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DIRECTORATE GENERAL FOR INTERNAL POLICIES
POLICY DEPARTMENT B: STRUCTURAL AND COHESION POLICIES

FISHERIES

FISHERIES IN THE CANARY ISLANDS

NOTE

This document was requested by the European Parliament's Committee on Fisheries.

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DIRECTORATE GENERAL FOR INTERNAL POLICIES
POLICY DEPARTMENT B: STRUCTURAL AND COHESION POLICIES

FISHERIES

FISHERIES IN THE CANARY ISLANDS

NOTE

Abstract

This note was requested by the Committee on Fisheries for its Delegation to Canary Islands (28/04-1/05/2013). The note provides an overview of the current state of the Canarian fisheries sector and outlines its main characteristics, particularly with regard to fisheries management, production, fishing fleets and trade of fisheries products.

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LIST OF ABBREVIATIONS

- BIP** Border Inspection Post
- CFP** Common Fisheries Policy
- EEZ** Exclusive Economic Zone
- EMFF** European Maritime and Fisheries Fund
- ICCM** Canarian Institute of Marine Sciences
- IEO** Spanish Institute of Oceanography
- ISTAC** Canarian Institute of Statistics
- JACUMAR** National Advisory Board for Marine Aquaculture
- PROAC** Regional Plan of Management of the Canarian Aquaculture
- TAC** Total Allowable Catches
- ULPGC** University of Las Palmas de Gran Canaria
- UNCLOS** United Nations Convention on the Law of the Sea

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EXECUTIVE SUMMARY

The Canary Islands are an autonomous community of Spain and an outermost region of the European Union (Table 1). They form an archipelago located off the northwest coast of mainland Africa. The Canarian jurisdictional waters have three national maritime borders, with Portugal, Morocco and Western Sahara.

The seafloor bathymetry around the islands is typically abrupt with a narrow shelf and a steep slope plunging to more than 1000 m depth, which produces near-shore conditions similar to the open ocean. The archipelago is located in the path of the cool water Canary Current which moderates the climate and shapes the oceanographic features of the area. The presence of upwelling along the West African coast brings deep cold nutrient-rich waters to the surface and stimulates primary productivity.

As compared with the very rich fishing grounds in the upwelling area, waters around the Canaries are relatively poorer, whereas the narrow continental shelf of the islands limits the abundance of demersal resources. Nevertheless, fishing activities represent a fundamental part of the identity of the Canary Islands, and many Canarian municipalities are highly dependent on this sector.

The recent history of the Canarian fishing sector has been marked by a series of major events: the loss of the access to the rich Saharan fishing grounds when Spain retired from Western Sahara (1975), the change of status of the Canary Islands which become an Autonomous Community with certain rights over fishing matters (1982), Spain's accession to EU giving access to EU structural aids and fishing agreements (1986), and application of the Common Fisheries Policy in the Canary Islands (1991).

As a result of this evolution, there is a certain convergence between the various levels involved with **fisheries management** in the Canary Islands.

- At local level, fisheries management is the responsibility of the Canarian Government through its *Viceconsejería de Pesca y Aguas*. The Canary Islands have exclusive rights over the fishing policy affecting inland waters, harvesting of sea food and aquaculture.

Table 1: Key data

Area	7447 km ²
Population (at 1/01/2012)	2 118 344
Main islands	Tenerife, Fuerteventura, Gran Canaria, Lanzarote, La Palma, La Gomera, El Hierro
Capital	Santa Cruz de Tenerife and Las Palmas de Gran Canaria
Flag	
Location	Eastern Central Atlantic
Exclusive Economic Zone	456 237 km ²
Length of coastline	1379 km

Source: Diverse.

- At national level, the Spanish Ministry of Agriculture, Food and Environment, through its General Secretariat for Fisheries, is the central government administration responsible for marine fisheries. The Spanish government has full jurisdiction in matters relating to sea fishing, and hence the relevant legislation and its implementation.
- At EU level, the CFP is applied in the Canaries, though not the TACs and quota system. As an outermost region, the Canary Islands are beneficiaries of POSEI Fisheries - a scheme aimed at mitigating the extra costs associated with marketing certain fisheries products.

The total **production** of fisheries and aquaculture registered in Canarian first-sale ports reached 18 055.45 tonnes in 2011, with a total value of 46.99 million EUR. Most of this quantity consists of fresh fisheries products (58.7%). However, aquaculture products represent most of the total production value (59.6%). Frozen products, which in 2008-2009 corresponded to higher values than fresh fish, declined significantly to reach 5.9% of the total quantity and 7.6% of the total value in 2011.

The main fishing activities of the Canary Islands are coastal artisanal fishing (for small pelagic species, demersals and tuna), cephalopod fishing off the coast of Africa by a fleet of freezer trawlers, and high seas tuna fishing. All the catches are landed in ports authorised as first-sale markets. Currently, there are 31 entities authorised as first-sale points for fresh fisheries products, and 17 for frozen fisheries products.

More than half of the total fresh fisheries production is landed in Tenerife, particularly as regards pelagic fish and crustaceans. Gran Canaria is very significant for landings of demersal fish and molluscs. In Lanzarote pelagic landings are dominant, whereas La Palma and El Hierro have important parts of the crustaceans landings.

Tunas have constantly formed the large majority of the landings in recent years. Bigeye tuna was the most common species in 2011, with 31.7% of the total quantity and 26.7% of the value. Skipjack tuna represented 12.5% of the production and 5.1% of its value, but significantly increased in 2012 - up to four times the 2011 figure. Yellowfin tuna and albacore are also major species in terms of value (10.4% and 6% respectively).

Small pelagics landings mostly consisted of Atlantic chub mackerel (8.3% of the total quantity in 2011), round sardinella (5.1%), European pilchard (2.2%) and Madeiran sardinella (1.8%). Some higher value species are parrotfish (4%), red porgy (2.9%), pink dentex (2.6%) and swordfish (2%).

Aquaculture production in 2011 reached 6385.89 tonnes with a total value of 28.01 million EUR. The most important species in the Canary Islands are seabream and European seabass, which represent more than 95% of the aquaculture production in the islands and 22% of the total production of these species in Spain.

At the beginning of 2013, the **fishing fleet** consists of 856 fishing vessels registered in Canarian ports (8.5% of the national fleet in terms of number of vessels, 5.8% of the total tonnage and 6.1% of the total power of the Spanish fishing fleet).

The structure of the Canarian fishing fleet shows a high social and economic dependency on small-scale fishing. Apart from some specific areas such as Las Palmas and Arrecife, small vessels are the most important segment. The boats less than 12 m long represent 86.7% of the number of vessels and account for 7.8% of the total capacity. Most of the small-scale

vessels alternate the species targeted as well as the types of gears they use. The remaining fleet registered in Canary ports mainly consists of high capacity trawlers, active in international waters and in third countries such as Morocco, Mauritania and Guinea-Bissau subject to bilateral agreements with the EU.

The vast majority of the vessels use several **types of gear**. The most common combination is by far set longlines (main gear) and pots (used by 94% of the vessels). In terms of capacity, trawlers represent a significant part of the fleet (67% of the gross tonnage and 42% of the engine power). Only 3% of the vessels are considered to be specialised (no subsidiary gear is declared). This category represents 12% of the gross tonnage of the Canary fleet and includes drifting longlines, purse seines (mainly for small pelagics), bottom water trawls and trammel nets.

A total of 41 **ports** with fishing vessels are registered in the Canaries in 2013. The port of Las Palmas (also called La Luz Port) is the most important one, and Spain's third fishing port after Bermeo and Vigo. Las Palmas accounts for 78.5% of the total capacity of the Canary fleet, and for ca. half its engine power. Other significant ports in terms of capacity are Santa Cruz de Tenerife (gross tonnage 5.1%, engine power 6.3%) and Arrecife de Lanzarote (4.7% and 6.8% respectively). High numbers of vessels with lower capacity are registered in Arguineguin, Corralejo, Gran Tarajal and Caleta del Sebo (in the province of Las Palmas), as well as in Hierro, Santa Cruz de la Palma, Tazacorte and Los Cristianos (in the province of Santa Cruz de Tenerife).

The **evolution of the Canary fleet** in the last two decades shows a significant effort of reduction of the fishing capacity, particularly since 2000. The number of vessels almost halved between 2000 and 2013, whereas the total gross tonnage and engine power reduced by ca. 60%, with a sharp fall in 2003-2004. The capacity per vessel also decreased from 38.1 tonnes/vessel and 87.2 kW/vessel in 2000 to 26.2 tonnes/vessel and 62.8 kW/vessel in 2013, i.e. a reduction of ca. 30%.

In 2012 the **imports** of marine products to Canary Islands (fish, crustaceans, molluscs and other marine invertebrates) reached 55 179 tonnes, with a total value of 155.27 million EUR, which represents around 4% of the total imports of marine products to Spain. Much higher figures were recorded in previous years (2009 to 2011), when imports were situated around 100 000 tonnes, with a maximum value which amounted to 202.81 million EUR in 2010. China has been the most significant source in recent years, with ca. 23% of the total value of the imports in 2012. Other countries in Asia such as Vietnam and South Korea are also major providers of marine products. Imports from northwest Africa have constantly accounted for an important share of the total value, with Mauritania and Morocco providing ca. 15% and 8% respectively in 2012. EU countries together reached only 8% of the imports value, ca. half of which comes from the Netherlands.

Exports of marine products reached 36 973.5 tonnes in 2012, for a total value of 50.24 million EUR, whereas in previous years figures varied around 90–100 000 tonnes and 70-80 million EUR. The EU is the most important market for marine products exported from the Canary Islands: in 2012 the export value to EU reached 25.5 million EUR (around 51% of the total export). Italy is the main destination in the EU (18% of the total exports in 2012). However, the value of export to Italy has been decreasing in recent years, and it was recently overcome by China as the largest national market with ca. 24% of the export value. Other significant markets in Asia are Japan, Vietnam and Thailand. In Africa, the main markets are Côte d'Ivoire and Nigeria though considerably declining in recent years.

Given the position of the Canary Islands acting as a major gateway for fisheries products into the EU, the **control** of the compliance of these products with EU legislation is a major

issue. Las Palmas and Santa Cruz de Tenerife are designated ports for direct landings of third country fishing vessels. Out of 426 landings of third country vessels in Spanish ports in 2010 and 2011, almost half (193) have been recorded in the port of Las Palmas.

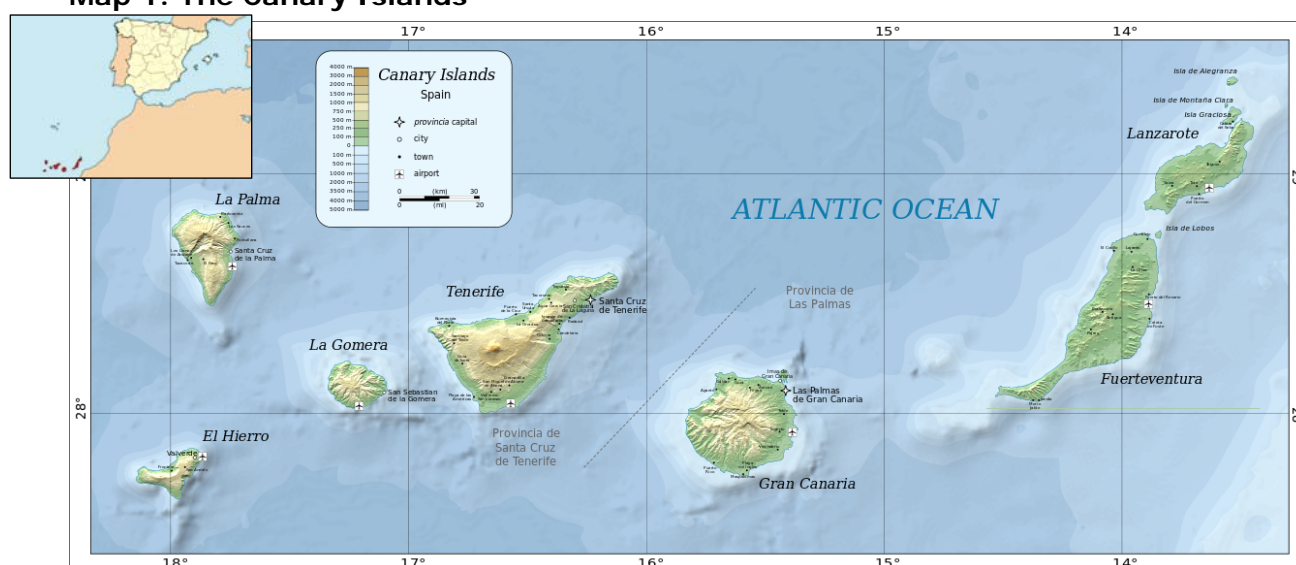
There are several organisations for research in **marine science**. The Canarian Institute of Marine Sciences - ICCM is a research centre which depends on the Canarian Government through the Canarian Agency for Research, Innovation and Society Administration, and is located in the municipality of Taliarte, in Gran Canaria. The ICCM provides expertise and technologic development in marine sciences and contributes to environmental education. In addition, it is involved in international research with other research agencies, and is responsible for developing a postgraduate course in marine harvesting, coordinated with the University of Las Palmas de Gran Canaria (ULPGC). The Oceanographic Institute of Canary Islands, located in Tenerife, is part of the Spanish Oceanographic Institute (IEO). The Marine Biotechnology Centre (CBM) is a research centre of the ULPGC dealing with Applied Algology and Biological Oceanography.

1. BACKGROUND

The Canary Islands (*Islas Canarias*) are one of Spain's 17 autonomous communities and an outermost region of the European Union. The Canaries form an archipelago located off the northwest coast of mainland Africa, 100 km west of the border between Morocco and the Western Sahara (Figure 1). The archipelago includes seven major islands (from largest to smallest): Tenerife, Fuerteventura, Gran Canaria, Lanzarote, La Palma, La Gomera and El Hierro, as well as four islets and a multitude of rocks (La Graciosa, Alegranza, Isla de Lobos, Montaña Clara, Roque del Este and Roque del Oeste).

The Canary Islands have a population of 2,118,344 inhabitants¹, accounting for 4.5% of the population of Spain. It is the ninth most populous of Spain's autonomous communities, with a density of 284.4 inhabitants per km². The total area of the archipelago is 7447 km² (Table 2).

Map 1: The Canary Islands



Source: Wikipedia

Table 2: Canary Islands: area and population

ISLAND	AREA (km ²)	AREA (%)	POPULATION (inhabitants)	POPULATION (%)
Lanzarote	846	11%	142.132	6,7%
Fuerteventura	1.660	22%	106.456	5%
Gran Canaria	1.560	21%	852.225	40,2%
Tenerife	2.034	27%	898.680	42,4%
La Gomera	370	5%	22.350	1,1%
La Palma	708	10%	85.468	4%
El Hierro	269	4%	11.033	0,5%
TOTAL CANARIES	7.447	100%	2.118.344	100%

Source: Instituto Canario de Estadística (ISTAC).

¹ On 1 January 2012 (Instituto Canario de Estadística - ISTAC).

