



C. Perales-Raya, J.G. González-Lorenzo, A. Jurado-Ruzafa, S. Jiménez-Navarro, C. Acosta-Díaz,  
N. Villegas, B. Sotillo, J. González-Jiménez, M. González-Porto, E. Hernández-Rodríguez

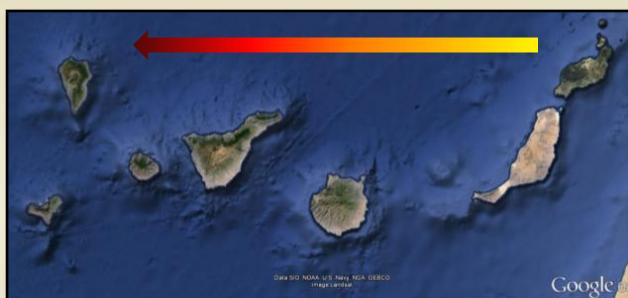
# DEMERSAL STOCKS FISHED BY THE ARTISANAL FLEET IN CANARY ISLANDS



FAO/CECAF Working Group on the Assessment  
of Demersal Resources - Subgroup North



# The Canary Islands and the demersal resources



Mean values 2013-2016

Landings (tons)	Effort (fishing days)	Vessels
1046	28643	337

- Location: approx. 100km off African coast (29°-27°N, 19°-13°W)
- Seven volcanic islands: narrow insular shelf
- Oceanic waters transported by Canary Current: oligotrophic and influenced by African upwelling
- Soft east-west gradient of increasing T<sup>a</sup> & Salinity
- High number of demersal species: parrotfish, sparids, morays, shrimps, amberjacks, groupers...
- The fishery: Artisanal **MULTI-GEAR** and **MULTI-SPECIES**. Vessels under “small-gear” licences conducting daily trips
- Since 2015: IEO monitors the fishery through **EU-Data Collection Framework**

# The fleet



- Polyvalent and opportunistic alternation with pelagic species
- Fleet selection for monitoring:

Step 1 – Demersal species  $\geq$  **20 trips/year** and  $\geq$  **100 kg/year**

Step 2 – Vessels with  $\geq$  **60%** of trips/year capturing demersal species

“Expert” criterion to move specific vessels that remains in the limit



Mean characteristics 2015-2016

Length interval	number of vessels	GRT (t)	Length (m)	Power (hp)
< 10 m	299	3	7	29
10 – 12 m	22	8	11	72
> 12 m	12	13	13	81



# Target species



*Sparisoma cretense*



*Pagrus* spp



*Seriola* spp



Muraenidae



*Beryx* spp

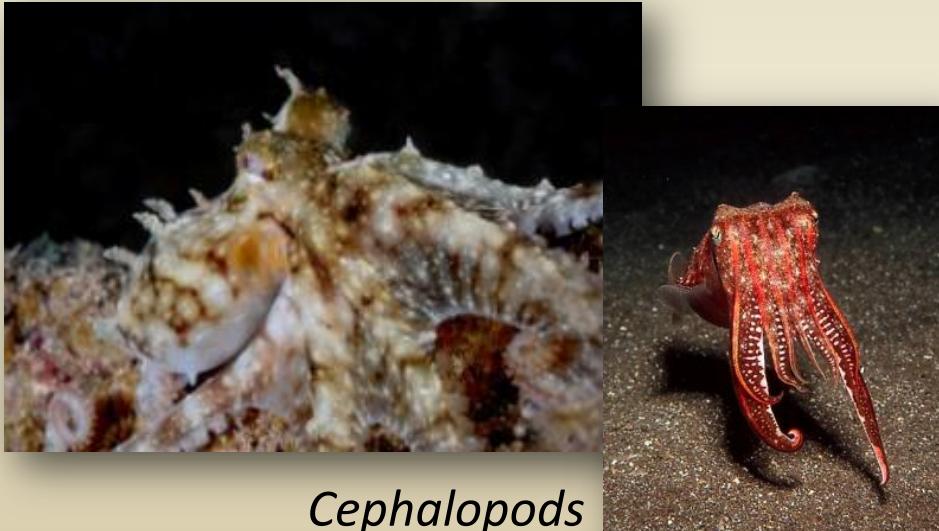


*Dentex* spp

## *Target species*



## *Plesionika* spp



# Cephalopods

## Other Sparidae

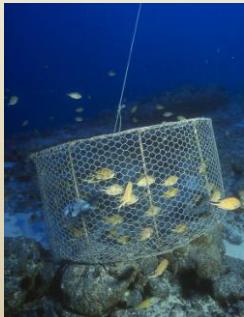


# Fishing gears - TRAPS

## Traps for fish



***Sparisoma cretense, Mullus surmuletus, Sparidae (Dentex gibbosus Sarpa salpa, Diplodus spp, Lithognathus mormyrus, Pagellus erythrinus, Pagrus pagrus), other fish and invertebrates (crabs, O. vulgaris)***



