

## Fishery Fact Sheet

CECAF Fisheries Reports 2011

# Spain Offshore longliner hake fishery - Moroccan Atlantic coast waters, 2011

*Palangriers espagnols de merlus*

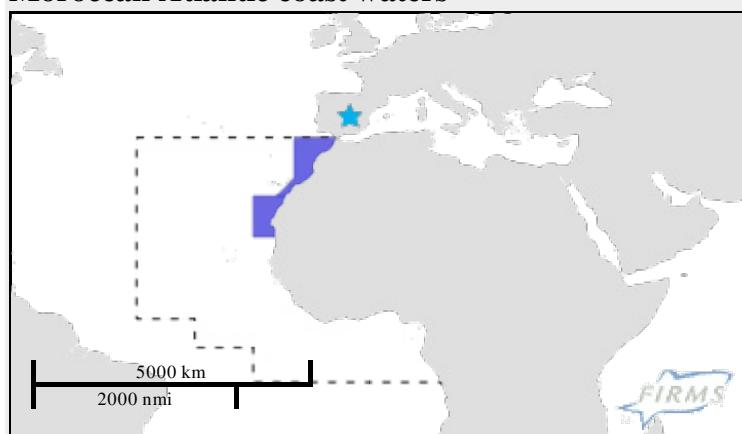
#### Data Ownership

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**Fishery life cycle**      This fishery terminated on 1999.

**Overview:** The majority of the fleet targeted hakes, mainly European hake, *Merluccius merluccius*, and Senegalese hake, *Merluccius senegalensis*, but part of the fleet targeted the Atlantic pomfret *Brama brama*, with an average number of 15-25 vessels during the last years of the agreement. The longline fleet operated in whole the Moroccan and Saharan coast. During the 1980's, they almost exclusively fished in the fishing grounds around the parallel 34°N, progressively increasing their activity to the Saharan coast (21°N-28°N) during the last years, then reaching the Mauritanian border. This was reflected in an increase of Senegalese hake catches. These vessels worked during the last years under the conditions established within the framework of the 1995 fishing agreement between the European Union and Morocco. The end of the Agreement in 1999 marked the closure of the fishery. The new fishing Agreement signed between the EU and the Kingdom of Morocco in 2006 authorises the use of longlines targeting black hake, scabbardfish and leefish, into the category "Demersal fishing" and in an area located south of 29°N and beyond 12 nautical miles. However, the licences provided to longliners have not been used until the moment.

#### Location of Spain Offshore longliner hake fishery - Moroccan Atlantic coast waters



##### Main layers

- FAO areas and their sub-divisions
- EEZ

#### APPROACH: FISHING ACTIVITY

##### Fishing Activity

Fishing Gear: Set longlines

Type of production system : Commercial;  
Industrial

Fishery Area: Morocco Atlantic coast;  
Morocco; Morocco coastal; Sahara coastal

##### Harvested Resource

Target Species: European hake; Senegalese hake; Atlantic pomfret

Associated Species: Swordfish; Silver scabbardfish; European conger ... more>>



Associated layers



Geographic reference

Intersecting layers



Intersecting: FAO major fishing areas

Base layers



200 nautical miles arcs

## Means of Production

Vessel Type: Longliners

## Fishery Indicators

Nominal Effort: Number of vessels

Production: Landing value total

**Geographic reference:** Spain**Spatial Scale:** National

## Table of Contents

Overview - Fishery History - Fishing Activity - Post Harvest - Management - Status and Trends - Source of Information

## History

The beginning of the Spanish longline fishery in Moroccan waters occurred at the end of the 1970s, when some Galician vessels based in the Port of Santa Eugenia de Riveira, started to operate in Morocco, after a decrease of the yields obtained in the North Spanish fishing grounds. The fleet experienced an important increase since 1995, reaching a number of 58 vessels in 1997.

This fleet suffered continuous changes in the gears employed from the beginning of the fishery until it was disappeared, alternatively changing from longline to gillnet and the opposite. In fact, different Fishing Agreements between the EU and the Kingdom of Morocco have included these gears in the same fishing category “Longline”.

## Fishing Activity

Type of production system: Commercial; Industrial

## Fishery Area

Climatic zone: Temperate. Depth zone: Slope - Upperslope (200 m - 500 m). Horizontal distribution: Neritic.

Vertical distribution: Demersal/Benthic.

