



भारत सरकार
GOVERNMENT OF INDIA
मत्स्यपालन विभाग
Department of Fisheries



FISHTech Report



“To Explore Technologies in Fisheries and Aquaculture Sector”



20
26
JULY



MANAGE Fisheries Innovation and Startup Hub (MANAGE - FISHub)

(A National Fisheries Incubation Centre Supported by the Ministry of Fisheries, Animal Husbandry and Dairying, Govt. of India)

National Institute of Agricultural Extension Management (MANAGE)

(An Autonomous Organization of Ministry of Agriculture and Farmers Welfare, Govt. of India)

Rajendranagar, Hyderabad – 500 030, Telangana, India

<https://www.manage.gov.in/managefishub/>

MANAGE-FISHub

MANAGE – Fisheries Innovation and Startup Hub (MANAGE-FISHub) is a national-level incubation and innovation hub hosted at the National Institute of Agricultural Extension Management (MANAGE). It was established at MANAGE in 2025 with the support of the Department of Fisheries (DoF), Ministry of Fisheries, Animal Husbandry and Dairying (MoFAHD), Government of India, to transform the fisheries and aquaculture sector through innovative technology, entrepreneurship, and ecosystem development.

Vision

The Vision of MANAGE-FISHub is to foster sustainable innovation and entrepreneurship in the fisheries and aquaculture sector by nurturing startups, accelerating technology adoption, and promoting inclusive growth across the value chain.

Collaboration Partner

ICAR–Central Marine Fisheries Research Institute (ICAR–CMFRI)

The ICAR–Central Marine Fisheries Research Institute (ICAR–CMFRI) played a central role by collaborating with MANAGE-FISHub for the FISHTech Webinar Series.

Established on 3 February 1947, the ICAR–Central Marine Fisheries Research Institute (ICAR–CMFRI), headquartered in Kochi, Kerala, is one of the world's leading tropical marine fisheries research institutes under the Indian Council of Agricultural Research (ICAR). Renowned for its excellence in marine fisheries, mariculture, biotechnology, and coastal ecosystem research, ICAR-CMFRI develops innovative technologies, scientific knowledge, and skilled human resources to promote the sustainable growth and resilience of India's marine fisheries and aquaculture sector.

FISHTech Webinar

FISHTech Webinar series is a flagship online knowledge-sharing initiative of MANAGE–FISHub, designed to showcase innovative technologies developed by fisheries research institutions, ICAR institutes, State Fisheries Universities, and other academic and R&D organizations across India. The series aims to bridge the gap between technology developers and end users by creating a structured national platform for technology dissemination.

Objective of the Webinar

- To disseminate knowledge on emerging fisheries technology developed by fisheries institutes.
- To facilitate technology awareness among budding aquapreneurs, innovators, rural youth, students and fisheries professionals.
- To showcase commercialization pathways and startup opportunities linked with institution-developed fisheries technology
- To strengthen capacity building through expert-led sessions.
- To facilitate interaction among scientists, startups, aspiring aquapreneurs and students, thereby fostering collaborative learning and innovation ecosystems.

Program Schedule

The MANAGE-FISHub Webinar Series was organized as a structured 15-day intensive program, with each day dedicated to covered cutting-edge technologies and emerging trends within the fisheries sector.

INAUGURAL SESSION

Setting the context for the topics

TECHNICAL PRESENTATION

Detailed lecture by a subject matter expert from ICAR-CMFRI

Q & A SESSION

Interactive Forum for participants queries

Promotional Activities

The outreach focused on both institutional and public digital platforms

Regular updates and speaker profiles shared across social media handles

Short coming soon posters were used to redirect the participants

A key collaborating partner, **CMFRI** promoted the series through their internal WhatsApp Group

Information brochures and daily session links were shared through all WhatsApp groups



Formal invitation and program posters were sent to various fisheries colleges, KVKs and participants of MANAGE-FISHub Program

Personalized emails were sent to the MANAGE-FISHub participants

Regularly reminder Email were sent to registered participants 12 hours and one hour before each live session

MANAGE-FISHTech Webinar Meet Our Speakers



MANAGE-FISHTech Webinar



MANAGE-FISHTech Webinar



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Coastal Pond & Sea Cage Farming of Indian Pompano