## Traps for shrimps



***Plesionika narval, Plesionika edwardsii, fish and invertebrates (Muraenidae, Octopus vulgaris)***



## Traps for morays



***Muraena spp, Gymnothorax spp***



# HOOKS and LINES

## Hand lines

*Phycis phycis, Mora moro, Beryx spp, Serranidae (Epinephelus spp, Mycteroperca fusca, Serranus atricauda, S. cabrilla), Polyprion americanus, Seriola spp, Dentex spp, Pagrus spp.*



## Long lines

*Merluccius merluccius, Phycis phycis, Mora moro, Beryx spp, Polyprion americanus, Scorpaenidae, Polymixia nobilis, Conger conger, Schedophilus ovalis ...*



## Jigging lines

*Loligo vulgaris, L. forbesi, Sthenoteuthis pteropus, Illex coindetii, Todarodes sagittatus, Ommastrephes bartrami*



# NETS



## GILLNETS: trammel nets/set gillnets

*Mullus surmuletus, Sparisoma cretense, Chelon labrosus, Sarpa salpa, Diplodus sargus, Mustelus spp* and other coastal fish



## LIFTNETS: portable liftnets

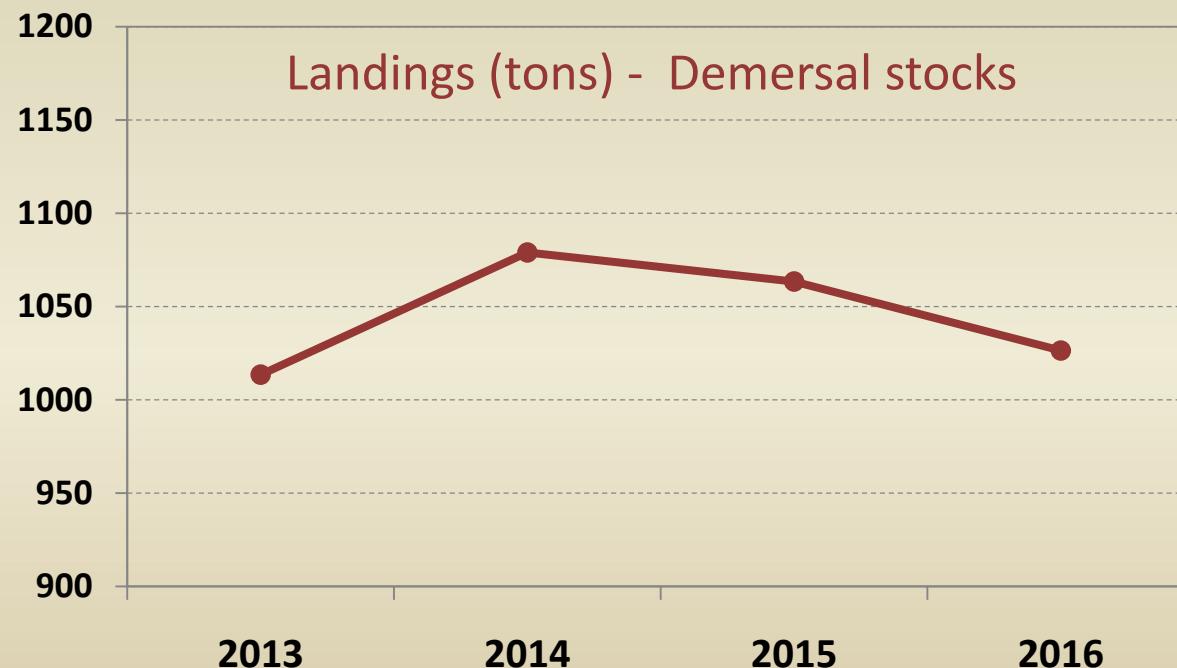
*Sparisoma cretense, Boops boops, Thalassoma pavo* and other coastal fish



