

Fishery Fact Sheet

CECAF Fisheries Reports 2011

Spain Bottom trawl octopus and cuttlefish fishery - Senegalese waters, 2011

Chalutiers Espagnols céphalopodiers

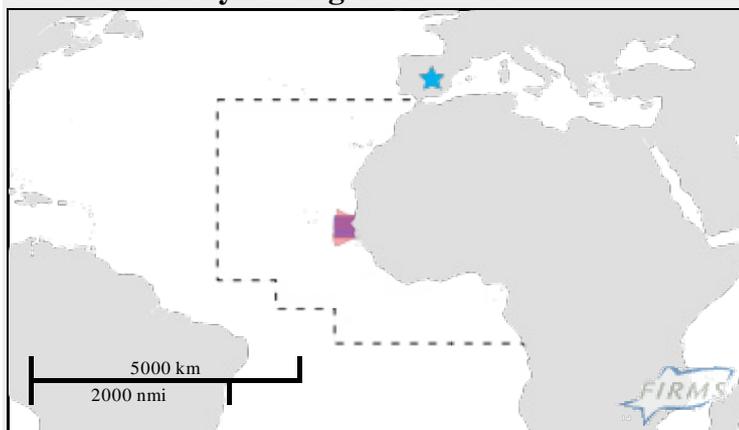
Data Ownership

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Fishery life cycle This fishery terminated on 2006.

Overview: *The restrictions of the access to Moroccan fishing grounds forced the Spanish cephalopod fleet to extend the scope of fishing agreements to other countries, first to Mauritania, from where it extended progressively to southern latitudes (Senegal, Guinea Bissau and Guinea). Access conditions in these countries were also becoming the more and more restrictive and the Spanish cephalopod fleet fishing in the whole region has been reduced dramatically. This fleet currently is less than one third of its maximum size of 279 vessels in 1980. The last EU-Senegal fishery Agreement expired in June 2006, with no renewal. Gears utilized by these freezer trawlers could be prepared either with chains (Spanish trawl) or with bobbins in the footrope (Korean trawl). The preservation of catches was frozen, what allowed longer trips with an average duration of 50 to 60 days at sea. Most common cephalopod species exploited in this fishing ground were octopus (*Octopus vulgaris*) and cuttlefish (*Sepia spp*).*

Location of Spain Bottom trawl octopus and cuttlefish fishery - Senegalese waters



Main layers

- FAO areas and their sub-divisions
- EEZ

Associated layers

- ★ Geographic reference

APPROACH: FISHING ACTIVITY

Fishing Activity

Fishing Gear: Bottom otter trawls
 Type of production system : Commercial;
 Industrial
 Fishery Area: Senegal; Atlantic, East ...
 Seasonality: December-September ...

Harvested Resource

Target Species: Common octopus; Cuttlefishes
 nei
 Associated Species: European squid;
 Senegalese hake; Benguela hake ... [more>>](#)

Means of Production

Vessel Type: Stern trawlers freezer

Fishery Indicators

Nominal Effort: Number of vessels

<i>Intersecting layers</i>	ACTUAL EFFORT, NUMBER OF VESSELS Participation: Number of fishermen Production: Catch total
 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 - Source of Information

Fishing Activity

Type of production system: Commercial; Industrial

Fishery Area

Climatic zone: Temperate; Tropical. **Depth zone:** Shelf (50 m - 200 m). **Horizontal distribution:** Neritic. **Vertical distribution:** Demersal/Benthic.

Geo References for: Senegal

Senegal

Exclusive Economic Zone Areas (EEZ)	SEN - Senegal
FAO Fishing Statistical Subdivisions	34.3.12 - Atlantic, East central / 34.3.12

More Geo References

The following area codes have been found as intersecting the location of Spain Bottom trawl octopus and cuttlefish fishery - Senegalese waters

FAO Major Fishing Areas	34 - Atlantic, Eastern Central
Large Marine Ecosystem Areas (LME)	27 - Canary Current
	28 - Guinea Current

The Senegalese EEZ is dominated by several cyclonic gyres, including the Guinea Dome at 10°N, 20°W, driven by the North Equatorial Counter Current (Tomczak and Godfrey, 1994). Because the cyclonic rotation induces upwelling (doming of the thermocline), these features are more productive than the surrounding waters. The productivity of the Senegalese waters is high during winter, as a result of river run-off after the rainy season, localized upwelling, and cyclonic eddies retaining productive waters. Around May, the hydrographic conditions off Senegal become less favourable, with SST rising towards ca. 25°C, stratification of surface water, and decreasing food availability (Zeeberg et al., 2008). The upwelling starts on the Senegalese continental shelf inducted by trade winds from November to January. Then, it extends from the North to the South coast, with a maximal intensity in March-April. Along the North coast, the upwelling localizes around Saint Louis, being extremely coastal and with maximal intensity in December-March. This marked seasonality of upwellings and the latitudinal displacement through the Mauritanian and Senegalese coasts produce important changes in the structure of the biological communities. In short periods (weeks), the system can alternate from a warm equatorial phase to a cold subtropical phase, this deriving in an alternated dominance between tropical and temperate communities (Meiners, 2007).

