot/trial stations have been established at Ain Kaam (near Khoms), Ain Ziana (near Benghazi), and Ain El Ghazala (near Tobruk). Work at Ain Kaam has involved brackish water cage culture of mullet and red tilapia. The lagoon at Ain Ghazala has been used for cage culture of sea bass, sea bream, mullet, and eels, and some cultivation of mussel has also been carried out on a trial basis. A major new hatchery and grow-out pond and cage culture of sea bass and sea bream complex is now under construction at Farwa Lagoon (near the Tunisian border). Few attempts by the private sector to establish cage and pond farming took place in the last few years but the level of expansion and production is still below the expected planned target (around 400 tonnes annually), due to technical and financial constraints.

Catch utilization

All catches of Libya is sold and consumed fresh on large urban market areas except for a part of the small pelagic which goes to canning for domestic market or as a fishmeal, during high peak production. As far as commercialization is concerned, facilities for receiving, handling and distributing fish have improved considerably, especially over the last few years after privatization of marketing chain. Most major landing and marketing centers are now served by ice plants and cold/chill storage facilities.

Seven fish canning plants belonging to state companies which can process tuna and small pelagic, with a daily (raw material) capacity, 85 tonnes of tuna, 51 tonnes of small pelagic and 130 tonnes of fishmeal were established during the last two decades. None of these plants seem to operate in a satisfactory condition due to problems in supply of raw material and poor state of equipment in some of them. Although the government of Libya decided in the 1990 s to engage into a broad privatization policy which aimed to progressively withdraw the State from the entire productive sector, privatization is still underway for these canning plants since 2003.

In general, exports of fish products are still very low. About 2 000 tonnes of bluefin tuna are exported annually to international markets (mostly to Japan) and small quantities of high value fish are exported to Tunisia.

State of industry

Although the fisheries authorities has devoted substantial resources to improving the harvest and post-harvest sectors, particularly in the areas of landing site and harbour development and processing plants, national fisheries still perform well below their real potential. Employment in the fisheries sector provides for a small fraction - around 1% - of the total national labor force. It is estimated, that the contribution of fisheries to the Agricultural GDP is around 9%.

DEVELOPMENT PROSPECTS

The situation of fish stock was examined in the latest studies. For the western part of Libya, between the Tunisian border and Misurata, scientific campaigns were carried out in 1993-94 under the LIBFISH project. It was concluded that the demersal stocks are nearing full

exploitation and that there should be no increase in fishing effort. For the central and eastern part (from misurata to the Egyptian border), a scientific cruise was organized in August 2003 by the Marine Biology Research Center (MBRC), in collaboration with Greek research institute. It was concluded that the demersal stocks were healthy and that there were potential for exploitation.

In general, Libya shows prospect for development of its fishing sector with stocks that could be more exploited and the presence of large quantities of bluefin tuna in its waters.

National planning objectives call for further diversification of the economy, particularly in food production, giving the increased role to fisheries and aquaculture.

Demand

In 2001, the average per capita consumption exceeded 7 kg. In general, the demand for domestically produced food fish could continue to grow. This trend could be considerably encouraged by upgrading product quality and improving marketing. Demand for fishmeal is also likely to show a steady increase in response to continuing pressure to expand production in local animal feed plants to serve the poultry industry.

RESEARCH

The fisheries research is under the responsibility of the Marine Biology Research Centre (MBRC) located on the coast at Tajura (near Tripoli).

The following are the main MBRC running activities:

- Bottom and Acoustic survey along the Libyan coast.
- Bluefin tuna population dynamics study.
- Exotic fishes study.
- Development of fishing methods and gears study.
- Seaweeds study.
- Monitoring of heavy metals and hydrocarbons in Libyan coast study.
- Impact of discharge of untreated sewage on marine environment.

AID

* COPEMED Project

The project conducted in Libya the following activites:

- Bluefin tuna population dynamics research.
- Landing Sites Frame survey.
- Socio-economic Indicators Study.
- Developing national staff skills through training activities and supporting experts travel to attend regional meeting and workshops.
- Supplying Mbrc with some Laboratory equipment and PC s.

* Med Sud Med Project

In recent years the project realized the following series of activities:

- Cooperative research programs.
- Working groups.
- National capacity building.
- Reinforcement of the technical cooperation at regional level.

For 2005 the following activities are forseen:

- Bottom Trawl Survey along the Libyan coast by using the MBRC research vessel.
- Acoustic sampling and pelagic trawling survey along the Libyan coast.

Links

Addresses of the national fisheries administrative and research institutions.

1- National Authority for Fishery Investment

Main office at Tripoli

Tel. +218-21-3608431 or 3608432/33
Fax: +218-21-3608430

2- National Project for Development of Aquaculture

Main office at Tripoli

Tel. +218-21-3344324

Fax: +218-21-4445877

3- Marine Biology Research Center

Main office - Tajura
P.O.Box, 30830,Tajura- Tripoli Libya

Tel. +218-21-3690001 or 3690001

Fax:+218-21-3690002
E- mail:info@mbrc-ly.org

www.mbrc-ly-org;

Fisheries-related Legislation and Decisions

- LAW 14/1989: Basic legislation concerning regulation of marine wealth use and preservation.
- Secretariat of Marine Wealth (SMW), Decision No.71/1990: Elaborates provisions of Law 14 and procedures pertaining thereto.
- SMW, Decision No. 80/1991: Provides technical explanations and specifications for the implementation of Law 14.
- SMW, Decision No. 95/1993: Prohibition on use of monofilament nets and no.11 hooks for fishing.
- *SMW, Decision No.*97/1993: Prohibition on trawling in some areas during July and

August spawning period for certain species. This decision has been replaced by the General People's Committee (GPC), Decision No. 271/2004. Defining a specific protected area from trawl fishing (This decision prohibits the trawlers from fishing in the defined areas during the months of May, June, July and it is permitted for the trawlers to fish in areas other than those defined by this decision during these months).

- SMW, Decision NO. 98/1993: Authorizes staff working with fishery administrations in municipalities and regions to act as legal officers.
- Law No.15/2001, replacing Law No. 7/1982 with regard to environment protection: The Law dedicated a chapter for marine and marine wealth protection (chapter three which contains 21 articles), pointing the necessary means and procedures for the protection of fish stock, banning, throwing oils and other pollutants from vessels to the sea and the discharge of sewage and industrial water, explosives, radioactive and other harmful substances.
- General People Committee (GPC), Decision No. 37/2005: Concerning a declaration of a protected fishing zone along the Libyan coastline, (This declaration prohibits all kinds of fishing in the declared zone without advance permission to be issued by an official authority to be determined by the GPC).