# Total-catch trends 2013-2016



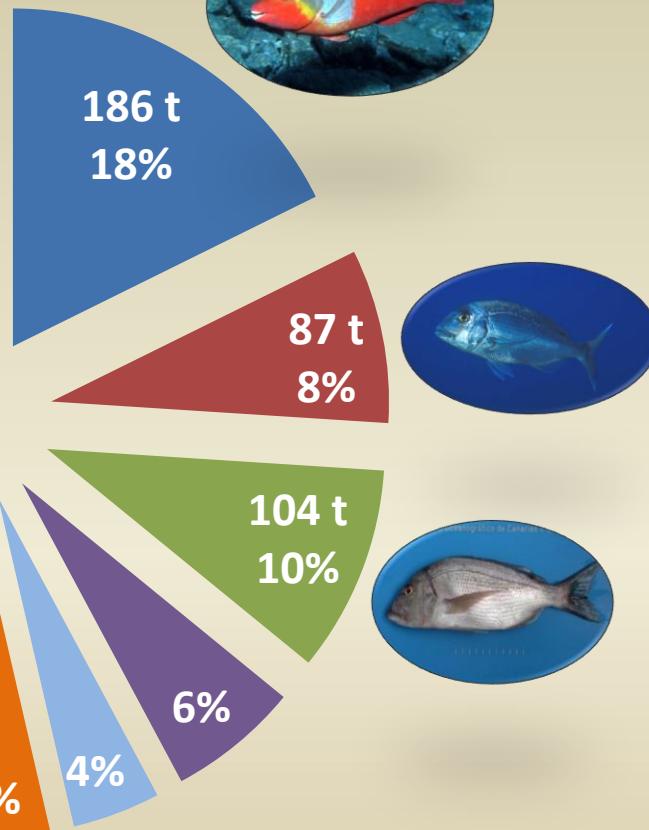
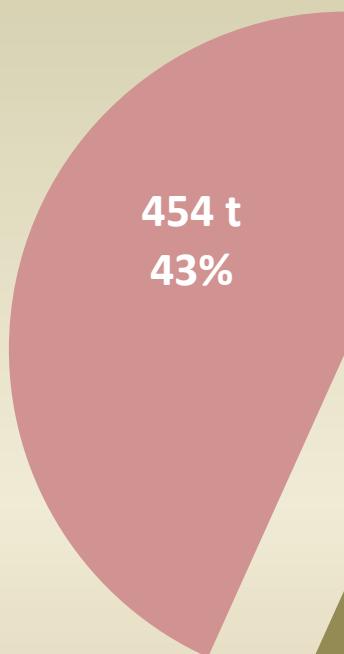
- Official Statistics: Sale Notes SGPM. Higher reliability from 2013
- Not total values due to the **polyvalence** of the fleet
  - Coverage of selected vessels for monitoring: 83% landings; 90% effort
  - **S. cretense**: 92% landings; 94% effort



