

Marine Fish Landings in India 2019



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Indian Marine Fisheries in 2019 At a Glance

1

The estimated marine fish landings from all the maritime states and two union territories in the main land of India for the year 2019 is 3.56 million tonnes showing an increase of 2.1% in comparison to landings in 2018 (3.49 million tonnes).

2

Tamil Nadu moved to the first position replacing Gujarat, which was holding the first position for the past few years, with 7.75 lakh tonnes compared to 7.02 lakh tonnes in 2018 (10.4% increase) accounting for 21.8% of the total landings in the country.

3

An important feature of the fishery in 2019 is that at national level Redtoothed trigger fish (*Odonus niger*) became the major resource in the harvests with its landings increasing to 2.74 lakh tonnes from 0.72 lakh tonnes in 2018.

4

The highest setback is for the Indian mackerel (*Rastrelliger kanagurta*) with huge reduction in its landings to the tune of 1.18 lakh tonnes at national level. Indian oil sardine (*Sardinella longiceps*) which used to be topmost contributor to the India's marine fish basket, continued reduction in landings with 6% decrease compared to 2018.

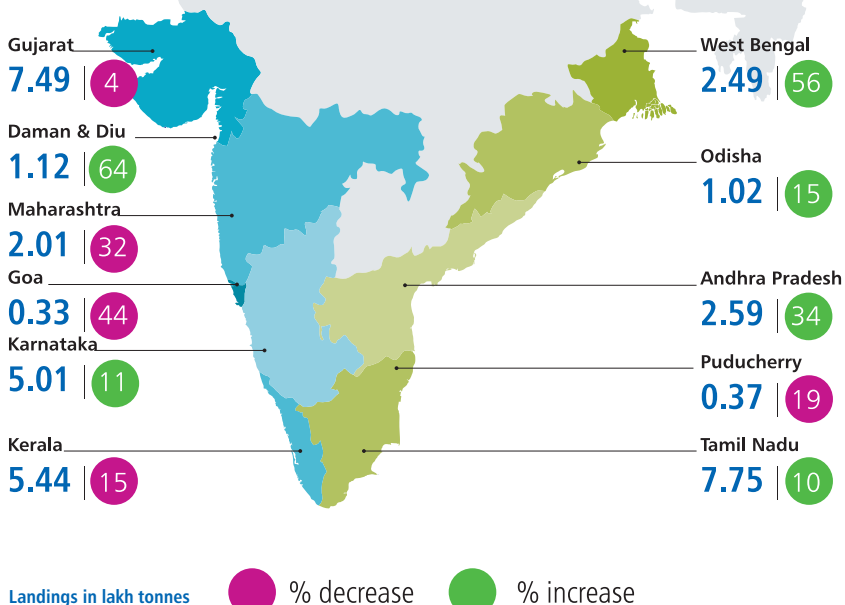
5

The year 2019 was very unusual for the Indian coast with almost 8 cyclonic storms in and around India of which 6 turned out to be severe cyclones - *Fani* in April, *Vayu* in June, *Hika* in September, *Kyarr* in October, *Maha* in Oct-Nov and *Bulbul* in Oct-Nov which adversely affected fishing calendar days especially in the west coast.

Marine Fish Landings in India 2019

3.56 million tonnes

2.1



The Fishery Resources Assessment Division of ICAR-CMFRI conducted the national level sample survey, based on the stratified multistage random sampling design developed by the Institute, for the assessment of exploited marine fishery resources by estimating marine fish landings in different fishing zones through its online data collection system. Using the data collected covering all the 1,265 marine fish landing centres along the Indian coast through the sampling design, estimates of species wise, fishing zone wise and gear wise landings were made for all the maritime states.