Resources Exploited

Octopus - Senegal and Gambia

Cuttlefish - Morocco, Mauritania Senegal and Gambia

European squid - Morocco, Mauritania, Senegal and Gambia

Senegal hake, Benguela hake - Mauritania, Senegal and Gambia

Dentex - Morocco, Mauritania, Senegal and Gambia

Seabreams - Northwest Africa

Other resources: Stocks of soles.

Target Species

Octopus vulgaris

FAO Names : en - Common octopus, fr - Pieuvre, es - Pulpo común

Sepia spp

FAO Names : en - Cuttlefishes nei, fr - Seiches nca, es - Sepias nep

Adults

Associated Species (Bycatch)

Loligo vulgaris

FAO Names : en - European squid, fr - Encornet, es - Calamar, ar - ذو الأذرع العشر أوروبي, zh - 真枪乌贼

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

Solea spp

FAO Names : null

Dentex spp

FAO Names : en - Dentex nei, fr - Dentés nca, es - Dentones, samas, etc. nep, ru - Зубаны

Pagellus spp

FAO Names : en - Pandoras nei, fr - Pageots nca, es - Brecas nep, ru - Пагелы

Sparus spp

Pagrus spp

FAO Names : en - Pargo breams nei, fr - Dorades nca, es - Pargos nep

Adults and juveniles

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

Spain Freezing bottom trawlers octopus fishery - Mauritanian waters

Spain Trawlers cephalopods fishery - Guinea Bissau waters

Spain Trawlers cephalopods fishery - Guinean waters

Fleet segment

Bottom otter trawl for cephalopods with minimum mesh size of 70 mm

Vessel Type

Stern trawlers freezer

Flag State

 Spain

Average characteristics of these vessels were 30 m length, 240 GRT and 900 h.p.

Catch Handling and Processing Equipment

Freezing

Crew

17 persons (2009)

Fishing Gear

Bottom otter trawls

Gears could be prepared either with chains (Spanish trawl) or with bobbins in the footrope (Korean trawl).

Seasonality

December-September (during last fishing agreement)

Trip Duration

50-60 days at sea

Ports

La Luz, Las Palmas de Gran Canaria (in Canary Islands) and Dakar (Senegal)

Fishery Indicators

Type	Measure	Value	Unit	Time period
Nominal Effort	Number of vessels	5	vessels	2006
Participation	Number of fishermen	100	persons	2009
Production	Catch total	350	tonnes	(2002-2006)

Post Harvest

Fish Utilisation

Consumption and exportation

Markets

EU and Japan

Management

Management unit : No

Jurisdictional framework

Management Body/Authority(ies): Ministère de l'Économie Maritime des Transports Maritimes de la Pêche et de la Pisciculture

Mandate: Management.

Area under national jurisdiction: Senegal

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: Senegal

Maritime Area: Exclusive Economic Zone Areas (EEZ).

Management Regime

Council Regulation (EC) No 2323/2002 of 16 December 2002 on the conclusion of the Protocol setting out the fishing opportunities and the financial contribution provided for by the Agreement between the European Economic Community and the Government of the Republic of Senegal on fishing off the coast of Senegal for the period from 1 July 2002 to 30 June 2006 (OJ L 349, 24.12.2002, p. 46–65). Management measures of the Spanish cephalopods bottom trawl fishery in Senegalese waters were included in the Fisheries Agreement between the European Community and the Republic of Senegal. After the end of the last Agreement (OJ L 349, 24.12.2002, p. 46–65) the Spanish fisheries in Senegalese waters were closed. Management measures described below are those included in this last Fishery Agreement.

Management Methods

Conservation and management measures with focus to Effort control (licences system) and catch control.

- *Aquatic species-related measures*
Limitation of by-catches: 7,5 % shrimps. Prohibition of catches of *Cetorhinus maximus* (bашin shark/pèlerin), *Carcharodon carcharias* (great white shark/grand requin blanc), *Carcharias taurus* (sand tiger shark/requin taureau) and *Galeorhinus galeus* (tope shark/requin-hà).
- *Gear-related measures*
Gear type (doubling of the twine forming the cod-end prohibited), and mesh size (minimum 70 mm)
- *Vessel-related measures*
Access control: Vessel size (Maximum 1 500 GRT/quarter) for bottom trawlers under the fishing category “Shore sea demersal bottom trawl for fish and cephalopods, with part of the landings and commercialisation in Senegal”).
- *Fishing activity-related measures*

Licences, vessel number (Maximum 1 500 GRT/quarter), closed area (out of the fishing area established by the Agreement) and closed season (Two months: October-November).

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

Spain Bottom trawl black hake fishery - Senegalese waters

Spain Freezer bottom trawl shrimp fishery - Senegalese waters

More information on fisheries legislation at: FAOLEX legislative database

Source of Information

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