FISHERY COUNTRY PROFILE	Food and Agriculture Organization of the United Nations	FID/CP/MLT
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THE REPUBLIC OF MALTA

GENERAL GEOGRAPHIC ECONOMIC DATA

Area:	320 km²
Water area:	N/A
Shelf area:	13 000 km²
Length of continental coastline:	140 km
Population (2004):	402 668
GDP at purchaser's value (2004):	US$ 4 548.2 million
GDP per head (2004):	US$ 11 295
Agricultural GDP (2004):	US$ 106.5 million
Fisheries GDP (2004):	US$ 13.3 million

FISHERIES DATA

Data for 2004	Production	Imports*	Exports*	Total supply	*Per capita* supply
	tonnes liveweight				kg/year
Fish for direct human consumption	1 936	1 853	1 138	2 651	6.58

Fish for animal feed and other purposes	N/A	19 309	N/A		

NOTES: * Figures for the tuna penning industry are not included since the live fish are imported and the harvested product is re-exported. Canned and other processed products are negligible.

Estimated employment (2004):	
Primary sector (including aquaculture): Secondary sector:	539 870
Gross value of fisheries output (2004):	US$ 11.4 million
Trade (2004):	
Value of imports:	US$ 15.1 million
Value of exports:	US$ 12.3 million

FISHERY SECTOR STRUCTURE

Overall Fishery Sector

Maltese fisheries are of a typically Mediterranean artisanal type, which are not species selective and are frequently described as multi-species and multi-gear fisheries, with fishermen switching from one gear to another several times throughout the year. The social and cultural importance of the Maltese fishing industry far outweighs its negligible economic contribution, which is equivalent to about 0.1 percent of the national Gross Domestic Product (GDP). The livelihood of most of the local fishermen depends on the sale of highly prized species that made available to the consumer as fresh fish of highest quality caught by traditional artisanal methods during very short fishing trips. The variety and quality of the catch also contributes significantly to the important tourism industry, since local restaurants are proud of their high quality local seafood, which is a significant attraction, and the colourful traditional fishing vessels are a tourist attraction. The number of active vessels varies according to season, with minor ports having practically no active vessels during the winter months and as little as a quarter of registered vessels landing fish in major ports during this period.

The aquaculture industry in Malta started in the late 1980s, with culture of marine finfish in offshore cages. Production built up to a maximum of about 2 000 t/year in the late 1990s, but fell to about 1 000 t/year by 2000, with most farms switching to tuna penning operations. Maltese aquaculture produce is almost entirely exported to European and Asian markets.

Marine Subsector

Catch profile

Over 65 percent of annual landings (about 1 000 t) originates from the tuna and dolphin

fish fisheries, which contribute about 56 percent in value terms (about US$ 6 million). Trawling, bottom long-lining and swordfish longlining have similar importance in terms of both weight (7−10 percent of annual landings each) and value (11−15 percent of annual value each). Trammel nets and other artisanal demersal gears account for about three percent of annual landings, whilst minor pelagic gears account for about four percent of the annual landings.

Landing sites

The main fishing port in Malta is Marsaxlokk Harbour, in the southeast of the island. About 40 percent of the vessels registered in Malta operate from the fishing villages of Marsaxlokk and the neighbouring Birzebbugia, which lie either side of harbour, separated by the promontory on which lies the historic Fort San Lucjan, which now houses the Malta Centre for Fisheries Sciences (MCFS).

The most important fishing port on the island of Gozo is Mgarr Harbour, where over 70 percent of the island's fleet berth. This port is also the second largest in terms of number of fishing boats for the whole of the Maltese Islands. The other main ports are distributed around Malta. In order of importance they are: St. Paul's Bay in the north; Marsascala and Msida on the east coast; and the landing place of Gnejna, located conveniently amidst the cliffs of the western coast, caters for the fishers from Mgarr (Malta) and Rabat.

