

Integrating Western Saharan Coastal Fisheries into the International Economy, 1885-1975

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At the start of the nineteenth century, the Canary Island fishing industry had not varied its methods, species of catch and preserving techniques in 300 years of hunting along the Saharan coast.¹ The fleet that fished in these waters increased from 30 15-to-30-tonne boats in 1764 to 33 boats in 1830 with 1,225 total tonnages. These boats mainly came from the islands of Gran Canary, Lanzarote and La Palma.

Up to 1850, the Canary fishing sub sector was hampered not only by local governments' excessive burden on the salt water industry and increased lumber prices but also because of the Canary economic crisis between 1820 and 1850 as a result of the collapse of exports (wine and a type of local thistle) and established protectionist measures. Damage was also caused by European and Latin American privateering which hindered the islanders' fishing operations.

In the second half of the nineteenth century, a series of factors encouraged more intensive fishing in these grounds. In addition to the islands' proximity to northwest Africa and European expansion into this continent, a series of articles were published in Great Britain and France comparing the abundant Newfoundland banks with the Canary-Saharan fishing ground around the time the 1860 Hispanic-Moroccan treaty was signed, granting Spain an enclave south of Agadir. This led to numerous Canary fishing ventures into the Saharan waters throughout the 1870s and 80s. It was during that period when some of the Islands' economic and political sectors pressed Madrid to have Spain occupy part of what is today Morocco, thus ensuring Canary fishermen's rights to fish those rich coastal waters.

All these more intensive fishing attempts in the Saharan bank, however, did not fulfil their expectations. First, they were based on the mistaken principle that these waters teemed with cod (*gadus morrua*). Furthermore, the Spanish government could

¹ To conserve fish, Canary fishermen used two methods: the fish "in branch" or fish "salt pressed", which involved cutting the fish to fill them with salt, and used to prepare "codfish", in which they removed the head and spine, and salted them again.

not occupy the port of Ifni and such a venture proved costly². Despite this, pressures from Canary Island and Madrid authorities would prove successful when, on 24 December 1884, the Spanish government communicated to those attending the Berlin Conference of the decision to annex the territory between Cape Bojador and Cape Blanco. Although the geo-strategic factor played a crucial role in the decision, the fishing question (ensuring traditional Canary fishing rights to the Saharan grounds) was the main argument used by Madrid to justify, and subsequently to defend, occupying the Saharan coast.

1. The fishing banks between 1885 and 1940: The slow inclusion of the fishing grounds in the world economy.

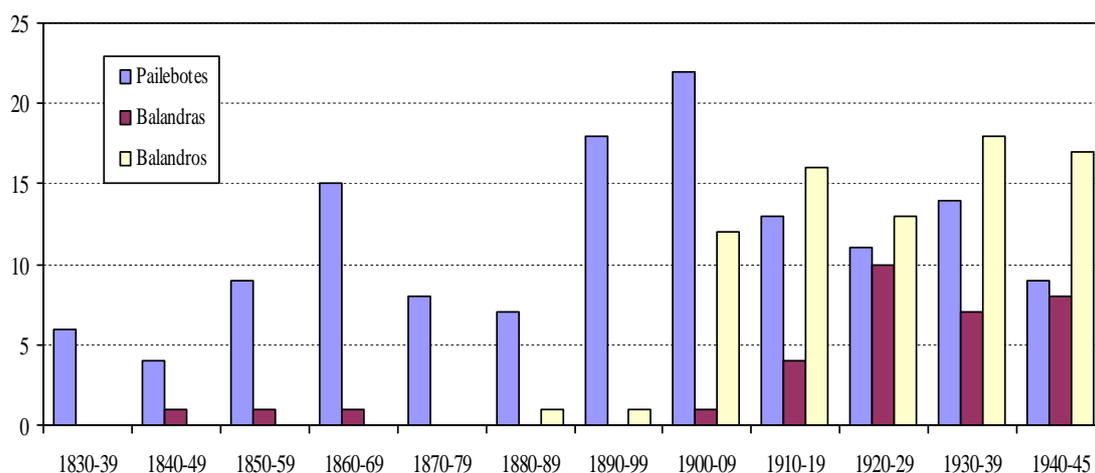
Once access to Saharan waters was ensured, the Canary deep sea fleet enjoyed a period of growth which did not entail technical change or fishing modernization. The fleet consisted of three types of boats: the schooner, the sloop and the small sloop constructed mainly by local carpenters, using Canary pine. Some ships were constructed in the United Kingdom. There were also mainland trading ships that later were adjusted to fish the Saharan banks. Statistical sources³ provide limited continuous, homogenous data on the Spanish fishing sector prior to 1936. This problem becomes even worse regarding the islanders fishing of the Saharan grounds. However, the official Shipping Registry provides enough detail to analyse the course of the Canary boats that worked the Saharan coast⁴.