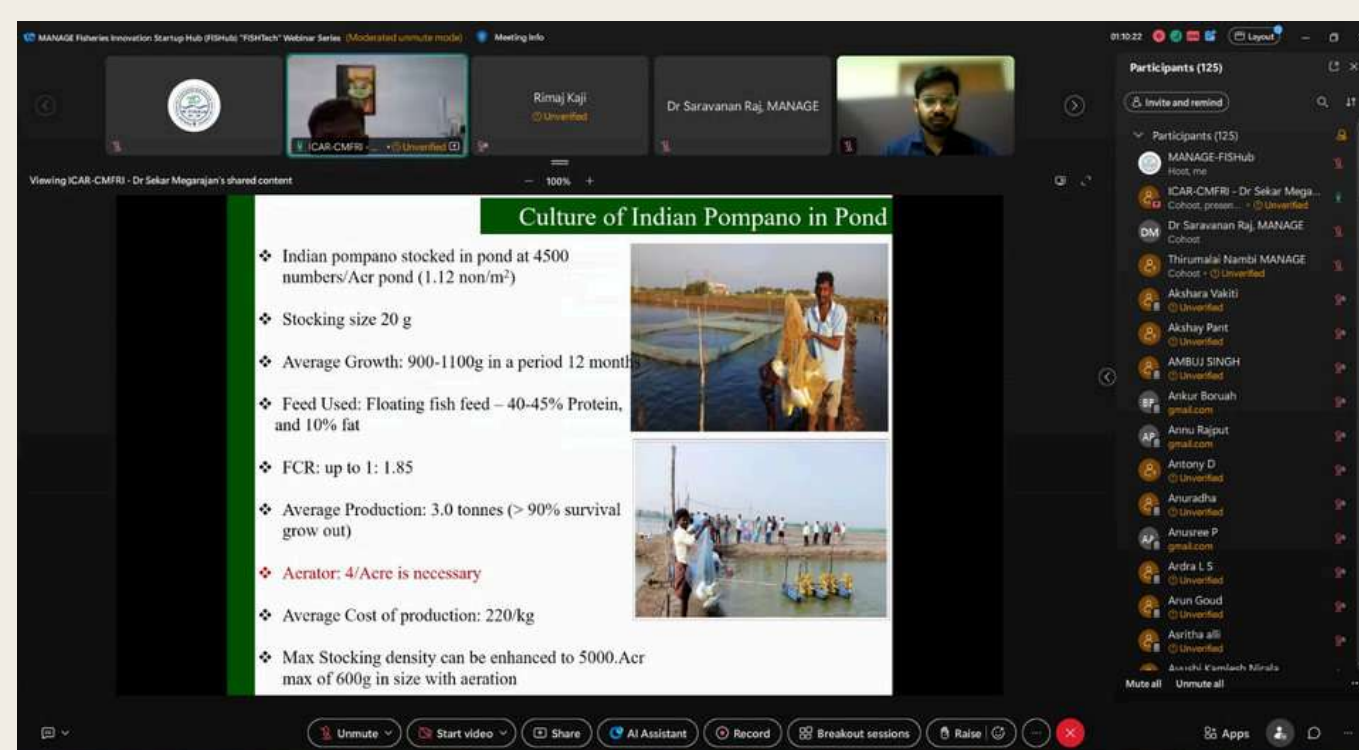
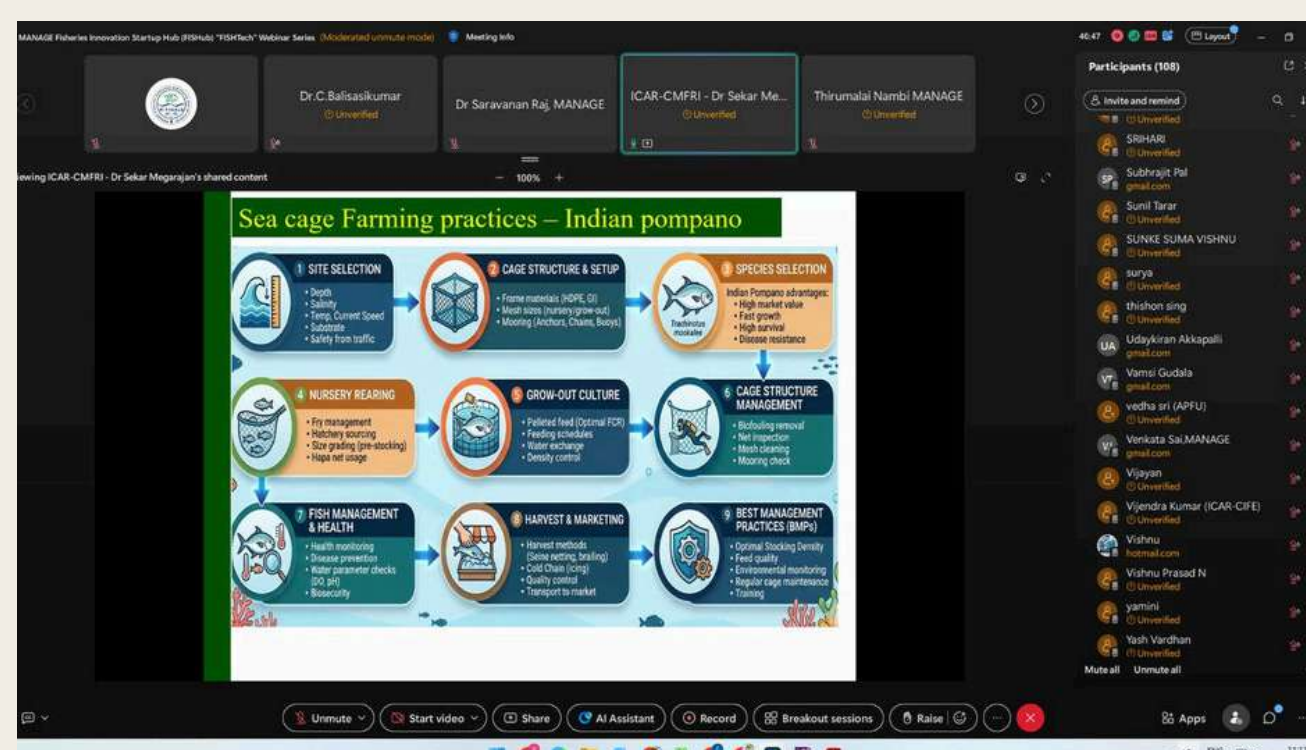
Dr. Sekar Megarajan
Senior Scientist
ICAR-CMFRI
Regional Centre, Visakhapatnam
sekarrajaqua@gmail.com