# Mean data by species (2013-2016)



Catch (tons/year)	Effort (days/year)
1046	28643



■ *Sparisoma cretense*

■ *Pagrus spp*

■ *Dentex spp*

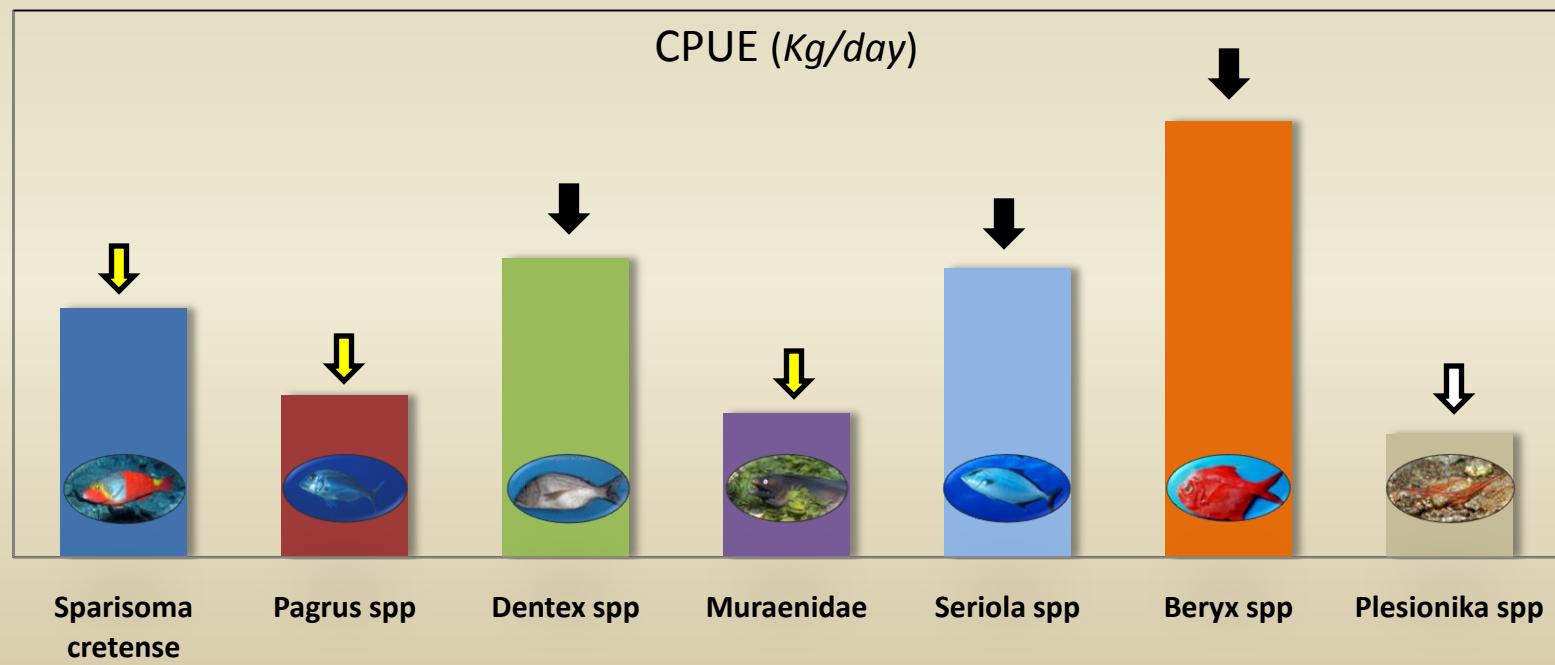
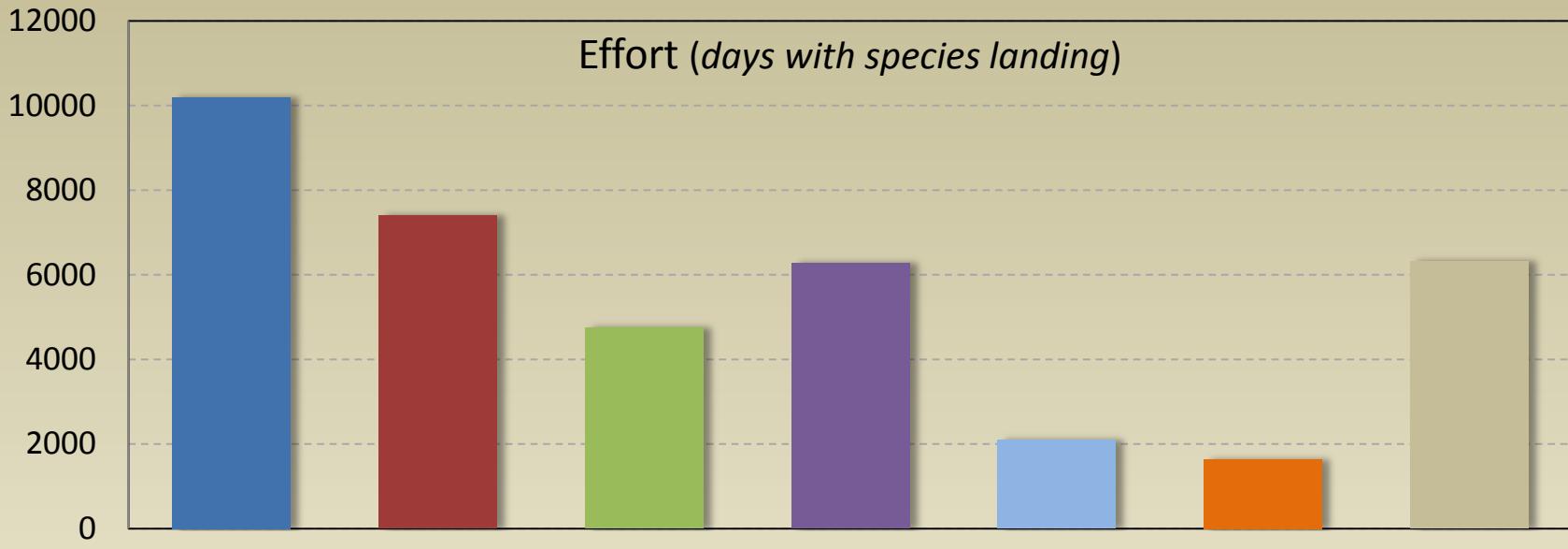
■ Muraenidae