² See Jesús M^a Martínez Milán (1992): *Las pesquerías canario-africanas (1800-1914)*. Madrid, CIES-La Caja de Canarias, pp. 5-60.

³ Jesús Giráldez Rivero (1991): "Fuentes estadísticas y producción pesquera en España (1880-1936)", en *Revista de Historia Económica*, año IX, n^o 3, pp. 513-532.

⁴ Jesús M^a Martínez Milán (2003): *España en el Sáhara Occidental y en la zona sur del Protectorado en Marruecos, 1885-1945*. Madrid, UNED ediciones, pp. 187-204.

Graph 1. Number of working boats registered in Gran Canaria, 1830-1945.



Source: Author's interpretation based on Third List of the Shipping Register for Las Palmas de Gran Canaria.

Graph 1 show only boats registered in Gran Canaria and therefore provides a bias which does not consider the islands of Lanzarote and Tenerife, whose boats also frequented Saharan waters, though to a lesser extent than those of Gran Canaria. Until 1950, there were more fishing boats operating and also more diversification⁵. For the first time since 1830, the number of schooners –heavier boats than the other two– decreased in comparison to the small sloops. Between 1900 and the end of World War I, it went from 62% to 38%, whereas the others were reduced from 47% to 12%, in the second decade. In the 1930s and 40s this situation was consolidated. The explanation for this increase in small sloop construction, was linked to price –they cost more than schooners– and "they sailed better", since the Gran Canary shipbuilders constructed the crafts with the aim of transporting fresh, live fish to the islands more quickly and at a lower cost. As indicated above, there was little technical transformation in the tonnage or the fishing equipment. This phenomenon is consistent with the data presented in Table 1.

Table 1. Development of the Canary fishing fleet that fished Saharan coast (1818-1943).

Years	Number Boats	TRB	Crew	TRB/Boat	TRB/Crew
1818	21	577	811	27,5	0,7
1830	33	1.225	—	37	—
1887	35	—	1.500	—	—
1901	52	1.654	1.535	32	1
1920	144	4.839	1.800	33,6	2,7
1943 ¹	195	7.642	3.695	39	2

⁵ For a more detailed study of the Canary fishing fleet in the Canary-Saharan bank between the nineteenth and twentieth century: Jesús M^a Martínez Milán (2005): "La flota artesanal canaria en el caladero sahariano: crecimiento sin cambio técnico (1880-1945)", in *VIII Congreso de la Asociación Española de Historia Económica*. Santiago de Compostela, [CD-ROM].

1= Data only pertain to the province of Las Palmas de Gran Canaria.

Source: Jesús M^o Martínez Milán (2000): *El colonialismo español en el Sáhara occidental y en la zona sur del Protectorado español en Marruecos, 1885-1945*. Doctoral Dissertation, Madrid, UNED, Volume II, p. 362.

Besides verifying that the number of ships, tonnage and crews grew much more in the first half of the twentieth century than in the entire nineteenth century, it clearly shows average tonnage by boat descended between the final years of the nineteenth century until 1930. This reduction affected the schooner tonnage in Las Palmas which fell from 84 tonnes average gross in the 1870s to 34 tonnes between 1910 and 1920. Although between 1920 and 1940 there was a significant tonnage increase in length and lengthener, the average price of this boat descended to 37.5% up to 1930, due to competition with smaller, lower cost boats such as the sloop and the small sloop. All this was also linked to more intense fishing by the Canary fleet in the fishing bank affecting the mode of capture and species caught. Thus, we can distinguish the different types from Canary Island fishing practices throughout the first few decades of the nineteenth century:

a) Fishing with tackle and pair seine.

This was an older, more traditional Canary fishing practice used along the coast between Cape Juby and Blanco. The most common methods of capture were the hanging rope, trolling line and hook with rod, along with basket trap. With these equipments plus the introduction of the small boat (small art of drag), the Canary fishing boats went to a zone located between Cape Bojador and the south of Villa Cisneros and hunted demersal species or deep, in depths of up to 55 fathoms. Between these species it is possible to emphasize to the following ones: island grouper (*Dentex dentex*); Canary dentex (*Dentex canariensis*); dogtooth grouper (*Plyprion americanus*); grunts (*Pagellus acarne*); abbots (red *Mycteroperca*); sea bream (*Dentex gibbosus*) and bocinegro (*Pagrus pagrus*).

b) Meagre fishing.