Dr. Sekar Megarajan highlighted the potential of Indian pompano farming in coastal ponds and sea cages, focusing on appropriate farm management practices, market potential and the opportunities for farmers to diversify their aquaculture enterprises.

He emphasized that Indian pompano can adapt to different culture environments, including both pond-based and cage-based systems, and that established production technologies and packages of practices are now available to support its commercial farming.

The speaker emphasized the importance of proper farm management, particularly aeration, feeding and water-quality management. He recommended maintaining adequate aeration, with around 2–3 paddle-wheel aerators per unit as a minimum requirement, along with proper feeding management and the creation of designated feeding zones. For coastal pond farming, he highlighted the importance of regular water exchange, recommending approximately 25 per cent water exchange per month. He explained that although zero-water-exchange systems may be practiced in some shorter-duration aquaculture systems, Indian pompano farming involves a longer culture period of around one year, making periodic water exchange important for maintaining suitable culture conditions.

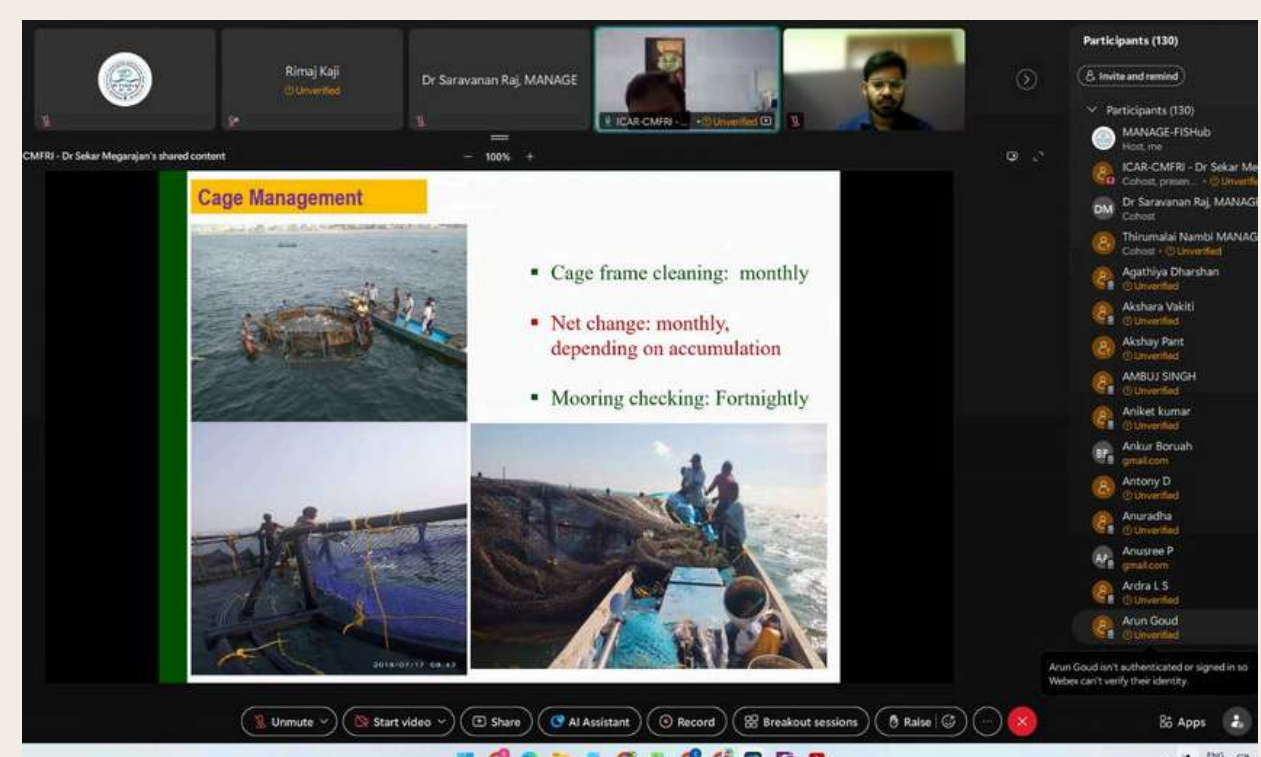
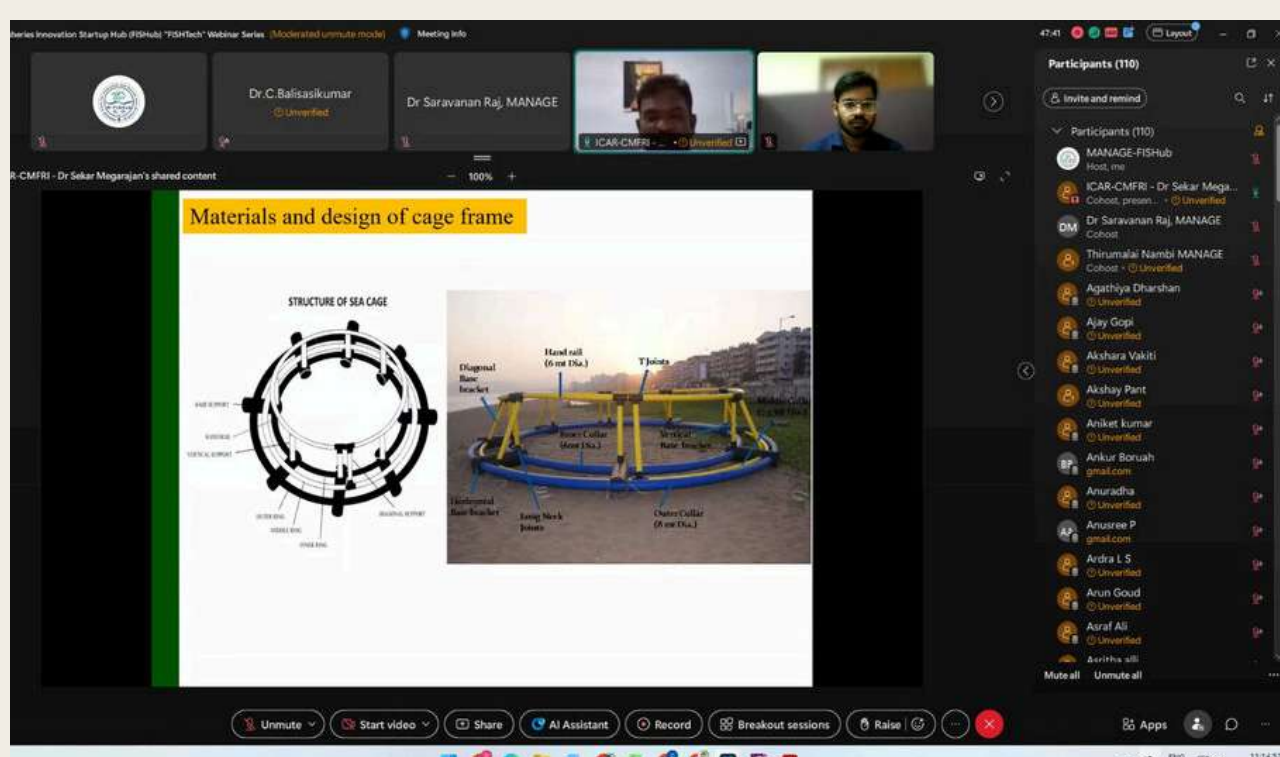
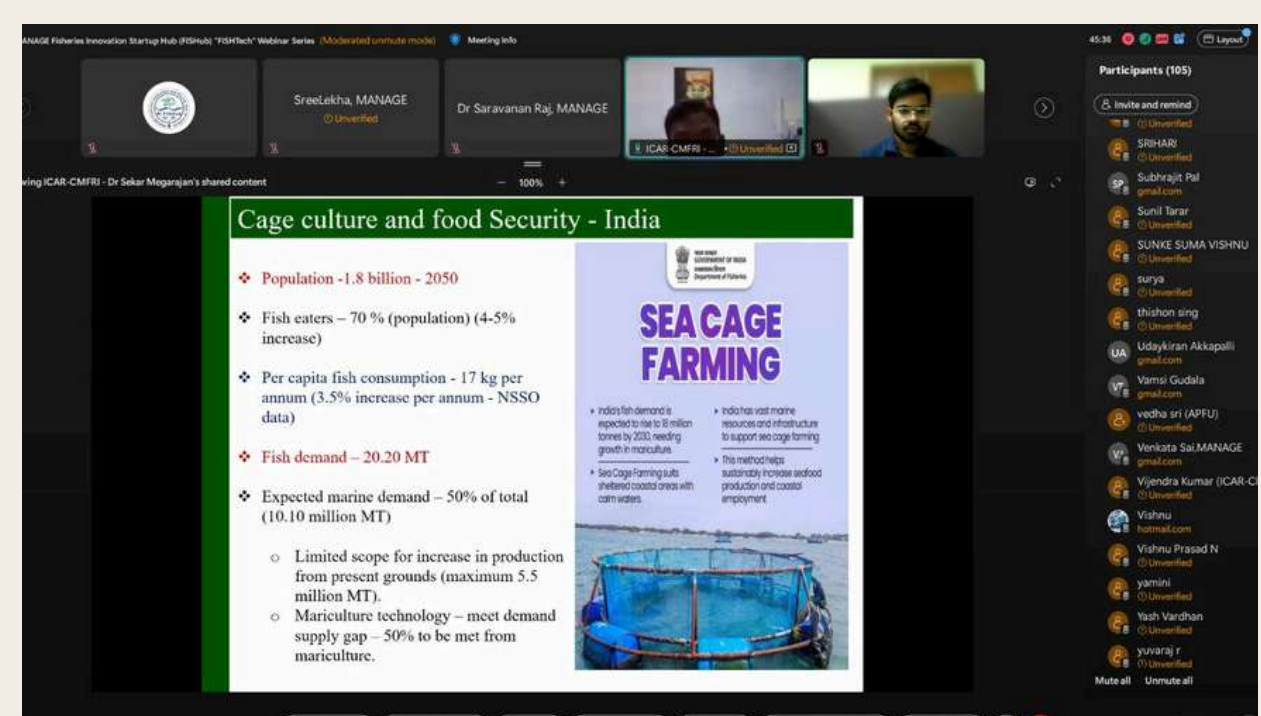
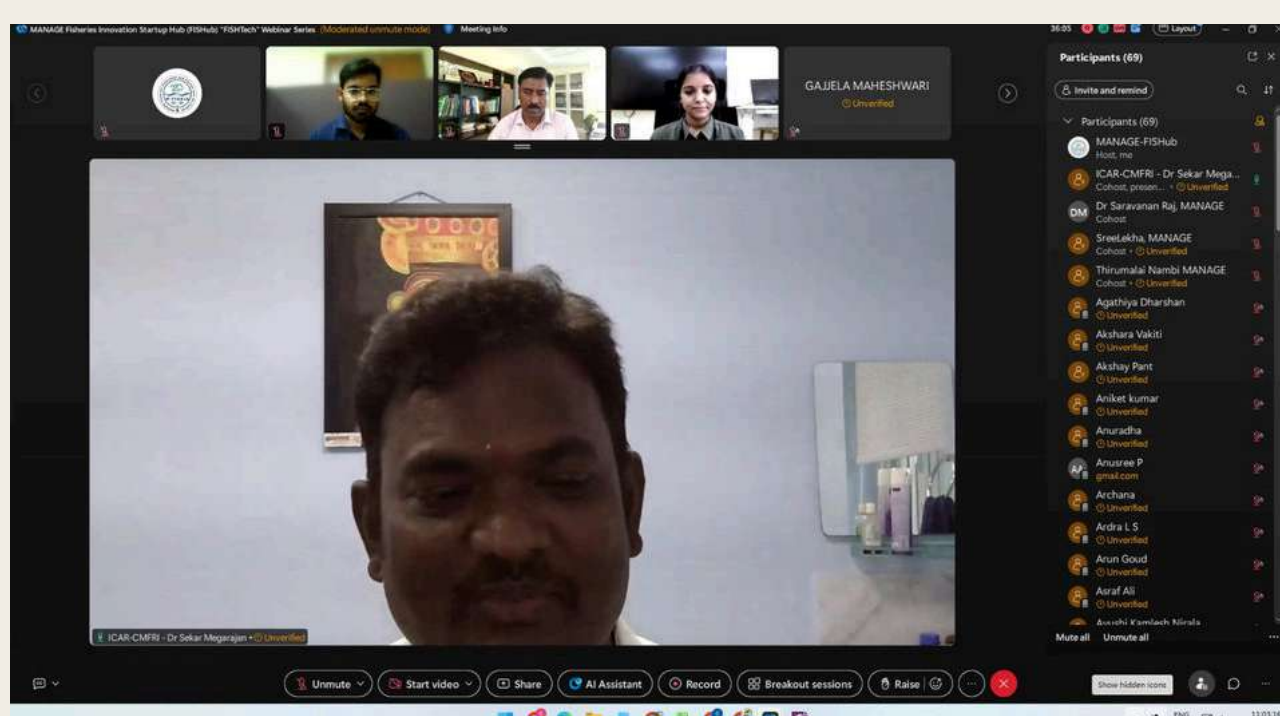
Dr. Sekar also discussed the market potential of Indian pompano, emphasizing its premium market value and growing consumer demand. The fish is being promoted as **“Golden Pompano”** and can command prices of up to approximately ₹600 per kg in the market. He highlighted that the fish has good meat quality, taste and consumer appeal, along with an attractive appearance characterized by a white body with slight yellowish tinges, which contributes to its market preference.



