MARINE FISH CALENDAR

IX. VIZHINJAM

P. N. Radhakrishnan Nair, N. Gopalakrishna Pillai, P. S. Sadashiva Sharma,
A. K. Velayudhan, Mathew Joseph, K. T. Thomas and T. A. Omana

Vizhinjam Research Centre of CMFRI, Vizhinjam

Introduction

The fishery investigations in various parts of India have established that there are divergence in the pattern of species distribution and their abundance in these regions. Such changes are also noticed annually at a particular region as well as between closely adjacent centres of the same region. Therefore certain trends and patterns in seasons and abundance of the major fisheries become apparent from prolonged observations. Data collected over a period of five years, from 1981 to 1985, from the landing centre at Vizhinjam have been analysed to draw up a general fishery calendar suitable for this centre elucidating the cyclic changes in the abundance and dominance of the commercially important species/groups of fish within a year.

Vizhinjam, 16 km, south of Trivandrum in Kerala State (Lat. 8°22'30" N, Long. 76°59'15" E), is an important fish landing centre in the fishery zone extending from Kollangode in the south to Valiaveli in the north spreading over a distance of 50 km on the southwest coast of India. Owing to the bay protected by breakwaters, which affords facilities for launching the boats into the sea even in the peak monsoon, fishing activity takes place in Vizhinjam area all through the year. Moreover the Vizhinjam Fishing Harbour, which is underway provides facilities for safe launching and harbouring of the crafts as well as landing of the catch. Good marketing outlets are available at nearby places such as Trivandrum, Balaramapuram and adjacent towns. The fishery is artisanal, employing catamaran, dugout canoe, plankbuilt boat and indigenous gears such as boat seine ('Thattumadi'), drift net ('Pattu vala'), hooks and line ('Choonda') etc. Neither trawling nor purse seining is being carried out at this centre. Mechanisation came very late to Vizhinjam, while in the nearby places like Sakthikulangara and Kolachai mechanised fishing had been well established even years back. Vizhinjam fishermen were rather cautiously avoiding mechanised fishing since they feared that favouring mechanisation may invite big businessmen into the field which may adversely affect the traditional fishing sector. However, in 1981 a few small mechanised boats have started operating in this area using traditional drift nets. But only a few fishermen could afford to the high capital investment and operational costs. By about September, 1982, five traditional crafts fitted with outboard motors started operating from Vizhinjam. Due to the high profit obtained by the fishermen and low capital and operational costs for the outboard motor when compared to those of mechanised boats, the mechanisation of traditional crafts with outboard motor became acceptable to the fishermen. In the course of past five years the total number of outboard motors at this centre increased to about 400. This trend is bound to continue, in view of the prospect of the fishing harbour under construction.

Mechanised craft generally go about 20-25 km off Vizhinjam to area of 60-80 m depth, whereas the
non-mechanised crafts are confined to about 10 km from the shore and a depth range of 40-50 m. The number of actual fishing days in a month ranged from 20 to 25 for both the types of units.

The data collected from 1981 to 1985 have been processed for the preparation of the calendar. The data show that the annual marine fish landings (fin fish alone) at Vizhinjam ranged from 5,207.01 t in 1981 to 9,726.2 t in 1985 with the annual average landings at 6,374.41 t. The average monthly landings varied from 147.88 t in January to 1,230.05 t in July with the overall monthly average at 531.2 t. Fish landings higher than this monthly average were obtained during June to October, when nearly 71.3% of the annual catch was landed. It may be seen that the fishing effort was fairly high from May to October and there was also a corresponding increase in the catch and catch rate in these months. The highest catch (1,230.05 t) and catch rate (67.22 kg) were observed during July. From the foregoing trend it may be stated that June to October presents the main fishing season with best return in July in the Vizhinjam area. A large variety of fishes support the fishery at Vizhinjam and the landings of each gear have a characteristic species composition.

At present ten types of traditional gears are employed in Vizhinjam area to exploit its fishery resources. Of these boat seine, hooks and line, ‘achil’ (a tape of hand line with smaller hooks) and shore seine together contribute to the bulk (74.87%) of the total fish landings and the rest (25.13%) by gill nets which include drift net, ‘chala vala’, ‘netholi vala’, ‘kolachi vala’, ‘konchu vala’ and ‘nandu vala’.

