



**Interface Workshop on
“Fostering Student Entrepreneurship for Next
Generation Aquaculture”**

02 August, 2024

Division of Aquaculture, ICAR-CIFE, Mumbai

**Sponsored by
NAHEP**

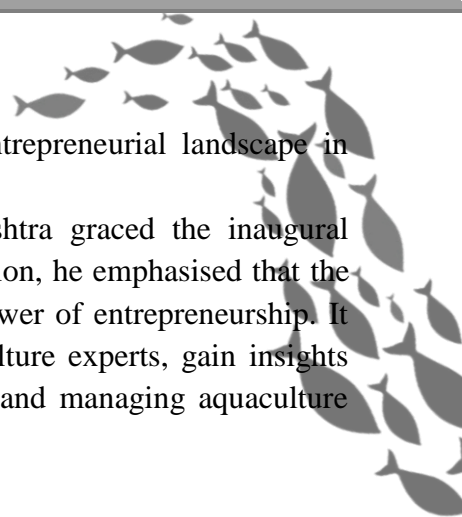


In recognition of the pivotal role of entrepreneurship in advancing the frontiers of aquaculture, the Division of Aquaculture, ICAR-Central Institute of Fisheries Education, Mumbai, organised the Interface Workshop on "Fostering Student Entrepreneurship for Next Generation Aquaculture." on 2nd August, 2024 sponsored by NAHEP. This initiative aimed mainly to cultivate a ground for innovation, sustainability, and economic empowerment within the aquaculture sector.

The workshop focused to unite aquaculture industry experts, farmers, scientists, bankers, manufacturing companies and students in a collaborative environment, fostering a vibrant exchange of ideas and insights. It has given opportunity to empower students with the knowledge, skills, and resources necessary to navigate the challenges and opportunities in aquaculture entrepreneurship. The workshop has provided a platform to ignite a spirit of innovation and enterprise among the next generation of aquaculture enthusiasts through vibrant discussion among all the participants. All the participants joined hand in this transformative journey which delved into the intricacies of modern aquaculture, explore emerging trends, and chart a course towards a sustainable and prosperous future for the aquaculture industry.

This workshop delivered a platform where 140 participants including aquaculture experts across the country, fish farmers, and aquaculture inputs manufacturing companies, students of College of Fisheries in different State Agricultural Universities of the country, students and scientists of aquaculture division of CIFE actively participated and discussed various ideas for innovation and challenges happening in the industry sector. The primary focus of the workshop was on empowering students, encouraging them to actively participate and learn. Specifically, the workshop covered the latest developments and innovations in the field of aquaculture.

Dr. C. N. Ravishankar, Director and Vice Chancellor and Dr. N. P. Sahoo, Joint Director and PI, NAHEP while addressing the participants stated that this workshop facilitated direct engagement between students and successful individuals from the aquaculture industry. Participants got the opportunity to interact with and learn from established professionals and entrepreneurs who have achieved success in the aquaculture sector. By bringing together academia, industry experts, and entrepreneurs, the workshop provided a comprehensive learning environment and networking opportunity in a single setting. The Director and Vice Chancellor also mentioned that the sessions were meticulously designed to cover a broad spectrum of topics, from emerging technologies to market dynamics, ensuring that



participants left with a comprehensive understanding of the entrepreneurial landscape in aquaculture.

Dr. Atul Patne, Commissioner of Fisheries, Govt. of Maharashtra graced the inaugural program of the workshop as **Chief Guest**. Speaking on the occasion, he emphasised that the workshop was a testament to our belief in the transformative power of entrepreneurship. It provided a platform for students to engage with leading aquaculture experts, gain insights into industry trends, and explore the practicalities of launching and managing aquaculture enterprises.

The following are the major thrust areas of the workshop-

- Envisioning the fisheries Industry-Academia outlook for “Vikshit Bharat” (Developed India).
- How to promote Industry-Academia relationship for promoting student entrepreneurship in fisheries and aquaculture sector?
- How do you foresee the special skill requirement of the student for the aquaculture sector?
- What should be role of ICAR-CIFE towards building successful entrepreneurs?
- The scope of demand driven industry sponsored student research programs.
- What is the policy support required from Govt. to support aquaculture industry?

The panel discussions in the workshop was held based on the following themes-

- Entrepreneurship opportunities for students in shrimp aquaculture sector: An Academia-Industry perspective
- A Roadmap to ‘Viksit Bharat’ encouraging student entrepreneurship in freshwater aquaculture sector
- Scope for demand driven research programs to address challenges in ornamental aquaculture industry
- Young Entrepreneurial Vision Award Competition & Discussion

The notable Aquaculture Industry Expert namely Padmashree Sultan Singh, Dr. Manoj M Sharma, Mr. Hitesh Sureshbhai Patel, Dr. P. Elancheran, Mr. Musunuru Venkateswara Rao, Mr. Ranjan Jyoti Saikia, Mr. Jyotish Talukdar, Mr. Pandit Chavan, Mr. Bhargav Kr Bhagwati, Mr. Razaqul Islam, Mr. Soibam Surchandra Singh, Mr. Firoj Tajuddin Tamboli, Mr. Sammy Kempe, Mr. Arun Alase and many more participated in the workshop, interacted with the students and provided valuable suggestions.

A competition among the students on the topic “What should be role of ICAR-CIFE towards building successful entrepreneurs?” was organised where 40 students across the SAU’S and CIFE participated. Out of that 10 best write up were selected for the power point presentation and 4 participants received the “Young Entrepreneurial Vision Award” in the workshop.

Dr. Debajit Sarma, Head, Division of Aquaculture along with the scientists of aquaculture division co-ordinated the workshop successfully.

Recommendations of the workshop

- Innovative Farming Techniques for intensification of fish and shell fish farming.
- Student entrepreneurship and skill development in disease management, screening and testing in shrimp farming.
- Eco-friendly farming practices and resource efficiency.
- Branding and marketing to enhance domestic consumption.
- Automation and IoT in aquaculture practices for next generation aquaculture.
- Data analytics by academia to support aquaculture industry.
- Academia-Industry partnership in collaborative research at farm level.
- Community-based initiatives for livelihood enhancement especially in ancillary activities.
- Industry oriented curriculum development in B. F. Sc. /M. F. Sc. /Ph.D. program
- Student led start-ups and mentorships support programs.
- Industry demand driven research areas for sustainable aquaculture practices and technological integration.
- Internship and collaborative projects in hatchery technology development of new candidate species.
- Academia-Industry partnerships and product development in innovative domestic marketing.
- Sustainable breeding practices and conservation measures for indigenous ornamental species.
- Disease surveillance and interventions in value chains by academia.
- Technology development on ornamental plants in collaboration.
- Selection of Right Business Model to get to repeated customer and finding out of financial source.
- Development of APP and Consultancy Service by the students.
- Technology validation in the farm level with the help of Aquaculture Expert.
- Understandings marketing strategies along with facilities of post-harvest/value addition chain.
- Proper selection and understanding avoid inbreeding problem by the breeders to enhance the production.
- Hatchery certification and assessment of seed quality in carp is highly essential.
- Establishment of common platform for farmer's grievances and problems.
- Incorporation of knowledge gap bridging through skill development program in academic curriculum.
- Alternative business to fish like aquatic plant, sports fishing, aqua tourism in the sector.
- Recirculatory aquaculture systems (RAS) to be taken up only for high value species.
- Supplementary feeding supporting a well fertilized plankton rich soil bottom pond is more economically viable.
- The internship of M. F. Sc. program should be of minimum three months instead of one month.