The meagre (*Scioena aquila*) is a species that can measure a meter sixty centimeters. Of excellent meat in fresh state, one is throughout the coast between Cape Juby and Senegal, especially at Galgo Bay. Captured up to the end of the nineteenth century with basket trap, it was not until the early twentieth century when the use of drift art such as the meagre net became popular. From 1885 some authors believed the meagre and grouper could partly replace the cod that which was imported because, "in spite of its large size, it is better for salt processing and drying to make codfish"⁶. This increased the catch considerably between 1885 and 1945.

⁶ A. Gruvel y A. Bouyat (1906): *Les Pêcheries de la côte occidentale d'Afrique*. Paris, Augustin Challamel, p. 155.

c) Breeding grounds fishing.

This was the term for year-long fishing along the coast, but especially near Cape Juby and Cape Bojador, then transporting the fresh fish to the Canary Islands where it was loaded in floating depots. From the available data, this type of fishing began between the nineteenth and twentieth centuries. As mentioned, from 1896 the Canary shipbuilders reduced coasting vessel size in order "to increase speed and thus reduce fishing time to get the freshest fish to the Canary Islands"⁷. The fishing ships used were similar to those used in the salt industry, differing only in that the latter had a central part completely separate from the rest of the ship in watertight compartments, and this central part had bored sidewall holes a centimetre in diameter at certain points to allow constant movement of water fed by the ship as it sailed.

Increased fishing along the Saharan grounds ran parallel with an increase of the demand in the Canary Islands with its population increase (between 1857 and 1940, Santa Cruz de Tenerife grew by an annual average rate of 2.06%, Las Palmas de Gran Canaria by 2.59% and the island of Lanzarote, 0.69%)⁸, and of the colonial markets of sub-Saharan Africa, though these sectors did not require quality, as well as of some points of Latin America. In 1930 the port of Las Palmas de Gran Canaria exported 2.2 tonnes of dried and salt fish (91.7%) to the colonies of English Africa, Equatorial Guinea and French West Africa, whereas one hundred percent of the fresh fish went to mainland Spain and Italy⁹.

The Canary Islanders were not the only ones to increase the fishing activities along the Saharan grounds. In the early 1920s, as in the coastal waters of the French protectorate in Morocco, rich in sardines, and the southern Saharan-Mauritanian waters with abundant Breton-type lobsters, the first Portuguese, Italian and Spanish trawlers, appeared, motivated by their depleted European fishing grounds. Many were based in the main ports of Andalusia. These trawlers fished generally on the edge of the continental plain and 80 to 300 fathoms in depth. The main capture was hake and young hake, although in 1925 some ships of the Catalan Freixes Brothers line were instructed to hunt tunas and to take them back fresh to Barcelona. When the demand did not match the company's expectations, the tuna was acquired by the firm Lloret and Llinares de Tarifa Company (that would eventually settle in the Canary Islands) which took over the business.

⁷ Arthur Taquín (1903): *Les Iles Canaries et les parages de pêche canariens*. Bruxelles, L'imprimerie, p. 158-160.

⁸ Eugenio Burriel de Orueta (1982): *Canarias: población y agricultura en una sociedad dependiente*. Barcelona, Oikos-Tau, p. 50-51

⁹ Antonio Macías Hernández (1982): "El sector pesquero en la economía canaria del pasado inmediato (1800-1970)", en VV.AA.: *II Jornadas de estudios económicos canarios. La pesca en Canarias*. Sta Cruz de Tenerife, Universidad de La Laguna, p. 23.

Nevertheless, the Spanish ships also began trawling within territorial waters (more shallow waters within six miles of the coastline), capturing species that the Canary boats fished with drift, which alarmed some Canary shipbuilders and Naval authorities, which was feared to endanger "tracking on those peaceful shallow water beaches areas, destroying the grass, killing the young and driving away the fish, killing the fishing industry if the State authorities do not put step in"¹⁰.

For example, the steamship *Francisco's* voyage, 21 January to 6 August 1931, under Captain Vicente Cabo, caught 53.4 tonnes of fish, of which 53.9% were composed of fish apprehended at depths of less than 55 fathoms (sea bream, grunts, grouper, meagre, gilthead bream, etc.). The 46.1% remaining fish were considered "more select" (hake and small hake)¹¹. The Islanders fished the shallow areas trawling clear, sandy bottoms and also the stone bottom, using "special devices to work the stone" so the nets slipped over the rough surface, thus preventing breakage. This device resembled the one used years before by Portuguese and northern European trawlers, which "thoroughly cleared the natural deposits, taking even young fish in their nets and dragging up vegetation"¹².