Apart from those species mentioned in this calendar, a number of species of fishes, which formed stray catches showing no regular fishery and were quite insignificant as independent fishery, also contributed to the fishery.

In addition to these, the juveniles of almost all major commercially important fishes formed a minor fishery locally called ‘Nonna’ fishery. This contributed to 0.03%. The fishery season extended from October to August. The average annual catch was 2,134 t with monthly catch ranging from 4 kg in October to 451 kg in August.

**AMBASSIDAE**

<table>
<thead>
<tr>
<th>Popular English Name</th>
<th>Vernacular Name (Malayalam)</th>
<th>Annual average catch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glassy perchlets</td>
<td>‘Mulli’</td>
<td>5.7 t</td>
</tr>
</tbody>
</table>

**ATHERINIDAE**

<table>
<thead>
<tr>
<th>Popular English Name</th>
<th>Vernacular Name (Malayalam)</th>
<th>Annual average catch</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.09</td>
<td>Boat seine : 0.08%</td>
<td></td>
</tr>
<tr>
<td>0.01</td>
<td>Shore seine : 0.01%</td>
<td></td>
</tr>
</tbody>
</table>

**BALISTIDAE**

<table>
<thead>
<tr>
<th>Popular English Name</th>
<th>Vernacular Name (Malayalam)</th>
<th>Annual average catch</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.04</td>
<td>Boat seine: —</td>
<td></td>
</tr>
<tr>
<td>0.01</td>
<td>Shore seine: —</td>
<td></td>
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</tbody>
</table>

**BELONIDAE**

<table>
<thead>
<tr>
<th>Popular English Name</th>
<th>Vernacular Name (Malayalam)</th>
<th>Annual average catch</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.31</td>
<td>Hooks &amp; line: 0.67%</td>
<td></td>
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</table>

**CARANGIDAE**

<table>
<thead>
<tr>
<th>Popular English Name</th>
<th>Vernacular Name (Malayalam)</th>
<th>Annual average catch</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.09</td>
<td>Trevallies/Horse mackerel/</td>
<td></td>
</tr>
<tr>
<td>0.17</td>
<td>Queenfish/Darts</td>
<td></td>
</tr>
</tbody>
</table>

**Fig. 1. Seasonal abundance of balistids at Vizhinjam.**
Fishing methods and their contribution:

- Drift net: 2.49%
- Chala vala: 0.19%
- Konchu vala: 0.37%
- Hooks & line: 9.92%
- Boat seine: 2.40%
- Shore seine: 0.11%

**Fig. 2.** Seasonal abundance of carangids at Vizhinjam.

**Fig. 3.** Monthwise species composition of carangids in indigenous gears.

**Fig. 4.** Megalaspis cordyla.

**Fig. 5.** Decapterus dayi

- Scientific Name: Decapterus dayi
- Vernacular Name: 'Kozhiyala'
- Gear: Hooks & line/Chala vala/Boat seine/Shore seine/Konchu vala
- Peak period of occurrence: May - Oct.
- Depth of occurrence: 15 - 60 m
- Length range in commercial fishery: 60 - 229 mm
- Size at first maturity: 130 mm

**Fig. 6.** Atule mate.

- Scientific Name: Megalaspis cordyla
- Vernacular Name: 'Vankada'
- Gear: Drift net/Hooks & line/Shore seine/Boat seine

- Scientific Name: Megalaspis cordyla
- Vernacular Name: 'Urula para'
- Gear: Drift net/Chala vala/Konchu vala/Boat seine/Shore seine
Depth of occurrence : 30 - 60 m
Length range in commercial fishery : 100 - 314 mm
Size at first maturity : ---

**Carangoides malabaricus**

Scientific Name : Carangoides malabaricus
Vernacular Name : 'Vattakkanni para'
Gear : Hooks & line/
       Drift net/
       Konchu vala
Depth of occurrence : 30 - 60 m
Length range in commercial fishery : 110 - 215 mm
Size at first maturity : ---
Spawning season : ---

