



Farmed Marine Finfish Species in Brief

Sea cage farming has paved way for intensive and commercial-level production of finfish in the coastal areas of the country. Since its initiation in 2007 by ICAR- Central Marine Fisheries Research Institute (CMFRI), notable strides have been made in terms of innovations in cage and mooring system design and fabrication. Demonstrations of cage farming were undertaken by ICAR-CMFRI under a participatory mode with the help of local fishermen co-operatives and entrepreneurs. Two versions of 6-meter diameter cages indigenously developed by ICAR-CMFRI and fabricated with GI and HDPE frames, have gained traction among fishermen. Comprehensive Guidelines and Good Sea Cage Farming Practices tailored for different regions in the country have also been developed by ICAR-CMFRI.

The institute has identified and geo-referenced 146 potential cage farming sites (Total area: 47384 Ha) along the Indian coastline within 10 kms with a production potential of 2.13 million tonnes/year. A well-planned and scaled-up programme to commercialize sea-cage farming will go a long way in realising the Blue Economy potential in India. Furthermore, policy initiatives that open marine areas for sea cage farming with regulatory guidance and adequate social security coverage can catalyse such an initiative. Establishing end-to-end value chains and addressing stakeholders' concerns following sustainability principles are also essential.

The subsequent section provides a snapshot on farming of important finfish species, detailing their yield potential, unit cost, and farmgate price realized.

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Mariculture: Species and Harvest Potential in Brief

Sl No.	Species	Stocking Size - Total length (cm)	Stocking Density (no./m ³)	Culture Duration (months)	Size at Harvest (kg)	Survival (%)	Food Conversion Ratio	Production (in tonnes) Cage	Yield (kg/m ³)	Prod. Cost (Rs/kg)	Farm-gate Price (Rs/kg)
Open Sea Cage – Circular (6m diameter, 4m depth, volume 114m³)											
1.	Cobia (<i>Rachycentron canadum</i>)	15	9.0	8	3.0	90	1:5 (low value fish)	3.0	27	250	400
2.	Indian pompano (<i>Trachinotus mookalee</i>)	10	25	8	0.8	90	1:1.5 (artificial feed)	2.0	18	260	400
3.	Silver pompano (<i>Trachinotus blochii</i>)	10	25	8	0.6	90	1:1.5 (artificial feed)	1.75	12	250	400
4.	Grouper (<i>Epinephelus coioides</i>)	10	25	10	1.0	80	1:5 (low value fish)	2.0	20	210	400
5.	Snapper (<i>Lutjanus johnii</i>)	10	25	8	0.8	80	1:5 (low value fish)	2	16	210	400
6.	Maze rabbitfish (<i>Siganus vermiculatus</i>)	10	35	10	0.4	90	1:1.5 (artificial feed)	1.5	12.5	180	400
7.	Seabass (<i>Lates calcarifer</i>)	10	25	8	1.0	90	1:1.5 (artificial feed) 1:4 (low value fish)	2.5	22	250	500
Coastal Pond Culture (1 ha.) (Salinity: 15-32 ppt)								Production (in tonnes) from Pond (per ha.)			
1.	Indian pompano (<i>Trachinotus mookalee</i>)	10	1.5	11	0.8	80	1:1.5 (artificial feed)	9.5	0.95	230	400
2.	Silver pompano (<i>Trachinotus blochii</i>)	10	1.5	6	0.35	80	1:1.5 (artificial feed)	4.2	0.45	230	400
3.	Grouper (<i>Epinephelus coioides</i>)	10	1.0	12	0.85	80	1:5 (low value fish)	6.4	0.64	210	400
4.	Maze rabbitfish (<i>Siganus vermiculatus</i>)	10	3	10	0.4	90	1:1.5 (artificial feed)	4.3	1.0	160	400



Cobia
(*Rachycentron canadum*)



Indian pompano
(*Trachinotus mookalee*)



Silver pompano
(*Trachinotus blochii*)



Grouper
(*Epinephelus coioides*)



Snapper
(*Lutjanus johnii*)



Maze rabbitfish
(*Siganus vermiculatus*)



Seabass
(*Lates calcarifer*)