**IDENTIFICATION**

**SCIENTIFIC NAME**
Uroteuthis duvauceli

**SPECIES NAME(S)**
Indian squid

**COMMON NAMES**
Ahin della, Calamar índico, Calmar Indien, Habbar, Indian squid, Makul, Nala, Narsinga, Ranga, squid, 

**STOCK IDENTIFICATION**
Indian squid can be found in the Indian Ocean and Western Central Pacific. The stock structure is unknown.

**RELATED LINKS:**
- Indian Department of Animal Husbandry, Dairying and Fisheries (DADF)
- Indian Central Marine Fisheries Research Institute (CMFRI)

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### ASSESSMENT

#### Strengths
1. Impacts of heavy fishing pressure may be somewhat ameliorated by biological resiliency of the species.
2. There is a body of research on the biological characteristics of the species and the population dynamics within fisheries, including some estimated biological reference points, albeit not at the level of detail or regularity needed for active management of the species.
3. While it is indicated the species may be overexploited in some regions, it is considered only fully exploited in others.
4. There are non-mechanized fishing sectors in the fishery which are likely to have more minimal environmental impacts relative to the mechanized sectors.

#### Weaknesses
1. The fishery is open access (no limited entry or permitting requirements).
2. There are no harvest control rules and no clear effort to limit effort or reduce harvest in response to scientific advice.
3. Estimates of optimal biological reference points and limit reference points are limited, and there is no mechanism to require their use for management of the species.
4. There is no recent comprehensive stock assessment for the species throughout the coast.
5. The availability of fishery specific (i.e. gear type, area and species) data on harvest, harvest rates and abundance is sparse or irregular for most geographic locations; reporting of catches including target species and bycatch is weak.

#### Options
1. A better system to account for levels of harvest, fishery participation, fishery effort is needed in order to improve stock assessment, evaluate fishery impacts and sustainability at the sector level, and to ultimately allow control over the level of exploitation that is occurring. Adoption of a licensing system and monitoring, surveillance and control (MSC) program may be useful steps toward these objectives (Mathew 2009; Pillai and Ganga 2010). Additional recommendations include onboard observer coverage for the multi-gear fishing fleets within and beyond the EEZ in the IOTC region, a mandatory logbook scheme for all industrial purse seine and trawl fleets operating from Indian ports, and checks for reported catches for artisanal fisheries.
2. Movement toward decentralized management and a rights-based fisheries management strategy (see Mathew 2009) could be particularly beneficial for the artisanal fishery sectors.

### SCORES

**Management Quality:**

<table>
<thead>
<tr>
<th>Management Strategy</th>
<th>Managers Compliance</th>
<th>Fishers Compliance</th>
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**Stock Health:**

<table>
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**FIPS**

No related FIPs

**MSC**

No related MSC fisheries

### RECOMMENDATIONS

**RETAILERS & SUPPLY CHAIN**

- Conduct scientific studies to define the stock structure over the full range of the species.
- Encourage managers to collect and publish detailed fishery data by fishing method (e.g. catch, effort and fleet size) and biological data (length, sex, maturity, age) to support stock assessment development.
- Work with managers to design and implement a fishery management plan including a harvest strategy and harvest control rule suitable for short-lived species; ensure the management plan considers impacts of this fishery on the overall ecosystem and functions.
- Estimate the scope of illegal fishing and under-reporting, and implement effective monitoring, control, and surveillance measures.
- Implement data collection programmes to enable evaluation of bycatch, especially of protected and endangered species, and impacts on habitat.
- Ensure your supply chains are represented in SFP’s (Global Squid Supply Chain Roundtable) to review improvement needs in this and other similar fisheries, catalyze fishery improvement projects, and monitor progress in improvement efforts.