European pilchard

**SCIENIFIC NAME**

*Sardina pilchardus*

**SPECIES NAME(S)**

European pilchard, Sardine, European sardine

**STOCK IDENTIFICATION**

Many studies have investigated the stock structure of the European pilchard (or commonly, “sardine”) population widely distributed in the Northeast and Eastern Central Atlantic, and the Mediterranean and Black Sea (e.g. [Gutiérrez et al. 2018](https://www.fishsource.org/fishery_page/5935)). Engraulis encrasicolus is commonly known as the southern sardine and is a major component of the sardine fishery in Morocco and countries south, between Cap Blanc at 26ºN and Boujdour at 32ºN. The Southern stock unit reflects an entirely Moroccan population from Cap Blanc north to Cap Boujdour at 32ºN.

In addition to the West African stocks, FishSource considers the following regional stock subunits to be needed: (ICES Divisions 8.c and 9.a) and (ICES Divisions 8.a,b,d and Subarea 7). These 2 are already covered in profiles: - Northern Adriatic Sea (ICES GSA01). - Southern Adriatic Sea (ICES GSA17) and Northern Alboran Sea (ICES GSA03). The Western African stocks are captured in industrial and artisanal small pelagic fisheries in Morocco, Mauritania, Senegal, and the Gambia that also target European anchovy, Engraulis encrasicolus, Sardinella, Sardinella spp., horse mackerel (*Trachurus* spp. and chub mackerel (*Trachurus japonicus*)). The current activity of these fisheries is unclear. Furthermore, the structure of the stock remains somewhat uncertain.

The stock is regularly surveyed; in 2017, however, only the Russian and Moroccan acoustic surveys were conducted. The stock status is regularly assessed by both the FAO and the INRH; the FAO provides annual scientific advice. Scientists, within both the INRH and the FAO, found the stock to be in 2017 to be in relatively good health with respect to biomass reference points.

**ASSESSMENT**

**Strengths**

- The stock is regularly surveyed; in 2017, however, only the Russian and Moroccan acoustic surveys were conducted.
- The stock status is regularly assessed by both the FAO and the INRH; the FAO provides annual scientific advice.

**Weaknesses**

- The stock structure remains somewhat uncertain.
- There is some misalignment between the INRH and the FAO regarding the exploited status of the stock, some methods by INRH yield conflicting results.
- Stock assessment advice by the FAO is not released in a timely manner; the stock status and the connection between stock assessments, advice, and harvest limits is not clear.

**SCORING**

- **Management Quality:** ≥ 6
- **Management Strategy:** ≥ 6
- **Managers Compliance:** < 6 ≤ 6
- **Fishers Compliance:** ≥ 6

- **Stock Health:**
  - Current Health ≥ 6
  - Future Health ≥ 6

- **FIPs:** no related FPs

- **MSC:** no related MSC fisheries
RECOMMENDATIONS

RETAILERS & SUPPLY CHAIN

- Support the Sub-Regional Fisheries Commission and Morocco in their efforts to develop a strategic plan for management of the small pelagics fisheries in the region. The management plan should include species-specific TACs, joint setting of TACs, and consideration of how environmental variability may affect stocks.
- Work with scientists to understand the uncertainties in the stock assessment and improve the different assessment models and input data (catches, discards, biological data) to reduce the level of uncertainty in the assessment and to work towards resolving the differences between the models.
- Encourage management authorities to release stock assessment results sooner and improve transparency of subsequent management actions, including the setting of catch or effort limits.
- Ask the government/regional authorities to continue to improve catch and discard reporting and to publish fishery compliance information, especially for Mauritania.
- Work with scientists to conduct studies to clarify the stock structure of northwest African pilchard/sardine.
- Press managers to implement a recovery strategy for other target species in the multi-species fishery to ensure that all such species are at least above biologically-based limit reference points (or proxies for the point of recruitment impairment), especially for Cunene and Atlantic horse mackerels, and round and Madeiran sardinellas.
- Work with scientists and managers to expand the at-sea observer programme to provide representational coverage of all components of the fishery to better understand catches and discards, as well as interactions with habitats and all types of bycatch.