

Marine Fish Landings in India 2020



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Indian Marine Fisheries in 2020

At a Glance

1

The estimated marine fish landings from India's mainland coast for 2020 is 2.73 million tonnes, down from 3.56 million tonnes in 2019, a drop of roughly 23.45%.

2

Tamil Nadu retained the first position amongst the states based on marine fish landings in India during the years 2019 and 2020 with 7.75 lakh tonnes and 5.59 lakh tonnes respectively.

3

Major marine fishery resources in 2020 landings are, Lesser sardines 2.16 lakh tonnes accounting for 7.91% of the national total, Indian mackerel 1.80 lakh tonnes with 6.61%, Cephalopods 1.61 lakh tonnes with 5.90%, Penaeid prawns 1.57 lakh tonnes with 5.74%, Anchovies 1.45 lakh tonnes with 5.31% contribution.

4

The landings of Oil sardine (*Sardinella longiceps*) moved to the 10th position with only 0.83 lakh tonnes in 2020 (3.05% of national total).

5

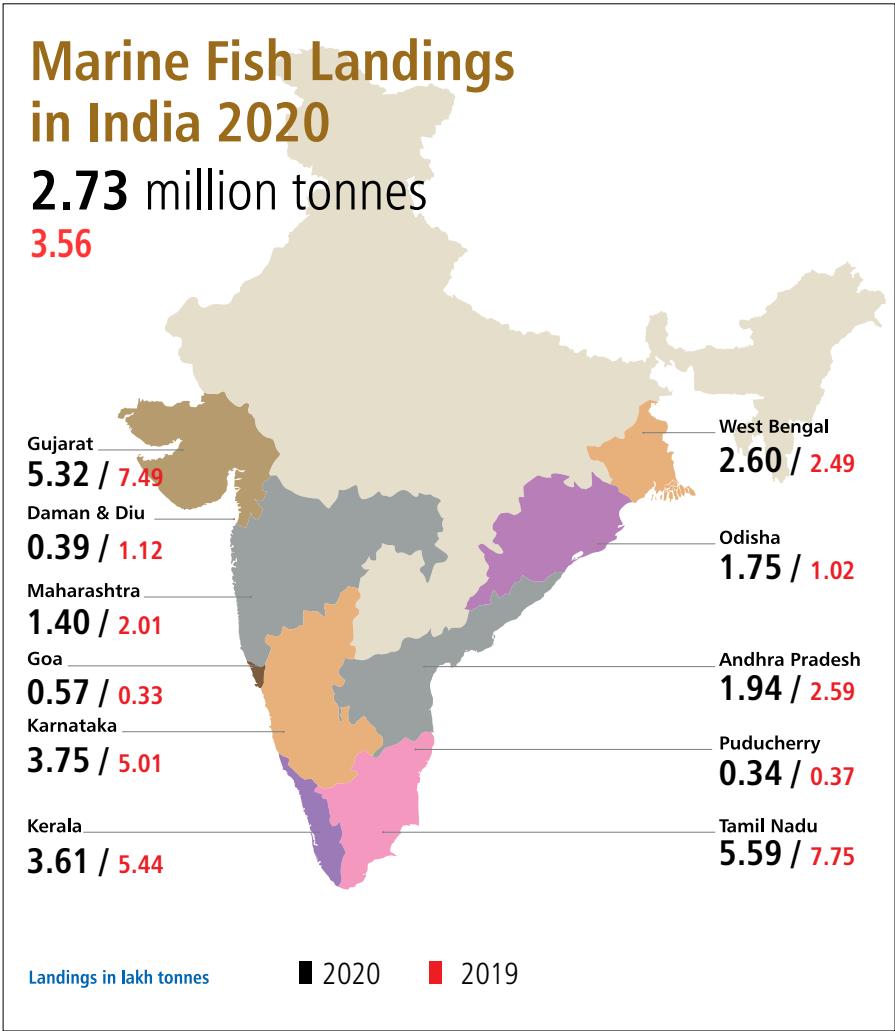
Compared to 2019, the major setback is for Non-penaeid prawns, Oil sardine and Ribbonfishes with a reduction of 44.04%, 42.76% and 34.30% respectively. The major gainers are Lesser sardines, Scads and Indian mackerel with an increase in landings by 26.65%, 16.22% and 11.27% respectively.

6

COVID-19 lockdown resulted in a considerable reduction in the number of fishing days in March, April, and May, while cyclones (Amphan in May and Nivar in November) significantly reduced the number of fishing days in some states.