**CHIROCENTRIDAe**

Wolf-herrings

Scientific Name : Chirocentrus dorab
Vernacular Name : 'Mulluvaala'
Gear : Gill net
Depth of occurrence : 30 - 60 m
Length range in commercial fishery : ---
Size at first maturity : ---
Spawning season : ---

**Chirocentus midus**

Gill net

Scientific Name : Chirocentrus midus
Vernacular Name : 'Mulluvaala'
Gear : Gill net
Depth of occurrence : 30 - 60 m
Length range in commercial fishery : ---
Size at first maturity : ---
Spawning season : ---

**CLUPEIDAE**

Sardines

Scientific Name : Sardines
Vernacular Name : 'Chala'

Fig. 7. Carangoides malabaricus.

Fig. 8. Seasonal abundance of chirocentrids at Vizhinjam.

Fig. 9. Chirocentrus dorab.

Fig. 10. Chirocentrus midus.
Annual average catch: 312.01 t
Percentage in total catch: 4.89
Fishing methods and their contribution:
- Chala vala: 4.14%
- Shore seine: 0.15%
- Hooks & line: 0.07%
- Boat seine: 0.53%

Fig. 11. Seasonal abundance of sardines at Vizhinjam.

Fig. 12. Monthwise species composition of clupeids in indigenous gears at Vizhinjam.

Fig. 13. Monthwise species composition of lesser sardines in indigenous gears at Vizhinjam.

Scientific Name: Sardinella longiceps
Vernacular Name: 'Nei-chala'
Gear: Chalavala/Shore seine/Hooks & line
Depth of occurrence: Up to 40 m
Length range in commercial fishery: 88-224 mm
Size at first maturity: —
Spawning season: Apr.-May and Sep.-Oct.

Fig. 14. Sardinella longiceps.

Scientific Name: Sardinella gibbosa
Vernacular Name: 'Chala'
Gear: Chala vala/Shore seine/Hooks & line
Peak period of occurrence: Jan.-Jun.
Depth of occurrence: Up to 20 m
Length range in commercial fishery: 84-194 mm
Size at first maturity: —
Spawning season: Apr.-Aug.

Fig. 15. Sardinella gibbosa.
**Coryphaenidae**

**Scientific Name** : Sardinella fimbriata  
**Vernacular Name** : 'Karichala'  
**Gear** : Chala vala  
**Peak period of occurrence** : Apr. - Jul.  
**Depth of occurrence** : Upto 30 m  
**Length range in commercial fishery** : 120 - 189 mm  
**Size at first maturity** : —  
**Spawning season** : —

**Cynosciadium**

**Popular English Name** : Dolphin fish  
**Vernacular Name (Malayalam)** : 'Palameen'  
**Annual average catch** : 24.6 t  
**Percentage in total catch** : 0.39  
**Fishing methods and their contribution** :  
Hooks & line: 0.37%  
Drift net: 0.02%

**Dussumieridae**

**Cynosciadium**

**Scientific Name** : Dussumieria hasseltii  
**Vernacular Name** : 'Moral'/'Muthu polappan'/'Kokkol'  
**Annual average catch** : 149.0 t  
**Percentage in total catch** : 2.33  
**Fishing methods and their contribution** :  
Chala vala: 0.13%  
Boat seine: 1.05%  
Shore seine: 0.02%  
Hooks & line: 1.13%  
Konchu vala: 0.01%

**Scientific Name** : Dussumieria hasseltii  
**Vernacular Name** : 'Moral'/'Muthu polappan'/'Kokkol'  
**Percentage composition in the gear** : —  
**Peak period of occurrence** : May - Sep.  
**Depth of occurrence** : Upto 40 m  
**Length range in commercial fishery** : 80 - 224 mm  
**Size at first maturity** : 170 mm  
**Spawning season** : —
ELASMOBRANCHS

Popular English Name: Sharks/Rays/Skates
Vernacular Name (Malayalam): 'Sravu'/Therachi'/'Poonthi'
Annual average catch: 82.9 t
Percentage in total catch: 1.3
Fishing methods and their contribution:
- Hooks and line: 0.37%
- Drift net: 0.66%
- Boat seine: 0.19%
- Shore seine: 0.01%
- Konchu vala: 0.09%

Fig. 20. Seasonal abundance of elasmobranchs at Vizhinjam.

