

**ICAR-CIFE'S SKILL DEVELOPMENT PROGRAMME ON**  
**“ORNAMENTAL FISH CULTURE & AQUARIUM MANAGEMENT”**  
**(SPONSORED BY NAIF-ABI)**  
**FROM 18 TO 25 AUGUST, 2023**

Division of Aquaculture, ICAR-Central Institute of Fisheries Education, Mumbai conceptualized and conducted a Skill Development Training Programme (SDP) on “Ornamental fish culture & aquarium management” 18 to 25 August, 2023, sponsored by the Agri Business Incubation Centre of ICAR-CIFE, which is supported by the National Agriculture Innovation Fund - (NAIF-ABI), in which, a total of 14 participants (ornamental fish breeders, entrepreneurs and hobbyists) were trained and provided necessary handholding through robust theory sessions, hands-on practical sessions, field trips and interactive group discussions. This training programme was coordinated by Dr Paramita Banerjee Sawant, Principal Scientist and Dr Upasana Sahoo, Scientist from Division of Aquaculture.

Indian ornamental industry is majorly based on the wild collection, which contributes a meagre 0.4% to the global trade of ornamental fishes at the moment. Even though potential for development of this industry is tremendous, it is time that hobbyists are geared up along with breeders by training them in tricks of the trade for diversification and better profits. Keeping this in mind, the course was structured in a readily understandable and user-friendly manner, with emphasis on hands-on practical along with relevant lectures by both internal faculty and external speakers from the Marine Products Export Development Authority and Konkan Agricultural University. Topics covered dealt with the breeding and rearing techniques of common, commercially important and indigenous ornamental fishes (freshwater, hill stream, brackish water, marine), role of inducing agents in breeding of ornamental fishes, colour enhancement in ornamental fish, fabrication and setting up of a glass aquarium, common gadgets used in the aquarium and their set up, water quality management, live feed culture as a starter feed for newly hatched larvae of ornamental fishes, feed formulation and preparation of ornamental fish feed, common diseases of aquarium fishes their prophylactics and treatment, recirculatory aquaponics – ornamental fish with plants, aquarium plants and aquascaping techniques, livelihood opportunities through export promotion in ornamental fisheries and soft skill enhancement in ornamental fish business.

An added attraction for the training was an interactive session “CHARCHA SATRA”, conceptualised for solving queries and connecting participant trainees to successful entrepreneurs in the industry along with experts from ICAR-CIFE, Mumbai. Three successful ornamental fish entrepreneurs from the Maharashtra Aquaculture Farmers' Association, Mumbai were also invited to interact with the participants in “SAWAL APKE JAWAB HAMARE” segment in addition to scientific faculty from this Institute. Along with the visit to ornamental set ups in the Institute, a field day arranged to RAS based marine ornamental fish breeding set up at Aksa, Mumbai (in association with the Mumbai Research Centre of CMFRI, Mumbai) was an eye opener for trainees to for taking up marine ornamental fish culture and marine aquarium setups as a hobby or commercial activity. An exposure visit to wholesale ornamental fish market at Kurla, Mumbai was also arranged for the participants to give them a byte of

the trade. A beautiful dry-scape was also designed by participants (for public viewing) in the reception area of the Institute as part of the practical session on aquascaping with existing eco- friendly materials.

Pre and post evaluation revealed an 80% increase in knowledge of the participants with 90-95% positive feedback. Participants were keen to upgrade their skills in ornamental fish farming techniques with different live feed culture techniques, which formed an important feedback to be taken up in future programs. Glimpses of the programme are as below :



**Theory & Hands-on Practical sessions**



**Interactive session "CHARCHA SATRA"**



Dry-scape designed by participants at Institute reception area



Field visit to RAS based marine ornamental fish breeding set up at Aksa, Mumbai