2. Growth and expansion of the Canary fishing industry in the Saharan coastal waters, 1940-1975.

With the outbreak of World War II and closure of the northern Atlantic fishing grounds, demand for all types of fish increased considerably. As a result, pressure on the Canary-Saharan fishing bank also increased and steamships trawled shallower waters. As Saharan Naval Commander Alfonso Varela Reducto aptly noted, in 1940, the trawlers were

"much more interested in quantity of catch than in quality. Thus they [...] frequented places within a mile of the shoreline, so they could fill their boats in a few days. That is the case of Aguera, Cabo Blanco, Villa Cisneros and the rest of the Río de Oro colony. The boats seen constantly trawling near shore had been Italian, up to the time of the war, plus the Canary Islanders and some mainland vessels"¹³.

The Canary boats Varela described were not sail boats or hybrid sail and motor, but steamers registered in mainland Spain, bought and, in many cases, rented to

¹⁰ General Public Administration Archives (AGA), Section on Africa, Guinea, box 88, 1, unnumbered office. Instancia de Barrera y Cia y otros armadores de Tenerife al Director General de Pesca. Sta Cruz de Tenerife, 15 July 1925

¹¹ See, Vicente Cabo (1939): *Explotación pesquera de la costa occidental de África*. Typed manuscript (Personal property of Manuel González Quevedo).

¹² AGA, Section Africa, Sahara, Box 61. *Datos para un estudio de las zonas de pesca del Sahara español hasta las proximidades de San Luis de Senegal*. Villa Cisneros, 12 August 1940, p. 6.

¹³ *Ibidem*, p. 9

shipbuilders by the fishing factory owners in the Canary Islands. In 1941, the *R.A.L., S.A.* fishing company based at Arrecife on the island of Lanzarote and Rodolfo Alonso Lamberti, a Galician who owned three trawlers which worked the Saharan grounds: two rented to the Galician shipbuilder Curbera, the steamers *Arrecife* and *Agadir*, both registered at Vigo and 122 TRB each, with a crew of fourteen men; and the steamer *Santa M^a de P.*, owned by the firm, registered in Cadiz, with twenty crew and 263 TRB displacement. *Pesquerías y Salazones de Tenerife S.A.* had three trawlers: the *Ramon de Carranza* with 223 TRB registered in Seville; the *Remimak*, of 117 TRB, registered in Cadiz; and the *Luis Pozuelo*, of 106 TRB and registered at Santa Cruz de Tenerife. Another steamer was owned by Asturian shipbuilder, Ojeda Angel Perez, registered in Las Palmas. These boats took up 86% of the total value of the boats registered between 1940 and 45. The remaining Spanish trawlers came from the north and northwest of Spain. After they finished fishing Irish water, they returned to their base at Cadiz and then proceeded to the Saharan coastal waters.

The foreign trawlers were mainly Italian. In 1941 there was a total of seven steamers, five of which (*Adua; Amba Alagi; Ascianghi, Amba Aradan* and *Assab*) belonged to the "Great Italian Fishing" company. The *Segliola* and *Seorgano* belonged to the "S.A. Industry Atlantic Fishing". In addition to the boats of the transalpine country, in those waters they also killed the steam *Pescagel* and *Vivagel* of the "S.A. French Fishing". All of them moved to the port of Las Palmas de Gran Canaria.

Although the Spanish authorities applied their own legislation to the Saharan sovereignty thus prohibiting trawlers in territorial waters (within 6 miles of the coast) and Galgo Bay, they were unable to control illicit activities¹⁴.

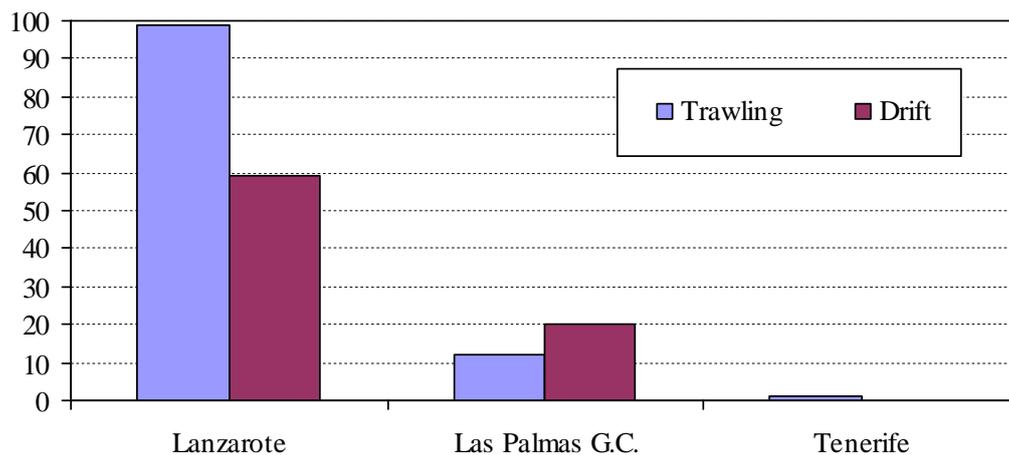
The Canary fishing industry –and therefore the artisan fleet– was considered satisfactory at the outbreak of WW II. In a 1947 book published in Madrid, and titled: *Las Islas Canarias. Estudio geográfico-económico. Notas sobre la tierra y los hombres*, author Francisco Alonso Luengo (commercial technical commerce delegate in Santa Cruz de Tenerife in those years), wrote, when talking about to the early war years,