He also noted that Indian pompano has a supply-deficit market, as it is relatively rare in wild catches, creating an opportunity for farmers to meet demand through aquaculture production.

The speaker further highlighted Indian pompano farming as a potential crop diversification and rotation strategy, particularly for farmers engaged in shrimp farming. Since shrimp farming can face recurring disease-related pressures, incorporating Indian pompano as an alternative crop can help break disease cycles and reduce the risk of major losses associated with continuous monoculture. He emphasized that farmers can select either pond-based or sea-cage farming depending on their local environmental conditions and available resources.

Dr. Sekar concluded by highlighting the role of institutional and technological support in promoting Indian pompano farming. The development of technologies for seed production and farming practices, along with established packages of practices, provides farmers with greater confidence to undertake the culture of Indian pompano. Overall, the session emphasized Indian pompano as a high-value, consumer-preferred and commercially promising species, offering opportunities for coastal aquaculture diversification through both pond and sea-cage farming.





Q & A Session

Q1. Can freshwater dip treatment be used to control parasitic infestation in Indian pompano?

Ans: Dr. Sekar explained that freshwater dip treatment can be used when the number of fish is relatively small, particularly in broodstock or smaller cage populations. Individual fish can be removed from the cage, given a freshwater dip, and returned to the cage, with the salinity change helping to control the parasites. However, this approach is not practical for large grow-out cages containing a high number of fish.

Q2. What treatment approach is recommended for parasite infestation in large grow-out cages?

Ans: The speaker explained that for larger numbers of fish, an appropriate therapeutic treatment should be used rather than freshwater dipping individual fish. He noted that parasite infestation can take around 35 days to reach its peak, so farmers should plan treatment according to the expected harvest period. He also observed that major infestations are commonly seen when fish reach approximately 250–350 g, making this an important stage for monitoring and management. The treatment discussed has a 7-day withdrawal period.

Q3. Are internship or training opportunities available at ICAR-CMFRI for undergraduate students in fish breeding?

Ans: Dr. Sekar clarified that ICAR-CMFRI does not currently offer a one-year internship programme. However, students can undertake short-term project work of around one month, and training may also be considered when it forms part of a university course curriculum, such as a three-month academic training requirement.

