

## Fishery Fact Sheet

CECAF Fisheries Reports 2013

# Spain Freezing bottom trawlers octopus fishery - Mauritanian waters, 2013

*Flotte des pêcheurs espagnols*

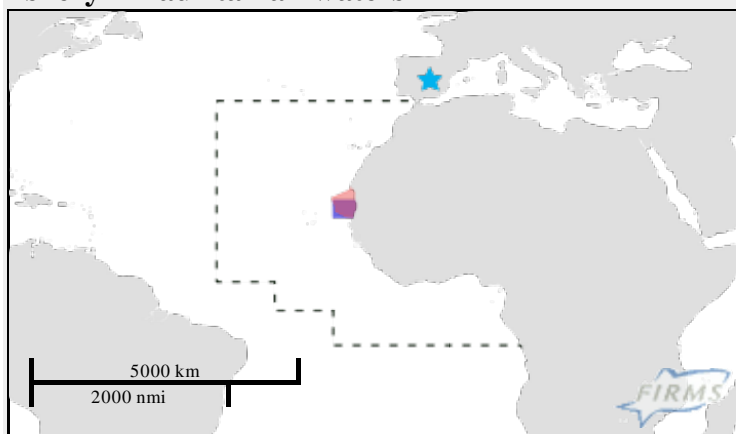
### Data Ownership

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**Fishery life cycle** This fishery terminated on 2012.

**Overview:** Gears utilized by freezer trawlers can be prepared either with chains (Spanish trawl) or with bobbins in the footrope (Korean trawl). Catches are frozen, this allowing long fishing trips with an average duration of 50 to 60 days at sea. Most common cephalopod species exploited in this fishing ground are octopus (*Octopus vulgaris*), squid (*Loligo vulgaris*), and cuttlefish (*Sepia hierredda* and *S. officinalis*). Octopus are eviscerated before their freezing and divided into commercial categories depending on their size. Squids and cuttlefishes are directly frozen and sold in different commercial categories according to the length of squids and the weight of cuttlefishes. Nowadays most of the landings take place at Nouadhibou (Mauritania) being after transported by freighters to Gran Canaria.

### Location of Spain Freezing bottom trawlers octopus fishery - Mauritanian waters



#### Main layers

- FAO areas and their sub-divisions
- EEZ

#### Associated layers

- ★ Geographic reference

#### Intersecting layers

- Intersecting: FAO major fishing areas

### APPROACH: FISHING ACTIVITY

#### Fishing Activity

Fishing Gear: Bottom otter trawls  
 Type of production system: Commercial; Industrial  
 Fishery Area: Mauritania; Atlantic, East ...  
 Seasonality: November-April ...

#### Harvested Resource

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

#### Means of Production

Vessel Type: Stern trawlers freezer

#### Fishery Indicators

Nominal Effort: Number of vessels  
 Participation: Number of fishermen  
 Production: Catch

**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 restrictions of the access to Moroccan fishing grounds (see Related Fisheries: Freezer bottom trawlers cephalopods fishery - Moroccan Atlantic coast waters, South) forced the Spanish cephalopod fleet to extend the scope of fishing agreements to other countries such as Mauritania. Cephalopod fishery in Mauritania started in the middle 70s in the Cape Blanc zone (21°N), from where it extended progressively to southern latitudes. The access of Spanish trawlers to the fishery has been regulated by the technical conditions imposed by successive fishing agreements signed firstly between Spain and Mauritania and lately between the European Union and this country. Access conditions are becoming the more and more restrictive and the Spanish cephalopod fleet has been reduced dramatically. This fleet currently is less than one third of its maximum size of 279 vessels in 1980. Their main landing ports are Puerto de la Luz and Las Palmas (in Gran Canaria, Canary Islands).

## Fishing Activity

Type of production system: Commercial; Industrial

### Fishery Area

Climatic zone: Temperate. Bottom type: Soft\_bottom\_clean\_sand; Hard\_rocky\_bottom. Depth zone: Coastal (0 m - 50 m); Shelf (50 m - 200 m). Horizontal distribution: Littoral; Neritic. Vertical distribution: Demersal/Benthic.

Geo References for: Mauritania

### Mauritania

Exclusive Economic Zone Areas (EEZ)	MRT - Mauritania
FAO Fishing Statistical Subdivisions	34.3.11 - Atlantic, East central / 34.3.11

### More Geo References

The following area codes have been found as intersecting the location of Spain Freezing bottom trawlers octopus fishery - Mauritanian waters

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

The Mauritanian 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). The upwelling off

Mauritania is being described as a wind driven upwelling system restricted to a narrow strip along the coast. It can be separated into two regimes: south of approximately 20°N upwelling is most pronounced during winter and spring, whereas upwelling north of 20°N occurs all year round with a maximum intensity in summer and early fall (Mittelstaedt, 1991). The 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). Off Cape Blanc the upwelling occurs throughout the year with periods of stronger intensity, while it lasts nine months off Nouakchott.