The national level sample survey, based on the Stratified Multistage Random Sampling Design (SMRSD), was executed to estimate individual species-wise, fishing gear-wise, monthly marine fish landings along with fishing effort, both in number of fishing trips as well as hours of fishing for the year 2020 for each of the fishing zones distributed along the Indian coast covering the nine maritime states and two coastal union territories.

The marine fish landings from the coast of the mainland of India in 2020 was estimated as 2.73 million tonnes against 3.56 million tonnes in 2019, experiencing a decline by about 23.45%. The decline in landings by all the maritime states in northwest, southwest and southeast regions except Goa resulted in the reduction in the national level landings in 2020. The percentage decline in marine fish landings by the states ranged between 8.17% and 65.22%.



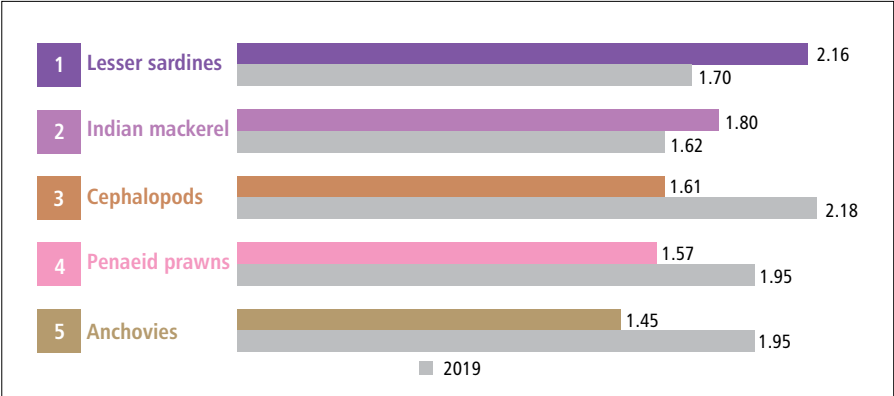
Estimated marine fish landings (tonnes) in India 2020

PELAGIC FINFISH		DEMERSAL FINFISH	
CLUPEOIDS		ELASMOBRANCHS	
Wolf herring	10185	Sharks	10507
Oil sardine	83048	Skates/Guitarfish	2963
Lesser sardines	215676	Rays	12438
Hilsa shad	9423	Eels	9754
Other shads	11629	Catfishes	57635
Anchovies		Lizard Fishes	73019
Coilia	32230	PERCHES	
Setipinna	9295	Rock cods	33730
Stolephorus	59488	Snappers	11207
Thryssa	44020	Pig-face breams	14254
Other clupeids	65295	Threadfin breams	122835
Bombayduck	79178	Bullseyes	22107
Half Beaks&Full Beaks	4356	Other perches	52368
Flying Fishes	406	Goatfishes	19966
Ribbon Fishes	143711	Threadfins	6370
CARANGIDS		Croakers	117698
Horse Mackerel	38434	Silverbellies	60284
Scads	85792	Whitefish	3477
Leather-jackets	12910	POMFRETS	
Other carangids	121290	Black pomfret	23377
MACKERELS		Silver pomfret	23384
Indian mackerel	180216	Chinese pomfret	8009
Other mackerels	856	FLAT FISHES	
SEER FISHES		Halibut	699
<i>Scomberomorus commerson</i>	23482	Flounders	35
<i>Scomberomorus guttatus</i>	13783	Soles	33964
<i>Scomberomorus lineolatus</i>	2		
<i>Acanthocybium solandri</i>	192	CRUSTACEANS	
TUNNIES		Penaeid prawns	156586
<i>Euthynnus affinis</i>	28318	Non-penaeid prawns	100781
<i>Auxis</i> spp.	12728	Lobsters	1389
<i>Katsuwonus pelamis</i>	11076	Crabs	38551
<i>Thunnus tonggol</i>	4052	Stomatopods	4381
<i>Thunnus albacares</i>	13410	MOLLUSCS	
Other tunnies	630	Mussels, Oysters & Clams [#]	107559
Bill Fishes	7532	Bivalves	4175
Barracudas	37624	Gastropods	496
Mulletts	8657	Cephalopods	
Unicorn Cod	11	Squids	72998
OTHERS		Cuttlefish	81322
Seaweed [#]	28545	Octopus	6684
MISCELLANEOUS	170001		
TOTAL		2862483	

[#]The estimates are based on an alternate method and are excluded from the comparisons made. The comparisons are based on 2726379 tonnes (2862483-28545-107559=2726379)

