





# **TRAINING CALENDAR**

2023-24



ICAR Central Institute for Brackishwater Aquaculture (Indian Council of Agricultural Research) # 75, Santhome High Road, Raja Annamalai Puram Chennai 600 028 Tamil Nadu Phone: 044-24610565, 24618817, 24616948 Fax: 044-24610311 Email: <u>director.ciba@icar.gov.in</u> Website: <u>https://ciba.icar.gov.in</u> Brackishwater Aquaculture sector is playing a major role in fisheries economy of India. As per 2020-21 statistics India has produced 8.43 lakh tonnes of farmed shrimp from an area of 1.67 lakh ha (MPEDA, Kochi, India). *Penaeus vannamei* production was to the tune of 815745 tons and that of *Penaeus monodon* was 27616 tons. During the same period, the export earnings from frozen shrimp accounted for ₹32520 crore per annum. Andhra Pradesh, Gujarat, Tamil Nadu, Odisha, West Bengal are the major shrimp producing States in the country, followed by Kerala, Karnataka, Goa and Maharashtra. Andhra Pradesh tops the country with an annual shrimp production of 6.39 lakh tonnes, accounting for 75.8% of the Indian shrimp production. Production of shrimp species like white shrimp (*Penaeus vannamei*), milk fish (*Chanos chanos*), Asian seabass (*Lates calcarifer*) and pearl spot (*Etroplus suratensis*) would fetch higher income within a crop period of 3-4 months in case of shrimp, and 5-9 months in the case of finfish.

India exported fish and fishery products worth US\$ 5.96 billion where farmed shrimp contributed 51% by volume and 74% by value during 2020-21 (www,mpeda,gov.in). Shrimp occupies top position in terms of earning foreign exchange vis-à-vis other agricultural commodities in India. Indian shrimp exports to US grow from 14% to 46%, while exports to EU and Japan reduced by 37% to 12% and 16% to 7%, respectively during the past decade.

The total shrimp quantity exported in 2020-21 was 5.9 lakh tonnes worth USD 4.4 billion. It was a decline by 9.47 per cent in value terms and 9.50 per cent in quantity compared to 2019-20. USA is the largest importer with 46% (2.72 lakh tonnes) of Indian shrimp followed by China (1.02 lakh tonnes), European Union (70,133 t), Japan (40,502 t) and South East Asia (38,389 t). Shrimp import by China was drastically declined by 30% from1.4 lakh tonnes in 2019-20 to one lakh tonnes in 2020-21.

India has about 1.2 million ha of brackishwater resources, of which only 16.57 percent is being utilized for farming and 8.62 million ha of inland saline areas are available in Gujarat, Rajasthan, Punjab and Haryana and other inland states, which are mostly unexplored. In the case of brackishwater resources suitable for aquaculture, do not compete with agriculture, drinking purposes and construction etc.

To promote sustainable development of brackishwater aquaculture farming and other fisheries related activities in India, Ministry of Fisheries, Animal Husbandry and Dairying under Government of India is implementing major schemes like Pradhan Mantri Matsya Sampadan Yojana (PMMSY) which are being coordinated and monitored by National Fisheries Development Board (NFDB) Hyderabad through respective State Department of Fisheries. The Central Institute of Brackishwater Aquaculture (CIBA) under the Indian Council of Agricultural Research (ICAR) was established in 1987 with the following mandate:

- Basic, strategic and applied research for techno-economically viable and sustainable culture systems for finfish and shellfish in brackishwater.
- > Species and systems diversification in brackishwater aquaculture.
- Act as repository of information on brackishwater fishery resources with a systematic database.
- Human Resource Development, capacity building and skill development through training, education and extension

The Headquarters of the Institute is located at Chennai and the experimental facilities, finfish and broodstock holding facilities, experimental hatcheries, pilot scale feed mill, etc., are at Muttukadu, about 25 km south of Chennai. The Institute has two Research Centres located at Kakdwip in South 24 Parganas District of West Bengal (KRC) and at Navsari in Gujarat (NGRC).

The research and development programmes in brackishwater aquaculture are carried out under the framework of the following five divisions:

- Crustacean Culture Division (CCD)
- Fish Culture Division (FCD)
- Nutrition, Genetics & Biotechnology Division (NGBD)
- Aquatic Animal Health & Environment Division (AAHED)
- Social Sciences Division (SSD)

The Institute has linkages and collaboration with other ICAR Fisheries Research Institutes and other Institutes under ICAR, State Agricultural Universities (SAUs), Fisheries, Agriculture, Horticulture and Animal Husbandry Departments of the State Governments/Union Territories, Brackishwater Fish Farmers Development Agencies (BFDAs) in various states, Department of Animal Husbandry, Dairying and Fisheries, the Coastal Aquaculture Authority, Ministry of Agriculture, Govt. of India, the National Fisheries Development Board, Ministry of Agriculture, Govt. of India, Department of Biotechnology (DBT), the Marine Products Export Development Authority (MPEDA), Mangrove and Marine Biodiversity Conservation Foundation of Maharashtra, Vellore Institute of Technology (VIT), NOFIMA, Norway, Govt. of India, Chennai Petro Chemicals Limited, M.S.Swaminathan Research Foundation, Chennai, Aquaculture Foundation of India, Chennai, FAO-Bay of Bengal Programme, Network of Aquaculture Centres in Asia-Pacific (NACA) and World Bank.