■ *Seriola spp*

■ *Beryx spp*

■ *Plesionika spp*

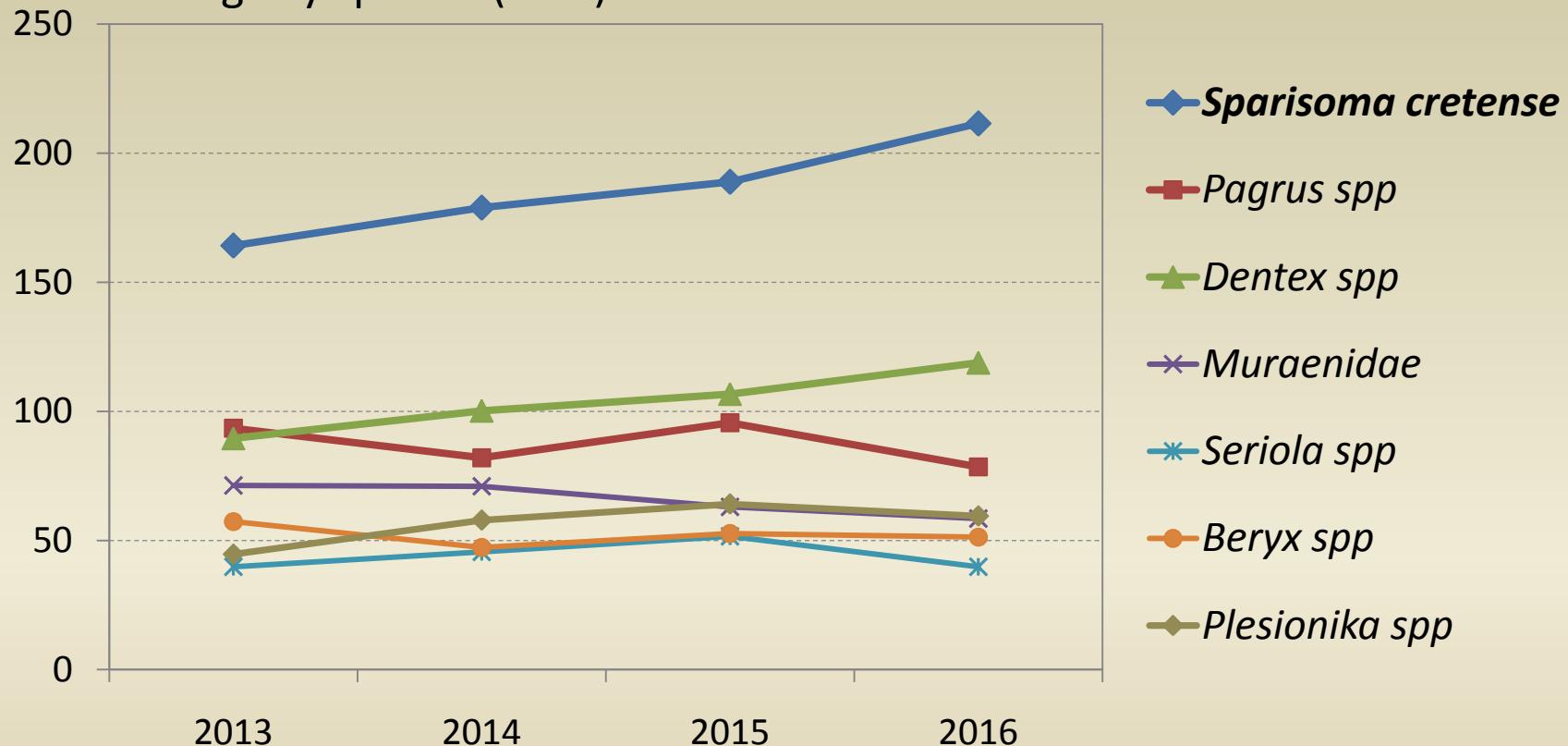
■ Others: Sparidae, Serranidae, Octopus vulgaris...