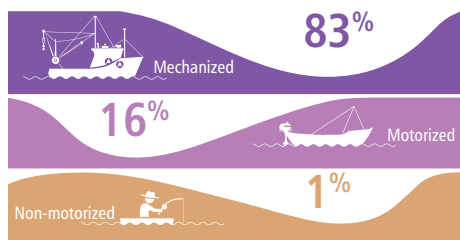
Landings in Goa, Odisha and West Bengal showed an increase in 2020 compared to 2019 by about 73.92%, 71.59% and 4.57% respectively. When examined state-wise, the maximum landings were in Tamil Nadu (5.59 lakh tonnes), Gujarat (5.32 lakh tonnes) and Karnataka (3.75 lakh tonnes) with 20.51, 19.51 and 13.75 as the percentage contribution towards national total. In 2019, the percentage contribution towards national total by these states were 21.75, 21.04 and 14.08 respectively. The marine fish landings in Kerala reduced and its position moved from third in 2019 to fourth in 2020 with percentage contributions towards national total in respective years as 15.27 and 13.24.

In 2020, the southwest region comprising Kerala, Karnataka and Goa had the maximum landings of 7.93 lakh tonnes (29% of national total) recording 26.45% reduction compared to 2019 landings. Contribution from the other regions are 7.87 lakh tonnes from the southeast region (10.70 lakh tonnes in 2019) accounting for 29% (30.06% in 2019); 7.11 lakh tonnes from the northwest region which is 26% of national total (in place of 10.62 lakh tonnes which is 29.82% in 2019); 4.35 lakh tonnes in northeast region contributing 16% to national total (3.51 lakh tonnes which is 9.85% in 2019).

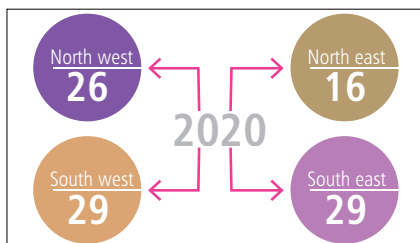


Major five species/groups with their contribution (lakh tonnes) towards total marine fish landings in India (2019 & 2020)

Major marine fishery resources in 2020 landings are, Lesser sardines 2.16 lakh tonnes accounting for 7.91% of the national total (1.70 lakh tonnes with 4.78% contribution in 2019), Indian mackerel 1.80 lakh tonnes with 6.61% contribution (1.62 lakh tonnes and 4.55% in 2019), Cephalopods 1.61 lakh tonnes with 5.90%, Penaeid prawns 1.57 lakh tonnes with 5.74% (1.95 lakh tonnes and 5.46% in 2019), Anchovies 1.45 lakh tonnes with 5.31%, Ribbonfishes 1.44 lakh tonnes with 5.27% (2.19 lakh tonnes and 6.14% in 2019) and Threadfin breams 1.23 lakh tonnes with 4.51% contribution (1.53 lakh tonnes and 4.30% in 2019). The Oil sardine (*Sardinella longiceps*) which used to be at the first position a few years ago moved to the 10th position with only 0.83 lakh tonnes as the landings in 2020 (3.05% of national total). Among the major 10 resources, compared to the landings in 2019, the reduction percentage was 44.04% for Non-penaeid prawns, 42.76% for Oil sardine and 34.30% for Ribbonfishes whereas Lesser sardines, Scads and Indian mackerel



Sector-wise landings (%) India

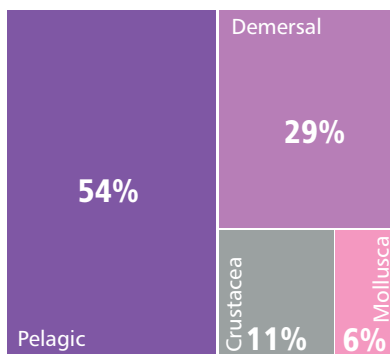


Region-wise contribution (%)

landings showed increase by 26.65%, 16.22% and 11.27% respectively.

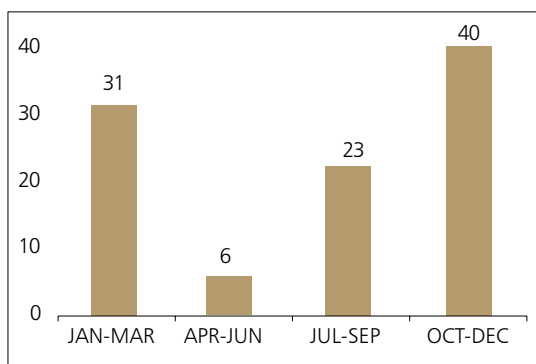
Assemblage wise percentage contributions were Pelagic 54%, Demersal 29%, Crustacea 11% and Mollusca 6%.

