

Fishery Fact Sheet

CECAF Fisheries Reports 2011

Spain Bottom wet fish trawler black hake fishery - Moroccan Atlantic coast waters, South 29°N, 2011

Merluccius polli et *Merluccius senegalensis* - *Merluccius* *che fraîche de merlus noir*

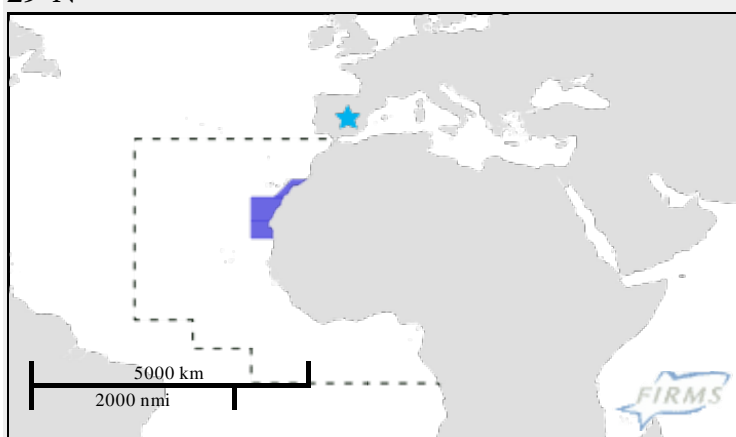
Data Ownership

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Fishery life cycle This fishery started on 2007 and terminated on 2011.

Overview: Nowadays, Spanish hake fishery in Moroccan waters targets the two species of black hakes (*Merluccius polli* and *M. senegalensis*), allowed by the last Fishery Agreement between the EU and the Kingdom of Morocco signed in May, 2006. This fishery is included into the category "Demersal fishery" of this Agreement, which also includes licences for longlines and multifilament gillnets. Until the moment, only bottom trawl licences have been used. Although the Agreement provides 11 licences for bottom trawls, only two licences have been used, with two vessels operating in 2007 and only one in 2008 and 2009. Cádiz (S Iberian Peninsula) is the landing Port of these trawlers, which has a wide tradition in black hake commercialization. Black hake constituted 93% and 95% of total landings of these vessels in 2007 and 2008, respectively. The licensed bottom trawlers are obligated to land 50% of their catches in Morocco. During the period 2007-2009, landings were made at the Moroccan Port of Dakhla, being transported by lorries from Morocco to the Spanish Port of Cádiz.

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



Main layers

- FAO areas and their sub-divisions
- EEZ

APPROACH: FISHING ACTIVITY




Fishing Activity

Fishing Gear: Bottom otter trawls
 Type of production system: Commercial; Industrial
 Fishery Area: Morocco Atlantic coast - South Zone (B and C); Morocco; Atlantic, East ...; Atlantic, East ...; Atlantic, East ...
 Seasonality: From December ...

Harvested Resource

Target Species: Senegalese hake; Benguela hake
 Associated Species: Sebastidae; Scorpionfishes nei; Shortspine African angler ... [more>>](#)

Means of Production

<i>Associated layers</i>	Vessel Type: Stern trawlers
 Geographic reference	Fishery Indicators Nominal Effort: Number of vessels Production: Catch total; Catch black hakes; Catch total; Catch black hakes
<i>Intersecting layers</i>	
 Intersecting: FAO major fishing areas	
<i>Base layers</i>	
 200 nautical miles arcs	

Geographic reference: Spain
Spatial Scale: National

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

Fishing Activity

Type of production system: Commercial; Industrial

Fishery Area

Climatic zone: Temperate. **Depth zone:** Slope (200 m - 1000 m). **Horizontal distribution:** Neritic. **Vertical distribution:** Demersal/Benthic.

Geo References for: Morocco Atlantic coast - South Zone (B and C)

Morocco Atlantic coast - South Zone (B and C)

Exclusive Economic Zone Areas (EEZ)	MAR - Morocco
FAO Fishing Statistical Subdivisions	34.1.13 - Atlantic, East central / 34.1.13
	34.1.31 - Atlantic, East central / 34.1.31
	34.1.32 - Atlantic, East central / 34.1.32

More Geo References

The following area codes have been found as intersecting the location of Spain Bottom wet fish trawler black hake fishery - Moroccan Atlantic coast waters, South 29°N

FAO Major Fishing Areas	34 - Atlantic, Eastern Central
	37 - Mediterranean and Black Sea
Large Marine Ecosystem Areas (LME)	26 - Mediterranean Sea
	27 - Canary Current

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

Senegal hake, Benguela hake - Morocco

European hake - Morocco

Seabreams - Northwest Africa

West African geryon - Morocco, Mauritania, Senegal and Gambia

Other resources: Stocks of scorpionfishes, anglers, rays, dogfish sharks and Jhon dory.