Fishing production means

The average Maltese fishing vessel (of which there were 2 252 registered in 2004) is well under 10 m LOA, with the exception of the trawlers, which exclusively use bottom otter trawls and average 22.5 m LOA. Most of vessels are traditional, i.e. *luzzu* and *kajjik*, with the latter being more common. Multi-Purpose Vessels (MPVs) are a relatively recent addition to the fleet, but form more than 35 percent of the fleet. Unlike the *luzzu*, which is an "antique" traditional vessel constructed almost wholly of wood, MPVs generally have fibreglass hulls. Fibreglass has also become the preferred material for construction of *kajjiks*, which until a couple of decades ago used to be made of wood. The *kajjik* differs from the *luzzu* in being generally smaller and flat ended at the stern, whereas the luzzu is pointed fore and aft.

The main engine power of the traditional vessel classes and their derivatives is generally very low, but MPVs have a higher average power rating, reflecting their larger size and different hull structure. Trawlers, as might be expected, have much more powerful main engines, although still comparatively small for their kind of fishing operations (e.g. trawling for prawns at 800 m depth).

The main gear used by the Maltese fishing fleet are various forms of hook-and-line (over 60%). Different types of gillnets and entangling nets are also popular (20%), whilst traps form over ten percent of the registered main gear.

The most prevalent method of fishing is set bottom longlining, which is seasonally operated by over half of the operational vessels, especially those in the <6 m and 6−12 m categories. The next most frequent method of fishing is trammel netting, which is practiced by 27% of the fishers, principally those operating smaller craft.

A quarter of the fishers use the hand trolling line locally known as rixa, which consists of a line and artificial lure, mainly made of hackle and neck feathers, covering different sizes of hooks. The main species targeted by the rixa are dolphin fish (*Coryphaena hippurus*), frigate mackerel (*Auxis hazard*) and amberjack (*Seriola dumerili*). These fishers, the

majority of whom are part-timers or recreational fishers owning vessels <6 m LOA, frequently also use bogue traps. Octopus traps are used by only 4.5% of fishers, who operate vessels of up to 12 m LOA. Bogue traps are made of strips of cane and are baited with balls of bean flour laced with essence of salted herring, whilst octopus traps are made of metal wire and are baited mainly with mackerel and pieces of larger fish.

Drifting longlines are used by ten percent of the fishers. In this case, the vessels are larger, with lengths between 6 and 24 m. This is necessary because the target species are tuna and swordfish, which are caught from around 20 miles offshore and beyond.

Apart from their registered normal fishing activity, up to 130 vessels (>6 m LOA) also participate in the traditional dolphin fish or *lampuki* fishery (August−December), whereby a fishing site or *rimja* is assigned to each vessel after lots are drawn for each national district. Each licensee must lay at least 35 Fish Aggregating Devices (FADs − known locally as *kannizzati*), which are anchored small floating rafts onto which a few palm fronds are attached, in a straight line along a given direction. Fishing sites are distributed all around the Maltese Islands, apart from in the "swordfish corridor", which is kept free from lampuki FADs so that swordfish fishing can proceed unhindered. The sites start from 7 miles offshore and FADs are laid at intervals of one-half to three-quarters of a mile, depending on the district. Aggregated dolphin fish and other species, such as pilot fish (*Naucrates ductor*) and amberjack (*Seriola dumerili*) are caught by a surrounding net similar to a purse seine.

MAIN RESOURCES

Between April and July, the market is dominated by landings of bluefin tuna, with the second most plentiful species being the swordfish. Both these species are targeted in the same way, with pelagic drifting longlines, but differ in the thickness of the snood and the size of the hook, with the tuna long-lines double the strength of swordfish long-lines. This is because tuna are stronger than swordfish and before such differentiation there was considerable (up to 70%) loss of fish through the breaking of both lines and hooks by tuna.

On an annual basis, swordfish is the third most landed species in terms of weight, and it is the only species with landings of more than 1 t in every month of the year. It is targeted throughout the year, albeit to varying degrees and for different reasons. During the winter months (December−April), most boats target lucrative demersal species, before reverting to tuna long-lining, which catches swordfish and albacore as secondary species. The peak fishing period for swordfish is between May and August.