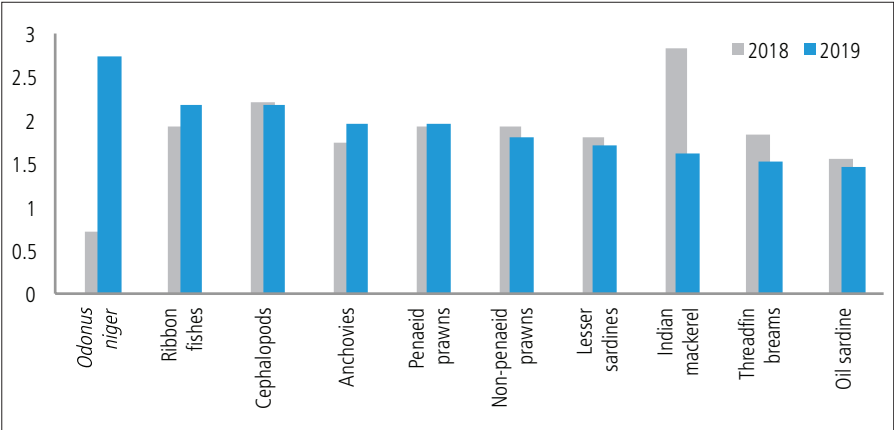
The estimate of marine fish landings in India for the year 2019 is 3.56 million tonnes compared to 3.49 million tonnes in 2018, showing a marginal increase of about 73,770 tonnes (2.1%). Tamil Nadu grabbed the first position from Gujarat, which was holding the first position for the past few years, with 7.75 lakh tonnes compared to 7.02 lakh tonnes in 2018 (10.4% increase) accounting for 21.8%

Estimated marine fish landings (tonnes) in India 2019

PELAGIC FINFISH		DEMERSAL FINFISH	
CLUPEOIDS		ELASMOBRANCHS	
Wolf herring	16899	Sharks	16174
Oil sardine	145083	Skates/Guitarfish	4281
Lesser sardines	170298	Rays	23281
Hilsa shad	14748	Eels	12321
Other shads	11290	Catfishes	65007
Anchovies		Lizard Fishes	91144
Coilia	35178	PERCHES	
Setipinna	11016	Rock cods	26508
Stolephorus	105915	Snappers	10246
Thryssa	43334	Pig-face breams	11565
Other clupeids	80603	Threadfin breams	153066
Bombayduck	117213	Bullseyes	38789
Half Beaks&Full Beaks	5838	Other perches	56929
Flying Fishes	1989	Goatfishes	22705
Ribbon Fishes	218736	Threadfins	9074
CARANGIDS		Croakers	135750
Horse Mackerel	48365	Silverbellies	100613
Scads	73816	Whitefish	4837
Leather-jackets	14001	POMFRETS	
Other carangids	130439	Black pomfret	16022
MACKERELS		Silver pomfret	28606
Indian mackerel	161957	Chinese pomfret	6599
Other mackerels	3269	FLAT FISHES	
SEER FISHES		Halibut	2275
<i>Scomberomorus commerson</i>	29396	Flounders	11
<i>Scomberomorus guttatus</i>	16279	Soles	47727
<i>Scomberomorus lineolatus</i>	33	<i>Odonus niger</i>	273705
<i>Acanthocybium solandri</i>	618	CRUSTACEANS	
TUNNIES		Penaeid prawns	194618
<i>Euthynnus affinis</i>	31843	Non-penaeid prawns	180103
<i>Auxis</i> spp.	12947	Lobsters	1671
<i>Katsuwonus pelamis</i>	31014	Crabs	56198
<i>Thunnus tonggol</i>	5853	Stomatopods	8602
<i>Thunnus albacares</i>	26177	MOLLUSCS	
Other tunnies	556	Mussels, Oysters & Clams [#]	110317
Bill Fishes	14765	Bivalves	3945
Barracudas	34010	Gastropods	4807
Mulletts	14437	Cephalopods	
Unicorn Cod	92	Squids	112727
OTHERS		Cuttlefish	92849
Seaweed [#]	18400	Octopus	12123
MISCELLANEOUS	108498		
TOTAL		3690100	

[#]The estimates are based on an alternate method and are excluded from the comparisons made. The comparisons are based on 3561383 tonnes (3690100-110317-18400=3561383)

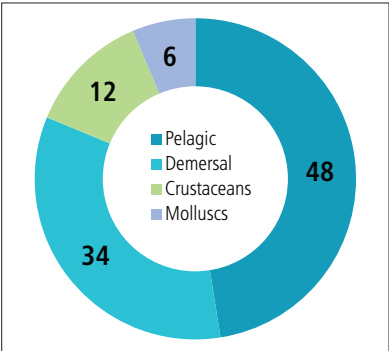
of the total landings in India. The landings from Gujarat in 2019 is 7.49 lakh tonnes (21.0% of national total) showing reduction of 4.0% compared to 7.80 lakh tonnes in 2018. Kerala retained the third position with landings of 5.44 lakh tonnes (6.43 lakh tonnes in 2018) owing to reduction in landings of about 0.99 lakh tonnes (15.4% reduction). The contribution from Kerala towards total landings in India reduced to 15.3% from 18.4% in 2018. The maritime states with increased landings in 2019 compared to 2018 are West Bengal with 88,800 tonnes increase (55.5%), Tamil Nadu with 72,700 tonnes increase (10.4%), Andhra Pradesh with 65,500 tonnes increase (33.9%), Karnataka with 49,300 tonnes increase (10.9%), Daman & Diu with 43,500 tonnes increase (63.7%) and Odisha with 13,000 tonnes increase (14.5%). Maritime states with decrease in landings in 2019 compared to 2018 are Kerala with 98,700 tonnes (15.4%), Maharashtra with 94,400 tonnes (32.0%), Gujarat with 31,000 tonnes (4.0%), Goa with 26,200 tonnes (44.4%) and Puducherry with 8,500 tonnes (18.8%). An important feature of the fishery in 2019 is that at national level *Odonus niger* became the major resource in the harvests with its landings increasing to 2.74 lakh tonnes from 72,140 tonnes in 2018. The second highest landings is 2.19 lakh tonnes of ribbon fishes