"Stimulated by the general mainland Spanish demand for food products such as dry and salted fish and the suspension or reduction of cod imports, the Canary fishing industry has enjoyed an extraordinary increase... But, that amazing rate should be considered quite normal, since its main base, the wealth of the sea, was sufficient to handle that development and, on the other hand, the circumstantial growth, every time only the transitory circumstances of these years produced the strong peninsular demand whose interest drove the progress".

¹⁴ Jesús M^a Martínez Milán (2000): *El colonialismo español en el Sáhara occidental y en la zona sur del Protectorado español en Marruecos, 1885-1945*. Ph. D., Madrid, UNED, Volume II, p. 354 y 370-371.

That "circumstantial growth" motivated an increasing number of boats to fish the Saharan grounds in the first years of the 1940s. Of the 195 fishing boats from the province of Las Palmas de Gran Canaria (see Table 1) that operated along the nearby African coast in 1943, 30 (23.3% of the total tonnage) were motorised sailboats with an average tonnage of 59 TRB, and 165 were swift-sailing. Of the latter, 130 (63% of total tonnage) had an average tonnage of 37 TRB, and 35 (14% of total tonnage) reached 30 tonnes average per boat. Also the captures disembarked in the Canary Islands were multiplied by 2.3 in period 1940-1944, happening of 24,595 tonnes to 58,235. Antonio Macías has defined the period between 1940 and 1956 as the "golden age of Canary Island fishing". This growth would continued unabated into the 1950s, before eventually giving way to a stage of more austerity, of modernization, that would finalise in the mid 70s, when the oil crisis hit this sub sector.

Graph 2. Number of Canary Island boats fishing the waters near La Güera in 1956, classed by fishing techniques.



Source: Canary Island Naval Command (CINC), Spanish West Africa, Legajo 20, carpeta 4, despacho nº 143/56. *El Ayudante militar de Marina de La Güera al Comandante militar de Marina del AOE*. La Güera, 29 / 5/1956.

One of the first characteristics of those "golden years" was an increase in catch, especially around Lanzarote. This fact is corroborated by the number of boats from that island fishing off the Southern Saharan coast (see Graph 2). Based on the fishing equipment used: drift netting and tackle, the Spanish authorities carried out a census in 1956, which found that of 191 totals Canary Island fishing boats that worked the waters of Güera, 158 were based at Arrecife, 32 at the port of Las Palmas and only one at Santa Cruz de Tenerife. Of the 158 ships of Lanzarote, 62.66% used the tackle

method (*traíña*), whereas 37.34% used drift. In the case of Las Palmas boats, the amounts were reversed. Thus 37.5% worked mainly with tackle and 62.5% with drift. The explanation for this considerable increase in the use of tackle, especially among boats from Lanzarote, was closely related to an increased sardine demand (*sardinella aurita* and *sardinella eba*) from the fish meal mills on Lanzarote and Gran Canaria. Between 1943 and 1950, the number of fish meal factories in the Eastern Canary Islands increased from zero to thirteen.

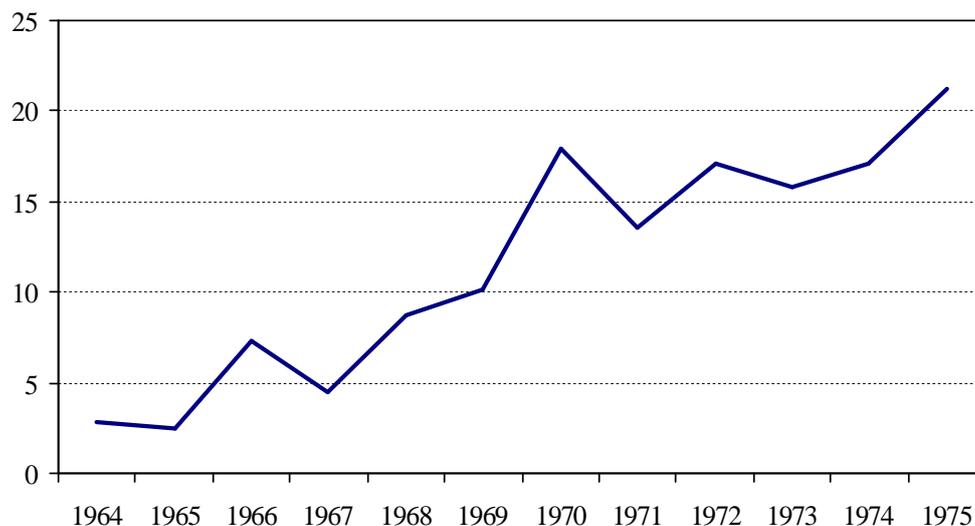
In the mid 1950s, the Spanish authorities tried to bring "order" to the Saharan fishing ground, creating the "Territorial Association of Fishing of Spanish Western Africa", whose mission was "the study any subjects related to this important branch of the economy and carry out the relevant legislation to regulate the best exploitation of those coasts' wealth." The association included members of the general government of the AOE and shipbuilder and manufacturer representatives related to the fishing bank¹⁵.