The Autonomous Community of the Canary Islands consists of two provinces, Santa Cruz de Tenerife and Las Palmas. The capital of the Autonomous Community is shared by the cities of Santa Cruz de Tenerife and Las Palmas de Gran Canaria, also the capitals of the two provinces. The third largest city of the Canary Islands is La Laguna on Tenerife. Each of the seven major islands is ruled by an island council named *Cabildo Insular*. The Islands have 13 seats in the Spanish Senate. Of these, 11 seats are directly elected, 3 for Gran Canaria, 3 for Tenerife, 1 for each other island; 2 seats are indirectly elected by the regional Autonomous Government. The local government is presided over by Paulino Rivero Baute, the current President of the Canary Islands. The Canaries have their own Parliament with 60 seats.

All the islands of the archipelago are volcanic in origin. The western islands - Gran Canaria, Tenerife, La Gomera, La Palma and El Hierro - are mountainous and green, with rocky landscapes cut by deep valleys (or *barrancos*). The Teide volcano on Tenerife is the highest mountain in Spain (3718 m), and the third highest volcano on Earth² (7500 m from its base on the ocean floor). Lanzarote and Fuerteventura, located closer to Africa, are more arid and have a lower topography.

The Spanish maritime jurisdictions, including the Canary Islands, are as defined by the United Nations Convention on the Law of the Sea (UNCLOS; Table 3). The jurisdictional waters have three national maritime borders, with Portugal, Morocco and Western Sahara (Map 2). Their western part borders on the high seas in the Atlantic Ocean, and the exclusive economic zone can extend to its maximum width of 200 nautical miles. Consequently, the Canary Islands jurisdiction generates the greatest area of exclusive economic zone (EEZ) on the national scale with over 60% of the total, and it represents 45% of the surface area of all maritime jurisdictions on the national scale (Suárez de Vivero, 2011). The continental shelf could be extended beyond the 200 nautical mile limit on the basis of Article 76 and Annex II of the United Nations Convention on the Law of the Sea; however, the submission that Spain will make to the United Nations Commission on the Limits of the Continental Shelf is currently in its preparation stage (Suárez de Vivero, personal communication).

Table 3: Canary Islands: jurisdictional waters

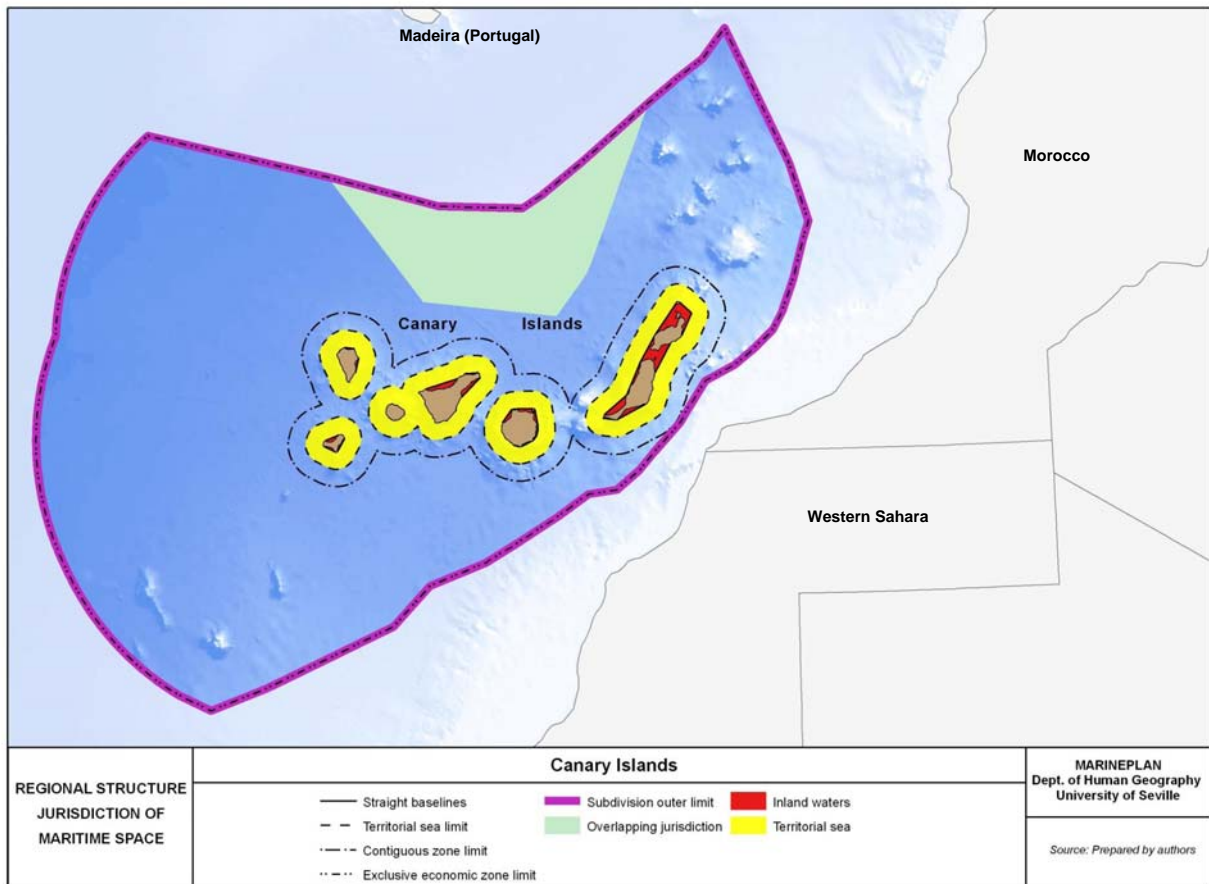
JURISDICTION	AREA (km ²)	PART OF SPANISH JURISDICTION (%)
Internal waters	2.347	15.99%
Territorial sea	31.753	31.22%
Contiguous zone	40.349	34.42%
Exclusive economic zone	456.237	60.17%
TOTAL¹	490.337	43.77%

¹According to the delimitation line declared by Spain. The total jurisdictional area according to the delimitation line declared by Portugal is 447.093 km².

Source: Suárez de Vivero (2011).

² After Mauna Kea and Mauna Loa in Hawaii

Map 2: EEZ delimitation around the Canary Islands

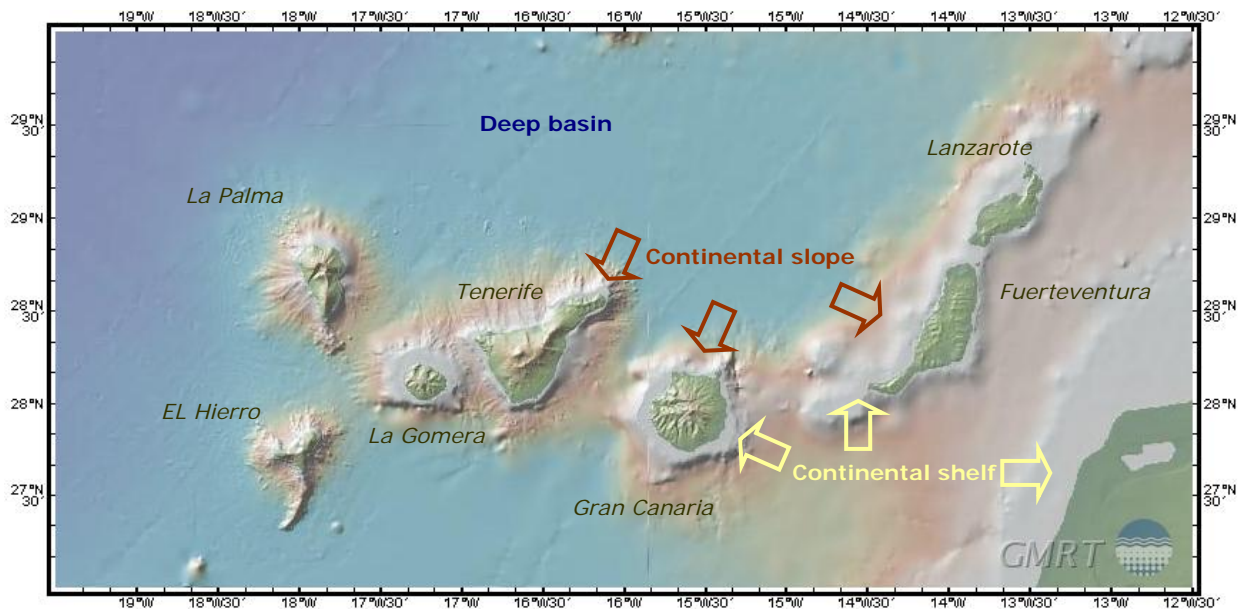


Source: Suárez de Vivero (2011).

The maritime boundary between Spain and Morocco is subject of dispute. Morocco opposed the unilateral designation of EEZ by Spain, based on a median line between Morocco and the Canary Islands (November 2000). Also, Morocco rejected unilateral delimitation of the continental shelf by Spain, following granting of oil exploration permits east of the Canary Islands (January 2002). Since then the discussions have not progressed on a comprehensive maritime delimitation.

The total Canarian coastline is 1379 km long, an extensive coastline which represents 18.38% of the national total. In broad terms, a distinction can be found on all the islands between the northern coasts, with high cliffs, and the southern coasts, sandy and of a more open nature and with a greater number of beaches (Suárez de Vivero, 2011). The seafloor bathymetry around the islands is typically abrupt with only a narrow shelf present, and a steep slope plunging to more than 1000 m depth, which produces near-shore conditions similar to the open ocean. The deepest waters adjacent to the Canary Islands are in the western part, while in the areas around the easternmost islands the waters do not exceed 2500 m in depth (Map 3).

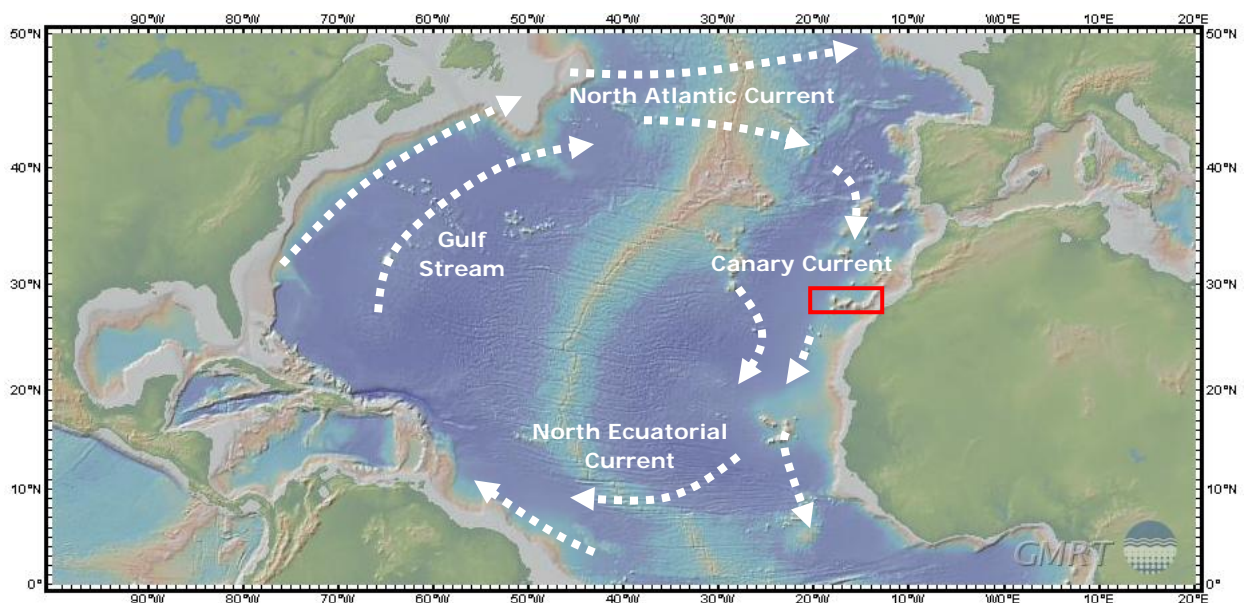
Map 3: Seafloor morphology of the Canary Islands area.



Source: Bathymetry after Global Multi-Resolution Topography www.marine-geo.org (Ryan *et al.*, 2009).

The archipelago is located in the path of the cool water Canary Current which greatly moderates the climate, in particular in the western islands, located further from the African mainland. The Canary Current is a wind-driven surface current that forms the eastern part of the North Atlantic Gyre, which also includes the Gulf Stream in the west, the North Atlantic Current in the north, and the Atlantic North Equatorial Current in the south (Map 4). A prominent feature of the Canary Current is the presence of upwelling, i.e. coastal surface waters are moved offshore by persistent northerly winds, and are replaced with deep water from below. Deep waters are cold and nutrient-rich and have a key role in stimulating primary productivity. Inhabited by a large number of endemic and migrant species, the Canary Current is a unique ecosystem of global significance.

Map 4: Main currents and seafloor morphology in Central Atlantic. The red frame shows the location of Map 3.



Source: Bathymetry after Global Multi-Resolution Topography www.marine-geo.org (Ryan *et al.*, 2009); Currents after American Meteorological Society (2005).

The Canary Current is rich in fisheries resources, among which the small pelagic fish such as sardine (*Sardina pilchardus*), sardinella (*Sardinella aurita*, *S. maderensis*), anchovy (*Engraulis encrasicolus*), chub mackerel (*Scomber japonicus*) and horse mackerel (*Trachurus* sp.) constitute more than 60% of the catch in this large marine ecosystem. Other species include tuna (e.g. *Katsuwonus pelamis*), coastal migratory pelagic fish, hakes (*Merluccius merluccius*, *M. senegalensis*, *M. polii*), a wide range of demersal finfish, cephalopods (*Octopus vulgaris*, *Sepia* sp., *Loligo vulgaris*) and shrimps (*Parapenaeus longirostris*, *Penaeus notialis*). Most of these species are transboundary or migratory, with the distribution of tuna often extending beyond the bordering countries EEZs into international waters (Heileman and Tandstad, 2009).

As compared with the very rich fishing grounds in the upwelling area located along the West African coast, waters around the Canaries have a relatively poorer primary productivity, whereas the narrow continental shelf of the islands limits the abundance of demersal resources. Nevertheless, fishing activities represent a fundamental part of the identity of the Canary Islands, and many Canarian municipalities are highly dependent on this sector (Map 5).

Map 5: Municipalities dependent of fishing activities in the Canary Islands (in green)



Source: Canarian Government, after EFF National Strategic Plan.

2. FISHERIES MANAGEMENT

Several political and institutional events marked the recent history of the Canary Islands fishing sector (Pérez Labajos *et al.*, 1996):

- 1975: Spanish Sahara, a territory ruled by Spain since 1884, is abandoned and becomes Western Sahara

The change was traumatic for the Canarian fishing sector, in particular for the artisanal fleet, as it led to the loss of the rich Saharan fishing grounds. Spain signed an agreement with Morocco and Mauritania in 1975, through which a fishing franchise was established for 20 years on the Saharan coastline for vessels based in the Canary Islands. As a result of the agreement, many vessels from other Spanish communities registered in the Canaries, which caused an artificial increase of the fleet and led Morocco to reconsider the agreement.

- 1982: The Canary Islands become an Autonomous Community

The Statute of Autonomy conferred certain rights of control over fishing matters. It awarded exclusive authority over inland water fishing, harvesting of shellfish and aquaculture, without affecting the national authority in matters of supervision of these waters. Similarly, the Statute transferred authority over professional sea fishing education, determined non-exclusive authority related to the running of the fishing sector and established the mechanisms of coordination and support between the central administration and the Canary Islands. Until this time, the Spanish state had maintained exclusive rights over all areas of fishing. After the transfer, the national authority reserved the right to approve general norms for coordinating activities which might affect the natural resources outside the inland waters, and the right to establish international relations in matters concerning inland water fishing, harvesting of sea shells and aquaculture.