Fig. 22. Seasonal abundance of anchovies at Vizhinjam.

Fig. 21. Monthwise species composition of elasmobranchs at Vizhinjam.

Fig. 23. Monthwise composition of Stokphorus and Thryssa in indigenous gears at Vizhinjam.

Fig. 24. Monthwise species composition of anchovies in indigenous gears at Vizhinjam.

Fig. 25. Stokphorus indicus.

ENGRAULIDAE

Popular English Name: Anchovy
Vernacular Name (Malayalam): 'Netholi'
Annual average catch: 727.3 t
Percentage in total catch: 11.41
Fishing methods and their contribution:
- Netholi vala: 1.18%
- Boat seine: 10.05%
- Shore seine: 0.13%
- Chala vala: 0.03%
- Konchu vala: 0.02%
<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Vernacular Name</th>
<th>Gear</th>
<th>Peak period of occurrence</th>
<th>Depth of occurrence</th>
<th>Length range in commercial fishery</th>
<th>Size at first maturity</th>
<th>Spawning season</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td><em>Netholi vala</em> (Gill net)</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

**Stolephorus devisi**

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Vernacular Name</th>
<th>Gear</th>
<th>Peak period of occurrence</th>
<th>Depth of occurrence</th>
<th>Length range in commercial fishery</th>
<th>Size at first maturity</th>
<th>Spawning season</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Stolephorus devisi</em></td>
<td>‘Netholi’</td>
<td>Netholi vala/Boat seine</td>
<td>Apr.–Nov.</td>
<td>5–15 m</td>
<td>30–140 mm</td>
<td>60 mm</td>
<td>Extended spawner</td>
</tr>
</tbody>
</table>

**Stolephorus buccaneeri**

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Vernacular Name</th>
<th>Gear</th>
<th>Peak period of occurrence</th>
<th>Depth of occurrence</th>
<th>Length range in commercial fishery</th>
<th>Size at first maturity</th>
<th>Spawning season</th>
</tr>
</thead>
</table>

**Thryssa mystax**

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Vernacular Name</th>
<th>Gear</th>
<th>Peak period of occurrence</th>
<th>Depth of occurrence</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Thryssa mystax</em></td>
<td>‘Kootal’</td>
<td>Shore seine/Boat seine</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Fig. 26. Stolephorus devisi.**

**Fig. 27. Stolephorus bataviensis.**

**Fig. 28. Stolephorus buccaneeri.**

**Fig. 29. Thryssa mystax.**
<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Vernacular Name</th>
<th>Gear</th>
<th>Peak period of occurrence</th>
<th>Depth of occurrence</th>
<th>Length range in commercial fishery</th>
<th>Size at first maturity</th>
<th>Spawning season</th>
</tr>
</thead>
</table>

**Hemiramphidae**

<table>
<thead>
<tr>
<th>Popular English Name</th>
<th>Vernacular Name (Malayalam)</th>
<th>Annual average catch</th>
<th>Percentage in total catch</th>
<th>Fishing methods and their contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Half-beak</td>
<td>'Kolachi'/'Ottachundan kola'</td>
<td>2.6 t</td>
<td>0.04</td>
<td>Kolachi vala: 0.04 %</td>
</tr>
</tbody>
</table>

**Holocentridae**

<table>
<thead>
<tr>
<th>Popular English Name</th>
<th>Vernacular Name (Malayalam)</th>
<th>Annual average catch</th>
<th>Percentage in total catch</th>
<th>Fishing methods and their contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Squirrel fish</td>
<td>'Katantha mulli'</td>
<td>0.3 t</td>
<td>--</td>
<td>Hooks &amp; line/Drift net: --</td>
</tr>
</tbody>
</table>