Landings of lampuki occur mainly between August and December, mostly from the FAD fishery, but, if weather conditions remain favourable, the season can extend into January. Other major species associated with the dolphin fish fishery are pilot fish, amberjack and small bluefin tuna, which are caught as secondary species. They occur in considerable concentrations under FADs.

Landings of small gregarious pelagic and demersal species are generally not seasonal except for mackerel; species in these groups are landed in quantities of less than 5 t per month. Bogue is the most landed small pelagic species, caught mostly by traditional traps made out of cane strips, followed by mackerel. Prawns originate exclusively from trawling, which takes place throughout the year, with quantities reducing in winter months due to unfavourable weather. Landings of other demersal species originate from trawling, long-lining and fixed netting operations.

MANAGEMENT APPLIED TO MAIN FISHERIES

The Fisheries Conservation and Control Division (FCCD) regulates and manages both the capture fisheries and the aquaculture industries, together with all other related activities. The FCCD is also involved in scientific monitoring, research and development through the Malta Centre for Fisheries Sciences (MCFS) and offers technical advice to the industry.

The main goal of the FCCD is to implement sound fisheries management, ensuring the sustainability of living marine resources. In particular, the management of the unique Maltese 25-mile Fisheries Management Zone is of highest priority for the effective conservation of local and sub-regional fisheries resources.

Malta's accession to the EU in May 2004 required extensive changes in national fisheries legislation to ensure compliance with EC regulations related to the Common Fisheries Policy (CFP). The results of the Malta-EU negotiations on the 25-mile Fisheries Management Zone have also been transposed into a new Council Regulation (EC 813/2004) which lays down detailed conservation measures in connection with the zone's management regime. Essentially, it limits the number, size and power of fishing vessels allowed in the zone, depending on the type of fishing activities in which they are engaged.

Apart from the main Maltese Legal Act (Act II of 2001, Chapter 425) dealing with the conservation and management of fisheries, a number of subsidiary regulations have been drawn up, including one on the registration and operations of fishing vessels (L.N. 407 of 2004). The fishing fleet register was closed on 15 September 2003 through a notice in the Government Gazette (10 September 2003) in order to prevent any increase in fishing capacity and effort, in line with the management policy reflected in EC 813/2004.

Malta has adopted management measures compliant with the EU CFP and is currently participating in discussions in connection with the revision of EC legislation on management measures for the conservation and sustainable exploitation of fisheries resources in the Mediterranean Sea. Through MCFS, Malta has a scientific data collection programme, in line with Commission Regulation (EC) No 1581/2004, the results of which are essential for the national and regional fisheries management processes.

United Nations fisheries agreements and the FAO Code of Conduct for Responsible Fisheries are thoroughly reflected in Maltese fisheries policy, and a Maltese version of the Code has recently been published. Malta is complying with the various International Plans of Actions in support of the Code of Conduct and is addressing the issues contained in the FAO Strategy to improve the status and trends in capture fisheries, as well as those of the Reykjavik Declaration on responsible fisheries in the marine ecosystem.

Malta became a member of the General Fisheries Commission for the Mediterranean on 29 April 1965 and ratified the amendments to the Agreement on 23 December 1999. It has always been an active member of this Commission, but since 1998 has intensified its participation at scientific level, attending all GFCM Scientific Advisory Committee meetings and taking a key role in the scientific activities of the FAO sub-regional projects COPEMED, MedSudMed and MedFiSIS. Malta also became a member of the International Commission for the Conservation of Atlantic Tunas on 7 August 2003.

FISHERMEN COMMUNITIES

There are two fishers' cooperatives in Malta and all professional fishermen are affiliated to one or the other. Ghaqda Koperattiva tas-Sajd Ltd. and Koperattiva Nazzjonali tas-Sajd offer various services between them to all professional and part-time fishers, including fish

purchasing and sales (including exports and imports); supply of ice, fishing tackle and other inputs; cold storage facilities; insurance coverage; and facilities for packing and processing of fish.

