

Short Course
on
ENTREPRENEURSHIP DEVELOPMENT IN ORNAMENTAL FISH
BREEDING AND CULTURE
(20 AUGUST TO 18 SEPTEMBER, 2025)



ICAR-CENTRAL INSTITUTE OF FISHERIES EDUCATION
(Deemed University), Kolkata Centre
32-GN Block, Sector-V, Salt Lake City, Kolkata-700091



ICAR-CENTRAL INSTITUTE OF FISHERIES EDUCATION

ICAR-Central Institute of Fisheries Education (CIFE) is a leading Fisheries University having a distinguished heritage and has nurtured many illustrious scholars and leaders over the years. In over 50 years of existence, CIFE has emerged as a Centre of excellence for higher education in fisheries and allied disciplines. The Institute was established on 6th June 1961, under the Ministry of Agriculture, Govt. of India with assistance from FAO/UNDP. It came under the administrative control of Indian Council of Agricultural Research (ICAR) on 16th April 1979 and subsequently, the scope and mandate have been widened to include education, research and extension.



Recognizing the pivotal role played by CIFE in human resources development in fisheries, the institute was conferred the status of Deemed-to-be-University on 29th March 1989. Encouraged by the new status, the University grew by leaps and bounds. Building professional capabilities and competencies of more than 4000 State fisheries extension and development personnel since 1961, the emphasis has always been on quality education. Now CIFE is a knowledge powerhouse and a brand name in fisheries higher education.

From a modest beginning in 1961, CIFE is now located in a new campus with state-of-the-art facilities and is looking forward to the future with great optimism and excitement. As a leading university, CIFE seeks to innovate and adopt best practices in educational and research programmes that prepare students to be leaders in the respective domains. CIFE has created an ecosystem of teaching and research excellence making it a preferred destination of students. The breadth of disciplines and collaboration among constituent institutions give unparalleled opportunity to students to cross departmental boundaries and explore different horizons.

ICAR-CIFE, KOLKATA CENTRE AT A GLANCE



ICAR-CIFE, Kolkata Centre has historical importance in imparting fisheries education in India. It was established in 1947 as “Inland Fisheries Training Centre (IFTTC)” under Central Inland Fisheries Research Institute (CIFRI), Barrackpore in West Bengal. This Centre was solely responsible for providing trained manpower to fisheries sector in the country as during that time there was no fisheries college or university. It was taken over by CIFE, Mumbai in October, 1967. The CIFE along with its various centres were brought under the aegis of the ICAR in April, 1979. The Centre was shifted to its own new building complex, established at 32-GN Block, Sector -V, Salt Lake City, Kolkata in June, 1997 and started functioning under the name of “CIFE, KOLKATA CENTRE”.

BACKGROUND

The global trade in ornamental fish involves 125 countries worldwide and is worth US \$18-30 billion annually. This total is dominated (90%) by freshwater fishes, most of which are sourced mainly from developing countries in Asia or South America. India ranks 31st in ornamental fish trade with only 0.4% of the global trade. The earning potential of this sector has hardly been understood and the same is not being exploited in a technology driven manner. There has been growing interest in ornamental fish keeping as an interesting activity for many, in the process generating income for the unemployed youth and farmers. The entrepreneurship development through ornamental fish farming is gaining popularity day-by-day. Therefore, more people are entering into this lucrative business of culturing and breeding these fish through farming. As a result, many ancillaries as pet shops are also coming up in cities and even small towns. It has the potential to create substantial job opportunities, besides helping export earnings. There is very good domestic market too, which is mainly based on domestically bred exotic species. The domestic ornamental fish market is worth around Rs. 50 crores and the demand is increasing at the rate of 20%. India on the other hand has distinctive edge over other countries in trade potential. Ornamental fish industry has enormous potential in tropical countries like India and large number of species can only foster the needs of the industry. Hence, there is a need for tailor-made practical oriented skill development short course. The experimental learning will help them acquire their skills and knowledge which will boost their confidence and make them competent to undertake production of ornamental fish as a means of self-employment. A participant subsequent to successful completion of the training could submit a project proposal to NFDB or any other financial institutions, banks for setting up ornamental fish business.

LEARNING OBJECTIVES OF THE COURSE

- To create awareness about the importance of ornamental fish farming as a livelihood option
- To provide knowledge about various techniques of ornamental fish breeding, rearing and its marketing for professional skill development
- To develop entrepreneurship in ornamental fish farming and trading

DURATION: 30 days

TIME ALLOTMENT FOR THEORY AND PRACTICAL CLASSES

Sl. No.	Course	Theory (Hours)	Practical (Hours)
1	OFC 101	18	20
2	OFC 102	12	10
3	OFC 103	0	36
Total		30	66

COURSE CONTENTS

1. OFC 101: ORNAMENTAL FISH BREEDING AND CULTURE

THEORY

- Identification of ornamental fishes

- Breeding, seed production and culture of freshwater ornamental fishes
- Feed, feed preparation and feeding management
- Health and environment management
- Culture of brackishwater and marine ornamental fishes

PRACTICAL

- Identification of ornamental fishes
- Breeding and larval rearing
- Pond culture of ornamental fishes
- Food, feed preparation and feeding management
- Analytical techniques for water parameters in aquarium keeping
- Disease management



2. OFC 102: ORNAMENTAL FISH AND ACCESSORIES TRADING, MARKETING, FINANCIAL SUPPORT AND ENTREPRENEURSHIP

THEORY

- Ornamental fish keeping and accessory items
- Packaging, transportation & marketing
- Financial support (schemes)
- Economics and project formulation

PRACTICAL

- Equipment and accessories
- Fabrication and setting up of aquarium
- Packaging, transportation & marketing
- Formulation of project proposal



3. OFC 103: FIELD VISITS AND ATTACHMENT

- Field attachment in ornamental fish farms
- Visit to ornamental fish markets
- Visit to ornamental fish farms
- Visit to backyard ornamental hatchery unit
- Visit to a SHG/community fish culture Centre

EVALUATION

The course will be evaluated for 100 marks. The breakup of the marks would be as follows. Pass marks: 60% of total marks.