**Istiophoridae**

<table>
<thead>
<tr>
<th>Popular English Name</th>
<th>Vernacular Name (Malayalam)</th>
<th>Annual average catch</th>
<th>Percentage in total catch</th>
<th>Fishing methods and their contribution</th>
</tr>
</thead>
</table>
| Sail-fish | 'Thala' | 30.9 t | 0.48 | Hooks & line: 0.42 %
| | | | | Drift net: 0.06 % |

**Lactaridae**

<table>
<thead>
<tr>
<th>Popular English Name</th>
<th>Vernacular Name (Malayalam)</th>
<th>Annual average catch</th>
<th>Percentage in total catch</th>
<th>Fishing methods and their contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>White fish</td>
<td>'Parava'</td>
<td>12.6 t</td>
<td>0.20</td>
<td>--</td>
</tr>
</tbody>
</table>

**Leiognathidae**

<table>
<thead>
<tr>
<th>Popular English Name</th>
<th>Vernacular Name (Malayalam)</th>
<th>Annual average catch</th>
<th>Percentage in total catch</th>
<th>Fishing methods and their contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silver bellies</td>
<td>'Karal'</td>
<td>167.7 t</td>
<td>3.95</td>
<td>--</td>
</tr>
</tbody>
</table>

**Leithrinidae**

<table>
<thead>
<tr>
<th>Popular English Name</th>
<th>Vernacular Name (Malayalam)</th>
<th>Annual average catch</th>
<th>Percentage in total catch</th>
<th>Fishing methods and their contribution</th>
</tr>
</thead>
</table>
| Pigface-breaths/Emperor-breaths | 'Velameen' | 37.8 t | 0.59 | Hooks & line: 0.34 %
| | | | | Drift net: 0.21 %
| | | | | Boat seine: 0.03 % |
### Lutjanidae

<table>
<thead>
<tr>
<th>Popular English Name</th>
<th>Vernacular Name (Malayalam)</th>
<th>Annual average catch</th>
<th>Percentage in total catch</th>
<th>Fishing methods and their contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Snapper job fishes</td>
<td>‘Chempalli’</td>
<td>33.2 t</td>
<td>0.52</td>
<td>Hooks &amp; line: 0.31%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Drift net: 0.14%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Konchu vala: 0.04%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Boat seine: 0.02%</td>
</tr>
</tbody>
</table>

### Menidae

<table>
<thead>
<tr>
<th>Popular English Name</th>
<th>Vernacular Name (Malayalam)</th>
<th>Annual average catch</th>
<th>Percentage in total catch</th>
<th>Fishing methods and their contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moon fishes</td>
<td>‘Kannadi karal’</td>
<td>1.9 t</td>
<td>0.03</td>
<td>Boat seine: 0.03%</td>
</tr>
</tbody>
</table>

### Mugilidae

<table>
<thead>
<tr>
<th>Popular English Name</th>
<th>Vernacular Name (Malayalam)</th>
<th>Annual average catch</th>
<th>Percentage in total catch</th>
<th>Fishing methods and their contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mullets</td>
<td>‘Mala’/’Kanambu’</td>
<td>24.1 t</td>
<td>0.38</td>
<td>Boat seine: 0.37%</td>
</tr>
</tbody>
</table>

### Nemipteridae

<table>
<thead>
<tr>
<th>Popular English Name</th>
<th>Vernacular Name (Malayalam)</th>
<th>Annual average catch</th>
<th>Percentage in total catch</th>
<th>Fishing methods and their contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Threadfin bream</td>
<td>‘Kilimeen’</td>
<td>167.7 t</td>
<td>2.63</td>
<td>Hooks &amp; line: 2.55%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Boat seine: 0.05%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Gill net: 0.04%</td>
</tr>
</tbody>
</table>

### Pomadasyidae

<table>
<thead>
<tr>
<th>Popular English Name</th>
<th>Vernacular Name (Malayalam)</th>
<th>Annual average catch</th>
<th>Percentage in total catch</th>
<th>Fishing methods and their contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grunters</td>
<td>‘Cheymeen’</td>
<td>5.1 t</td>
<td>0.08</td>
<td>Hooks &amp; line: 0.01%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Konchu vala: 0.01%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Boat seine: 0.06%</td>
</tr>
</tbody>
</table>