- 1986: Spain joins the EC

Although in a first phase the Canary Islands remained outside the Common Fisheries Policy (CFP), the fishing sector could take advantage of fishing agreements between the EC and other countries, and of international agreements in which the EC was a contracting party. Also, Community structural aids were established since 1987.

- 1991: The CFP is applied in the Canary Islands

The CFP has been applied in the Canary Islands subject to the same conditions as in peninsular Spain since 1 July 1991. However, like in the Mediterranean, the TACs and quota system is not applied. The introduction of the CFP was accompanied by measures which took into account the differential factors in the archipelago, and a program of specific options was established in response to the remoteness and insularity of the Canaries (POSEICAN).

As a result of this evolution, there is a certain convergence between the various institutions involved with fisheries management in the Canary Islands. Three maritime zones can be distinguished, corresponding to three different levels of rights of control (see also Map 2):

- Inland waters zone, situated inside the baselines of the territorial sea: rights belong to the Canary Islands Autonomous Authority
- Offshore waters zone, corresponding to the territorial sea, ranging from the straight base lines to 12 miles: rights belong to the Spanish state

- Offshore waters zone corresponding to the EEZ, ranging from 12 miles to 200 miles: rights belong to the EU

From an institutional point of view, although the Canary Islands have exclusive rights over the fishing policy affecting inland waters, harvesting of sea food and aquaculture, the EU and Spanish administration intervene through mechanisms of aid and control. Similarly, in offshore waters, although the rights belong to the EU and to Spain, the Canaries administration can intervene in some aspects related to the running of the sector.

At **local level**, fisheries management is the responsibility of the Canarian Government through its *Viceconsejería de Pesca y Aguas*.

With regard to inland fishing, the local authority has the power to authorise the undertaking of fishing activities, regulate fishing gear, mark out fishing zones, set exclusion periods and activity timetables, establish authorised species and minimum sizes, and keep an official register of activities.

Regarding harvesting of shellfish and aquaculture, the Canarian administration have the authority to award concession for seafood establishments, sea farms and the practice of extractive activities in general, to establish the partitioning of certain beaches and natural fishing banks, to set quantities, exclusion periods and timetables, to establish authorised species and types of exploitation and to dictate inspection and sanction norms.

The Canary Islands also have rights of control over the regulation of recreational activities, although they recognise the fishing permits issued by the national administration and any other territorial entities which respect the internal norms of the Autonomous Community (Pérez Labajos *et al.*, 1996).

At **national level**, the Spanish fisheries administration was restructured in December 2011 into a new Ministry of Agriculture, Food and Environment. The General Secretariat for Fisheries, which reports to this Ministry, is the central government administration responsible for marine fisheries. Responsibility for fisheries and oceanography research lies with the Spanish Institute of Oceanography (IEO), which reports to the Ministry of Economy and Competitiveness.

The Spanish government has full jurisdiction in matters relating to sea fishing, and hence the relevant legislation and its implementation. With regard to the development of the fishing industry and commercial activity, however, the central government only establishes "basic legislation", i.e. the fundamental principles governing such activities; the regulatory framework in these areas is established by Act 3/2001, of 26 March 2001, on territorial sea fisheries (OECD, 2012). The Autonomous Community can adopt provisions that complement legislation in these two areas and proceed to implement them.

At **EU level**, the outermost regions are granted special status under the terms of the Article 349 of the Treaty, which allows specific measures to be adopted to take account of their constraints and difficulties. These specific measures for the fisheries and aquaculture sectors are provided for by the compensation regime governed by Council Regulation (EC) No 791/2007³, which expires at the end of 2013. The outermost regions are beneficiaries of POSEI⁴ Fisheries - a scheme aimed at mitigating the extra costs associated with marketing

³ Council Regulation (EC) No 791/2007 of 21 May 2007 introducing a scheme to compensate for the additional costs incurred in the marketing of certain fishery products from the outermost regions the Azores, Madeira, the Canary Islands, French Guiana and Réunion.

⁴ Programme of Options Specifically Relating to Remoteness and Insularity.

certain fisheries products from the Outermost Regions. The annual amount allocated to the Canary Islands is 5 844 076 EUR, which corresponds to a global amount of 40 908 532 EUR for the period 2007-2013.

For the period after 31 December 2013, the Commission has proposed a compensation scheme similar to the one currently in force. This new scheme has been integrated into the proposal for a regulation on the European Maritime and Fisheries Fund (EMFF), with specific provisions included Articles 73, 74 and 75. The Commission has proposed to maintain the current regime in terms of financing levels (after rounding), eligibility criteria and geographical scope. In its EMFF proposal the Commission maintains the amounts provided for in the current regulation on the basis that they are sufficient to ensure the proper functioning of the scheme.

However, the proposal results in a reduction of 308 532 EUR for the Canary Islands. This prompted the Canarian government to argue that the increase of the production to be commercialised leads to an increase of the volume of the products to be compensated through POSEI fisheries, making available funding insufficient. This is especially the case for certain items such as aquaculture products, which alone could cover the total amount foreseen in the compensation plan for products which comply with the requirements of the calls, but are not paid due to insufficiency of the funding. Given the limited level of funding made available for the period 2008-2013, the even lower EMFF proposal is considered by the Canarian government completely unsatisfactory and unable to deal with the funding requests under the POSEI programme.

Also at EU level, the Canary Islands benefits from fisheries agreements between the EU and third countries. Given the close proximity of the rich fishing grounds off the coast of West Africa, the agreements with Morocco and Mauritania have had a major impact on the Canarian fisheries.

During the last fisheries agreement with Morocco (28 February 2007-27 February 2011), the Canary Islands had 37 licences (out of 100 Spanish licences): 11 for artisanal fisheries (hand lines, pole lines and pots), 23 for artisanal tuna fisheries and 3 for demersal fisheries. The agreement was prolonged for 1 year pending ratification by the European Parliament. The rejection of the agreement on 14 December 2011 prevented 26 Canarian vessels from fishing in Moroccan waters (20 tuna vessels and 6 artisanal vessels). The Canarian Government showed that the rejection negatively affected the fishing sector and the related economic activities, and estimated a decrease of more than 50% of the landings at first-sales points, a loss of 250 direct jobs and more than 1000 indirect jobs, as well as a loss of more than 11 million EUR for the fishing companies and of more than 18 million EUR for the Producers Organisations and commercial agents. To alleviate these effects, a compensation scheme was put in place by the Spanish Government for 6 months, further prolonged for another 6 month until 14 December 2012.

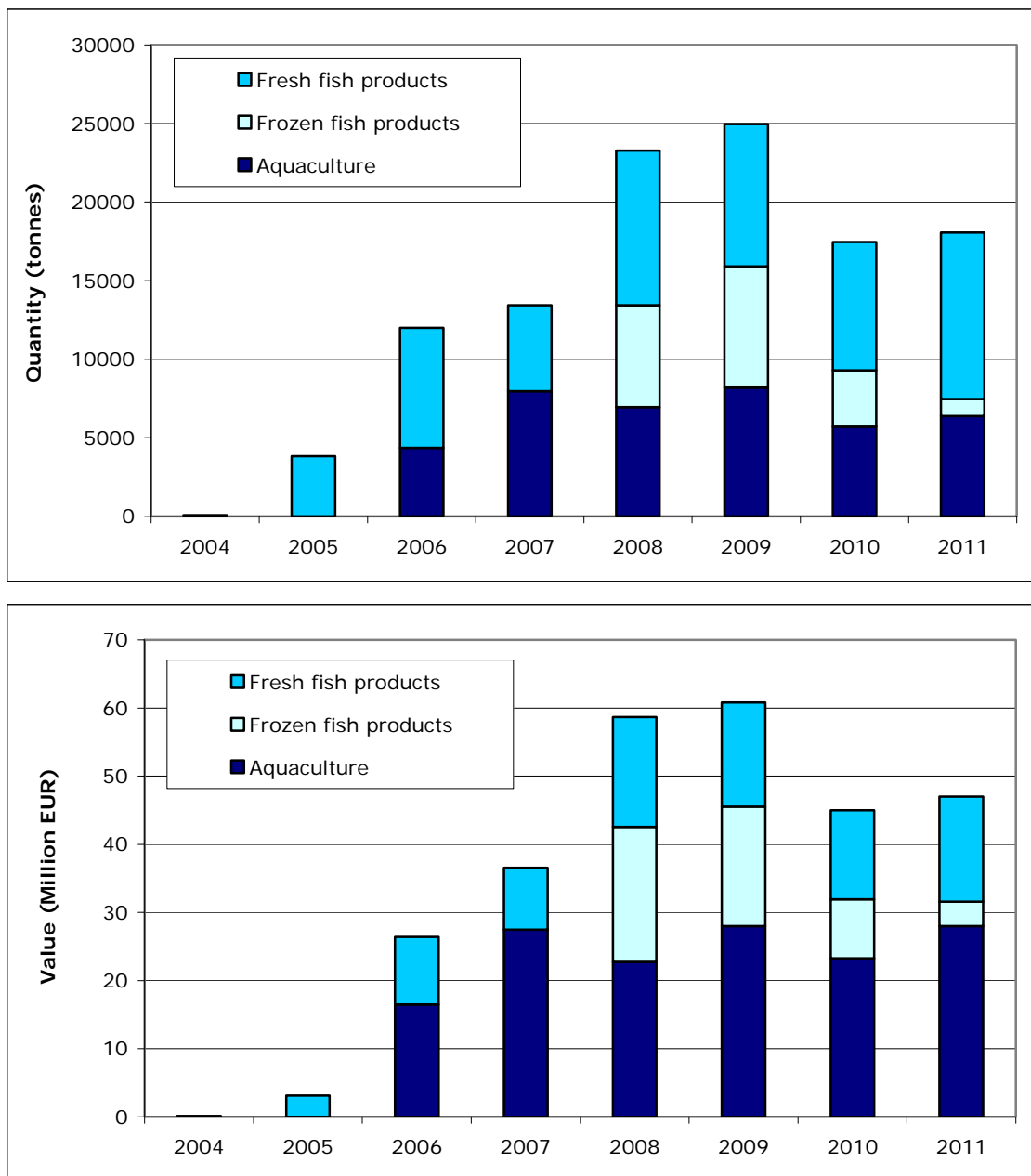
After the expiry of the fisheries agreement with Mauritania on 31 July 2012, a new agreement negotiated by the European Commission and signed on 26 July 2012 is now in the phase of ratification by the Council and the Parliament⁵. The agreement is regarded as highly important for the Canary Islands, in particular for trawlers fishing for cephalopods which have no alternative fishing grounds.

⁵ For a detailed presentation of previous fisheries agreements with Mauritania, see Iborra Martín (2010).

3. PRODUCTION

The total production of fisheries and aquaculture products registered in Canarian first-sale ports reached 18 055.45 tonnes in 2011, with a total value of 46.99 million EUR. Most of this quantity consists of fresh fisheries products (58.7%), whereas aquaculture products represent 35.4%. However, aquaculture products make most of the total value (59.6%), with fresh fish at 32.8% of the value. Frozen products, which in 2008-2009 corresponded to higher values than fresh fish, declined significantly to reach 5.9% of the total quantity and 7.6% of the total value in 2011 (Figure 1).

Figure 1: Total production registered in Canarian first-sale ports (2004-2011): (A) Quantity, (B) Value



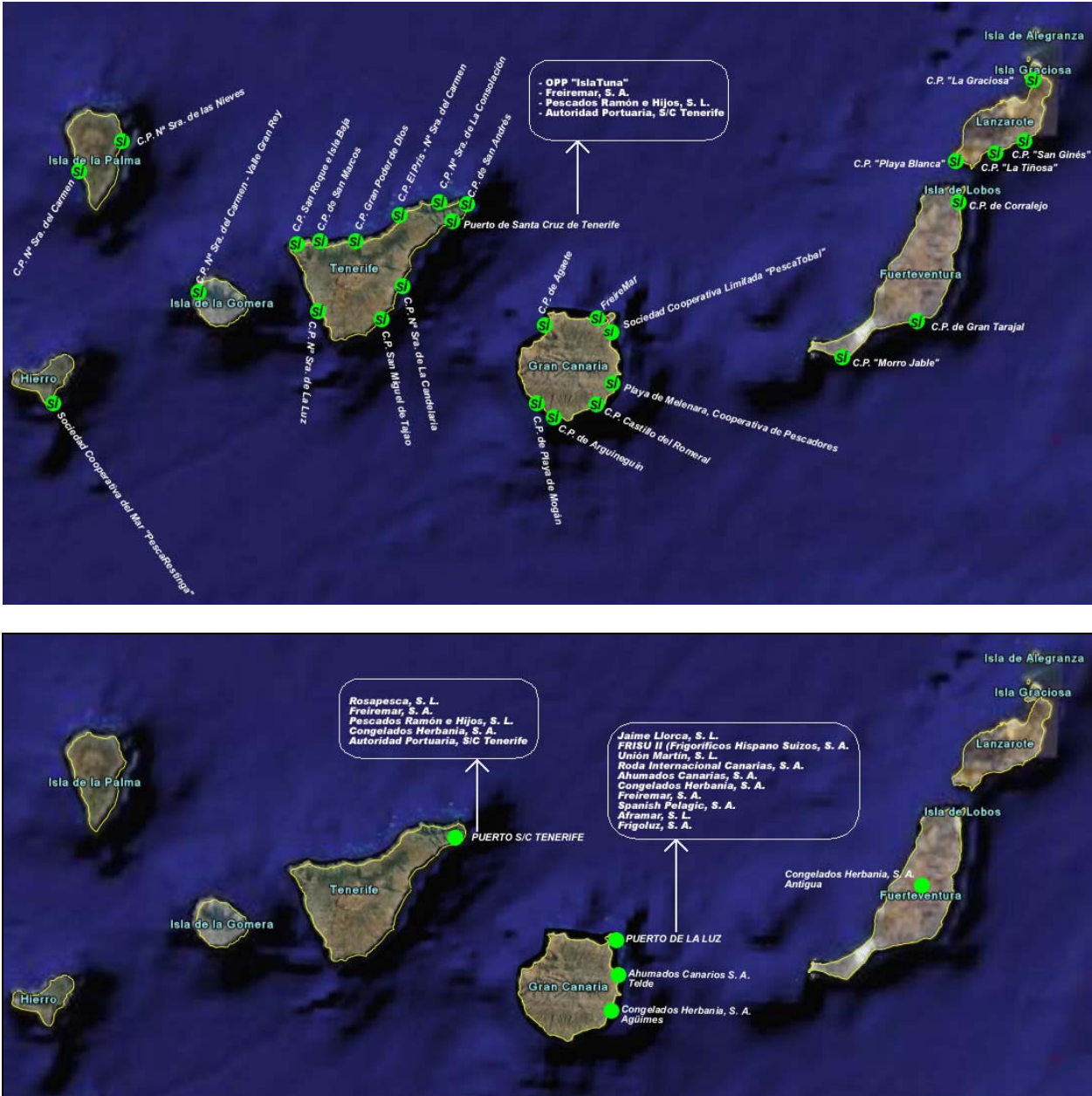
Note: Figures for 2004-2007 do not appear consistent with data from the Spanish General Secretariat for Fisheries.