INLAND SUBSECTOR

There are no inland fisheries in Malta.

RECREATIONAL SUBSECTOR

The recreational fishing sector in Malta has two sectors. The major sector comprises vessels (826 in 2004) that are registered in the national fishing fleet register and are classified as non-commercial "Category C" vessels. According to national legislation, this category cannot practice any professional fishing operation and can only use only minor fishing gear, as listed in the fishing gear regulations. A fishing licence is issued to each vessel in "Category C" in a manner similar to professional vessels.

The second sector comprises vessels engaged in recreational fishing that are registered only in the National Maritime Register, and owners of such vessels can use only sport fishing gear for which licenses are not required.

AQUACULTURE SUBSECTOR

Annual mariculture production increased dramatically during the 1990s, from 60 t in 1991 to a peak of 1 800 t in 1998, from six commercial farms, when output consisted of 1 200 t of sea bream and 600 t of sea bass. However, due to decreased prices for these two species throughout the Mediterranean region, production dropped to 1 300 t in 2001, and production in 2004 was around 1 000 t, valued at about US$ 6 million. The market for these species is currently re-expanding and production is expected to increase once again. There are no hatcheries in Malta and all fingerlings are imported from European countries for growing on in offshore cages.

The production of Bluefin tuna (*Thunnus thynnus*) through penning has been increasing over the past few years. The fattening of this species around the Maltese islands started in 2000, with one farm producing 300 t/year. During 2001, two farms produced 1 150 t and production reached a peak of 3 550 t in 2003. The live tuna are exclusively imported from foreign purse seiners fishing in the central Mediterranean, and are re-exported to Asian markets after harvesting the fattened fish.

The main sea bream and sea bass growing-on units use offshore floating cage technology in the form of Dunlop and Farmocean cages. Floatex and Kames type cages are used for the more protected, inshore units. All cages are moored on concrete mooring blocks. For bluefin tuna fattening, 50-m diameter plastic double-collar offshore cages, manufactured in line with the latest offshore technology, are used.

POST-HARVEST USE

Fish Utilization

Capture fisheries products are generally consumed locally as fresh fish. However, most bluefin tuna and an increasing percentage of swordfish caught by Maltese long-liners are exported to foreign markets. About 95 percent of Maltese mariculture finfish products are exported to European markets.

The fish processing industry in Malta is practically non-existent and there is no utilization of fish-derived by-products. A few tonnes of locally caught small pelagic fish species, such as mackerel, are utilized as feed in the tuna farming industry, although most of the fish

feed (pelleted or whole fish) is imported.

Fish Markets

Capture fishery products are mainly sold through the wholesale fish market in Valletta. Fish are sold by public auction carried out by intermediaries (belonging to five limited companies) under the supervision of fisheries protection officers. Sales are usually made on credit and FCCD collects the monies due to the fishers. The fish are bought wholesale and are marketed by about 150 registered fish vendors, each of which has an exclusive marketing zone. Fish products originating from small-scale artisanal fisheries are also frequently sold direct to catering outlets. The number of modern fish shops is increasing throughout the country.

As mentioned earlier, highly priced bluefin tuna (both caught and farmed) and finfish mariculture products are almost exclusively exported to Asian and to European markets, respectively.

FISHERY SECTOR PERFORMANCE

Economic Role of Fisheries in the National Economy

The fishing industry in Malta is small and vulnerable. The proportion of the working population depending, to varying extents, on this industry for its livelihood, is around 1.3 percent. The average value of catches is around 0.16 percent of national GDP, with the industry's direct contribution to GDP estimated at around two-thirds of this figure when adjusted for the cost of imported inputs, most notably fuel. From an international perspective, the value of the annual fish catch in Malta is around 0.07 percent that of the EU, while total employment, including full-time, part-time and seasonal employment, is around 0.4 percent of the EU total for the sector.