### Priacanthidae

<table>
<thead>
<tr>
<th>Popular English Name</th>
<th>Vernacular Name (Malayalam)</th>
<th>Annual average catch</th>
<th>Percentage in total catch</th>
<th>Fishing methods and their contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bull’s eye</td>
<td>‘Kanna pola’</td>
<td>29.8 t</td>
<td>0.47</td>
<td>Boat seine: 0.01%</td>
</tr>
</tbody>
</table>
### SCIAENIDAE

<table>
<thead>
<tr>
<th>Popular English Name</th>
<th>Vernacular Name (Malayalam)</th>
<th>Annual average catch</th>
<th>Percentage in total catch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Croackers</td>
<td>'Tora'</td>
<td>96.5 t</td>
<td>1.51</td>
</tr>
<tr>
<td>Fishing methods and their contribution:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Boat seine: 1.07%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Shore seine: 0.04%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hooks &amp; line: 0.07%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Konchu vala: 0.33%</td>
<td></td>
<td></td>
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</tbody>
</table>

### SCOMBRIDAE

#### Popular English Name
Tunas/Seer fishes/Mackerel

#### Vernacular Name (Malayalam)
'Choora'/Neimeen'/Ayila

<table>
<thead>
<tr>
<th>Annual average catch</th>
<th>Percentage in total catch</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,172.6 t</td>
<td>18.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fishing methods and their contribution:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Hooks &amp; line: 9.7%</td>
<td>Drift net: 8.4%</td>
</tr>
<tr>
<td>Konchu vala: 0.2%</td>
<td>Shore seine: 0.1%</td>
</tr>
</tbody>
</table>

### TUNAS

#### Popular English Name
Tuna

#### Vernacular Name (Malayalam)
'Choora'

<table>
<thead>
<tr>
<th>Annual average catch</th>
<th>Percentage in total catch</th>
</tr>
</thead>
<tbody>
<tr>
<td>802.4 t</td>
<td>12.58</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fishing methods and their contribution:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Hooks &amp; line: 8.9%</td>
<td>Drift net: 3.7%</td>
</tr>
</tbody>
</table>

---

**Fig. 34.** Seasonal abundance of tunas at Vizhinjam.

**Fig. 35.** Monthwise species composition of tunas in indigenous gears at Vizhinjam.

**Fig. 36.** Katsuwonus pelamis.

**Fig. 37.** Thunnus albacares.
### AUXIS ROCHEI

- **Scientific Name**: Auxis rochei
- **Vernacular Name**: 'Urulan choora'
- **Gear**: Hooks & line/
- **Peak period of occurrence**: Jul. – Dec.
- **Depth of occurrence**: 30 – 60 m
- **Length range in commercial fishery**: 180 – 280 mm
- **Size at first maturity**: —
- **Spawning season**: —

### AYILA

- **Scientific Name**: Euthynnus affinis
- **Vernacular Name**: 'Kerachoora'
- **Gear**: Hooks & line/
- **Peak period of occurrence**: Sep. – Jun.
- **Depth of occurrence**: 40 – 60 m
- **Length range in commercial fishery**: 280 – 720 mm
- **Size at first maturity**: —
- **Spawning season**: —

--

**SEER FISHES**

- **Popular English Name**: Seer fishes
- **Vernacular Name (Malayalam)**: 'Neimeen'
- **Annual average catch**: 144.7 t
- **Percentage in total catch**: 2.27
- **Fishing methods and their contribution**:
  - Drift net: 2.20%
  - Hooks & line: 0.01%

### SEER FISHES

**Indian mackerel**

- **Popular English Name**: Indian mackerel
- **Vernacular Name (Malayalam)**: 'Ayila'
- **Annual average catch**: 225.5 t
- **Percentage in total catch**: 3.54

--

**Fig. 40. Auxis rochei.**
Fishing methods and their contribution:

- Drift net: 2.60%
- Konchu vala: 0.17%
- Hooks & line: 0.80%
- Shore seine: 0.05%
- Boat seine: 0.05%