Out of the total 2.73 million tonnes of marine fishery resources harvested in 2020 about 2.26 million tonnes (83.0%) is by mechanised fishing vessels, 0.44 million tonnes (16.1%) is by motorised fishing crafts and only 0.03 million tonnes (1.0%) is by non-mechanised fishing crafts. In 2019, the contribution



Assemblage (%): India

by the mechanised, motorised and non-mechanised sectors were 83.4%, 15.7% and 0.9% respectively. The overall catch rate of mechanised fishing vessels in 2020 is 2175 kg/trip, that for the motorised fishing vessels is 144 kg/trip and for the non-mechanised fishing vessels, it is 45 kg/trip. The catch rates per hour of fishing for the three sectors are 60 kg, 23 kg and 20 kg respectively for mechanised, motorised and non-mechanised sectors. There is not much difference in the per hour catch rate of all the three sectors in 2020 compared to that in 2019 but the per trip catch rate of mechanised sector in 2020 is less by 11%.



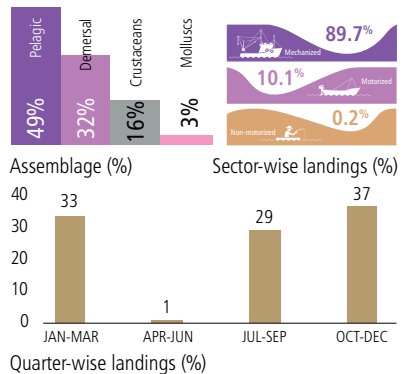
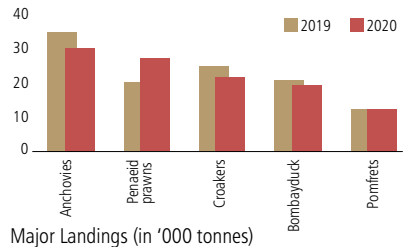
Quarter-wise landings (%) India

A total of 815 species recorded in the landings during 2020 by sampling from the 1269 landing centres distributed along the 6069 km long coastline of India. The number of species in the landings in 2019 was 859. The maritime state with maximum number of species reported in landings is Tamil Nadu (594) followed by Kerala (449) and Odisha (269).

West Bengal

Total estimated landings **2.60** lakh tonnes

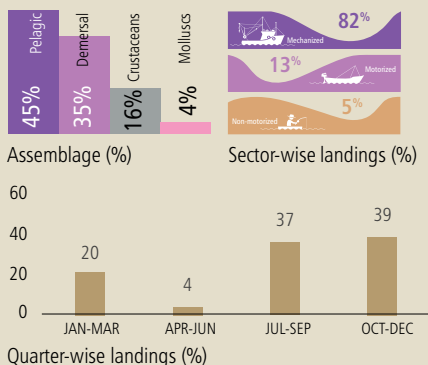
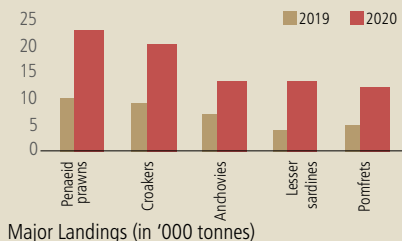
- Despite Covid 19 lockdowns and the devastating Amphan cyclone, West Bengal recorded a mild increase of 5% in its marine fish landings during 2020. The state recorded 2.60 lakh tonnes of total landings while its previous year catch was 2.49 lakh tonnes.
- Hilsa shad continued its declining trend with 7101 tonnes.
- Second quarter (Apr-Jun) was the least productive season with only 1% of the total landings.
- The coastal districts South 24 Parganas and Purba Midnapur contributed nearly equal shares with 49% and 51% of the total landings, respectively.



Odisha

Total estimated landings **1.75** lakh tonnes

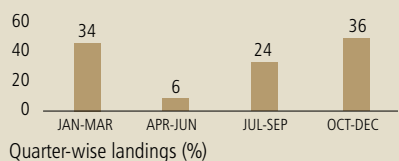
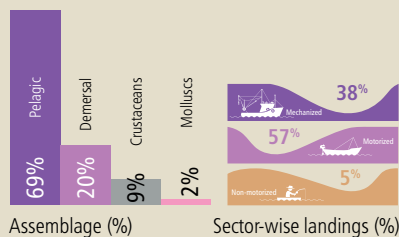
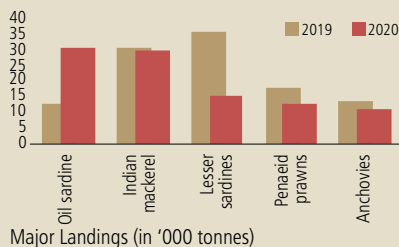
- In Odisha, total marine fish landings in 2020 were estimated as 1.75 lakh tonnes. It showed an increase of 72% over the landings in 2019.
- A twofold increase in the landings of Lesser sardines (13094 tonnes) was observed in comparison to 2019.
- The landings of Hilsa shad showed a decline since 2018, and its landing was estimated to be 1818 tonnes in 2020.
- In 2020, about 69% of the marine fish landings in the state were contributed by multi-day trawlers.
- A large quantum of marine fish landings was contributed by two districts, namely Bhadrak (58430 tonnes) and Jagatsinghpur (56855 tonnes), in 2020.