Tourism is one of the key areas of Maltese economy activity, generating around one-fourth of the economy's output and employment. Surveys of visitors to Malta have repeatedly identified the high value placed on culture as expressed in local artisanal crafts as a prime tourist attraction. The fishing industry is one of the more important artisanal crafts that has survived to an appreciable extent. Its contribution to the tourist industry is consonant with ongoing efforts to attract upper-market tourists through cultural activities in order to diversify away from the highly seasonal, typically lower income, "sun and sea" tourists.

Demand

The local consumption of capture fisheries products is heavily supplemented by locally farmed fish, imported chilled and frozen fish products, as well as processed imported fish products.

Supply

The per capita consumption of fish products (excluding canned and other processed products) is estimated at 6.58 kg/year.

Trade

Malta's trade balance in fisheries products is negative at US$ 2.8 million.

Food Security

Fresh fish and other fisheries products form part of the national staple diet.

Employment

The estimated numbers of full-time and part-time professional fishers (2004) are 455 and

848 respectively, with less than one percent being females. The mariculture industry employed 84 full-time and 22 part-time persons, including technical and scientific experts, farm managers, farm operators, divers and maintenance staff.

Rural Development

The Maltese population involved in the fishing industry is economically, geographically and culturally dependent on artisanal fisheries. The introduction of industrial fishing methods and any further increase in artisanal fishing would have negative impacts for this sector of the population.

Major fishing villages around the Maltese Islands, particularly Marsaxlokk, are attractions for both locals and tourists due to their picturesque characteristics and ongoing artisanal activities related to fishing.

FISHERY SECTOR DEVELOPMENT

Constraints

The vulnerability of the fishing industry in Malta can be gauged by its low productivity. The average value of annual catches per employee is slightly over LM 800 (€ 2 000), merely one-fifth of the EU average. This reflects the predominantly non-industrial, part-time nature of fishing activities in Malta, based on artisanal methods.

The small size and lack of resources of the Maltese economy have resulted in underinvestment in a number of sectors, of which the fishing industry is a prime example. Moreover, the small size of the industry has been an obstacle to the accumulation of significant amounts of capital for investment in technology, which could reap economies of scale.

The main constraint for the mariculture sector is the limited coastal sea areas suitable for farm site installations, which greatly restricts the expansion of the industry and its viability.

Development Prospects and Strategies

The Malta-EU agreement on the establishment of a specially managed 25-nautical mile Fisheries Management Zone around the Maltese Islands offers some protection to the local fishing industry, to the sustainability of fisheries resources and the associated marine environment therein. This implies the need for improved surveillance of fishing activities, such as through Vessel Monitoring Systems and patrolling for protection and enforcement. An ecosystem-based approach to fisheries is also being promoted to sustain fisheries resources through scientific monitoring and sound management measures.

As a new member of the EU, Malta has the opportunity and support to modernize its fishing fleet and to monitor more efficiently the interaction between fishing operations, the environment and the living marine resources. The marketing of fishery products could also expand as a result of EU membership, especially if the Maltese catch is promoted for an "eco-labelled" niche market, fetching higher prices, as high quality fresh fish caught by artisanal methods taken from within a strictly managed fishing zone.
The modernization process of the fishing fleet (including fishing gear, equipment, health and safety, hygiene) could utilize EU-FIFG funds to maximize local fishing industry outputs, expand the local commercial fishing potential, and exploit opportunities for sharing fishing yields from international waters.

Mariculture is a long-term natural opportunity for Malta to supplement capture fisheries and ensure the continual provision of fresh fish at reasonable cost. Malta is involved in

applied culture fisheries research, especially in fish farming engineering applications, fish pathology and husbandry, and species diversification, as well as in the field of environmental monitoring to ensure compatibility of mariculture practices with the marine ecosystem.

RESEARCH

MCFS is the national institution responsible for scientific monitoring and research related to capture and culture fisheries.