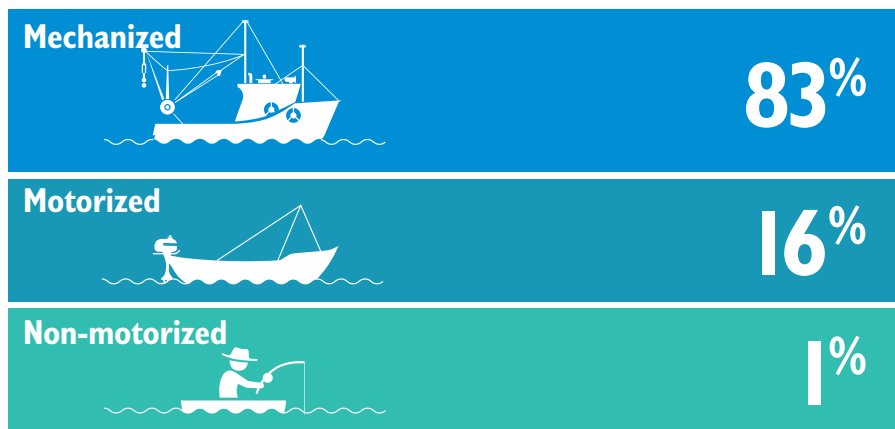
All India landings of Major Resources (in lakh tonnes)

followed by penaeid prawns 1.95 lakh tonnes, non-penaeid prawns 1.80 lakh tonnes, lesser sardines 1.71 lakh tonnes, Indian mackerel 1.62 lakh tonnes, threadfin breams 1.53 lakh tonnes and oil sardine 1.45 lakh tonnes.

In 2019, out of the total 3.56 million tonnes landings, 1.69 million tonnes (48%) is pelagic resources, 1.20 million tonnes (34%) is demersal resources, 0.44 million tonnes (12%) is crustaceans and 0.23 million tonnes (6%) is molluscs.



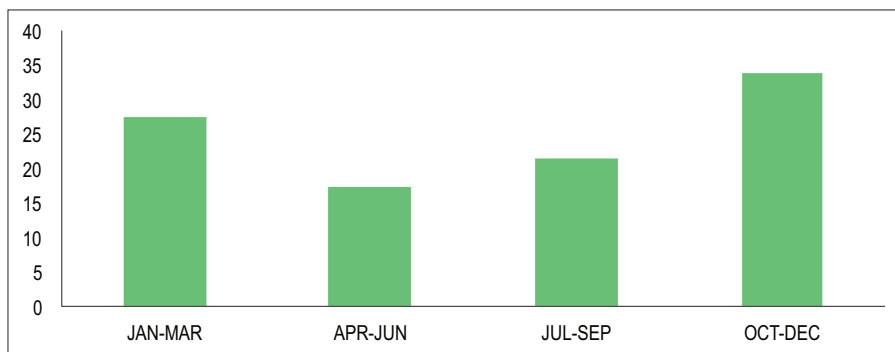
Assemblage (%): India



Sector-wise landings (%): India

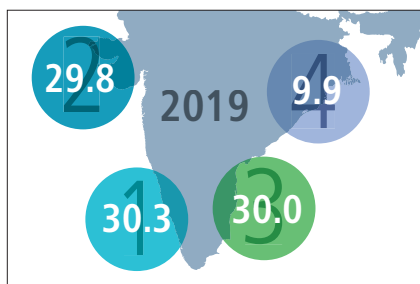
The mechanized sector contributed 2.98 million tonnes (83%) towards the total landings in 2019 which is 0.13 million tonnes more than that in 2018. The contribution by motorized and non-motorized sectors are 0.56 million tonnes (16%) and 0.03 million tonnes (1%) respectively.