Another characteristic was the growth of the transforming industries. If in 1934 there were 23, including salted meat companies, fish meal and preserves, in 1966 the amount had tripled. Meanwhile they had diversified with the growth of refrigeration firms. This was because the external demand forced these industries to vary supply and continuously improve quality. The sardine conserve industry is a clear example. From end of the nineteenth century, the Canary preserves industry had been oriented towards the production of tuna, which had a competitively priced raw material. From the 1960s, with abundant sardines in the Saharan ground, the yield of the tackle, improved canning techniques and the sardine crisis in Galicia, the canning of sardines in oil was opened in the eastern Canary Islands, especially in Lanzarote¹⁶. As shown in Graph 3, canning exports of sardines from the province of Las Palmas by an annual average rate of 29.5% between 1964 and 1969, to slow down to an average of 3.5% from 1970-1974, as a result of the inflation that produced the first oil crisis.

¹⁵ Official Records of the Western African Spanish territory, year II, 13 / 5/ 56.

¹⁶ Álvaro Díaz de la Paz (1999): "Las estrategias de producción y los costes de la industria conservera de pescado canaria en el pasado inmediato", en *II Seminario de economía canaria*. ULPGC, pp. 1-13.

Graph 3. Exports of canned sardines by the province of Las Palmas, 1964-1975 (in thousands of metric tonnes).



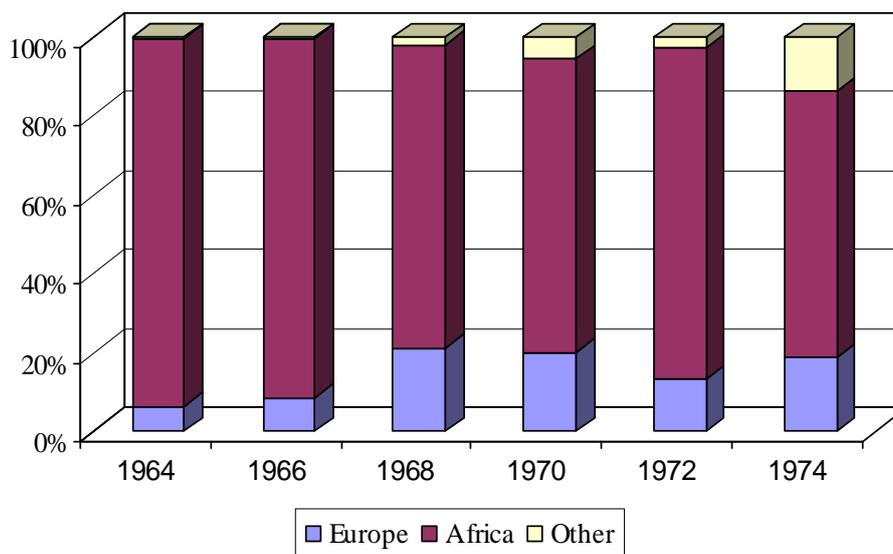
Source: Author's interpretation of import and export statistics collected from the Las Palmas de Gran Canaria Chamber of Commerce and Shipping (1964-1975).

Except for some low periods, the growth begun in 1964 with 2,792 tonnes was constant until 1970, when 17,900 exported tonnes of tins was reached. Between that last year and 1974, the numbers stagnated until in 1975 with 21,247 exported tonnes growth began again, thus following until the end of the decade. This could be seen in the average price of exported canned sardines in oil. Measured in current pesetas by exported kilogram, the kilogram of cans of sardine in oil (prices FOB) stayed more or less constant until 1972, oscillating between 29.70 pesetas in 1964 and 33.88 pesetas in 1972. In both years economic crisis and inflation multiplied the price by 1.5.