Data source: Canarian Government.

3.1. Fisheries

The main fishing activities of the Canary Islands are coastal artisanal fishing (for small pelagic species, demersals and tuna), cephalopod fishing off the coast of Africa by a fleet of freezer trawlers⁶, and high seas tuna fishing. Catches are landed in ports authorised as first-sale markets. Currently, there are 31 entities authorised as first-sale points for fresh fisheries products, and 17 for frozen fisheries products (Map 6). Data presented further in this chapter focus on the fresh fisheries production.

Map 6: First-sale ports for fisheries products: (A) Fresh, (B) Frozen



Source: Canarian Government.

⁶ Data on Canarian freezer catches provided by the Spanish General Secretariat for Fisheries indicate the following figures: 7723.7 tonnes (2008), 12 838.2 tonnes (2009), 10 838.7 tonnes (2010), 11 404.2 tonnes (2011), 7198.9 tonnes (2012). A major part of these catches is landed in Mauritania and sent by cargo to Las Palmas, thus it is not included in the Canarian first-sale statistics.

Table 4: Fresh fisheries production by islands: quantity in kg (2011)

ISLAND	CRUSTACEANS	DEMERSALS	MOLLUSCS	PELAGICS	TOTAL
Lanzarote	3.088,80	109.353,82	666,02	2.127.697,48	2.240.806,12
	5,2%	6,2%	2,5%	24,3%	21,1%
Fuerteventura	719,20	284.025,93	1.648,76	127.902,66	414.296,55
	1,2%	16,0%	6,1%	1,5%	3,9%
Gran Canaria	4.621,29	814.430,60	12.203,58	740.098,51	1.571.353,98
	7,7%	45,9%	45,2%	8,5%	14,8%
Tenerife	25.140,87	379.869,70	9.686,89	5.522.427,58	5.937.125,04
	42,0%	21,4%	35,9%	63,2%	56,0%
La Gomera	4.405,00	25.496,05	366	12.025,00	42.292,05
	7,4%	1,4%	1,4%	0,1%	0,4%
El Hierro	6.773,10	39.869,25	26	50.586,50	97.254,85
	11,3%	2,2%	0,1%	0,6%	0,9%
La Palma	15.160,66	119.824,82	2.412,72	159.515,50	296.913,70
	25,3%	6,8%	8,9%	1,8%	2,8%
Total per category	59.908,92	1.772.870,17	27.009,97	8.740.253,23	10.600.042,29
	100%	100%	100%	100%	100%

Data source: Canarian Government.

Table 5: Fresh fisheries production by islands: value in EUR (2011)

ISLAND	CRUSTACEANS	DEMERSALS	MOLLUSCS	PELAGICS	TOTAL
Lanzarote	15.114,13	509.929,94	3.970,66	925.209,34	1.454.224,07
	4,5%	10,0%	5,2%	9,4%	9,4%
Fuerteventura	1.918,70	702.954,79	2.597,18	184.978,91	892.449,58
	0,6%	13,7%	3,4%	1,9%	5,8%
Gran Canaria	28.902,55	1.879.647,75	23.093,11	674.374,62	2.606.018,03
	8,7%	36,7%	30,0%	6,8%	16,9%
Tenerife	154.171,14	1.426.991,52	40.711,89	7.742.202,66	9.364.077,20
	46,3%	27,9%	52,9%	78,3%	60,7%
La Gomera	25.506,50	88.050,45	1.521,00	12.710,60	127.788,55
	7,7%	1,7%	2,0%	0,1%	0,8%
El Hierro	53.014,05	249.731,67	169	143.436,00	446.350,77
	15,9%	4,9%	0,2%	1,5%	2,9%
La Palma	54.210,29	259.259,15	4.847,63	205.818,36	524.135,43
	16,3%	5,1%	6,3%	2,1%	3,4%
Total per category	332.837,37	5.116.565,26	76.910,46	9.888.730,54	15.415.043,63
	100%	100%	100%	100%	100%

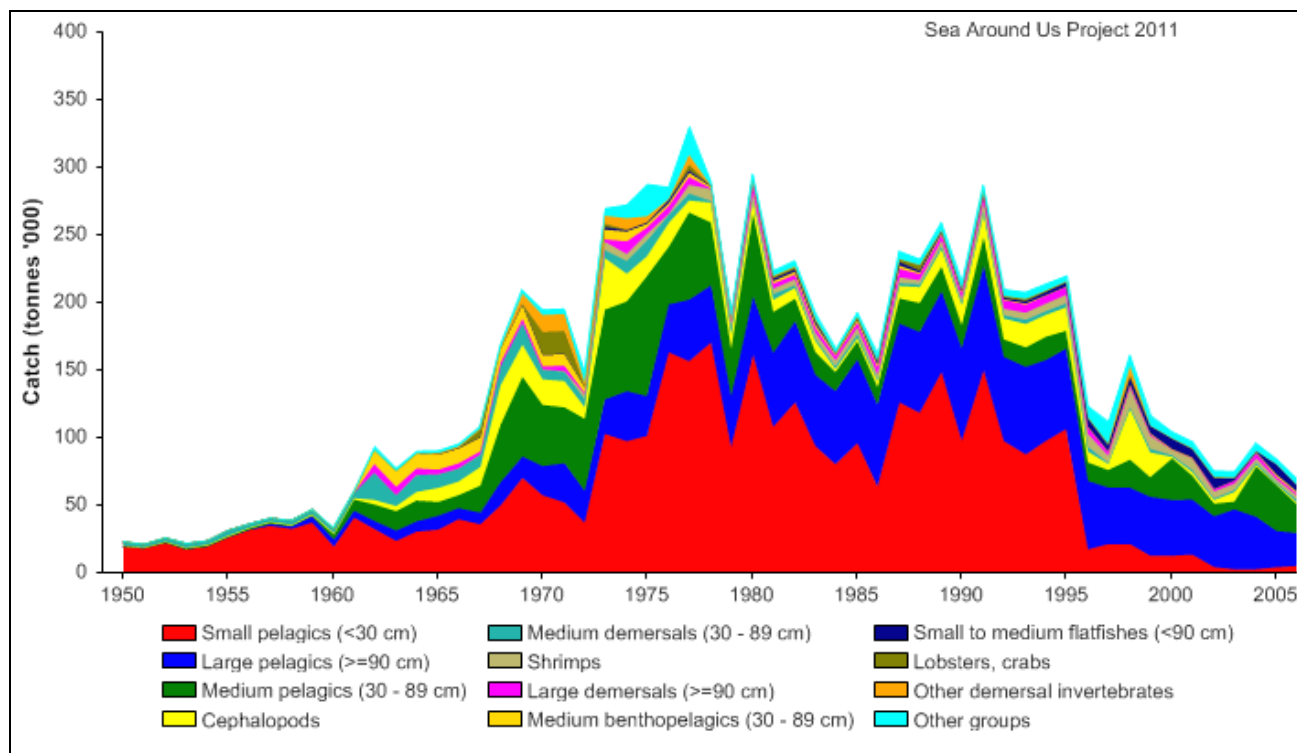
Data source: Canarian Government.

More than half of the total fresh fisheries production is landed in Tenerife (56% of the quantity and 60.7% of the value), particularly as regards pelagic fish (63.2% and 78.3% respectively) and crustaceans (42% and 46.3% respectively; Tables 4 and 5). Gran Canaria (14.8% of the total quantity and 16.9% of the production value) is very significant for landings of demersal fish (45.9% in volume and 36.7% in value) and molluscs (45.2% and 30% respectively). In Lanzarote (21.1% of the total fresh production quantity and 9.4% of the value), pelagic landings are dominant (24.3% of the total quantity of pelagics), whereas La Palma and El Hierro have important parts of the crustaceans landings (25.3% and 11.3% respectively in term of quantity).

In 2011 the bulk of the fresh fisheries products consisted of pelagic fish (82.5% of the quantity and 64.1% of the value). Demersal fish also represented a significant part (16.7% of the quantity and 33.2% of the value). Other categories had minor contributions: crustaceans (quantity 0.6%, value 2.2%), and molluscs (quantity 0.3%, value 0.5%). Historic data show that small pelagics provided the major part of the catches until around 1996, when they dropped considerably (Figure 2). This decrease appears to be related to technical problems with the fisheries agreement with Morocco, i.e. the closure of the main fishing area for small pelagics (Spanish General Secretariat for Fisheries, personal communication).

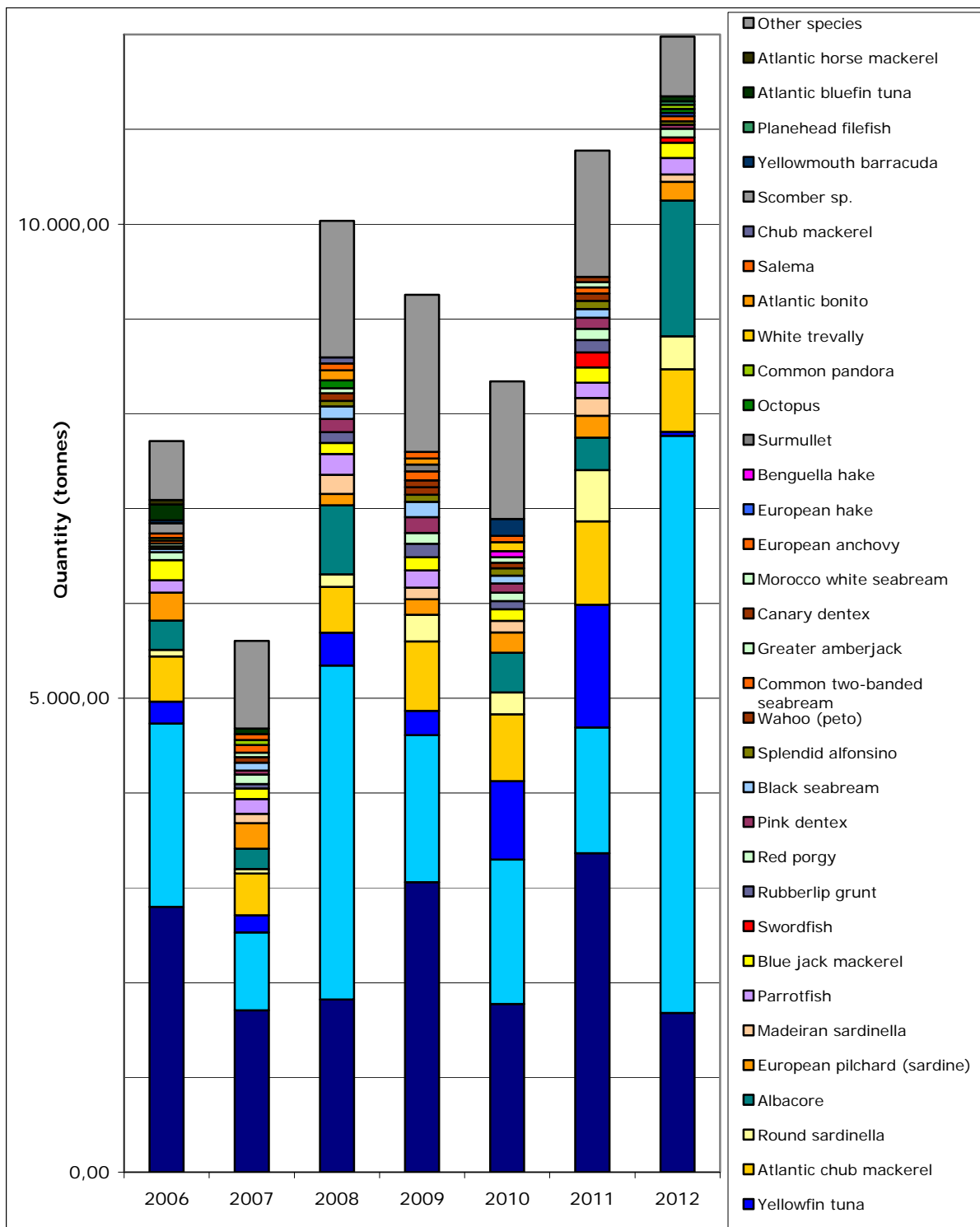
More recently, tunas have constantly formed the large majority of the landings (Figures 3 and 4, Tables 9 and 10 in Annex 1). Bigeye tuna was the most common species in 2011, with 31.7% of the total quantity and 26.7% of the value. Skipjack tuna represented 12.5% of the production and 5.1% of its value, but significantly increased in 2012 - up to four times the 2011 figure. Yellowfin tuna (12.2%) and albacore (3.2%) are also major species in terms of value (10.4% and 6% respectively).

Figure 2: Catches by functional groups: quantity in thousand tonnes (1950-2006)



Source: Sea Around Us Project.

Figure 3: Fresh fisheries production by species: quantity in tonnes (2006-2012)



Note: Data for 2012 do not cover the whole year and are presented as available in October 2012.

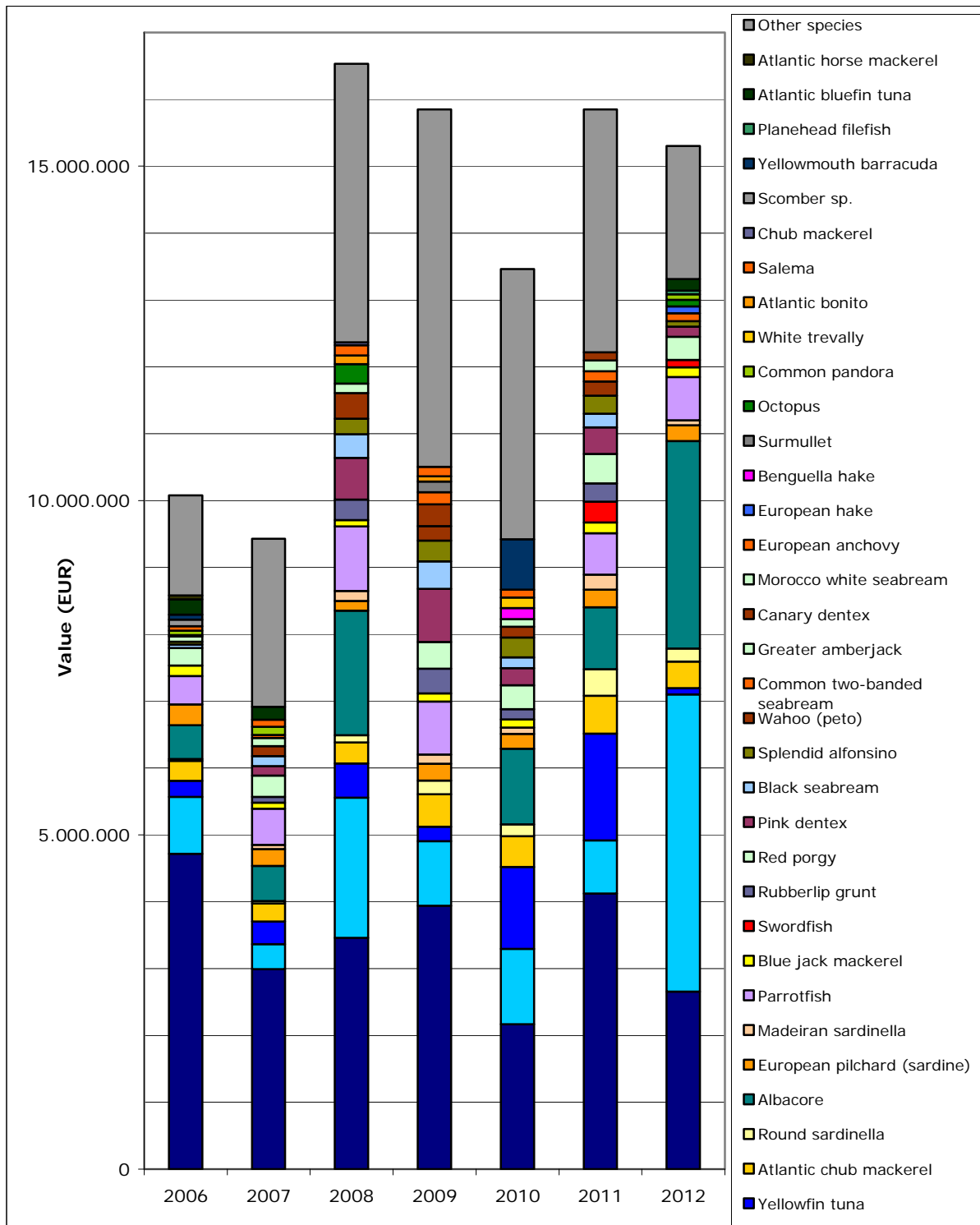
Data source: Canarian Government ⁷.