Andhra Pradesh

Total estimated landings **1.94** lakh tonnes

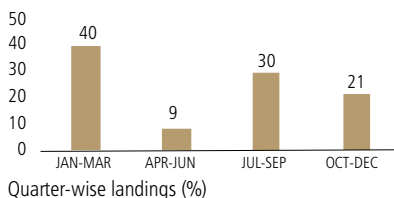
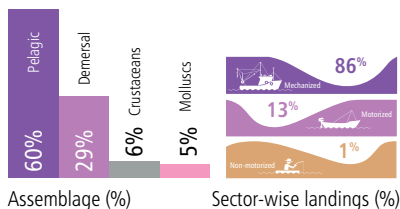
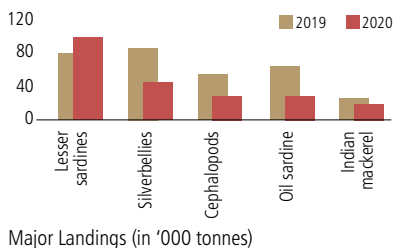
- The total marine fish landings of Andhra Pradesh during the year 2020 was estimated to be 1.94 lakh tonnes, which was reduced by 25% compared to 2019.
- The major resources landed at Andhra Pradesh during 2020 were Oil sardine, Indian Mackerel, Lesser sardines, Penaeid prawns and Anchovies.
- Around 38% of the total landings were from Mechanised sector, 57% were from Motorised sector, and 4% were from Non-motorised sector.
- Of the total landings, 69% were Pelagic resources, 21% were Demersal resources, 9% were Crustaceans, and 2% were Molluscs.
- East Godavari gained a top position with 37%, followed by Visakhapatnam with 22% among the nine coastal districts of Andhra Pradesh.



Tamil Nadu

Total estimated landings **5.59** lakh tonnes

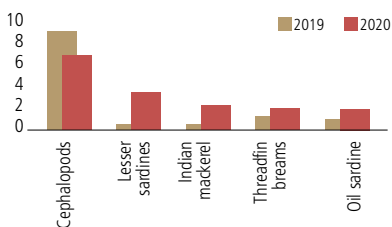
- The Tamil Nadu marine fish landings in the year 2020 was 5.59 lakh tonnes and the previous year, it was 7.75 lakh tonnes. There was a 28% of decrease when compared with the year 2019.
- Tamil Nadu retained the first position of highest marine fish landings in India during the years 2019 and 2020. The contribution of Tamil Nadu to all India landings was 21%.
- Lesser sardine showed a 25.46% increase in landings, and Oil sardine showed a 58% reduction in marine fish landings as compared to 2019. Silver bellies and cephalopod landings decreased by approximately 50%.
- The Ramanathapuram district landings alone form 47% of the total landings of the state, while it was only 27% in 2019.



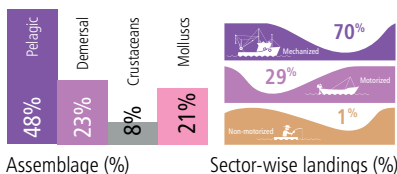
Puducherry

Total estimated landings **0.34** lakh tonnes

- The Puducherry marine fish landings in 2020 were 0.34 lakh tonnes, and the previous year was 0.37 lakh tonnes. There was 8% decrease when compared with the year 2019.
- Lesser sardine was the major gainer in landings, whereas cephalopods was the major loser.
- Lesser sardine showed an eightfold increase in landings in 2020, followed by Indian mackerel (fourfold), and cephalopods showed a 23.54% decrease in landings as compared to 2019.
- Multi-day trawlers recorded the highest landings (34.44%).