Maximum landings took place during the period October-December with 1.21 million tonnes (34.0%), followed by 0.97 million tonnes (27.4%) during January-March, 0.76 million tonnes during July - September (21.3%) and 0.61 million tonnes during April - Jun (17.3%).



Quarter-wise landings (%): India

In 2019, three regions that almost equally contributed to total landings were Southwest region with 1.08 million tonnes (30.3%), Southeast region with 1.7 million tonnes (30.0%) and Northwest region with 1.06 million tonnes (29.8%). The Northeast region contributed 0.35 million tonnes (9.9%).

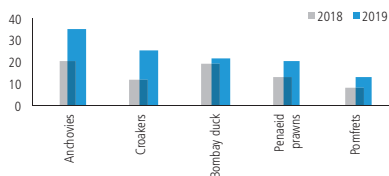


Region-wise contribution (%)

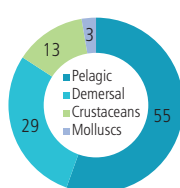
West Bengal

Total estimated landings - **2.49** lakh tonnes

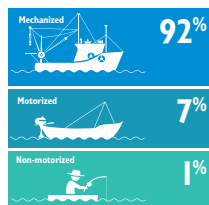
- The year 2019 has witnessed resurgence in the marine fish landings of West Bengal over the last 15 years with two-fold increase in landings compared to the previous year.
- Hilsa shad continued its declining trend with 11,307 tonnes positioning itself at the sixth place.
- Landings by trawlers were almost doubled in 2019 compared to the previous year even with a slight reduction in the number of units operated.
- A new kind of fishery with combined operation of trawlnet and gillnet was employed in the harbours of Kakdwip and Namkhana during the second half of the year which yielded good catch along with more species diversity.



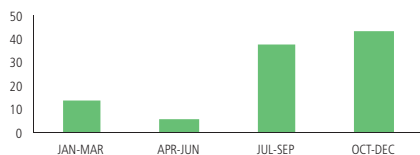
Major Landings (in '000 tonnes)



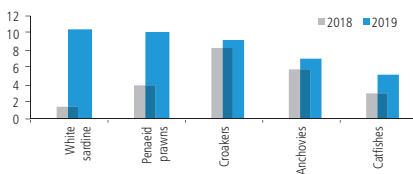
Assemblage (%)



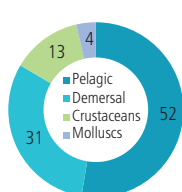
Sector-wise landings (%)



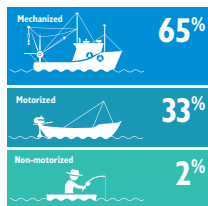
Quarter-wise landings (%)



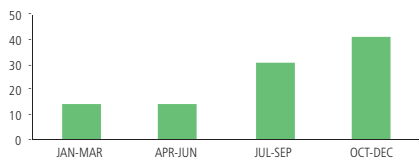
Major Landings (in '000 tonnes)



Assemblage (%)



Sector-wise landings (%)



Quarter-wise landings (%)

Odisha

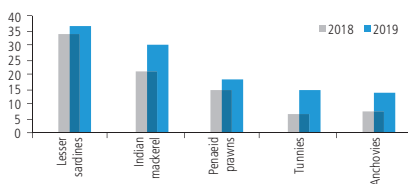
Total estimated landings - **1.02** lakh tonnes

- An unusual increase in White sardine landings in the state was noticed as compared to previous years.
- The landings of Hilsa shad continued its decline in 2019 also.
- A decrease of 75.6%, 76.2%, 32.0% and 38.9% was observed in landings of Indian mackerel, Lesser sardines, Bombayduck and Ribbon fishes in 2019 respectively.
- The maximum catch per unit effort was estimated for multi-day trawl, followed by mechanized gillnet.
- Among six coastal districts in Odisha, a large quantum of marine fish landings was shared by two districts namely Balasore and Jagatsinghpur.