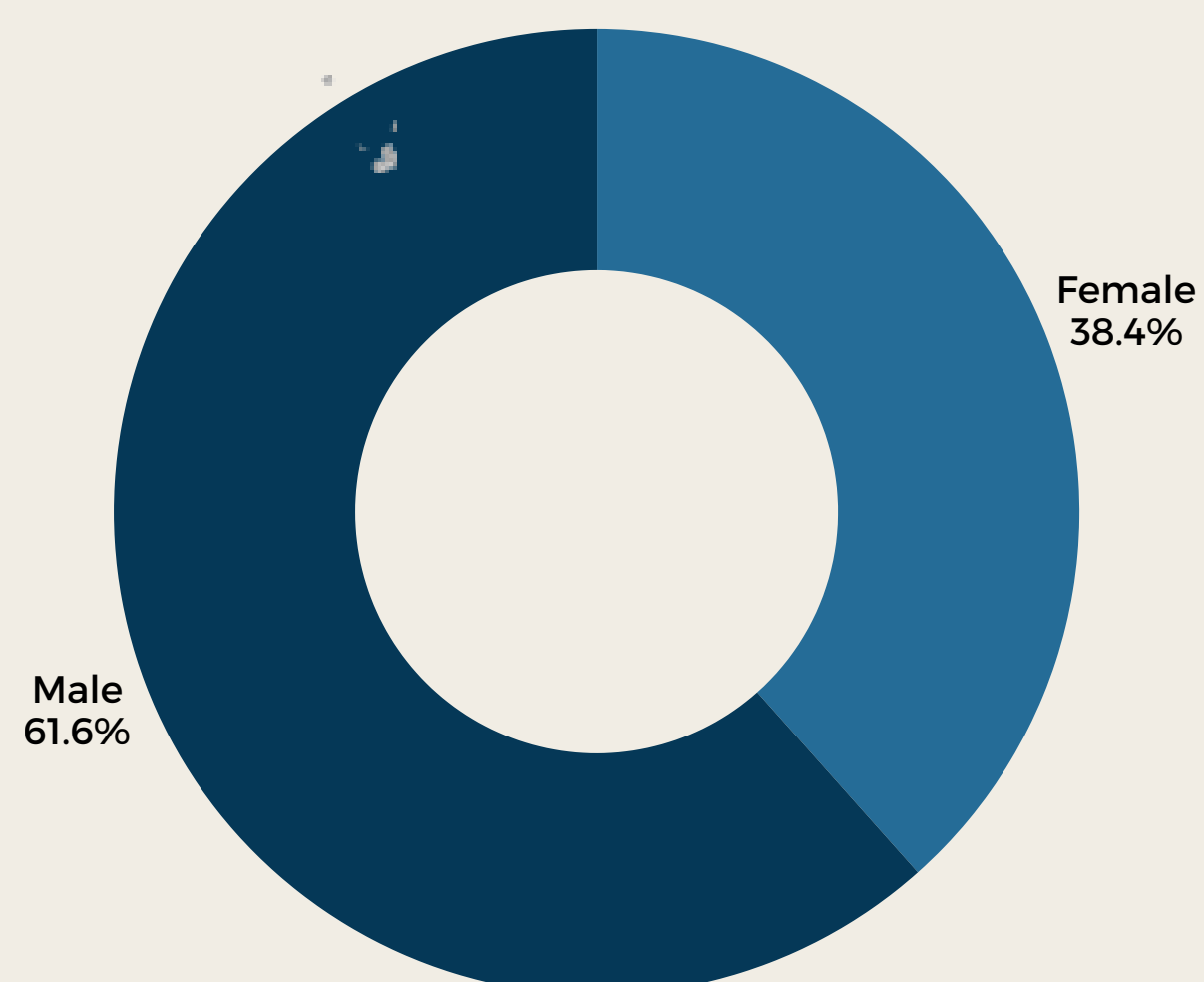
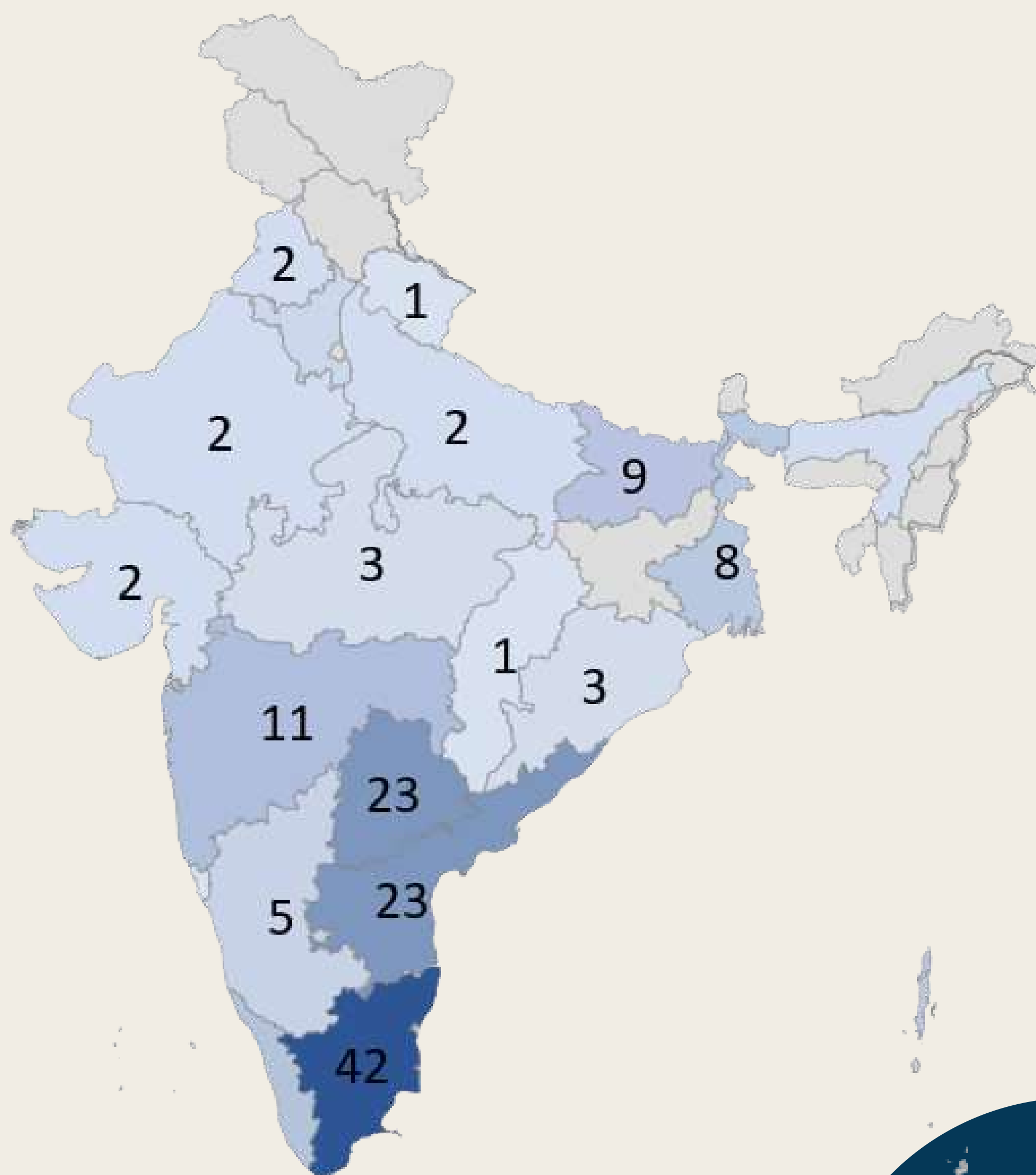
Q4. Are there commercial hatcheries producing Indian pompano seed apart from ICAR-CMFRI?

Ans: The speaker explained that the Indian pompano seed-production technology has been transferred to three hatcheries in Andhra Pradesh, including established groups involved in shrimp seed production. ICAR-CMFRI continues to provide handholding and technical support. Since seed production at the research institute is limited, approximately one lakh seeds per year are produced and supplied to around 20 farmers, with farming being undertaken in both coastal cages and ponds.

Q5. Does site suitability for cage farming vary among different fish species?

Ans: Dr. Sekar explained that the basic principles of site selection for cage farming are generally common across species, but species-specific environmental requirements, particularly salinity tolerance, must be considered. For example, Indian pompano can be cultured at comparatively lower salinities, whereas species such as cobia require higher salinity conditions. Therefore, the selected site must have salinity within the tolerance range of the target species.

Participants Overview



Total Registrations-520
 Attended Participants - 164
 (Male - 101; Female-63)

YouTube Video Link: https://www.youtube.com/watch?v=6zimpqpadbg&list=PL4G41x3BKM6lUBmHoLiRlGoB_5Efxiaep&index=10&t=122s