## Resources Exploited

Octopus - Mauritania

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

Other resources: Stocks of soles.

## Target Species

*Octopus vulgaris*

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

Adults

## Associated Species (Bycatch)

*Sepia officinalis*

FAO Names : en - Common cuttlefish, fr - Seiche commune, es - Sepia común

*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

Crustaceans and other demersal fishes

Adults

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

Spain Bottom trawl octopus and cuttlefish fishery - Senegalese waters

Spain Trawlers cephalopods fishery - Guinea Bissau waters  
Spain Freezer bottom trawl shrimp fishery - Guinean waters  
Spain Freezer bottom trawlers cephalopods fishery - Moroccan Atlantic coast waters, South

## Vessel Type

Stern trawlers freezer

## Flag State

 Spain

Average characteristics of these vessels are 32 m length, 245 GRT and 900 h.p.

## Catch Handling and Processing Equipment

Freezing. The whole catch is processed onboard. Octopus are eviscerated and divided into commercial categories, depending on their size. Catches are frozen at  $-40^{\circ}\text{C}$  and kept at  $-25^{\circ}\text{C}$  until their landing. Squids and cuttlefishes are directly frozen and sold in different commercial categories according to the length of squids and the weight of cuttlefishes.

## Crew

17 persons (2009)

## Fleet segment

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

## Fishing Gear

Bottom otter trawls

Bottom trawls-Otter trawls. Gears utilized by freezer trawlers can be prepared either with chains (Spanish trawl) or with bobbins in the footrope (Korean trawl).

## Seasonality

November-April and July-August

**Environmental limitations:** Strong winds in the fishing areas

## Trip Duration

50 to 60 days at sea

## Ports

Most of the catches are carried out by freezer trawlers, that have the ports of Puerto de la Luz and Las Palmas (in Gran Canaria, Canary Islands) as both base and landing ports (until 2008). However, nowadays most of the landings take place at Nouadhibou (Mauritania) being after transported by freighters to Gran Canaria. Sometimes, the Port of Vigo (Galicia, NW Spain) is used for both functions.

## Fishery Indicators

Type	Measure	Value	Unit	Time period
Nominal Effort	Number of vessels	23	vessels	2008
Participation	Number of fishermen	400	persons	2009
Production	Catch	6 300	tonnes	2004-2008

## Post Harvest

### Fish Utilisation

Consumption and exportation

### Markets

EU, Japan and China

## Management

Management unit: No

### Jurisdictional framework

Management Body/Authority(ies): Ministère des pêches et de l'économie maritime

**Mandate:** Management.

Area under national jurisdiction: Mauritania

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: Mauritania

Maritime Area: Exclusive Economic Zone Areas (EEZ).

### Legal definition

Cephalopoders

### Management Regime

Fisheries Partnership Agreement between the European Community and the Islamic Republic of Mauritania (for the period 1 August 2008 to 31 July 2012) (OJ L 203, 31.07.2008, p. 4–59).

Management measures of the Spanish cephalopods trawlers fishery are included in the current Fishery Agreement between the European Community and the Islamic Republic of Mauritania (OJ L 203, 31.07.2008, p. 4–59) under the fishing category number 5 “Cephalopoders”.

Fishing agreement expired in July 2012. The new fishing agreement is in the ratification process by the European Parliament.

### Management Methods

## **Conservation and management measures with focus on Effort control (licences system), catch control and fish size limits.**

- *Aquatic species-related measures*  
Minimum fish size (Squid: 13 cm, cuttlefish: 13 cm and African cuttlefish: 7 cm), minimum fish weight (Octopus: 500 g, eviscerated weight) and limitation of by-catches (5% shrimps).
- *Gear-related measures*  
Gear type (doubling of the cod-end prohibited, doubling of the twine forming the cod-end prohibited) and mesh size (minimum 70 mm).
- *Vessel-related measures*  
Access control: Vessel size (maximum 13 950 GT authorized tonnage per licence period and for whole the EU fleet).
- *Fishing activity-related measures*  
Access by nationality (24 licences for Spain); vessel number (13 950 GT authorized tonnage per licence period and for whole the EU fleet), closed area (out of the fishing area established by the Agreement), and closed season (two periods: May-June and September-October).

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

Spain Bottom wet fish trawlers black hake fishery - Mauritanian waters

Spain Freezer bottom trawl shrimp fishery - Mauritanian waters

Spain Longliners black hake fishery - Mauritanian waters

More information on fisheries legislation at: FAOLEX legislative database

## **Status and Trends**

This fishery has suffered a strong decay during the last years. Catches have not increased despite the effort reductions and the strong management measures implemented during the last years. These, together with the fact that fishing coasts are significantly increasing, make this fishery little profitable at this moment.

## **Source of Information**

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