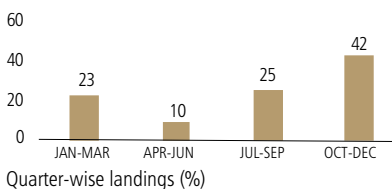


Major Landings (in '000 tonnes)

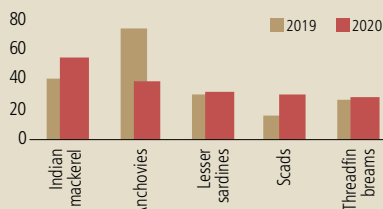


Assemblage (%)

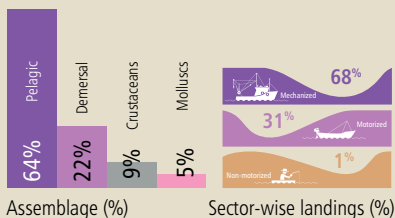
Sector-wise landings (%)



Quarter-wise landings (%)

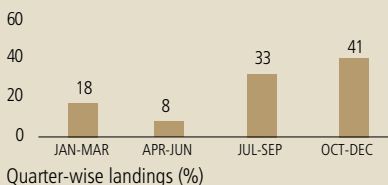


Major Landings (in '000 tonnes)



Assemblage (%)

Sector-wise landings (%)



Quarter-wise landings (%)

Kerala

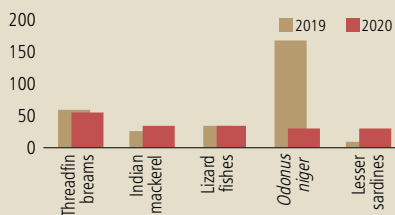
Total estimated landings **3.61** lakh tonnes

- Marine fish landings in Kerala witnessed a loss of 34% in 2020 compared to the previous year. The state has recorded a total of 3.61 lakh tonnes this year, which was around 1.8 lakh tonnes less than the last year's estimate of 5.44 lakh tonnes.
- Oil sardine was found to be in the same declining trend for the last few years with a meagre catch of 13154 tonnes.
- Multi-day trawlers contributed a major portion of the landings with 1.4 lakh tonnes, followed by ring seiners. In the motorised sector, ring seine was observed as the most dominant gear, followed by gillnet.
- Among districts, Kollam provided the maximum share with 25% of the total landings, followed by Ernakulam with 22%.

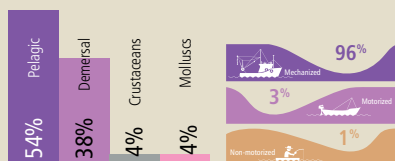
Karnataka

Total estimated landings **3.75** lakh tonnes

- The state of Karnataka recorded a decrease of 25%, compared to the previous year landings of 5.01 lakh tonnes.
- Oil sardine catch continued its declining trend from 12396 tonnes to meagre 1065 tonnes.
- Lesser sardines showed a fourfold increase as compared to 2019.
- Almost 90% of the total landings of the entire Karnataka state is being contributed by the two major harbours of Mangalore and Malpe.
- The usual pattern prevailed among the three districts, with Dakshina Kannada being the topmost, followed by Udupi with a marginally less catch, and Uttara Kannada the third.

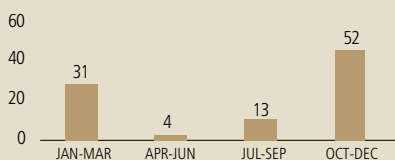


Major Landings (in '000 tonnes)

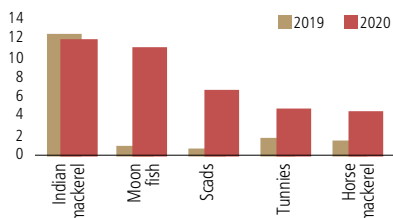


Assemblage (%)

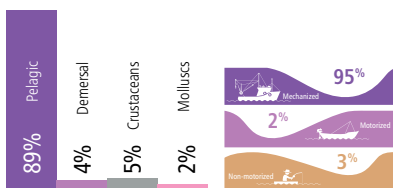
Sector-wise landings (%)



Quarter-wise landings (%)

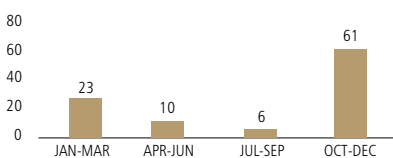


Major Landings (in '000 tonnes)



Assemblage (%)

Sector-wise landings (%)



Quarter-wise landings (%)

Goa

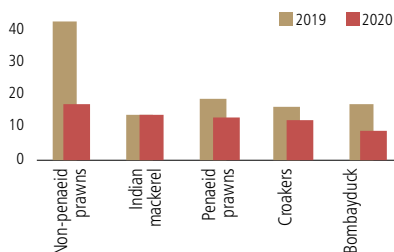
Total estimated landings **0.57** lakh tonnes

- Goa recorded 74% increase in landings; the major share of this increase in landings was due to the rise in the landings of Moon fish (*Mene maculata*), Scads, Tunnies, and Horse mackerel.
- Indian mackerel landings remained almost the same while Oil sardine catch had a sharp decline from 572 tonnes in 2019 to mere 2 tonnes in 2020.
- Except for Indian mackerel, all the other top four resources showed a positive increase in their landings.
- A reversal of preference for the non-motorised sector (0.5% increased to 3%) over motorised sector (5.1% reduced to 2%) was observed.
- South Goa had slightly more landings than North Goa.