Geo References for: Morocco Atlantic coast

### Morocco Atlantic coast

Exclusive Economic Zone Areas (EEZ)	MAR - Morocco
FAO Fishing Statistical Divisions	34.1.1 - Morocco coastal
	34.1.3 - Sahara coastal

## More Geo References

The following area codes have been found as intersecting the location of Spain Offshore longliner hake fishery - Moroccan Atlantic coast waters

FAO Major Fishing Areas	34 - Atlantic, Eastern Central
	37 - Mediterranean and Black Sea

The Moroccan Atlantic coast is part of one of the four major trade-wind driven continental margin upwelling zones in the world oceans, the northwestern African upwelling system (or the Canary Current System). In the Eastern Central Atlantic, the dynamics of an eastern boundary current interacting with trade wind-driven upwelling control this marine ecosystem with exceptionally high primary and secondary productivity (Cury and Roy, 1989; Binet, 1997; Demarcq and Faure, 2000). While coastal upwelling occurs mostly on the shelf, biogenic particles derived from upwelling are deposited mostly at the upper continental slope. Nutrient-rich coastal water is transported within the Cape Ghir filament region at 30°N up to several hundreds of kilometres offshore. Both upwelling intensity and filament activity are dependent on the strength of the summer Trades (Freudenthal et al., 2002).

## Resources Exploited

European hake - Morocco

Senegal hake, Benguela hake - Morocco

Other resources: Stocks of atlantic pomfrets, scabbardfish, conger, forkbeards and swordfish.

## Target Species

### *Merluccius merluccius*

FAO Names : en - European hake, fr - Merlu européen, es - Merluza europea, ru - Мерлуга восточноатлантическая

### *Merluccius senegalensis*

FAO Names : en - Senegalese hake, fr - Merlu du Sénégal, es - Merluza del Senegal, ru - Мерлуга синегальская

### *Brama brama*

FAO Names : en - Atlantic pomfret, fr - Grande castagnole, es - Japuta, ru - Лещ морской атлантический

Adults

## Associated Species (Bycatch)

### *Xiphias gladius*

FAO Names : en - Swordfish, fr - Espadon, es - Pez espada, ru - Меч-рыба

### *Lepidopus caudatus*

FAO Names : en - Silver scabbardfish, fr - Sabre argenté, es - Pez cinto, ru - Лепидоп

### *Conger conger*

FAO Names : en - European conger, fr - Congre d'Europe, es - Congrio común, ru - Угорь морской (=конгер)

### *Phycis spp*

FAO Names : en - Forkbeards nei, fr - Phycis nca, es - Brótolas nep, ru - Налимы нитеперые

Adults

## Discarded Species (Bycatch)

### *Pagellus erythrinus*

FAO Names : en - Common pandora, fr - Pageot commun, es - Breca

### *Galeus polli*

FAO Names : en - African sawtail catshark, fr - Chien râpe, es - Pintarroja africana, ar - قرش قِطْ مِنْشَار - إفريقي, zh - 西非锯尾鲨

### *Lepidopus caudatus*

FAO Names : en - Silver scabbardfish, fr - Sabre argenté, es - Pez cinto, ru - Лепидоп

### Juveniles

## **Related Fisheries - Fishery(ies) switching activity seasonally or targeting the same stock**

Spain Spain Offshore gillnetter hake fishery - Morocco Atlantic coast waters

Spain Bottom wet fish trawler black hake fishery - Moroccan Atlantic coast waters, South 29°N

Spain Bottom wet fish trawlers black hake fishery - Mauritanian waters

Spain Longliners black hake fishery - Mauritanian waters

Spain Bottom trawl black hake fishery - Senegalese waters

Morocco Coastal small bottom trawler hake fishery - Cape Spartel and Cape Bojador

Morocco Coastal longline hake fishery - Cape Spartel and Cape Bojador

Morocco Artisanal boats hooks and lines, trammelnet fishery - Cape Spartel and Cape Bojador

Morocco Morocco Spanish bottom trawler black hake fishery - South 29°N

Morocco Portuguese Hooks and lines hake fishery - North of 34th parallel

Morocco Portuguese gillnet hake fishery - North of 34th parallel

Morocco Portuguese longliners hake fishery - North of 34th parallel

Morocco European Union artisanal trawl and longline fishery - Southern area

## **Related Fisheries - Same fishing activity(ies) described by another national perspective (at the same or different aggregation level)**

Morocco Offshore Spanish longliner hake fishery - Atlantic coast

Morocco Offshore Spanish gillnetter hake fishery - Atlantic coast

## **Vessel Type**

Longliners

## **Flag State**



Longliner. The average characteristics during the last years of the fishery were 77 GRT, 333 h.p. and 21 m length (1991-1997).