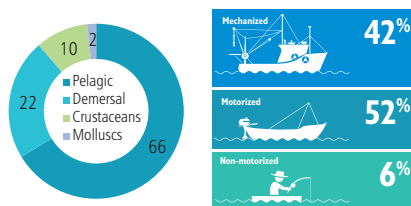
Andhra Pradesh

Total estimated landings - **2.59** lakh tonnes

- An increase of 34% was observed in the landings of Andhra Pradesh compared to 2018, contributing 7.2% to the total landings in India during 2019.
- There was reduction in the landings of Ribbon fishes and Croakers which were among the top five resources in 2018.
- Major share to the total marine fish landings in the state was attributed to motorized sector which is unique among all maritime states.
- There was a slight decrease in the number of units operated and in actual fishing hours with increased catch per unit (CPU) and catch per hour (CPH).
- There was a drop in the number of fishing days due to *Fani* cyclone during the months of April and May.

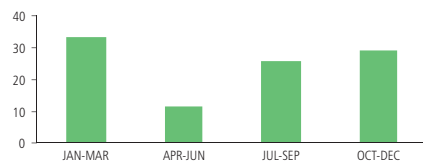


Major Landings (in '000 tonnes)



Assemblage (%)

Sector-wise landings (%)

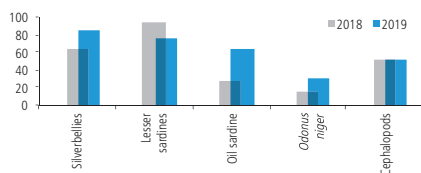


Quarter-wise landings (%)

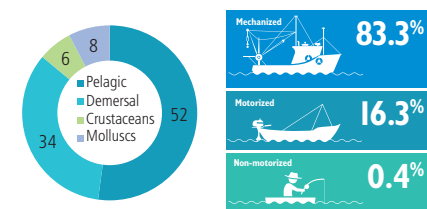
Tamil Nadu

Total estimated landings - **7.75** lakh tonnes

- Tamil Nadu recorded 10% increase in overall landings this year and reached the 1st position in the list of marine fish contributing states and its contribution to all India landings was 21.8%.
- Landings of *Odonus niger* was doubled with respect to previous year and listed among top five resources.
- Even though the landings of lesser sardine reduced in 2019, huge increase in oil sardine landings was seen (63,400 tonnes).
- Among the 13 marine districts of Tamil Nadu, Ramanathapuram, Chennai, Kanyakumari, and Nagapattinam contributed maximum landings by 27%, 18%, 12% and 11% respectively.

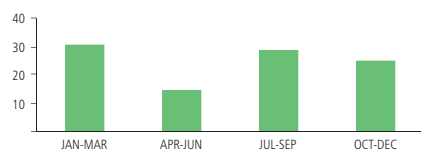


Major Landings (in '000 tonnes)



Assemblage (%)

Sector-wise landings (%)

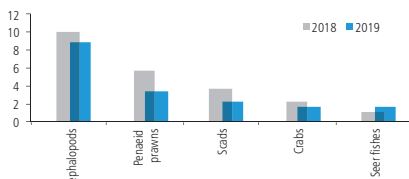


Quarter-wise landings (%)

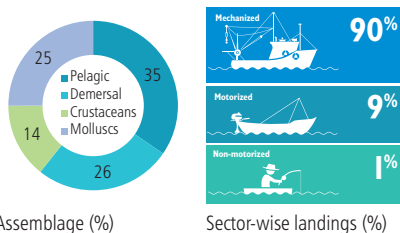
Puducherry

Total estimated landings - **0.37** lakh tonnes

- Marine fish production of the Union Territory (Puducherry region and Karaikkal region) was 0.37 lakh tonnes showing a decrease compared to the 2018 (0.45 lakh tonnes).
- The contribution from the U.T. towards all India marine fish landings was 1.0%.
- Karaikkal region shared 63% and Puducherry region shared 37% of the landings.
- Seer fishes came to the list of top five resources with increased landings compared to the previous year.
- The top four resources have declined in comparison to their landings in 2018.

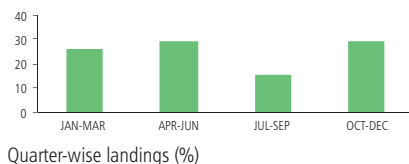


Major Landings (in '000 tonnes)

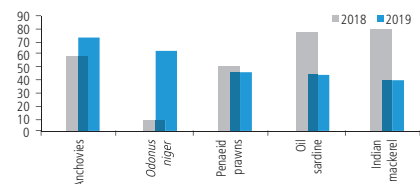


Assemblage (%)

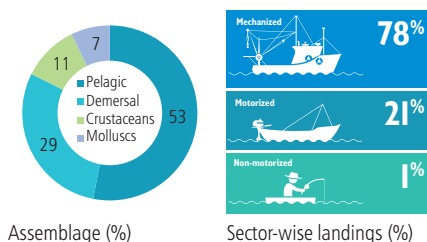
Sector-wise landings (%)