Small pelagics landings mostly consisted of Atlantic chub mackerel (8.3% of the total quantity in 2011), round sardinella (5.1%), European pilchard (2.2%) and Madeiran sardinella (1.8%). Some higher value species are parrotfish (4%), red pogy (2.9%), pink dentex (2.6%) and swordfish (2%)⁸.

⁷ After Boletín Oficial del Parlamento de Canarias, 16/11/2012.

⁸ The complete data for all species landed are presented in Annex 1.

Figure 4: Fresh fisheries production by species: value in EUR (2006-2012)



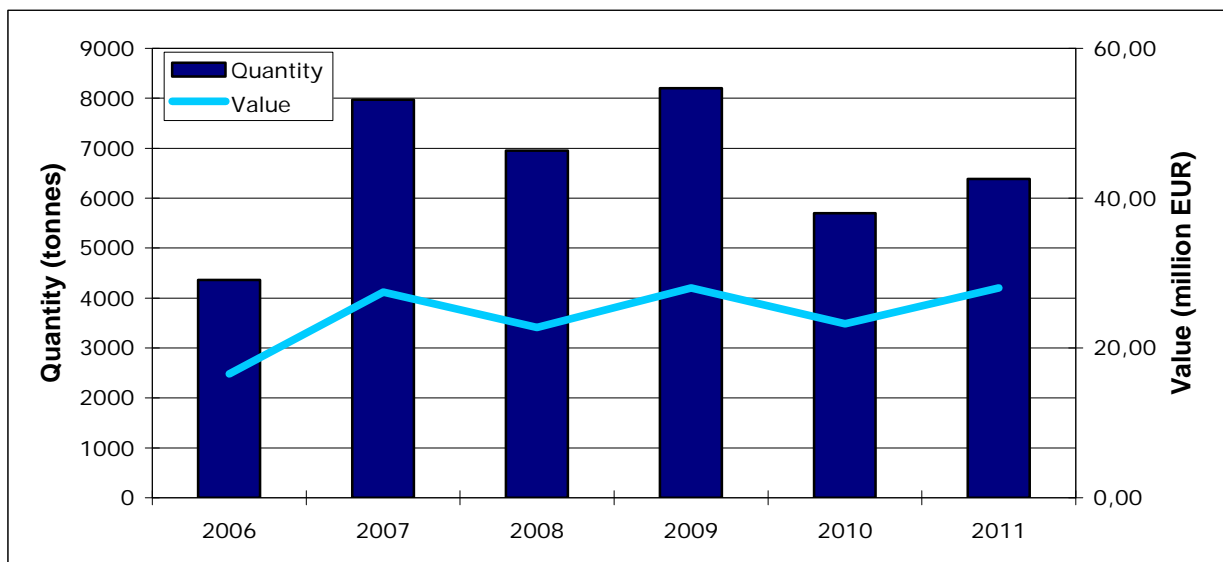
Note: Data for 2012 do not cover the whole year and are presented as available in October 2012.

Data source: Canarian Government.

3.2. Aquaculture

Aquaculture in Canary Islands started to develop in the 1980's in the islands of Gran Canaria and Tenerife, and did not spread out to other islands until 2000. The favourable conditions for growing temperate species in this area allow the continued growth and therefore a shorter production cycle (between 3 and 6 months earlier than in the Mediterranean). Aquaculture was declared a "strategic sector" for the Regional Government of Canary Islands, and experienced a boom in recent years. While in 1992 the production was barely 150 tonnes, it increased to more than 8000 tonnes in 2009. Aquaculture production in 2011 reached 6385.89 tonnes with a total value of 28.01 Million EUR, and ranking fourth Spanish region in aquaculture production (Figure 5).

Figure 5: Aquaculture production in the Canary Islands (2006-2011)



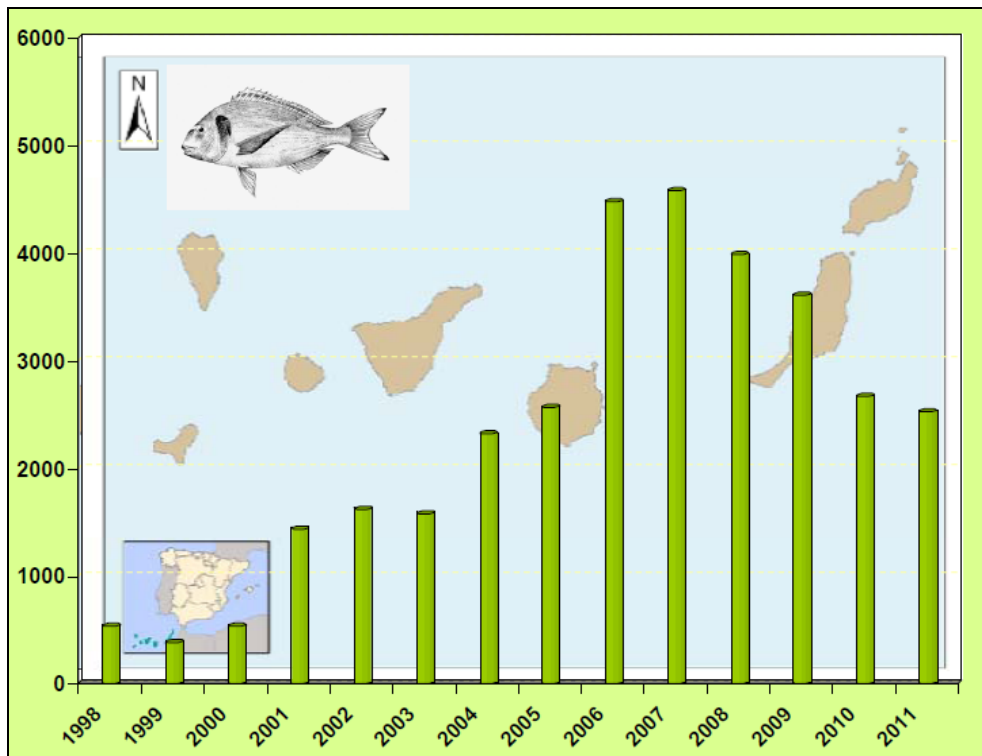
Data source: Canarian Government.

The most important aquaculture species in the Canary Islands are seabream and European seabass, which represent more than 95% of the aquaculture production in the islands and 22% of the total production of these species in Spain.

Seabream has long been the main species in Canary Islands aquaculture (Figure 6). It reached more than the 60% of the total production of the islands, but in recent years its production declined, like in the rest of Spain, and was overcome by European seabass. In 2011, gilthead seabream production was about the 37% of the total production of Canary Islands, and 19% of all Spain.

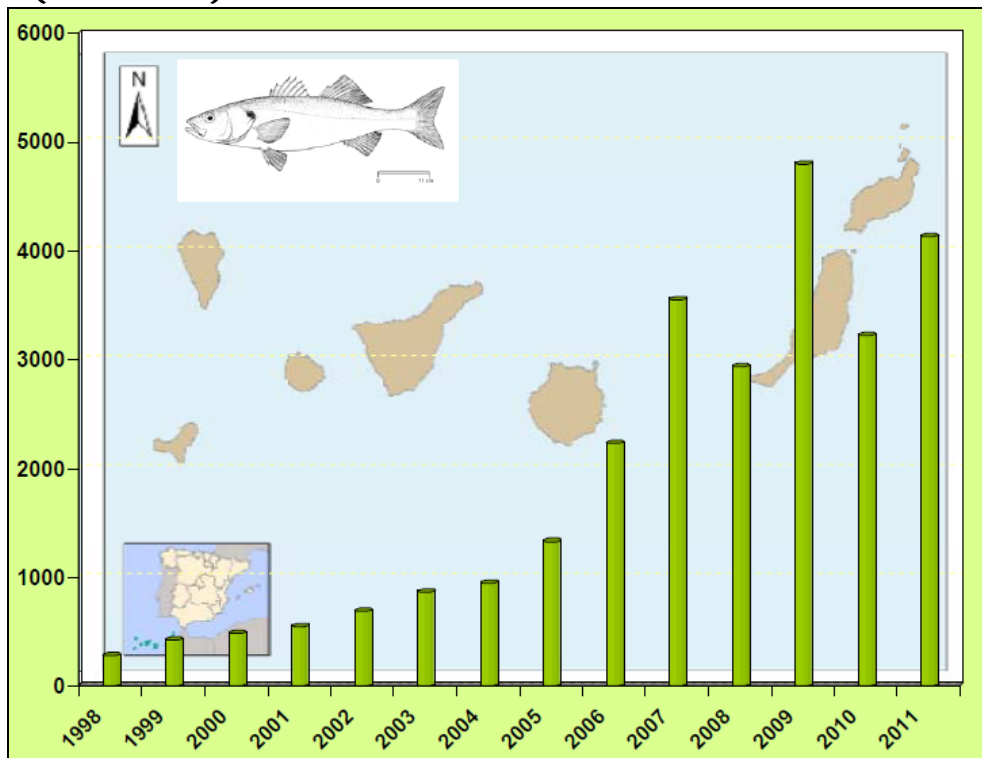
In 2011 **European seabass** production represented about 62% of the total aquaculture production of Canary Islands, and 24% of all Spain. European seabass production has grown rapidly in the past decade, like in the rest of Spain, to reach almost 5000 tonnes in 2009 (Figure 7). The effects of the economic crisis have led to a decline in production, making it impossible to achieve the planned 14 000 tonnes by 2016, according to the draft Regional Plan of Management the Canarian Aquaculture (PROAC).

Figure 6: Seabream aquaculture production in the Canary Islands (1998-2011)



Data source: National Advisory Board for Marine Cultivation (JACUMAR).

Figure 7: European seabass aquaculture production in the Canary Islands (1998-2011)



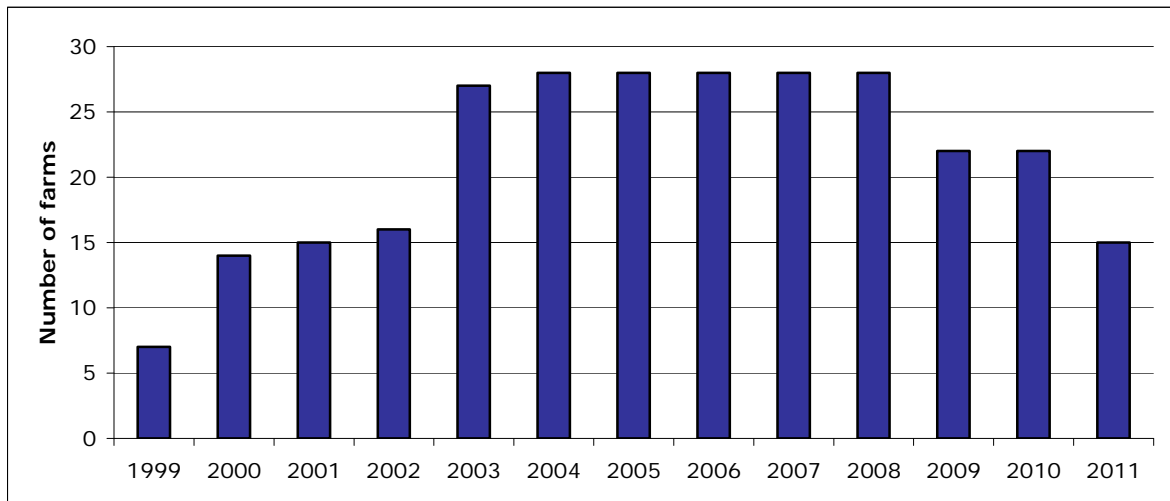
Data source: National Advisory Board for Marine Cultivation (JACUMAR).

In addition to seabream and seabass, the sole aquaculture was recently authorized. Although the sole production started only in 2007, it has grown rapidly to reach 28% of the total national production, with 31 tonnes in 2011. For the future there are good perspectives for another species like Canary carpet shell, red porgy and yellowtail.

The number of aquaculture facilities has been increasing until the year 2005, similarly to the rest of Spain. While in 1999 Canary Islands counted only 7 farms, in 2005 there were 28. However, since 2009 the number of farms has been decreasing due to the difficulties of the sector with a restructuration that entails the rationalization of the size of the viable farms, and in 2011 there were only 15 farms in Canary Islands, representing the 19% of all Spain (Figure 8).

Most aquaculture products are marketed in the rest of Spain, with a much less significant value exported to other countries such as United Kingdom, Portugal, Germany and USA. Data about Canary exports for the years 2004, 2005 and 2006 show that ca. the 70% of the production is destined to the rest of Spain, 20% is for the local consumption and only 10% is exported to other countries.

Figure 8: Number of farms in the Canary Islands (1999-2011)



Data source: Annual reports of marine aquaculture of fishes in Spain 2005-2012 (APROMAR).

4. FISHING FLEET

At the beginning of 2013⁹, 856 fishing vessels are registered in Canarian ports, which represents 8.5% of the national fleet in terms of number of vessels - the fourth regional fleet in Spain after Galicia (47.8%), Andalusia (15.9%) and Catalonia (8.9%). These vessels account for 5.8% of the total tonnage and 6.1% of the total power of the Spanish fishing fleet.

- The average size of a fishing vessel in the Canary Islands is 26.2 tonnes, compared to a national average of 38.2 tonnes¹⁰.
- The average power of a Canarian vessel is 62.8 kW, significantly lower than the national equivalent (86.5 kW).
- Most of the boats are made of wood (73%) and fibreglass (21%). Vessels with a metal hull represent 6% of the number of vessels, but 83% of the total capacity.

The Canarian fishing fleet shows a high social and economic dependency on small-scale fishing. Apart from some specific areas such as Las Palmas and Arrecife, small vessels are the most important segment. The boats less than 12 m long represent 86.7% of the number of vessels and account for 7.8% of the total capacity (proportions virtually unchanged since the early 90's). Meanwhile, they currently cover 30.6% of the total power of the Canarian fleet, which marks a significant rise during the past 10 years (up from 12-18% in the period 1990-2003). This rise is associated with a sharp decrease of the total fleet capacity in 2004, which augmented the relative proportion of the small vessels in the total figure, but also with a remarkable increase of the engine power per small vessel, particularly since 2006. Most of the small-scale vessels alternate the species targeted as well as the types of gears they use. Fishing areas are located on the continental shelf, which is very narrow around the islands, and thus artisanal fishing is concentrated in limited coastal areas.