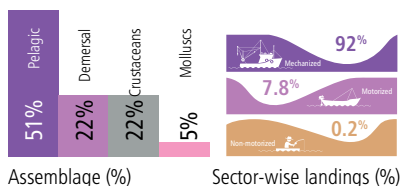
Maharashtra

Total estimated landings **1.40** lakh tonnes

- Maharashtra accounts for 5.1% of all India Marine fish landings, ranking 8th in the list of total marine fish contributors to the nation in 2020. However, there was a 30% decrease in landings compared to 2019.
- The district Mumbai City contributed 36% to the fish landings in Maharashtra, followed by Raigad (22.1%) and Ratnagiri (20.5%).
- The major harbours and single centers like New Ferry Wharf, Sassoon Dock (Old and New), Bassein Koliwada, Satpati, Arnala and Versova accounted for 44.7% of the total catch of Maharashtra.
- A decline in the landings of major species was observed except in the case of Indian mackerel.

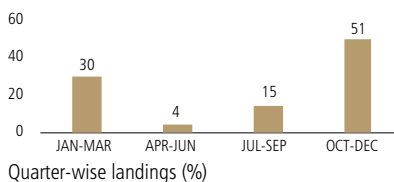


Major Landings (in '000 tonnes)



Assemblage (%)

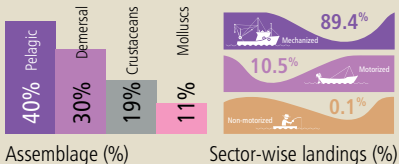
Sector-wise landings (%)



Quarter-wise landings (%)

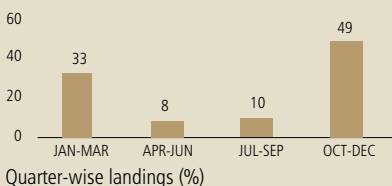


Major Landings (in '000 tonnes)



Assemblage (%)

Sector-wise landings (%)



Quarter-wise landings (%)

Gujarat

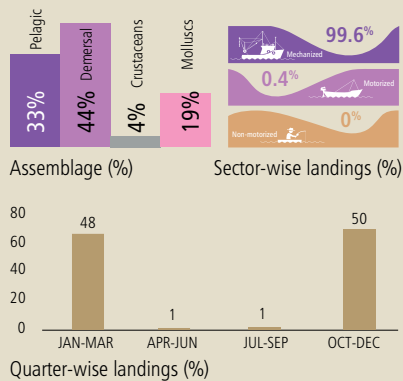
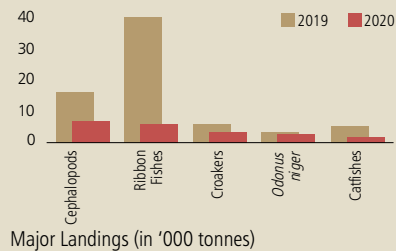
Total estimated landings **5.32** lakh tonnes

- A decline of 29% was observed in the marine landings of Gujarat in 2020 when compared to 2019. However, Gujarat still maintained its second position in the list of marine fish contributors to the nation (19.5%).
- Gir Somnath district contributed 49.1% of the total fish landings in Gujarat, followed by Porbandar (15.7%) and Junagadh (13.8%). The individual contributions of the other districts were below 10%.
- The major harbours Veraval, Mangrol and Porbandar, accounted for 59% of the total catch in Gujarat.
- A uniform fall in the landings of all major resources was observed except Cephalopods which showed a marginal increase.

Daman and Diu

Total estimated landings **0.39** lakh tonnes

- Marine fish landings in Daman and Diu showed a significant decrease of 65% in 2020 compared to 2019.
- Diu showed the highest decline in marine fish landings from 2019 to 2020 among the maritime units viz. states and UTs.
- The decline in the landings of Ribbonfishes, Catfish and Cephalopods were 83.5%, 57.2% and 55.5%, respectively.

