**Anchoveta** Peruvian Northern-Central

**Fishery:** Ecuador, Peru

**Purse seines**

**IDENTIFICATION**

**SCIENTIFIC NAME**

*Engraulis ringens*

**SPECIES NAME(S)**

Anchoveta

**COMMON NAMES**

Peruvian anchovy

**STOCK IDENTIFICATION**

Anchoveta has a wide geographical distribution in the South Eastern Pacific Ocean, from Zorritos (4°30' S) in Northern Peru to Chiloé (42°30' S) in Southern Chile (Serra et al., 1979). There are three different anchoveta (*Engraulis ringens*) stocks (Cahuin et al., 2015):

1. The Northern-Central Peruvian stock, managed by Peru;
2. The Southern Peru/Northern Chile stock, managed by both Peru and Chile, and;
3. The Central-Southern Chile stock, managed by Chile.

This profile refers on the Northern-central Peruvian stock.

The stock expands in warmer years up to Gulf of Guayaquil (3°00' S), in Ecuador (Instituto Nacional de Pesca, 2009), where a purse seine fishery operates, but since 2012 anchoveta population has retracted.

**RELATED LINKS:**

- Vice Ministry of Aquaculture and Fisheries of Ecuador (MAGAP)
- Marine Institute of Peru (IMARPE)

**ASSESSMENT**

**Strengths**

- Scientific surveys are regularly conducted.
- Public availability of information about the fishery, stock status and management measures is improving.
- An electronic logbook has been recently implemented to improve anchoveta and bycatch records and reduce incentives to illegal discarding.
- New management regulations were put in place for the artisanal component of the fishery, including an annual TAC.
- Several transitory fishing closures have been established for the protection of juveniles and spawning process, including the closure of the fishery. As well, a permanent spatial closure of 3 nm along the Peruvian coastline has been established.
- Two fishery improvement projects, for the industrial and for the artisanal and small-scale fleets are underway, focusing on bycatch and ecosystem improving data.

**Weaknesses**

- There is no management plan with an explicit harvest strategy and reference points that take into account the key role of anchoveta in the ecosystem.
- The species is strongly dependent on environmental variables and since 2009 there is an increase in environmental variability amplitude leading to higher uncertainty about stock status.
- Stock assessment models are not used and current fishing mortality or exploitation rate estimates are not publicly available in the last years, even if this was recommended by FAO in 2014.
- The TAC that was defined for the artisanal and small-scale fleet applies to the entire coast (i.e., is not fractioned by the northern-central and southern stock); there is also no public evidence that the quota is supported by a clear scientific recommendation.
- Data on protected and non-target species is scarce, and compliance on the percentage bycatch limit is not reported.
- Habitats’ vulnerability to fishery impacts are not well known.

**SCORES**

<table>
<thead>
<tr>
<th>Management Quality:</th>
<th>Management Strategy</th>
<th>Managers Compliance</th>
<th>Fishers Compliance</th>
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<tbody>
<tr>
<td></td>
<td>≥ 6</td>
<td>≥ 8</td>
<td>10</td>
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**Stock Health:**

**Current Health**

≥ 6

**Future Health**

≥ 6

**FIPS**

No related FIPs

**MSC**

No related MSC fisheries

**RECOMMENDATIONS**

**RETAILERS & SUPPLY CHAIN**

- Request the government of Peru to develop a long-term management plan for the fishery with an explicit harvest strategy and reference points that take into account the key role of anchoveta in the ecosystem.
- Advocate for the development of annual stock assessments that incorporate improved catch data (landings and discards) and consider the effects of environmental variability on the population. Stock assessment results should be peer reviewed and publicly reported.
- Encourage the Peruvian authorities to make public the process by which the artisanal sector TAC is determined, and to assign each stock a specific quota based on scientific advice.
- Encourage the Peruvian research authorities to assess the status of minor species (e.g., Longnose anchovy (*Anchoa nasus*)) and develop management/rebuilding plans as appropriate.
- Work with scientists and managers to improve reporting of catches, discards and all bycatch; analyse the data and publish the results on bycatch quantities and trends.
- Develop and implement bycatch reduction measures for the industrial and
artisanal fleets based on increased knowledge from the IMARPE observer programme.

- Work with scientists to define the scale of interactions with benthic habitats.