## **Catch Handling and Processing Equipment**

Ice. For quality reasons, sets targeting the Atlantic pomfret used to be made at the end of the fishing trip, as this species conserves worst than hakes. European hakes were separated and classified into five commercial categories, while Senegalese hakes only constituted one category, being all eviscerated. Catches were preserved in ice.

## **Fleet segment**

Longliners that operated in Moroccan waters were mainly based in the Port of Santa Eugenia de Riveira, with some unities based in La Guardia (both in Galicia, NW Spain) and others in the ports of

Algeciras (S Iberian Peninsula), Ceuta (N Africa), Las Palmas and Santa Cruz de Tenerife (Canary Islands).

## Fishing Gear

### Set longlines

Hooks and lines- Set longlines. The gear is composed of an average number of 100 longlines (approximately 1 100 hooks), that were usually set in one unique line. For hake fishery, 20-120 gears used to be set, corresponding to 2 000-14 000 hooks and a line length between 3-14 nautical miles. Sardines were used as baits. On the other hand, for the Atlantic pomfret fishery, a number of gears of 100-120 used to be set, corresponding to 10 000-14 000 hooks and a line length between 12-14 nautical miles. In this case, Ammodytidae and Scomberesox saurus were the main species used as baits.

## Ports

Santa Eugenia de Riveira and La Guardia (NW Iberian Peninsula), Algeciras (S Iberian Peninsula), Ceuta (N Africa), Las Palmas and Santa Cruz de Tenerife (Canary Islands).

## Fishery Indicators

Type	Measure	Value	Unit	Time period
Nominal Effort	Number of vessels	60	vessels	1999
Production	Landing value total	2273	tonnes	1989-1997
	Landing value M. merluccius	812	tonnes	1989-1997
	Landing value M. senegalensis	383	tones	1989-1997
	Landing value B. brama	858	tonnes	1989-1997

## Post Harvest

### Fish Utilisation

Consumption

### Markets

Mainly Algeciras, which comprises the third part of the landings, followed by Vigo, A Coruña, Riveira and Cádiz.

## Management

Management unit : No

## Jurisdictional framework

Management Body/Authority(ies): Ministère de l'Agriculture et de la Pêche Maritime. Département de la Pêche Maritime

**Mandate:** Monitoring; Management.

Area under national jurisdiction: Morocco

Maritime Area: Exclusive Economic Zone Areas (EEZ).

Management Body/Authority(ies): European Union

**Mandate:** Flag state responsibility for its fishing vessels operating in foreign area under national jurisdiction.

Area under national jurisdiction: Morocco

Maritime Area: Exclusive Economic Zone Areas (EEZ).

## Legal definition

Long liners

## Management Regime

Agreement on Cooperation in the sea fisheries sector between the European Community and the Kingdom of Morocco (OJ L 306, 19.12.1995, p. 7–43).

Management measures of the Spanish longliner hake fishery were included in different Fisheries Agreement between the European Community and the Kingdom of Morocco. This fishery was closed after the end of the Agreement of 1995-1999. Management measures described below are those included in the last Fishery Agreement where this fishery was allowed (OJ L 306, 19.12.1995, p. 7–43) under the fishing category “Long liners”.

## Management Methods

### CONSERVATION AND MANAGEMENT MEASURES with focus to Effort control-Licences system

- *Aquatic species-related measures*  
Crustaceans by-catches not allowed.
- *Gear-related measures*  
Gear type (prohibition of driftnets, encircling nets and monofilament or multifilament nets, excepting multifilament nets made by several filaments of natural and/or synthetic origin, which were allowed).
- *Vessel-related measures*  
Access control: vessel size (Maximum 9 270 GRT (140 vessels)) in 1999.
- *Fishing activity-related measures*  
Licences (quarter licences of the fishery category “Longliners”, which allows the use of longlines, gillnets and trammel nets), vessel number (140, longliners and gillnetters together) in 1999, closed area (inside 12 miles) and closed season (two months: 15 March-15 May).

## Related Fisheries - Fishing activity(ies) managed under the same management unit or being ruled by the same fishing agreement

Spain Bottom wet fish and freezer trawlers shrimp fishery - Moroccan Atlantic coast waters

Spain Small scale purse seine anchovy fishery - Moroccan Atlantic coast waters, North zone

Spain Coastal purse seine sardine fishery - Moroccan Atlantic coast waters, South zones B and C

Spain Freezer bottom trawlers cephalopods fishery - Moroccan Atlantic coast waters, South

## Status and Trends

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The fishery was closed at the end of the Fishery Agreement in 1999, with no renewal in the last Agreement of 2006.