Quarter-wise landings (%)

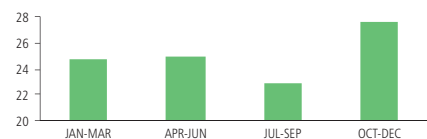


Major Landings (in '000 tonnes)



Assemblage (%)

Sector-wise landings (%)



Quarter-wise landings (%)

Kerala

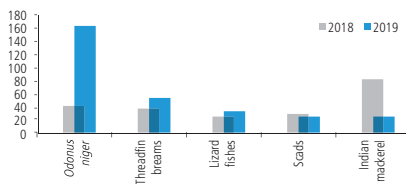
Total estimated landings - **5.44** lakh tonnes

- A sharp decline in the total marine fish landings (15%) of Kerala was observed during the year 2019.
- In addition to the declining trend of common resources which were once prevalent in the region, unusual formations of frequent cyclones occurred in Arabian Sea was also one of the reasons for the reduced landings.
- Oil sardine, the most important species of the state registered the lowest catch in last two decades and *Odonus niger* emerged as a major component of trawl catch.
- Third quarter (Jul-Sep) which was found to be the most productive in previous years turned out to be a less productive season in 2019 with only 23% of the total landings.

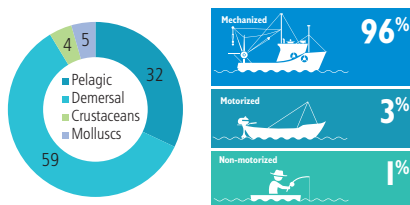
Karnataka

Total estimated landings - **5.01** lakh tonnes

- In spite of unusual storms in west coast, the state of Karnataka witnessed an increase in the marine fish landings.
- Odonus niger* became the top most resource and the increased landings of the state is mainly due to this species.
- Decreased landings of Indian mackerel was observed and brought it to the fifth position which was the topmost resource of the state in 2018.
- There was considerable reduction in the landings of oil sardine in 2019 which was among the top five resources in the previous year.

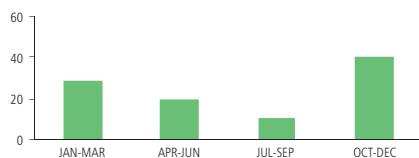


Major Landings (in '000 tonnes)

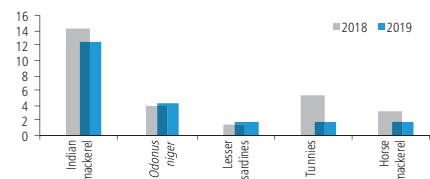


Assemblage (%)

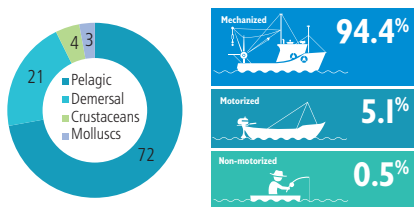
Sector-wise landings (%)



Quarter-wise landing (%)

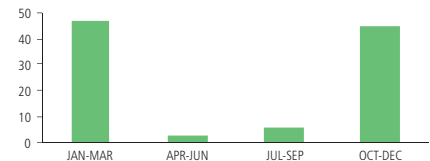


Major Landings (in '000 tonnes)



Assemblage (%)

Sector-wise landings (%)



Quarter-wise landings (%)

Goa

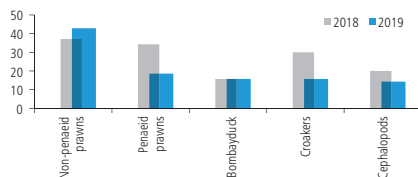
Total estimated landings - **0.33** lakh tonnes

- The state of Goa had showed a declining trend in landings during 2019.
- There was 44% decline in total landings in 2019, with maximum percentage loss among all the maritime states.
- Indian mackerel remained as the top most resource as in 2018 with slight drop in landings.
- Major decline was observed in the landings of Anchovies which was in the 2nd position in the list of major resources in 2018.
- The district of South Goa contributed about 60% of the landings while district of North Goa provided the 40% of the total landings.