# Catch trends: 2013-2016



Landings by species (tons)



# Monitoring at IEO

- Length sampling at market:  
RIM-IEO net in 21 landing sites
- Since 2015: **EU-DCF sampling**  
**at sea** by a program of  
scientific observers in TENERIFE



The highest percentage of vessels  
and fishing days (31%) of Canaries  
-data 2016-

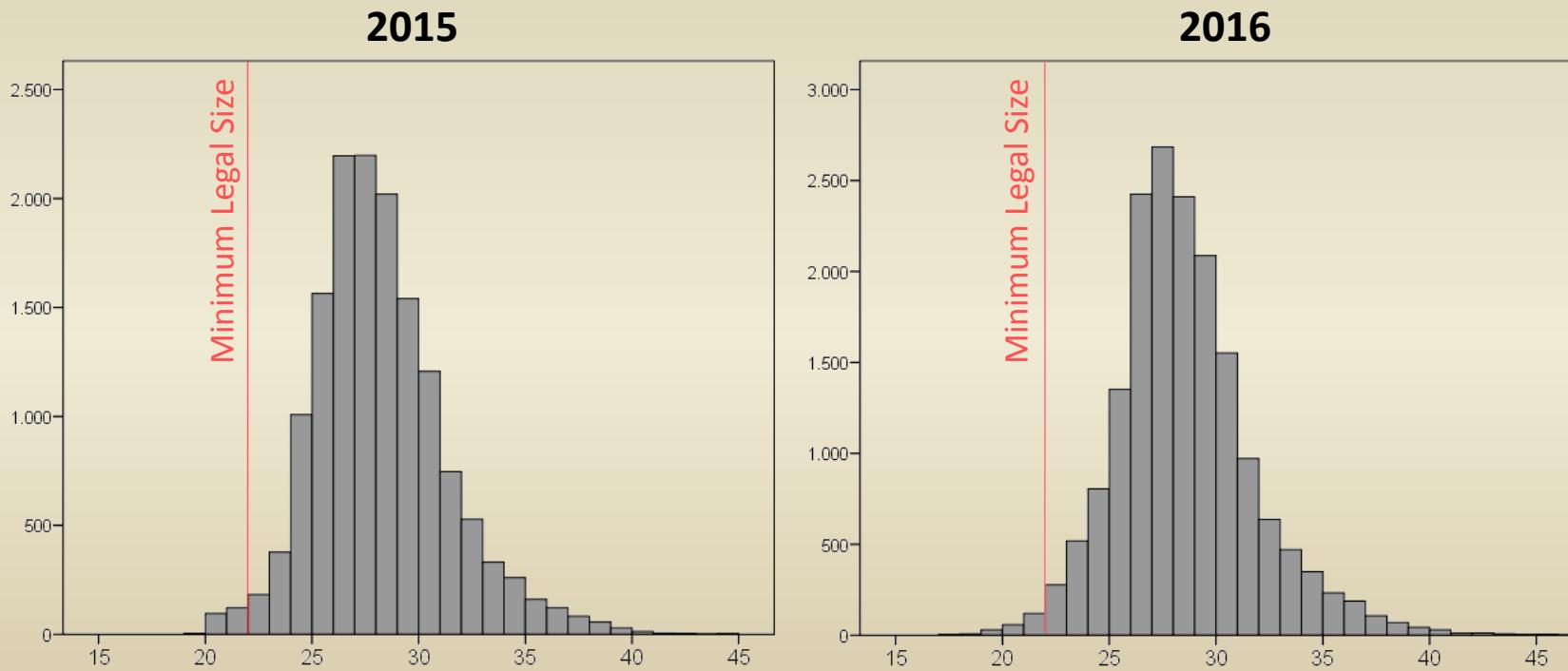
- 2-3 monthly samplings covering **North**, **Northeast** and **South**:  
length of all catches (**retained**  
and **discards**)
- Fishing activity  
(fishing areas, fishing strategy...)



# Length distributions *Sparisoma cretense*



- Since 2015: length sampling **at market** (RIM-IEO) and also **at sea** by scientific observers (UE-DCF)



# **OUR PROPOSAL to be discussed by the WG**



- Catch and effort data of the main stocks from 2013 onwards *{WHICH STOCKS?}*
- Length distribution of *Sparisoma cretense* from 2015 onwards
- To provide these data for the next data call of the Working Group



Thanks for your attention  
*Merci votre attention*



GOBIERNO  
DE ESPAÑA

MINISTERIO  
DE ECONOMÍA, INDUSTRIA  
Y COMPETITIVIDAD

Funded by Spanish Government and  
EU-Data Collection Framework