The remaining fleet registered in Canarian ports mainly consists of high capacity trawlers, active in international waters and in third countries such as Morocco, Mauritania and Guinea-Bissau subject to bilateral agreements with the EU.

The vast majority of the vessels (97%) use several **types of gear** (Table 6). The most common combination is by far set longlines (main gear) and pots (used by 94% of the vessels, it corresponds to 21% of the total gross tonnage and to 48% of the total engine power). In terms of capacity, vessels using a combination of bottom otter trawls (main gear) and bottom pair trawls represent a significant part of the fleet (67% of the gross tonnage and 42% of the engine power, though just 4% of the number of vessels). Only 3% of the vessels are considered to be specialised (no subsidiary gear is declared). This category represents 12% of the gross tonnage of the Canarian fleet and includes drifting longlines (6% of the tonnage), purse seines (mainly for small pelagics), bottom water trawls and trammel nets (Table 6).

The same pattern is reflected as regards the main fishing gear declared (Table 7). The Canarian vessels most commonly use set longlines (94% of the boats, covering 22% of the

⁹ All figures indicated in this chapter are based on data from the Community Fishing Fleet Register, downloaded in February 2013.

¹⁰ As the Canarian fleet is composed of distinct segments (small-scale vs. high capacity vessels), the average figures are given mainly for comparison with national equivalents.

gross tonnage and 49% of the total engine power). The longlines are limited to a maximum of 500 hooks and to 2000 m length, and their use is forbidden in certain areas. Vessels equipped with bottom otter trawls (4% of the total number) dominate in terms of gross tonnage (71%) and have a significant engine power (44%). However, trawling in Canarian waters is prohibited with few exceptions, and this segment operates in international, third country and Portuguese waters.

Table 6: Fishing gear used by the Canarian fleet

CODE	GEAR	VESSELS		TONNAGE		POWER	
		No.	%	GT	%	kW	%
PS	Purse seines	14	2%	260	1%	1313	2%
LLD	Drifting longlines	5	1%	1408	6%	2013	4%
OTB	Bottom otter trawls	3	0%	804	4%	1038	2%
LLS	Set longlines	2	0%	203	1%	403	1%
Specialised		24	3%	2674	12%	4766	9%
LLS FPO	Set longlines - Pots (traps)	801	94%	4673	21%	26021	48%
OTB PTB	Bottom otter trawls - Bottom pair trawls	30	4%	15061	67%	22807	42%
GTR GNS	Trammel nets - set gillnets	1	0%	61	0%	129	0%
Not specialised		832	97%	19795	88%	48956	91%
TOTAL		856	100%	22469	100%	53723	100%

Note: Information from the Spanish General Secretariat for Fisheries questions the use of bottom pair trawls as a secondary gear.

Data source: Community Fishing Fleet Register.

Table 7: Fishing gear used by the Canarian fleet (main gear declared)

CODE	GEAR	VESSELS		TONNAGE		POWER	
		No.	%	GT	%	kW	%
LLS	Set longlines	803	94%	4876	22%	26423	49%
OTB	Bottom otter trawl	33	4%	15865	71%	23844	44%
PS	Purse seines	14	2%	260	1%	1313	2%
LLD	Drifting longlines	5	1%	1408	6%	2013	4%
GTR	Trammel nets	1	0%	61	0%	129	0%
TOTAL		856	100%	22469	100%	53723	100%

Data source: Community Fishing Fleet Register.

A total of 41 **ports** with fishing vessels are registered in the Canaries in 2013 (see Table 11 in Annex 2). The port of Las Palmas (also called La Luz Port) is the most important one, and Spain's third fishing port after Bermeo and Vigo (Table 8, Map 7). Las Palmas accounts for 78.5% of the total capacity of the Canarian fleet, and for ca. half its engine power. Other significant ports in terms of capacity are Santa Cruz de Tenerife (gross tonnage 5.1%, engine power 6.3%) and Arrecife de Lanzarote (4.7% and 6.8% respectively). High numbers of vessels with lower capacity are registered in Arguineguin, Corralejo, Gran Tarajal and Caleta del Sebo (in the province of Las Palmas), as well as in Hierro, Santa Cruz de la Palma, Tazacorte and Los Cristianos (in the province of Santa Cruz de Tenerife).

Table 8: The main fishing ports in the Canary Islands

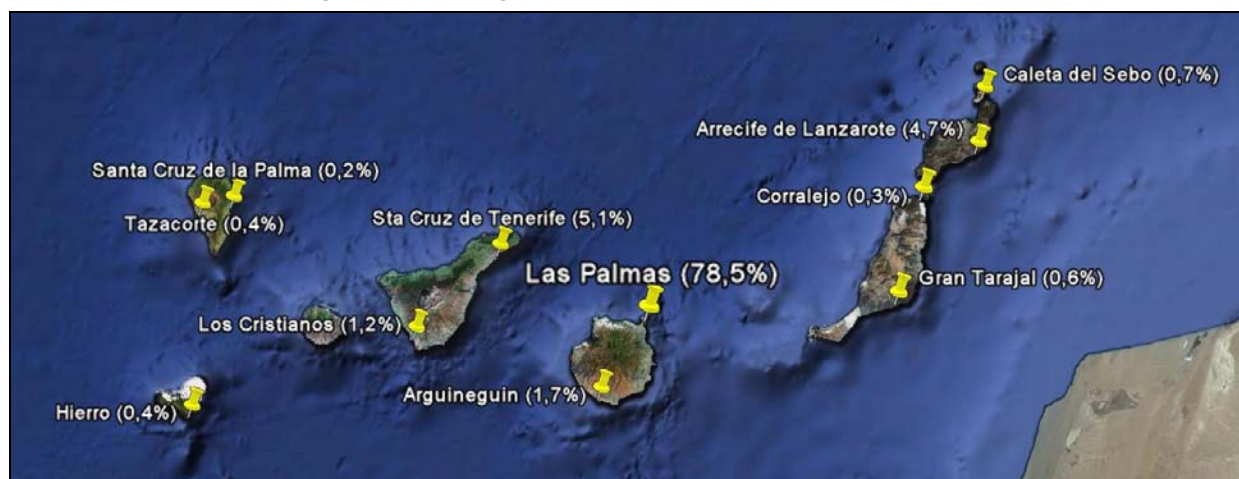
PORT		VESSELS		TONNAGE		POWER	
		No.	%	GT	%	kW	%
SCT	STA CRUZ TENERIFE	34	4,0%	1145	5,1%	3376	6,3%
SCT	SANTA CRUZ DE LA PALMA	31	3,6%	50	0,2%	607	1,1%
SCT	TAZACORTE	31	3,6%	88	0,4%	814	1,5%
SCT	HIERRO	35	4,1%	81	0,4%	763	1,4%
SCT	LOS CRISTIANOS	31	3,6%	272	1,2%	1766	3,3%
LP	LAS PALMAS	80	9,3%	17638	78,5%	27285	50,8%
LP	CORRALEJO	43	5,0%	70	0,3%	866	1,6%
LP	GRAN TARAJAL	43	5,0%	142	0,6%	1274	2,4%
LP	ARRECIFE DE LANZAROTE	36	4,2%	1061	4,7%	3632	6,8%
LP	CALETA DEL SEBO (GRACIOSA)	36	4,2%	168	0,7%	1229	2,3%
LP	ARGUINEGUIN	51	6,0%	378	1,7%	1906	3,5%

SCT = Province of Santa Cruz de Tenerife

LP = Province of Las Palmas

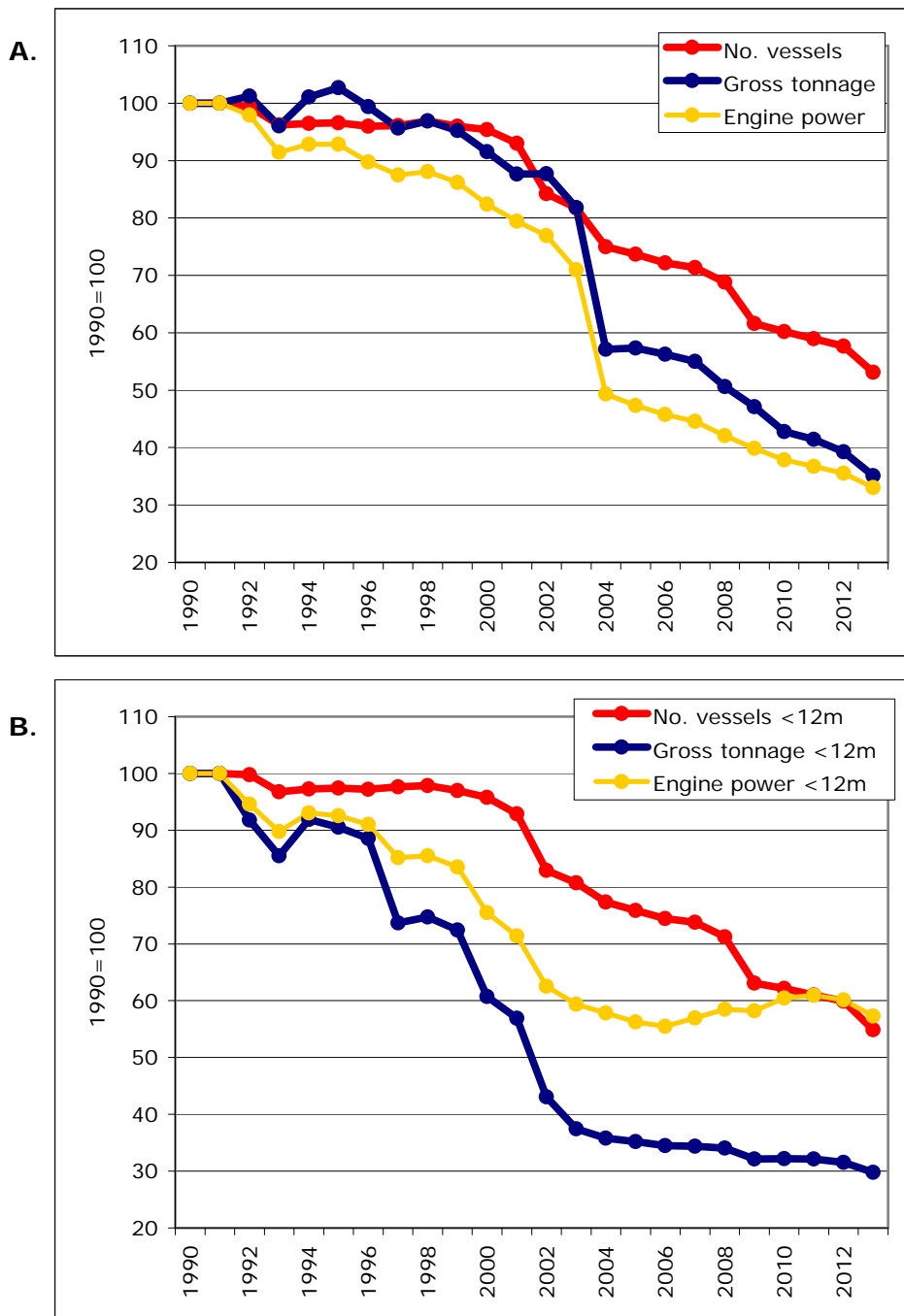
Data source: Community Fishing Fleet Register.

Map 7: Location of the main fishing ports in the Canary Islands. The percentage of the total gross tonnage is indicated.



Data source: Community Fishing Fleet Register.

Figure 9: Evolution of the Canarian fishing fleet in terms of number of vessels, gross tonnage and engine power (reference value 1990=100): A. Total fleet, B. Vessels less than 12 m long



Data source: Community Fishing Fleet Register.

The evolution of the Canarian fleet in the last two decades shows a significant effort of reduction of the fishing capacity, particularly since 2000. The number of vessels almost halved between 2000 and 2013, whereas the total gross tonnage and engine power reduced by ca. 60%, with a sharp fall in 2003-2004 (Figure 9). The capacity per vessel also decreased from 38.1 tonnes/vessel and 87.2 kW/vessel in 2000 to 26.2 tonnes/vessel and 62.8 kW/vessel in 2013, i.e. a reduction around 30%. The end of the fisheries agreement with Morocco in 1999 had a big impact on the Canarian fleet. Following a period of negotiations and establishment of subsidies, a large number of vessels were scrapped by 2003.

The fleet under 12 m has also decreased, particularly between 1995-2003. The number of small vessels and their total gross tonnage has continued to decrease after this date, albeit with a lower gradient. However, the total engine power increased after 2006, associated with a quite significant boost of the power per vessel from 15.8 kW/vessel in 2006 to 22.2 kW/vessel in 2013.

Box 1: The fishing port of Las Palmas

LAS PALMAS:

Puerto de la Luz in figures

- The first port facilities built in 1883
- Main base for deep sea fishing in the Central-East Atlantic
- The first fishing port of the Canary Islands and the third fishing port of Spain
- Main bunkering centre for ocean shipping in the Mid Atlantic
- 15 docks, 5 of them destined only to fishing
- 190 hectares of concession
- More than 175.000 m³ of cold storage
- Connexions with 180 ports around de 5 continents
- Total traffic of more than 280 000 tonnes of frozen fish and more than 650 tonnes of fresh fish in 2011
- 8315 merchant vessels and 474 fishing vessels in 2012
- 4500 direct jobs
- 1300 Million EUR in revenue
- A border inspection post (BIP) responsible for checking all types of imports from third countries or exports to countries outside the EU.

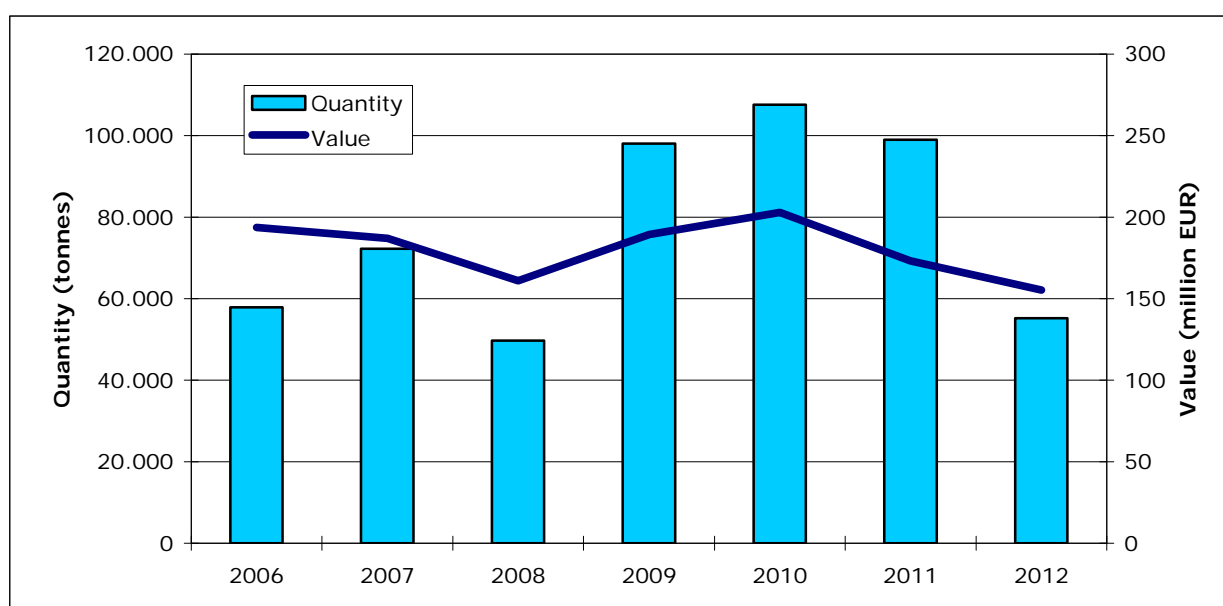
Source: www.palmasport.es, www.puertos.es.