Since 1998, MCFS has participated actively in various international scientific projects, including COPEMED (since 1998) and MEDSUDMED (since 2002), both FAO Mediterranean sub-regional projects, which have helped Malta prepare for future demanding challenges in managing marine resources in a responsible manner and using an ecosystem approach. MCFS also participates in various scientific activities of subsidiary bodies of the General Fisheries Commission for the Mediterranean, and the International Commission for the Conservation of Atlantic Tunas.

In January 2005, MCFS initiated an annual fisheries scientific data collection programme in line with EU regulations EC1639/2001 and EC1581/2004.

MCFS is a key partner in an EU project dealing with the reproduction of and feasibility for domestication of *Thunnus thynnus*.

EDUCATION

From time to time, MCFS provides formal courses and training at technical and scientific levels. Occasionally, courses for fishers and other persons involved in the fishing industry are also conducted.

FOREIGN AID

As a new EU member state, Malta has had access to funds available from the EU through various frameworks, such as the Financial Instrument for Fisheries Guidance (FIFG), research programmes and data collection programmes.

FISHERY SECTOR INSTITUTIONS

FCCD within the Ministry for Rural Affairs and the Environment is responsible for the management and regulation of the fishing and mariculture industries. MCFS falls within the structure of FCCD. (http://www.maltafisheries.gov.mt)

GENERAL LEGAL FRAMEWORKS

As an EU member state, Malta follows all relevant legislation within the framework of the EU CFP. At national level, the current legislation in force related to fisheries and aquaculture is summarized below.

Legislation directly related to fisheries and aquaculture

Chapter 425	Fisheries Conservation & Management Act
Chapter 146	Agriculture and Fishing Industries (Financial Assistance) Act
Chapter 129	Tunny Fishery (Shares) Act

Subsidiary Legislation LN 407 (2004)	Fishing Vessels Regulations
Subsidiary Legislation 10.12	Fishery Regulations
Subsidiary Legislation 138.01	Fish Marketing Regulations
Subsidiary Legislation 138.03	Slipway (Use) Regulations

Subsidiary Legislation 10.30	Berthing Regulations
Subsidiary Legislation 138.04	Registration of Fishing Boats Regulations
Subsidiary Legislation 138.06	Marine Vegetation Licence Regulations
Subsidiary Legislation 138.02	Tunny Fish (Importation) Restriction Order
Subsidiary Legislation 36.34	Aquaculture Regulations
Subsidiary Legislation 231.12	Sale of Fish Regulations
Subsidiary Legislation 231.43	Fish Packing and Processing Establishment Regulations

Subsidiary Legislation 36.26	Prohibition of Sale of Sea-Food Regulations
Subsidiary Legislation 35.01	Fees Leviable by Government Departments Regulations (Sections 5b & Ministry for Agriculture & Fisheries - Fisheries section)
Subsidiary Legislation 35.10	Fees for Abattoir and Veterinary Services Regulations (Section II)
Subsidiary Legislation 117.12	Price Control of Fish Regulations
Subsidiary Legislation 35.13	Fees Levied at Agricultural Produce Marketing Centres Regulations
Subsidiary Legislation 138.05	Fisheries Officers (Remuneration) Regulations

Other national legislation of importance to fisheries and aquaculture

Chapter 348	Environment Protection Act
Chapter 226	Territorial Waters and Contiguous Zone Act
Chapter 194	Continental Shelf Act

Chapter 352	Malta Maritime Authority Act
Chapter 356	Development Planning Act
Chapter 234	Merchant Shipping Act

Chapter 271	Marine Pollution (Prevention and Control) Act
Subsidiary Legislation 231.32	Residues in Meat Regulations
Subsidiary Legislation 231.34	Maximum Residue Limits in Veterinary Medicinal Products Regulations
Chapter 10	Code of Police Laws (Section 130)
Subsidiary Legislation 128.01	Police Licenses Regulations (Section 15)