Indian oil sardine (Sardinella longiceps)

**IDENTIFICATION**

**SCIENTIFIC NAME**
Sardinella longiceps

**SPECIES NAME(S)**
Indian oil sardine

**STOCK IDENTIFICATION**

Indian oil sardine is distributed on the entire west coast of India from Gujarat to Kerala, and also on Tamil Nadu, Pondicherry, Andhra Pradesh and Orissa in the Indian east coast, but the highest abundance is observed off Kerala and Karnataka coasts. The stock structure of the oil sardine in India has been the subject of different studies in the last years. (Subramaniam et al. 2018; Mangledur 2015; Venkita Krishnan 1993). Recent research suggests the presence of two stocks in India but the geographical limits of these stocks are not clear. In addition the possible presence of other distinct populations in some regions (especially in the southwestern coast) was evident in the analyses which needs to be confirmed further using more widespread sampling design and powerful markers. (Sebastian et al. 2017). In India, the State (Provincial) governments have jurisdiction over fisheries in the territorial waters and populations of oil sardine are normally assessed separately for each State.

Due to the lack of certainty in the precise number and geographical limits of the biological stocks of oil sardine in India, one profile at the assessment unit level is defined for each of the six coastal states that account for major catches in biological stocks of oil sardine in India, but the geographical limits of these stocks are not clear. In addition the possible presence of other distinct populations in some regions (especially in the southwestern coast) was evident in the analyses which needs to be confirmed further using more widespread sampling design and powerful markers. (Sebastian et al. 2017). In India, the State (Provincial) governments have jurisdiction over fisheries in the territorial waters and populations of oil sardine are normally assessed separately for each State.

**RECOMMENDATIONS**

**RETAILERS & SUPPLY CHAIN**

- Support current improvement efforts and encourage the development of a formal, national, Indian oil sardine fishery improvement project (FIP) covering all stocks including the following activities:
  - Encourage regulators to commission research to better define the biological stock structure.
  - Ask regulators to conduct and fully publish standardized stock assessments at the appropriate spatial scale.
  - Ask managers to publish historic annual catch data, including percentages of juvenile catch, by gear type for each state.
  - Work with managers to develop and agree on long-term objectives for the fishery, and develop a management plan, including biological reference points, a harvest strategy, and a harvest control rule for each

**MSC**

No related MSC fisheries

**SCORES**

**Management Quality:**

- Management Strategy: (Future Health) < 6
- Managers Compliance: > 6 (DATA DEFICIENT)

**FISPS**

No related FIPs

**DEFICIENT**

- Management Compliance: DATA DEFICIENT
- Fishers Compliance: DATA DEFICIENT
- Current Health: < 6 (DATA DEFICIENT)

**STRATEGIES**

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**ASSESSMENT**

**Strengths**

- Rapid stock assessments are conducted frequently for all coastal states by the Central Marine Fisheries Research Institute of India (CMFRI).

**Weaknesses**

- Assessment is not conducted at the stock level since the number and geographical limits of oil sardine stocks in India is not clearly understood.

- The quality of the rapid stock assessments conducted by CMFRI cannot be evaluated based on the information provided by the CMFRI.

- Information provided in the CMFRI Annual Reports is not consistent among states and years, and typically not enough to fully understand the fishery in Kerala, eg. there is no regular information on the percentage of catches captured by each fishing gear, or the percentage of juveniles in the catches.

- Presently no clearly stated long-term objectives are established for this fishery.

- Oil sardine in India is not managed through quotas or total allowable catches.

- There are no formal or routine arrangements in place to create a link between scientific findings and the management regime for this fishery and reference points have not been set.

- There is very little information on the environmental impact of the oil sardine fishery in India in terms of bycatch and ecosystem effects.

- Although there is not recent information on illegal, unreported, or unregulated (IUU) fishing related to the oil sardine fishery in India, IUU fishing was flagged as a major issue in the past including a range of illicit activities: fishing without permission or out of season; using outlawed types of fishing gear; not reporting or underreporting of catch, etc.

- Long time series of state-wise catch data are not publicly available, and the CMFRI website provides catch data only for the last 5 years.

- Catches have drastically decreased since record high values in 2012 as a consequence of overfishing and unfavourable environmental conditions.

- There are concerns all in the country that if the level of fishing effort remains unchecked, the fleet may grow to exceed sustainable levels.

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- There are concerns all in the country that if the level of fishing effort remains unchecked, the fleet may grow to exceed sustainable levels.
Push managers to prevent further growth in effort in these fisheries until adequate stock assessments are available and stock status relative to reference points is known.

Encourage managers to immediately implement management measures for each state to monitor and prevent or reduce the capture of juvenile fish, as advised by relevant scientific bodies, as done in Kerala.

Work with scientists to research the environmental impacts of the fishery, especially with regard to effective monitoring of the incidental capture of endangered, threatened, and protected species.

Support and encourage enhanced surveillance and enforcement to reduce illegal, unreported, and unregulated (IUU) fishing.

This profile last updated on 28 June 2019