5. TRADE OF MARINE PRODUCTS

In 2012 the **imports** of marine products to Canary Islands (fish, crustaceans, molluscs and other marine invertebrates) reached 55 179 tonnes, with a total value of 155.27 million EUR¹¹. This represents around 4% of the amount of marine products imported by Spain (4.4% of the total quantity and 3.8% of the value). Much higher figures were recorded in previous years (2009 to 2011), when imports were situated around 100 000 tonnes, with a maximum value which amounted to 202.81 million EUR in 2010 (Figure 10). The significant decrease in 2012 is partly related to reduced activity of the pelagic fleets after the new agreement with Mauritania changed the main areas for that fleet, becoming less attractive and leading to an abandon of the fishing grounds during second half of the year, and partly due to controls tightening up after the EU IUU regulation 1005/2008 entered into force on 1 January 2010 (Spanish General Secretariat for Fisheries, personal communication).

China has been the most significant source of imports of marine products in recent years, with ca. 23% of the total value of the imports in 2012 (Figure 11). Other countries in Asia are also major providers of marine products: Vietnam (9.3%) and South Korea (3.4%, down from higher values in previous years). Imports from northwest Africa have constantly accounted for an important share of the total value, with Mauritania and Morocco providing ca. 15% and 8% respectively in 2012. EU countries together reached only 8% of the imports value, ca. half of which comes from the Netherlands.

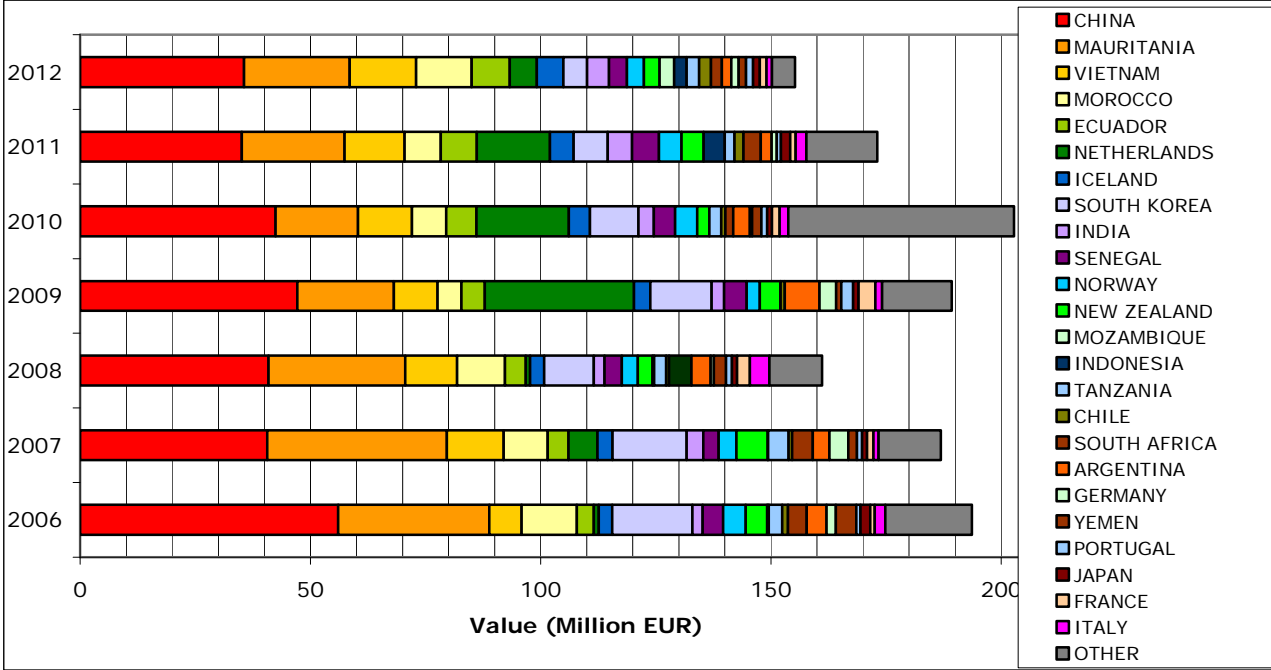
Figure 10: Quantity and value of imported marine products (2006-2012)



Data source: Spanish Foreign Trade Statistics.

¹¹ All trade data in this chapter are from Spanish Foreign Trade Statistics <http://customs.camaras.org/>. Last data available: December 2012, last definitive data: December 2011.

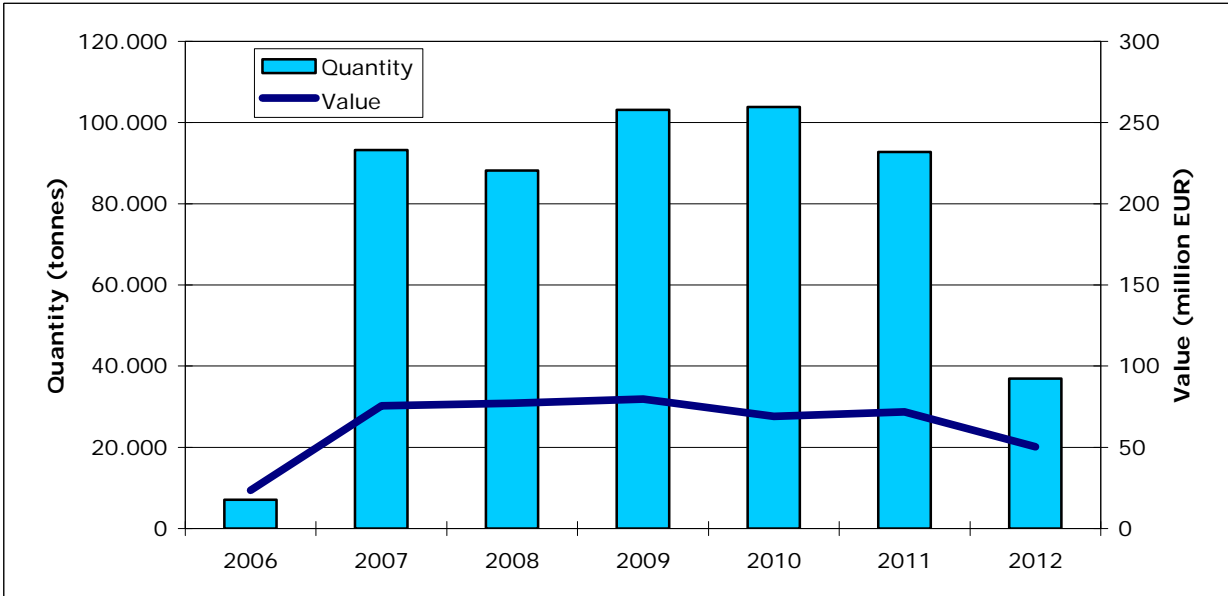
Figure 11: Value of imported marine products (2006-2012)



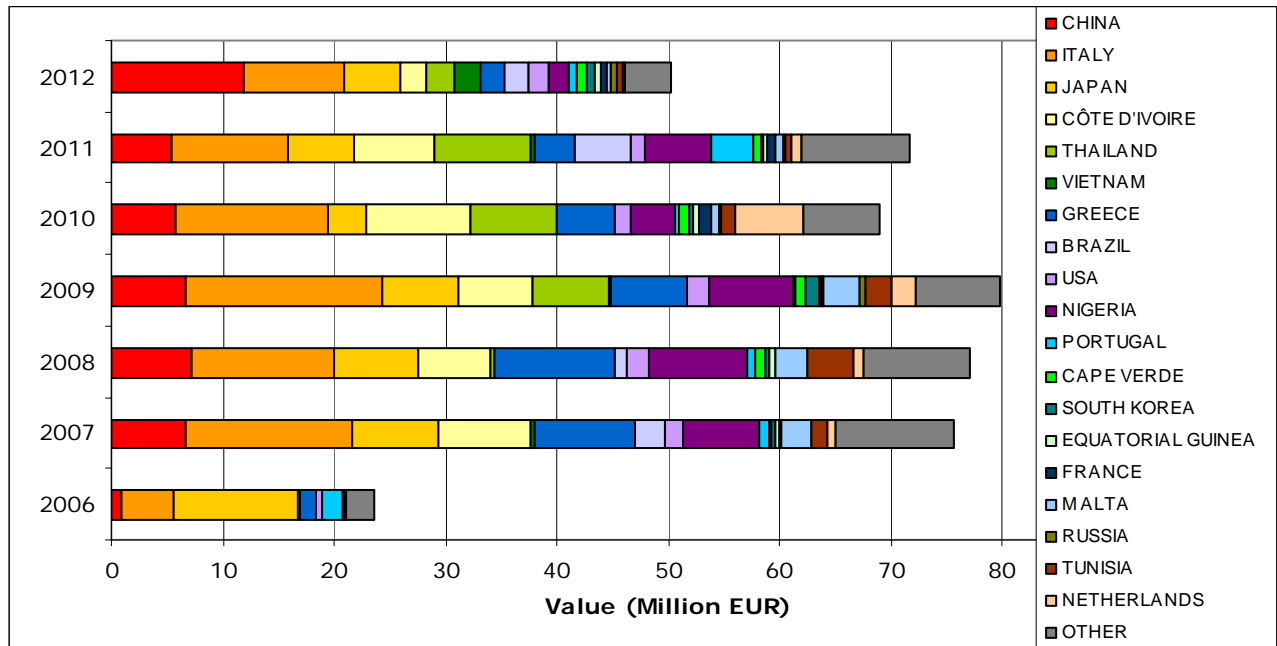
Data source: Spanish Foreign Trade Statistics.

Exports of marine products reached 36 973.5 tonnes in 2012, for a total value of 50.24 million EUR, whereas in previous years figures varied around 90–100 000 tonnes and 70-80 million EUR. This decrease reflects the evolution of the imports, as an important part of the imported products is reexported.

Figure 12: Quantity and value of exported marine products (2006-2012)



Data source: Spanish Foreign Trade Statistics.

Figure 13: Value of exported marine products (2006-2012)

Data source: Spanish Foreign Trade Statistics.

The EU is the most important market for marine products exported from the Canary Islands: in 2012 the export value to EU reached 25.5 million EUR (around 51% of the total export). Italy is the main destination in the EU (18% of the total exports in 2012), in particular for cephalopods fished in Mauritanian waters. However, the value of export to Italy has been decreasing in recent years, and it was recently overcome by China as the largest national market for Canarian exports. Greece (4.4%), which was another important market, has also declined since 2008.

China now ranks first with ca. 24% of the export value. Other significant markets in Asia are Japan (ca. 10%, also for Mauritanian cephalopods), Vietnam and Thailand (both with 4.8%). In Africa, the main markets are Côte d'Ivoire (4.9%) and Nigeria (3.4%), though considerably declining in recent years.

Las Palmas and Santa Cruz de Tenerife are designated ports for direct landings of third country fishing vessels. Out of 426 landings of third country vessels in Spanish ports in 2010 and 2011, almost half (193) have been recorded in the port of Las Palmas. Given the position of major gateway for fisheries products into the EU, the **control** of the compliance of these products with EU legislation is a major issue in the Canary Islands. Concerns have been voiced over landings of illegally-caught fish in the port of Las Palmas (e.g. EJV 2012). Between the date of application of the EU IUU Regulation 1005/2008 on 1 January 2010 and 31 December 2011, a total number of 329 inspections were carried out in the Canaries (out of 518 in all Spanish ports), and detected 34 infringements mostly consisting of obligatory information data not being mentioned in the logbook, and lack of notification previous to access to the port. As regards landings from third country vessels over the same period, 139 inspections were carried out on 172 landings, with 70.8% of the landings inspected in 2010, and 93.4% in 2011 (Ministry of Agriculture, Food and Environment 2012).

6. MARINE RESEARCH

In the Canary Islands, there are several organisations for research and technological development activities in the marine science sector, cooperating with other groups of international and national centres.

The **Canarian Institute of Marine Sciences** - ICCM (*Instituto Canario de Ciencias Marinas*) is a research centre created in the early 1970's to support the Canarian fishing industry and to boost higher education in Marine Sciences. Nowadays the ICCM is an important institution which provides research and technologic development in marine science, cooperating with regional, national or international institutions which share the same objectives, and contributes to environmental education. The ICCM generates resources with direct application in productive economic activities, provides expertise in the sector, detects and addresses needs of research and innovation, and promotes a culture of continuous improvement in the global society.

The ICCM depends exclusively on the Canarian Government through the Canarian Agency for Research, Innovation and Society Administration. Their powers are promoting research and development of science and technology, business innovation and deployment of telecommunications infrastructure and services of the information society.

The ICCM is located in the municipality of Taliarte, in Gran Canaria. The ICCM has two marine aquaculture facilities with capacity for more than 200 000 litres. Also, the ICCM has different laboratories such as the fisheries biology laboratory and the chemical oceanography laboratory, as well as other infrastructure and equipment e.g. a computer room and a specialized library.

The principal research areas of the institute are:

- Aquaculture
- Fishing Biology
- Coastal management and sustainable development
- Coastline
- Oceanography
- Fishing Resources

In addition, the ICCM is involved in international research with other research agencies, and is responsible for developing a postgraduate course in marine harvesting, coordinated with the University of Las Palmas de Gran Canaria (ULPCG).

The **Oceanographic Institute of Canary Islands**, located in Tenerife, along with those of Santander, La Coruña, Vigo, Malaga, Mar Menor, Balearic Islands and the central headquarters in Madrid, make up the Spanish Oceanographic Institute (IEO). The IEO is an autonomous body that reports, in organizational terms, to the Research Secretary of the MINECO (Economy and Competitiveness Ministry). The most important of its activities are inter-disciplinary oceanographic research on marine environment, fisheries resources and aquaculture, the representation of Spain in international bodies, the promotion of oceanographic research and institutional collaboration on the international, national, autonomous and local levels, as well as training of qualified staff.

The IEO in Tenerife has two main sections, fisheries and aquaculture, with the objective to improve technology in these important sectors of the Canarian industry.

The **Marine Biotechnology Centre** (CBM) is a research centre of the ULPGC and comprises the Applied Algology and the Biological Oceanography research groups. Their activities are focused on developing new lines of work that apply eco-physiological and biotechnical knowledge and techniques to marine resources. The Applied Algology Group has been working since 1987 with the particular aim to develop agro-industrial activity beneficial to the Canary Islands and nearby areas. The Biological Oceanography Group was created a few years before, in 1984. Its particular area of research is the study of the distribution, metabolism and trophic relationships of plankton and their interaction with physical processes.