- Theory and practical exams: 70 (40 + 30)
- Field report preparation and presentation: 30

JOB OR EMPLOYMENT OPPORTUNITIES

- Setting up of ornamental fish breeding and rearing units through different schemes of NFDB, NABARD, PMMSY and State Govt.
- Community based backyard or homestead ornamental fish rearing SHGs, cooperative societies, fish production groups
- Aquarium, fish and accessories trading/ export as startups
- Consultancy and facilitation services for aquascaping
- Technicians for private hatcheries and large aquarium centre



ELIGIBILITY FOR THE SHORT COURSE

Aspiring entrepreneurs, professionals, officials, students, researchers and other engaged in fisheries sector are eligible. Participants should be 10th pass from a recognized board of India. There is no age limit.

COURSE FEE

Course fee of Rs.5900/- (Rs.5000/ + 18% GST) should be paid to the current account no. 10224931725 of ICAR (CIFE Sub Unit), Kolkata payable at State Bank of India, Salt Lake Electronic Complex Branch (IFSC SBIN0009985) or in cash. Payment should be made before start of the short course.

NO. OF CANDIDATES: 20 candidates will be selected

TRAVEL ASSISTANCE

Participants interested to undergo the short course will have to bear their own TA/DA expenditure.

BOARDING AND LODGING

Boarding and lodging for the participants will be arranged in the hostel of ICAR-CIFE, Kolkata Centre. The Hostel fee of Rs.2000/- per person for entire course and food charge will be Rs.200/- per person per day to be borne by the participants.

MEDIUM OF INSTRUCTION: English, Hindi and Bengali

HOW TO REACH

ICAR-CIFE, Kolkata Centre is located in the Sector-V of Salt Lake City, Kolkata. The Centre is well connected with Road, Rail and Air. Netaji Subhash Chandra Bose International Airport at Dumdum is only 16 km away. The distance between the Centre and railway stations of Howrah and Sealdah are 18 and 10 km, respectively. Frequent bus and taxi services are available throughout the day from any part of the city. The Nicco Park, BenFish, Meen Bhawan and National Council of Science Museum are located at the vicinity of the Centre. The nearest bus stoppage is Swasthya Bhawan/ Meen Bhawan.

HOW TO APPLY

The applicant has to apply online through CASH Portal (<https://www.cife.edu.in/CASH-Training-Portal/public/index.php/trainees-login>) on or before **10th August 2025**. The detailed process of online application is mentioned below.

Step-by-Step Guide: How to Apply for Training on ICAR-CIFE CASH Portal

∞ Step 1: Open the Registration Page

Go to the official portal:

🔗 <https://www.cife.edu.in/CASH-Training-Portal/public/index.php/trainees-login>

🖋️ Step 2: Register Yourself

- Click on “**Register Yourself**” below the login form.
- Fill in the required details:
 - Full Name in **English and Hindi** (💡 *Ensure spelling is correct—same will appear on your certificate*)
 - Email ID and Mobile Number
 - Date of Birth, Gender, Qualification, Caste, Trainee category, etc.
 - Create your **own password**
- ✓ Click **Submit** to complete your registration.

🔑 Step 3: Login to Portal

- Use your **registered Email ID** and **created Password** to log in.
- If you forget your password, click “**Forgot Password**” – the new password will be sent to your registered email.

✈️ Step 4: Apply for a Program

- After login, click on “**Apply for Program**”
- Browse the list of available trainings.
- Select your **desired training program**.

💳 Step 5: Pay the Training Fee

- Make an **online payment of ₹5900** to the below account:

A/C Name: ICAR (CIFE Sub Unit), Kolkata
A/C No.: 10224931725
Bank: State Bank of India
Branch: Salt Lake Electronic Complex
IFSC Code: SBIN0009985
Type: Current Account

- Save the **payment receipt** (screenshot or PDF).

📁 Step 6: Upload Receipt & Complete Application

- Attach the **payment receipt** in the form.
- Fill in all remaining required fields.
- Review your application details.
- Finally, **submit** the application.

Note: In case of any kind of query related to online application, you may contact at shivaji@cife.edu.in (Dr. Shivaji- 7894252006)



COURSE LEADER

Dr. N. P. Sahu

Director/ Vice-Chancellor
ICAR-CIFE, Mumbai

COURSE DIRECTOR

Dr. T. K. Ghoshal

Principal Scientist & Head
ICAR-CIFE, Kolkata Centre

COURSE CO-DIRECTORS

Dr. G. H. Pailan

Principal Scientist
(ghpailan@cife.edu.in; 9674719372)
&

Dr. G. Biswas

Principal Scientist
(gouranga@cife.edu.in; 9434689392)

COURSE COORDINATORS

Mr. Dhalongsaih Reang

Scientist
(dhalongsaih@cife.edu.in; 8132848460)

Dr. Leesa Priyadarsani

Scientist
(leesa@cife.edu.in; 7003736429)
&

Mrs. Sweta Pradhan

Scientist
(sweta@cife.edu.in; 8249019408)

CORRESPONDENCE

Head

ICAR-Central Institute of Fisheries Education, Kolkata Centre
32 GN Block, Sector V, Salt Lake City, Kolkata -700091
Mobile: 9434567129, Phone: 033-23573893
Email: kolkata@cife.edu.in