**Silloginidae**

- **Popular English Name**: Whiting
- **Vernacular Name (Malayalam)**: 'Kilimeen'
- **Annual average catch**: 11.8 t
- **Percentage in total catch**: 0.18

**Sphyraenidae**

- **Popular English Name**: Barracudas
- **Vernacular Name (Malayalam)**: 'Seelavu'/Neduva'
- **Annual average catch**: 61.0 t
- **Percentage in total catch**: 0.95

**Serranidae**

- **Popular English Name**: Rock cods
- **Vernacular Name (Malayalam)**: 'Kalava'
- **Annual average catch**: 14.7 t
- **Percentage in total catch**: 0.23
Fishing methods and their contribution:

- Hooks & line: 0.51%
- Konchu vala: 0.09%
- Chala vala: 0.04%
- Boat seine: 0.01%

### Saurida undosquamis

**Scientific Name**: Saurida undosquamis  
**Vernacular Name**: 'Arana meen'  
**Gear**: Chala vala/ Konchu vala/ Hooks & line  
**Depth of occurrence**: 20-40 m  
**Length range in commercial fishery**: 50 - 329 mm  
**Size at first maturity**: —  
**Spawning season**: Aug.-Sep.

### Saurida tumbil

**Scientific Name**: Saurida tumbil  
**Vernacular Name**: 'Arana meen'  
**Gear**: Hooks & line/ Chala vala/ Konchu vala  
**Peak period of occurrence**: Jul.-Aug.  
**Depth of occurrence**: 20 - 40 m  
**Length range in commercial fishery**: 130 - 349 mm  
**Size at first maturity**: —  
**Spawning season**: Aug.-Sep.

---

**TACHYSURIDAE**

**Popular English Name**: Cat fishes  
**Vernacular Name (Malayalam)**: 'Thedu'  
**Annual average catch**: 85.4 t  
**Percentage in total catch**: 1.34  
**Fishing methods and their contribution**:

- Drift net: 0.26%  
- Hooks & line: 0.74%  
- Boat seine: 0.30%  
- Konchu vala: 0.04%

### Theraponidae

**Popular English Name**: Thorn fish/ Crescent perch  
**Vernacular Name (Malayalam)**: 'Keeli'  
**Annual average catch**: 25.5 t  
**Percentage in total catch**: 0.40  
**Fishing methods and their contribution**:

- Hooks & line: 0.19%  
- Drift net: 0.02%  
- Konchu vala: 0.16%  
- Boat seine: 0.03%
**Trichiuridae**

<table>
<thead>
<tr>
<th>Popular English Name</th>
<th>Ribbon fishes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vernacular Name (Malayalam)</td>
<td>'Vaala'/'Chunnambu vaala'</td>
</tr>
<tr>
<td>Annual average catch</td>
<td>1698.8 t</td>
</tr>
<tr>
<td>Percentage in total catch</td>
<td>26.65</td>
</tr>
<tr>
<td>Fishing methods and their contribution</td>
<td></td>
</tr>
</tbody>
</table>
  
  - Boat seine: 25.80%
  - Hooks & line: 0.43%
  - Drift net: 0.43% |

![Ribbon Fishes](image)

**Fig. 49.** Seasonal abundance of ribbon fishes at Vizhinjam.

**Fig. 50.** *Trichiurus lepturus.*

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th><em>Trichiurus lepturus</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>Vernacular Name</td>
<td>'Chunnambu vaala'</td>
</tr>
<tr>
<td>Gear</td>
<td>Boat seine</td>
</tr>
<tr>
<td>Peak period of occurrence</td>
<td>Jun. - Sep.</td>
</tr>
<tr>
<td>Depth of occurrence</td>
<td>15 - 40 m</td>
</tr>
<tr>
<td>Length range in commercial fishery</td>
<td>640 - 1130 mm</td>
</tr>
<tr>
<td>Size at first maturity</td>
<td>—</td>
</tr>
<tr>
<td>Spawning season</td>
<td>Jul. - Sep.</td>
</tr>
</tbody>
</table>