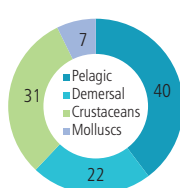
Maharashtra

Total estimated landings - **2.01** lakh tonnes

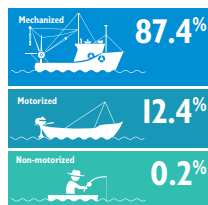
- There was 32% decrease in the landings compared to 2018, accounting for 5.6% of all India marine fish landings, ranking seventh in the list of marine fish contributors to the nation.
- Mumbai city district contributed 40% followed by Raigad and Ratnagiri.
- Bombayduck became the third most landed species in 2019 even though there was a slight decline in landings in comparison to previous year.
- All the top five resources showed decreased landings except non-penaeid prawns in comparison to previous year.



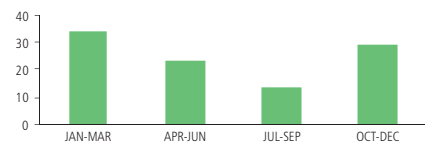
Major Landings (in '000 tonnes)



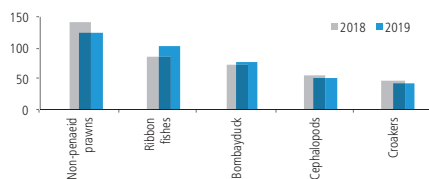
Assemblage (%)



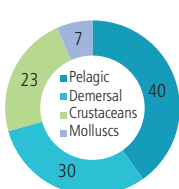
Sector-wise landings (%)



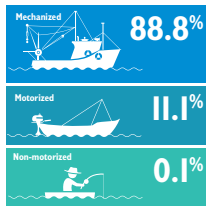
Quarter-wise landings (%)



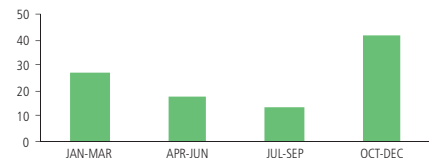
Major Landings (in '000 tonnes)



Assemblage (%)



Sector-wise landings (%)



Quarter-wise landings (%)

Gujarat

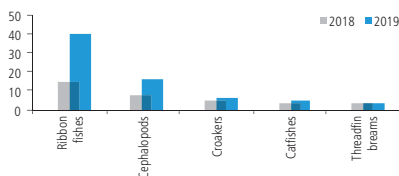
Total estimated landings - **7.49** lakh tonnes

- Gujarat recorded 4% decrease in landings in 2019 and is in the 2nd position in the marine fish contributors to nation in 2019 accounting 21% to all India total landings.
- Veraval, Mangrol, Porbandar and three Bombayduck landing centers (Jafrabad, Amreli, and Rajpara) notched 71% of the total landings. The contribution of Kutch district having Jakhau port accounted for 5.7% to the total landings.
- Among the districts, Gir Somnath contributed 44% while Dev Bhoomi Dwaraka and Amreli accounted for 17% and 12% respectively.
- The maximum contribution to the total landings in the state was in the 4th quarter.

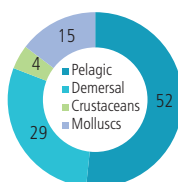
Daman and Diu

Total estimated landings - **1.12** lakh tonnes

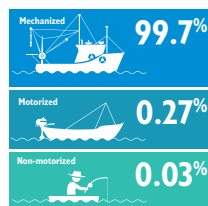
- Marine fish landings in Daman and Diu saw a remarkable increase compared to previous year and the U.T. occupies 8th position in all India landings.
- The UT witnessed a huge increase in landings of Ribbon fishes and retained it as the topmost resource in 2019.
- Mechanized sector contributed 99.7% of the total landings. Motorized and artisanal sector were 0.27% and 0.03% respectively during 2019.
- Catch per unit effort of multiday trawlers had slightly increased from 2018.



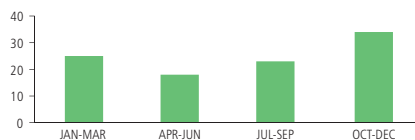
Major Landings (in '000 tonnes)



Assemblage (%)



Sector-wise landings (%)