## Source of Information

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- Cervantes, A. and R. Goñi, R. 1985. Descripción de las pesquerías españolas de merluzas y crustáceos de África Occidental al norte de Cabo Blanco. En: C. Bas, R. Margalef y P. Rubiés (Eds.). Simposio Internacional sobre las áreas de afloramiento más importantes del Oeste africano (Cabo Blanco y Benguela). II, 825-850. Instituto de Investigaciones Pesqueras. Barcelona, España.
- Cervantes, A., I. Sobrino, A. Ramos and L. Fernández, 1992. Descripción y análisis de los datos de las pesquerías de merluza y gamba de la flota española que faenó al fresco en África Noroccidental durante el período 1983-1988. Informe Técnico Instituto Español de Oceanografía 111, 85 pp. Madrid, España.
- Cury, P. and C. Roy, 1989. Optimal environmental window and pelagic fish recruitment success in upwelling areas. *Can. J. Fish. Aquat. Sci.* 46, 670–680.
- Binet, D., 1997. Climate and pelagic fisheries in the Canary and Guinea currents 1964–1993: the role of trade winds and the southern oscillation. *Ocean. Acta* 20, 177–190.
- Demarcq, H. and V. Faure, 2000. Coastal upwelling and associated retention indices derived from satellite SST. Application to Octopus vulgaris recruitment. *Ocean. Acta* 23, 391–408.
- Freudenthal, T., H. Meggers, J. Henderiks, H. Kuhlmann, A. Moreno, G. Wefer, 2002. Upwelling intensity and filament activity off Morocco during the last 250,000 years. *Deep Sea Res. (II Top. Stud. Oceanogr.)* 49, 17: 3655-3674.
- Meiners, C. 2007. Importancia de la variabilidad climática en las pesquerías y biología de la merluza europea *Merluccius merluccius* (Linnaeus, 1758) de la costa Noroccidental Africana. Tesis Doctoral, 187 pp. IEO-Univ. Politécnica de Cataluña.
- Meiners, C., L. Fernández, A. Faraj and R. García-Cancela, 2010. Length-weight relationships of 12 deep-sea teleost fish species from the NW African slope. *Journal of Applied Ichthyology*. In press.
- Meiners, C., L. Fernández, F. Salmerón and C. Hernández, 2010. Some biological parameters of deep-sea shark species from NW Africa. *Acta Ichthyologica et Piscatoria*. In press.
- Meiners, C., L. Fernández, F. Salmerón and A. Ramos, 2010. Climate variability and fisheries of black hakes (*M. polli* and *M. senegalensis*) in NW Africa: a first approach. *Monográfico de Elsevier-Journal of Marine System*, 80: 243-247.
- Meiners, C., L. Fernández, P. Torres and A. Ramos, 2006. Climate variability and recruitment success of European hake (*Merluccius merluccius* L.) in NW Africa. *ICES CM 2006/C:15*, 19 pp.
- Official Journal of the European Union, 1995. Agreement on Cooperation in the sea fisheries sector between the European Community and the Kingdom of Morocco. Protocol setting out fishing opportunities and the financial compensation and financial contributions. *OJ L* 306, 19.12.1995, p. 7–43.
- Official Journal of the European Union, 2006. Fisheries Partnership Agreement between the European Communities and the Kingdom of Morocco. *OJ L* 141, 29.5.2006, p. 1–37.
- Ramos, A. and L. Fernández. 1994. Las pesquerías de merluzas en los caladeros de África Noroccidental: Datos de base del año 1991. *Inf. Téc. Inst. Esp. Oceanogr.*, 153: 132 pp.
- Ramos, A. and L. Fernández. 1995. Biology and fisheries of North-west African hakes (*M. merluccius*, *M. senegalensis* and *M. polli*). In: J. Alheit and T. Pitcher (eds.). *Hake: Biology, fisheries and markets Series 15: 89-124*. Chapman & Hall, London, Reino Unido.
- Ramos, A., I. Sobrino and L. Fernández, 1996. Biología de la merluza europea, *Merluccius merluccius* (Linnaeus, 1758) de las costas de África noroccidental. *Oceanografía y Recursos Marinos del Atlántico*

Centro Oriental. Llinás, O., J.A. González y J.M. Rueda (eds.). ICCM, Cabildo Insular, 223-239. Las Palmas de Gran Canaria.

Ramos, A., R. González, T. García, I. Sobrino and L. Fernández, 2000. La crisis en el acceso al caladero marroquí: análisis de la evolución y situación de las pesquerías y recursos de merluzas y crustáceos. Inf. Téc. Inst. Esp. Oceanogr., 178: 171 pp.