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ANNEX 1

Table 9: Fresh fisheries production in the Canary Islands by species: quantity, in tonnes (2006-2012)

SPECIES	2006	2007	2008	2009	2010	2011	2012
Bigeye tuna	2.799,02	1.706,24	1.822,00	3.060,33	1.775,10	3.363,91	1.678,80
Skipjack tuna	1.933,80	823,67	3.520,15	1.549,10	1.523,32	1.328,38	6.087,01
Yellowfin tuna	231,51	180,10	349,00	256,05	825,13	1.293,24	42,90
Atlantic chub mackerel	475,86	439,39	481,50	734,61	706,81	880,00	659,60
Round sardinella	69,64	48,90	133,56	279,79	228,83	540,82	347,06
Albacore	308,45	211,93	728,51	0,00	419,26	341,57	1.433,68
European pilchard (sardine)	293,38	271,24	118,81	162,03	215,68	230,47	196,82
Madeiran sardinella	0,00	100,03	202,97	124,51	121,58	189,13	76,30
Parrotfish	131,40	15 4,99	219,73	182,34	0,00	161,14	176,70
Blue jack mackerel	212,74	110,52	115,04	138,71	122,19	160,30	161,41
Swordfish	0,00	0,00	0,00	0,00	0,00	158,52	53,74
Rubberlip grunt	0,00	46,90	114,44	141,14	86,96	130,62	0,00
Red porgy	84,56	100,49	0,00	112,85	88,63	117,58	91,48
Pink dentex	0,00	41,00	137,93	166,98	95,91	116,41	42,95
Black seabream	35,70	82,84	134,92	160,88	84,25	93,48	0,00
Splendid alfonsino	26,14	0,00	58,21	76,35	77,65	86,41	36,63
Wahoo (peto)	0,00	59,47	0,00	79,48	58,11	77,37	0,00
Common two-banded seabream	0,00	0,00	0,00	0,00	0,00	62,11	0,00
Greater amberjack	29,31	47,00	0,00	0,00	0,00	57,78	0,00
Canary dentex	0,00	0,00	79,04	71,41	0,00	55,22	0,00
Morocco white seabream	0,00	0,00	52,42	0,00	57,36	0,00	0,00
European anchovy	29,80	80,35	0,00	96,21	0,00	0,00	53,35
European hake	0,00	0,00	0,00	0,00	0,00	0,00	33,60
Benguella hake	0,00	0,00	0,00	0,00	65,61	0,00	0,00
Surmullet	0,00	0,00	0,00	72,45	0,00	0,00	0,00
Octopus	0,00	0,00	84,88	0,00	0,00	0,00	42,14
Common pandora	29,43	52,25	0,00	0,00	0,00	0,00	45,34
White trevally	0,00	0,00	0,00	0,00	93,64	0,00	0,00
Atlantic bonito	0,00	0,00	106,22	63,66	0,00	0,00	0,00
Salema	47,29	64,74	71,20	67,24	64,72	0,00	0,00
Chub mackerel	0	0,00	64,38	0,00	0,00	0,00	0,00
Scomber sp.	107,92	0,00	0,00	0,00	0,00	0,00	0,00

SPECIES	2006	2007	2008	2009	2010	2011	2012
Yellowmouth barracuda	30,97	0,00	0,00	0,00	177,94	0,00	0,00
Planehead filefish	0,00	0,00	0,00	0,00	0,00	0,00	35,42
Atlantic bluefin tuna	164,22	59,37	0,00	0,00	0,00	0,00	53,53
Atlantic horse mackerel	47,57	0,00	0,00	0,00	0,00	0,00	0,00
Other species	621,37	921,77	1.439,79	1.657,28	1.453,18	1.330,68	630,12
TOTAL	7.625,28	5.468,29	9.845,49	9.051,10	8.161,68	10.600,04	11.978,59

Note: Data for 2012 do not cover the whole year and are presented as available in October 2012.

Data source: Canarian Government.

Table 10: Fresh fisheries production in the Canary Islands by species: value, in EUR (2006-2012)

SPECIES	2006	2007	2008	2009	2010	2011	2012
Bigeye tuna	4.717.694,93	2.994.101,57	3.461.545,68	3.938.643,75	2.166.788,76	4.121.495,47	2.653.795,84
Skipjack tuna	849.453,40	370.772,33	2.094.552,87	965.513,83	1.126.416,19	793.201,80	4.446.866,46
Yellowfin tuna	239.903,26	337.311,89	510.946,87	218.543,85	1.226.086,41	1.600.532,04	95.306,27
Atlantic chub mackerel	300.597,00	273.345,61	314.039,77	483.980,55	460.979,34	565.464,71	393.656,17
Round sardinella	26.616,28	32.665,27	108.483,03	205.322,58	176.280,09	396.392,61	196.720,42
Albacore	507.314,27	527.721,59	1.864.297,78	0,00	1.132.285,52	928.442,47	3.104.045,63
European pilchard (sardine)	309.801,95	251.875,92	142.501,84	249.863,78	220.432,63	262.585,33	234.785,41
Madeiran sardinella	0,00	60.743,91	150.924,64	137.996,84	94.702,19	221.377,26	73.475,52
Parrotfish	424.523,15	544.558,18	966.829,80	793.286,43		620.633,21	650.783,14
Blue jack mackerel	157.764,37	88.815,53	92.066,23	120.672,42	123.155,59	162.395,02	143.708,80
Swordfish	0,00	0,00	0,00	0,00	0,00	308.548,83	111.728,95
Rubberlip grunt	0,00	88.542,31	307.204,96	370.298,30	154.764,32	275.138,87	0,00
Red porgy	259.772,14	314.343,61	0,00	401.573,13	356.334,29	439.410,98	343.771,85
Pink dentex	0,00	142.901,25	623.813,47	794.812,11	254.499,28	399.593,12	152.701,42
Black seabream	50.759,94	148.226,11	355.025,11	409.555,00	162.068,79	202.192,96	0,00
Splendid alfonso	46.262,88	0,00	231.225,93	310.579,55	298.674,96	273.203,96	81.766,41
Wahoo (peto)	0,00	152.358,24	0,00	216.345,37	158.616,36	211.936,76	0,00
Common two-banded seabream	0,00	0,00	0,00	0,00	0,00	151.145,14	0,00
Greater amberjack	79.312,96	118.892,69	0,00	0,00	0,00	160.419,31	0,00
Canary dentex	0,00	0,00	383.483,05	328.119,35	0,00	123.390,61	0,00
Morocco white seabream	0,00	0,00	142.916,15	0,00	114.690,24	0,00	0,00
European anchovy	17.881,74	50.004,70	0,00	178.386,30	0,00	0,00	118.300,04
European hake	0,00	0,00	0,00	0,00	0,00	0,00	101.311,23
Benguella hake	0,00	0,00	0,00	0,00	164.035,00	0,00	0,00
Surmullet	0,00	0,00	0,00	159.584,44	0,00	0,00	0,00
Octopus	0,00	0,00	291.861,43	0,00	0,00	0,00	97.909,94
Common pandora	68.334,70	119.125,90	0,00	0,00	0,00	0,00	85.445,41

SPECIES	2006	2007	2008	2009	2010	2011	2012
White trevally	0,00	0,00	0,00	0,00	157.119,09	0,00	0,00
Atlantic bonito	0,00	0,00	128.598,75	81.817,21	0,00	0,00	0,00
Salema	63.957,20	106.152,13	154.276,68	141.335,21	119.732,22	0,00	0,00
Chub mackerel	0,00	0,00	41.316,01	0,00	0,00	0,00	0,00
Scomber sp.	100.103,25	0,00	0,00	0,00	0,00	0,00	0,00
Yellowmouth barracuda	73.257,48	0,00	0,00	0,00	753.444,35	0,00	0,00
Planehead filefish	0,00	0,00	0,00	0,00	0,00	0,00	53.137,64
Atlantic bluefin tuna	228.116,12	191.112,88	0,00	0,00	0,00	0,00	173.369,05
Atlantic horse mackerel	60.349,18	0,00	0,00	0,00	0,00	0,00	0,00
Other species	1.494.461,95	2.515.157,68	4.165.891,20	5.342.181,49	4.041.695,45	3.632.498,22	1.989.701,72
TOTAL	9.882.327,61	9.078.393,17	16.104.585,70	15.297.139,72	13.070.762,27	15.415.043,63	15.302.287,32

Note: Data for 2012 do not cover the whole year and are presented as available in October 2012.

Data source: Canarian Government.

ANNEX 2

Table 11: Fishing ports in the Canary Islands

PORT		VESSELS		TONNAGE		POWER	
		No.	%	GT	%	kW	%
SCT	STA CRUZ TENERIFE	34	4,0%	1145	5,1%	3376	6,3%
SCT	CANDELARIA	25	2,9%	62	0,3%	708	1,3%
SCT	PUERTO DE LA CRUZ	22	2,6%	32	0,1%	287	0,5%
SCT	PUNTA HIDALGO	11	1,3%	15	0,1%	117	0,2%
SCT	VALLE GUERRA	2	0,2%	1	0,0%	9	0,0%
SCT	GUIMAR	2	0,2%	14	0,1%	82	0,2%
SCT	SAN ANDRES	9	1,1%	106	0,5%	370	0,7%
SCT	EL PRIX	17	2,0%	15	0,1%	163	0,3%
SCT	GARACHICO	13	1,5%	14	0,1%	203	0,4%
SCT	SANTA CRUZ DE LA PALMA	31	3,6%	50	0,2%	607	1,1%
SCT	TAZACORTE	31	3,6%	88	0,4%	814	1,5%
SCT	VALLE DE GRAN REY	19	2,2%	40	0,2%	277	0,5%
SCT	PLAYA SANTIAGO	7	0,8%	26	0,1%	181	0,3%
SCT	HIERRO	35	4,1%	81	0,4%	763	1,4%
SCT	LA RESTINGA	10	1,2%	24	0,1%	254	0,5%
SCT	LOS CRISTIANOS	31	3,6%	272	1,2%	1766	3,3%
SCT	PLAYA ALCALA	2	0,2%	4	0,0%	33	0,1%
SCT	PLAYA DE SAN JUAN	23	2,7%	125	0,6%	819	1,5%
SCT	PUERTO DE SANTIAGO	1	0,1%	4	0,0%	11	0,0%
SCT	LAS GALLETAS	18	2,1%	62	0,3%	484	0,9%
SCT	ARICO	19	2,2%	59	0,3%	608	1,1%
SCT	EL MEDANO	3	0,4%	4	0,0%	28	0,1%
SCT	GUIA ISORA	6	0,7%	7	0,0%	70	0,1%
SCT	PLAYA SAN MARCOS	21	2,5%	20	0,1%	177	0,3%
LP	LAS PALMAS	80	9,3%	17638	78,5%	27285	50,8%
LP	AGAETE	19	2,2%	66	0,3%	563	1,0%
LP	SAN NICOLAS DE TOLENTINO	2	0,2%	5	0,0%	71	0,1%
LP	TALIARTE	18	2,1%	112	0,5%	716	1,3%
LP	SAN CRISTOBAL	8	0,9%	26	0,1%	182	0,3%
LP	MOGAN	20	2,3%	200	0,9%	981	1,8%
LP	PUERTO DEL ROSARIO	24	2,8%	46	0,2%	282	0,5%

PORT		VESSELS		TONNAGE		POWER	
		No.	%	GT	%	kW	%
LP	CORRALEJO	43	5,0%	70	0,3%	866	1,6%
LP	MORRO JABLE	25	2,9%	100	0,4%	847	1,6%
LP	GRAN TARAJAL	43	5,0%	142	0,6%	1274	2,4%
LP	EL COTILLO	3	0,4%	6	0,0%	49	0,1%
LP	ARRECIFE DE LANZAROTE	36	4,2%	1061	4,7%	3632	6,8%
LP	CALETA DEL SEBO (GRACIOSA)	36	4,2%	168	0,7%	1229	2,3%
LP	PUERTO DEL CARMEN	21	2,5%	108	0,5%	795	1,5%
LP	PLAYA BLANCA (YAIZA)	15	1,8%	38	0,2%	478	0,9%
LP	ARGUINEGUIN	51	6,0%	378	1,7%	1906	3,5%
LP	CASTILLO DEL ROMERAL	20	2,3%	39	0,2%	362	0,7%

Data source: Community Fishing Fleet Register.

DICTIONARY

<i>Thunnus obesus</i>	Bigeye tuna	Patudo o atún de ojo grande o patudo del atlántico
<i>Katsuwonus pelamis</i>	Skipjack tuna	Listado o bonito de vientre rayado
<i>Thunnus albacares</i>	Yellowfin tuna	Atún claro o rabil o atún de aleta amarilla
<i>Scomber colias</i>	Atlantic chub mackerel	Estornino
<i>Sardinella aurita</i>	Round sardinella	Alacha
<i>Thunnus alalunga</i>	Albacore	Atún blanco o bonito del norte o albacora
<i>Sardina pilchardus</i>	European pilchard (sardine)	Sardina
<i>Sardinella maderensis</i>	Madeiran sardinella	machuelo
<i>Sparisoma cretense</i>	Parrotfish	Vieja colorada
<i>Trachurus picturatus</i>	Blue jack mackerel	Chicharro
<i>Xiphias gladius</i>	Swordfish	Pez espada
<i>Plectorhinchus mediterraneus</i>	Rubberlip grunt	Burro o roncador
<i>Pagrus pagrus</i>	Red porgy	Pargo
<i>Dentex gibbosus</i>	Pink dentex	Sama de pluma
<i>Spondylisoma cantharus</i>	Black seabream	Chopa
<i>Beryx splendens</i>	Splendid alfonsino	Alfonsiño o besugo americano
<i>Acanthocybium solanderi</i>	Wahoo (peto)	Peto
<i>Diplodus vulgaris</i>	Common two-banded seabream	Mojarra
<i>Seriola dumerili</i>	Greater amberjack	Pez de limón
<i>Dentex canariensis</i>	Canary dentex	Denton canario
<i>Diplodus sargus cadenati</i>	Morocco white seabream	Sargo
<i>Engraulis encrasicolus</i>	European anchovy	Boqueron o anchoa
<i>Merluccius merluccius</i>	European hake	Merluza o merluza europea
<i>Merluccius polli</i>	Benguella hake	Merluza negra o merluza de angola
<i>Mullus surmuletus</i>	Surmullet	Salmonete de roca
<i>Octopus vulgaris</i>	Octopus	Pulpo
<i>Pagellus erythrinus</i>	Common pandora	Breca
<i>Pseudocaranx dentex</i>	White trevally	Jurel limón
<i>Sarda sarda</i>	Atlantic bonito	Bonito
<i>Sarpa salpa</i>	Salema	Salema
<i>Scomber japonicus</i>	Chub mackerel	Estornino
<i>Scomber spp</i>	Scomber sp.	Caballas o estorninos
<i>Sphyrna viridensis</i>	Yellowmouth barracuda	Espetón boca amarilla
<i>Stephanolepis hispidus</i>	Planehead filefish	Lija áspera
<i>Thunnus thynnus</i>	Atlantic bluefin tuna	Atún rojo o de aleta azul
<i>Trachurus trachurus</i>	Atlantic horse mackerel	Jurel

NOTES

DIRECTORATE-GENERAL FOR INTERNAL POLICIES

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