In addition to Europe (more Eastern than the Western part), America, the Middle East and Asia, in that order, the main exporting market was, clearly Africa (see Graph 4). For every 100 cans exported in 1964, 93 went to the sub-Saharan African market. This proportion fell gradually to 74.46% in 1970 and 67.5% in 1974. This more marked reduction in the early 70s, more than in previous years, was related to concerns that hit the African continent, where destabilizing factors were aggravated by the oil crisis as in the industrialized countries¹⁷.

¹⁷ See, H el ene d'Almeida-Topor (1993) *L'Afrique au XXe si cle*. Paris, Armand Colin, p. 240-260.

Graph 4. Destination of the exports of tinned sardines for the province of Las Palmas (1964-1974).



Source: Author's interpretation of import and export statistics collected from the Las Palmas de Gran Canaria Chamber of Commerce and Shipping (1964-1975).

Ghana, the Democratic Republic of Congo (Zaire as of 1971), Nigeria, the Union of the Central African States, Senegal and Angola were, within the African continent, the main importers; emphasizing by the volume concerned both first countries. The direction towards the African market and East Europe allowed, according to Alvaro Diaz de La Paz, "adjustments in qualities and prices that were not possible in more demanding markets", like Western Europe, "where it had to compete with the probably more competitive Moroccan and Portuguese production"¹⁸. This affirmation is contradicted by the situation of the Moroccan canning industry after independence which underwent gradual growth as most of the established French companies. The small canning companies that remained in the country maintained their activity thanks to what they exported to France, but from 1972 they faced the Spanish competition whose prices were lower¹⁹.

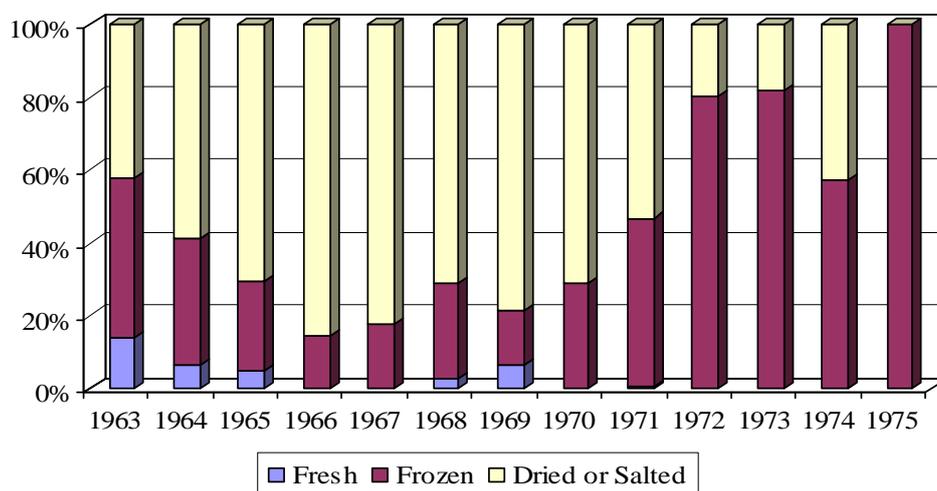
In addition to tinned sardines in oil, the African market continued being the greater receptor of the salted or dried fish prepared in the Canary Islands. Although as of 1970 (see Graph 5), frozen fish began to figure into the total fish exports for the port

¹⁸ Álvaro Díaz de la Paz (1999), *op. cit.*, p. 10.

¹⁹ Jean-Christophe Fichou (2005). "Sardines marocaines et industriels français, 1914-1973", en Sylviane Llinares et Philippe Hroděj (sous la dir.) : *Techniques et colonies (XVIe-XXe siècles)*. Paris, publications de la Société française d'Histoire d'outre mer et de l'Université de Bretagne Sud, p. 97-98.

of Las Palmas, the sub-Saharan African countries continued absorbing more than 90% of the salted fish exports.

Graph 5. Exports of fresh, frozen and dried or salted fish for the province of Las Palmas (1963-1965).