Target Species

Merluccius senegalensis

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

Merluccius polli

FAO Names : en - Benguela hake, fr - Merlu d'Afrique tropicale, es - Merluza de Benguela, ru - Мерлуза бенгальская

Adults

Associated Species (Bycatch)

Sebastidae

Scorpaenidae

FAO Names : en - Scorpionfishes nei, fr - Rascasses, etc. nca, es - Rascacios, gallinetas nep, ru - Скорпеновые

Lophius vaillanti

FAO Names : en - Shortspine African angler, fr - Baudroie africaine, es - Rape africano, ar - عفریت البحر إفريقي, zh - 短鳍鮟鱇

Rajidae

FAO Names : en - Rays and skates nei, fr - Rajidés nca, es - Rayidos nep

Squaliformes

FAO Names : en - Dogfish sharks, etc. nei, fr - Squaliformes nca, es - Squaliformes nep

Merluccius merluccius

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

Zeus faber

FAO Names : en - John dory, fr - Saint Pierre, es - Pez de San Pedro, ru - Солнечник обыкновенный

Sparidae

FAO Names : en - Porgies, seabreams nei, fr - Dentés, spares nca, es - Dentones, sargos nep, ru - Спаровые (=морские караси)

Chaceon maritae

FAO Names : en - West African geryon, fr - Géryon ouest-africain, es - Gerión de Guinea

Small by-catches: < 7% of total catches.

Related Fisheries - Fishery(ies) switching activity seasonally or targeting the

same stock

Spain Bottom wet fish trawlers black hake fishery - Mauritanian waters

Spain Longliners black hake fishery - Mauritanian waters

Spain Spain Offshore gillnetter hake fishery - Morocco Atlantic coast waters

Spain Offshore longliner hake fishery - Moroccan Atlantic coast waters

Spain Bottom trawl black hake fishery - Senegalese waters

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

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

Vessel Type

Stern trawlers

Flag State

 Spain

The average characteristics of the vessels operating in the period 2007-2009 were 170 GRT, 495 h.p. and 33 m length.

Catch Handling and Processing Equipment

Hakes are classified by commercial categories, depending on their sizes, being the largest eviscerated. Catches are preserved in ice.

Crew

16-17 persons (Spanish and Moroccan nationalities) (2009)

Fleet segment

The last Fishing Agreement EU-Morocco, signed in 2006, allows this fishery under the category of "Demersal fishery". However, only two vessels have operated with the EU licences provided into the framework of this agreement (two vessels in 2007 but only one during 2008 and 2009). They are fishing trawlers based in the Port of Vigo (Galicia) and Las Palmas (Canary Islands).

Fishing Gear

Bottom otter trawls

The gear employed is the classic bottom otter trawl. This gear operates with polyvalent trawl doors. The net is constructed in conventional polyethylene, with thread thickness of 3-4 mm, being very elastic and resistant to abrasion. The net is 80 mm mesh size, excepting the cod-end, which is 70 mm and rhombic-shape.

Seasonality

From December to September

Trip Duration

6-10 fishing days

Ports

Vigo (NW Iberian Peninsula) and Las Palmas (Canary Islands)

Fishery Indicators

Type	Measure	Value	Unit	Time period
Nominal Effort	Number of vessels	2	vessels	2007
	Number of vessels	1	vessels	2008
	Number of vessels	1	vessels	2009
Production	Catch total	183	tonnes	2007
	Catch black hakes	170	tonnes	2007
	Catch total	488	tonnes	2008
	Catch black hakes	462	tonnes	2008

Post Harvest

Fish Utilisation

Local consumption and wholesale

Markets

Cádiz (S Iberian Peninsula)

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

Demersal fishing

Management Regime

Management measures are included in the Fisheries Partnership Agreement between the European Community and the Kingdom of Morocco signed in 2006. This fishery is included into fishing category “Demersal fishing” of this Agreement.

Management Methods

CONSERVATION AND MANAGEMENT MEASURES with focus on Effort control- Licences system

- *Aquatic species-related measures*
Authorized by-catch: 0% of cephalopods and crustaceans, with the exception of crab (5 %)
- *Gear-related measures, Vessel-related measures*
Gear type (doubling of the cod-end prohibited and doubling of the twine forming the cod-end prohibited) and mesh size (minimum mesh size of 70 mm). Access control: vessel size (maximum average size of 275 GT)
- *Fishing activity-related measures*
Licences, Vessel number (maximum 11 trawlers/year with an average size of 275 GT), closed area (North of 29°N and in depths shallower than 200 m) and closed season (during the recovery period fixed for cephalopods, being October-November in 2007 and 2008).

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

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

More information on fisheries legislation at: FAOLEX legislative database

Status and Trends

The fishery has experienced a very slight development, with only 1-2 vessels operating since its beginning in 2007.

Source of Information

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