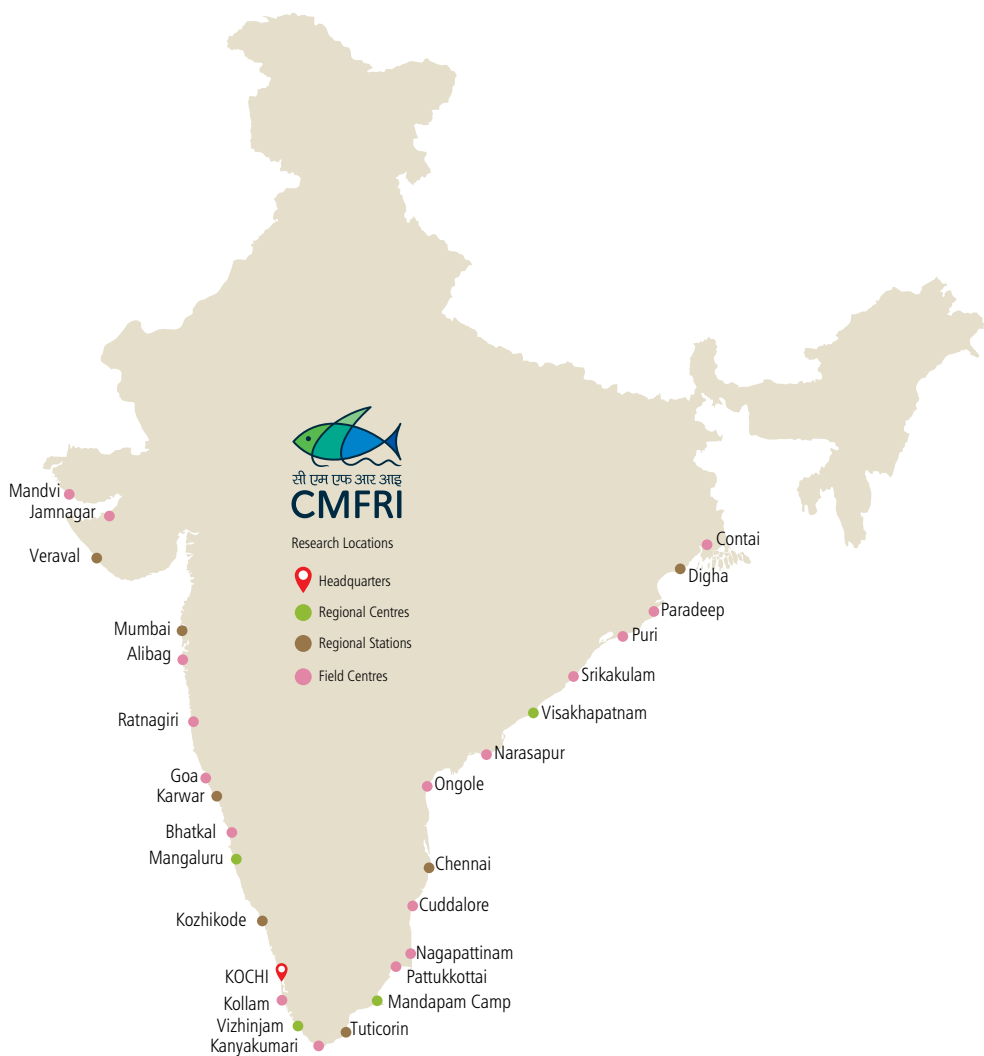


Valuation of fish landings across states

The estimate of the value of marine fish landings during 2020 at landing centre level was ₹45,518 crores, (25.23% decrease over 2019). The unit price per kg of fish at landing centre was ₹166.97 (1.92% decrease over 2019). At the retail level, the estimated value was ₹64,119 crores (30.57 % decrease over 2019). The unit price at the retail market level was ₹235.20 (8.93 % decrease over 2019). The marketing efficiency determining the producer’s share of the consumers was found to be 70.99 (7.69% increase over 2019).

State	Valuation (₹crores)					
	Landing Centre			Retail Centre		
	2019	2020	Share (%)	2019	2020	Share (%)
West Bengal	4306	4148	9.11	6370	5822	9.08
Odisha	1563	2976	6.54	2526	4211	6.57
Andhra Pradesh	3341	2553	5.61	5480	3796	5.92
Tamil Nadu	10054	7245	15.92	16696	12184	19.00
Puducherry	832	527	1.16	1265	734	1.15
Kerala	12387	7789	17.11	17515	9727	15.17
Karnataka	7118	6155	13.52	10030	8305	12.95
Goa	601	1197	2.63	874	1512	2.36
Maharashtra	6402	3105	6.82	9835	4353	6.79
Gujarat	12568	9174	20.15	19379	12560	19.59
Daman & Diu	1709	647	1.42	2386	915	1.43
Total	60881	45518	100.00	92356	64120	100.00

Data Collection Centres of CMFRI





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