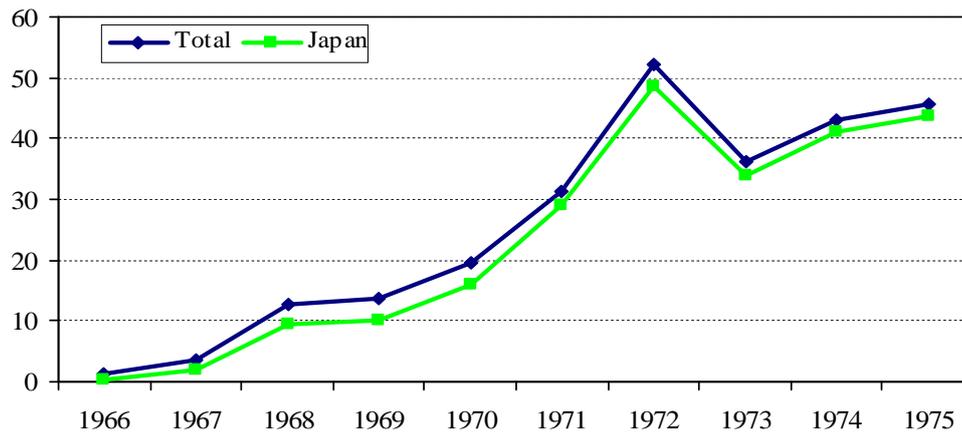
Source: Author's interpretation of import and export statistics collected from the Las Palmas de Gran Canaria Chamber of Commerce and Shipping (1964-1975).

The new fishing operations: the cephalopods and a diversity of species, especially abundant sardine, were closely related to the internationalization of the fishing bank since the 1960s. It was during that decade when an old-fashioned fleet of the Canary Islands began modernization, but that renovation arrived when the fishing activity was already in foreign hands.

The operation of the cephalopods began in the 1950s with the fishing boats from Alicante and other Spanish fishing boats based in Andalusia, that were centred especially in squid. But it was the Japanese trawler fleet, among others, that showed strong fishing growth, specializing in squid. Squid's development came in the wake of the biological breakdown in the area that the Canary Islands knew as "Playa Pargo" (zone which it went from a point located between Villa Cisneros and Güera, a point located ten kilometers north of Villa Cisneros), by the over-fishing of those fish that fed on molluscs and crustaceans. In addition to which Japan had its own fleet, in the campaign that began between the months of November of 1966 and 1967, the *Lloret y Llinares* company signed an agreement with the Japanese, *Hoko Fishing Co Ltd* for the water rights of Sarga Bay (Villa Cisneros) for their factory ships *Awazu Maru* and *Ohtsu Maru*, used to acquire cephalopods captured by Spanish fishing boats for freezing and subsequent shipping to that Asian country. This agreement, which

included the participation of *Pescanova*. As of 1971, was delayed until 1973. The boats that they provided were Canary ships "of little bearing that before beginning these operations suffered badly, as most of their catch was acquired in Las Palmas, at a very low price, for the fish meal factories."

Graph 6. Exports of frozen cephalopods for the province of Las Palmas de Gran Canaria, 1966-1975 (in thousands of metric tonnes)



Source: Author's interpretation of import and export statistics collected from the Las Palmas de Gran Canaria Chamber of Commerce and Shipping (1966-1975).

As depicted in Graph 6, in 1966 large scale cephalopod exporting began. Of the 1,230 tonnes exported that year, 18.77% went to Japan. The frozen fish for the Land of the Rising Sun consolidated as the first destiny of octopus between 1967 and 1971, representing that final year more than 90% of the cephalopod exports for Las Palmas port. In 1972 the maximum of exits, of 52,213 tonnes exported was registered, 93.12% was sent to the Asian country. The year 1973 marks a product slump in the oil crisis, but it is curious that Japanese exports practically monopolized the frozen cephalopods in the recovery years of 1974 and 1975, where the Japanese percentage of the total was over 95%.

It is very difficult to calculate the number of national and foreign fishing boats that worked in the Saharan waters between 1963 and 1975, as well as the number of fish caught. The Naval authorities were incapable of controlling traffic because the lack of means and preoccupation that showed the authorities of Madrid. Most of the Spanish trawling fleet, that also had two ships factory in the zone (*Galicia* and the *Idiazaba*), unloaded part of its catch in mainland Spanish ports. Of the foreign fleets, the most powerful ships were the Japanese, the Russians, Italian and South Africans. To these it would be necessary to add the Portuguese fishing boats, those of South Korea, Cuba, Greece and, during several years (1972-1974), a fleet of 20 Dutch boats

out of Willemstad (the Dutch Antilles). These boats, of which 18 had less than 300 tonnes TRB and only two were between the 300 and 450 TRB, belonged to the company *L'Interpeche*, and were authorized by the undersecretary's office of the Merchant marine to fish sardines with wall arts, in a zone between the "3 and 12 miles". This fleet had two ships factory: the *Transporteur* and the *Angranster* that moored Villa Cisneros Bay to gather the catch of their fishing boats²⁰.

²⁰ Canary Island Naval Command (CINC), Spanish West Africa, legajo 78, carpeta 70, despacho n° 31. *El Subsecretario de la Marina Mercante al Almirante Jefe del Estado Mayor de la Armada*. Madrid, 30/10/72.