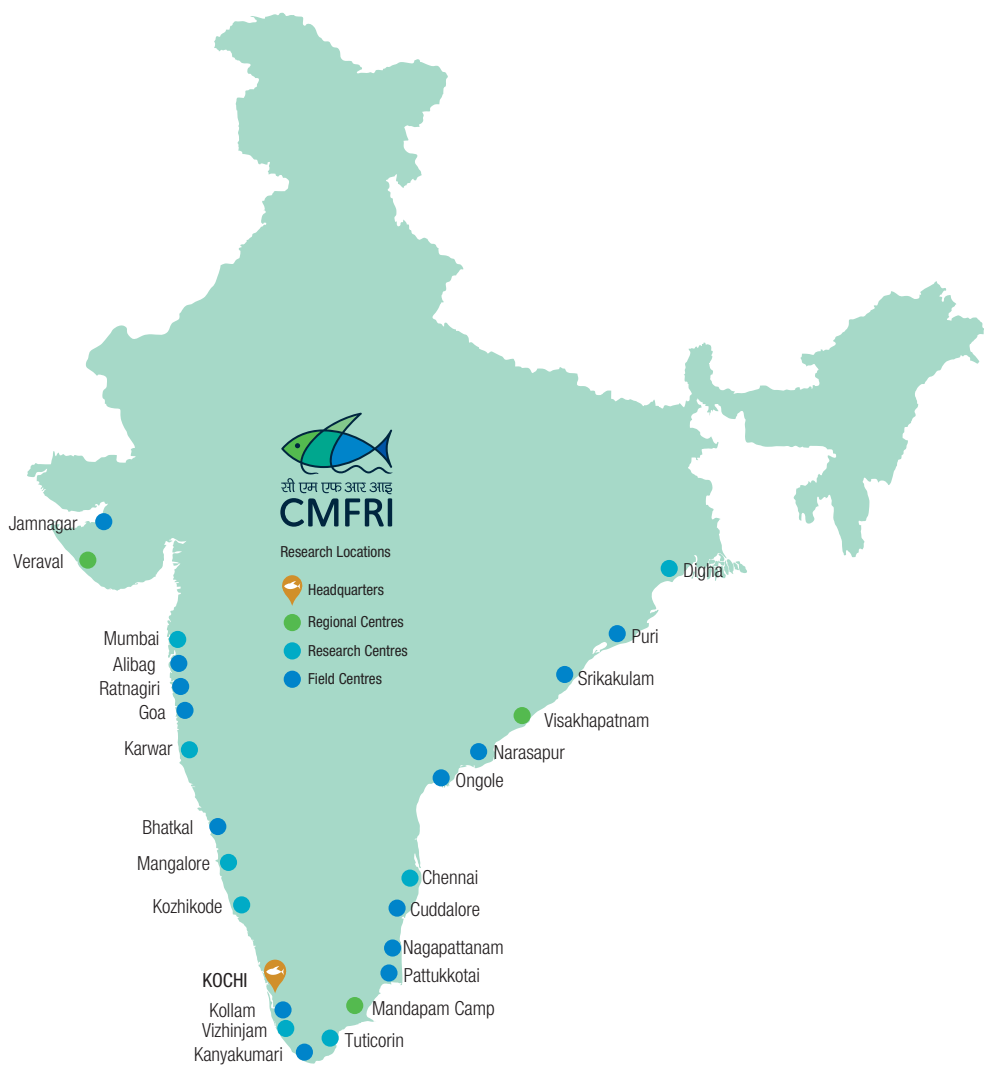
Quarter-wise landings (%)

Valuation of fish landings across states

The estimate of the value of marine fish landings during 2019 at landing centre level was ₹60,881 crores, (15.7% increase over 2018). The unit price per kg of fish at landing centre was ₹170.5, (12.2% increase over 2018). At the retail level, the estimated value was ₹92,356 crores (15.0% increase over 2018). The unit price at the retail market level was ₹258.7 (11.6% increase over 2018). The marketing efficiency determining the producer's share of the consumers was found to be 65.9, (0.59 % increase over 2018).

State	Valuation (₹crores)					
	Landing Centre			Retail Centre		
	2018	2019	Share (%)	2018	2019	Share (%)
Andhra Pradesh	2662	3341	5.49	4159	5480	5.93
Goa	920	601	0.99	1312	874	0.95
Gujarat	11536	12568	20.64	17382	19379	20.98
Karnataka	6442	7118	11.69	10470	10030	10.86
Kerala	10827	12387	20.35	14969	17515	18.97
Maharashtra	5771	6402	10.52	8510	9835	10.65
Odisha	1255	1563	2.57	2159	2526	2.73
Puducherry	733	832	1.37	1050	1265	1.37
Tamil Nadu	8576	10054	16.51	14464	16695	18.08
West Bengal	2759	4306	7.07	4184	6370	6.90
Daman and Diu	1156	1709	2.81	1664	2386	2.58
Total	52637	60881	100.00	80323	92356	100.00

Data Collection Centres of CMFRI





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