#### **Institute training programmes**

Training courses in brackishwater aquaculture are conducted throughout the year by the Institute as part of the extension services and offered to the State / Central government officials, faculty members and students of Fisheries Colleges and Agricultural Universities, farmers, entrepreneurs and other stakeholders engaged in brackishwater shellfish and finfish aquaculture activities. Brainstorming sessions, Interaction meetings, Farmers' meets, Demonstrations, Hands-on trainings, Workshops and Exhibitions are also conducted from time to time. The training programmes are broadly classified into three viz., Short Course (3 days), Hands on Training Course (5 days) and Intermittent Course (5-10 days).

#### Nomination and Course Fee

The application for the training (Annexure-I) in respect of each course can be uploaded in CIBA website along with the receipt of NEFT transfer details (ICAR UNIT-CIBA, Current Account Number 10013240762, State Bank of India, Santhome Branch, IFSc No.SBIN0005797) towards the course fee or in the form of a Demand Draft drawn in favour of "ICAR Unit, CIBA", payable at State Bank of India, Santhome Branch, Chennai-600028. The course fee can be also paid as Cash/Credit/Debit Card at the time of reporting for the course. There is no course fee for ICAR employees. Applications should reach 15 days i n advance before the commencement of the training programme for consideration. The employed candidates should apply through proper channel. The soft copy of the application can also be submitted through e-mail to director.ciba@icar.gov.in . The selected candidates will be intimated by post/e-mail and they should report on the first day of the commencement of the training course.

Application along with the course fee is to be sent to (i) Director, ICAR- Central Institute of Brackishwater Aquaculture, 75, Santhome High Road, Raja Annamalai Puram, Chennai – 600 028 for the Courses conducted at Chennai, (ii) Officer-in-Charge, Kakdwip Research Centre of CIBA, 24 Paraganas (South), Kakdwip - 743 347, West Bengal, for the courses conducted at the KRC, Kakdwip and iii) Officer-in-Charge, CIBA- Navsari Gujarat Research Centre, First Floor, Building of Polytechnic in Animal Husbandry, Navsari Agricultural University, Navsari, Gujarat 396 450 for the courses at NGRC.

### Travel

The expenditure on travel, TA, DA, etc., has to be borne by the sponsoring authority / Organization or by the candidates themselves

#### **Boarding and Lodging**

Since the institute is having only limited hostel facilities, guidance would be provided to find suitable accommodation in hotels nearby the Institute. The transport facility will be provided from Chennai to Muttukadu Experimental Station whenever the training course is conducted at Mutukkadu Experimental Station of the Institute.

### Coordination

The training courses will be coordinated by the concerned Division / Section in Charge / Subject Matter Specialist. If any participant is unable to understand the matter in English, arrangements would be made to translate in Hindi, Bangla, Odiya, Telugu, Kannada, Malayalam and Tamil. On successful completion of the Training Courses, a Certificate on the same will be provided to each participant. If there is a demand for particular Training Course(s), it can be repeated as per the requirement. **Conventional training programmes will be organized subject to COVID-19 pandemic and Government Rules prevailing in the place of training and period. The dates provided are purely tentative and subject to change depending on institute's discretion. However, changes if any will be notified in CIBA website before the training period.** 

Sl.No.	Title of the Course	Place & Date	Duration (in days)	Minimum Number of Participants	Course Fee /person in ₹ excluding 18% of GST	Division / Section / Centre to organize
01	Recent advances in seed production and farming of brackishwater finfishes	CIBA HQ Chennai (09-05-23 to 11-05-23)	03	10	3500	Finfish Culture Division
02	Pond water and soil analytical techniques and interpretation of results	CIBA HQ Chennai (30-05-23 to 01-06-23)	03	10	3500	Environment Section
03	Aqua feed preparation techniques and quality control	CIBA HQ Chennai (23-05-23 to 25-05-23)	03	10	3500	Nutrition Section
04	Recent advances in seed production and farming of brackishwater finfishes	CIBA HQ Chennai (05-09-23 to 07-09-23)	03	10	3500	Finfish Culture Division
05	Aqua feed preparation techniques and quality control	CIBA HQ Chennai (12-09-23 to 14-09-23)	03	10	3500	Nutrition Section

Sl.No.	Title of the Course	Place & Date	Duration (in days)	Minimum Number of Participants	Course Fee /person in ₹ excluding 18% of GST	Division / Section / Centre to organize
01	Biofloc production technology	CIBA HQ Chennai 01-05-23 to 05-05-23)	05	10	5500	Crustacean Culture Division
02	Hands on training on finfish farming technologies in the west coast of India	NGRC Navsari, Gujarat (05-06-23 to 09-06-23)	05	10	5500	NGRC Navsari, Gujarat
03	Hands on training on Best Management Practices in finfish culture	CIBA HQ Chennai (12-06-23 to 16-06-23)	05	10	5500	Finfish Culture Division
04	Hands on training on shrimp and mud crab culture : A practical exposure	CIBA HQ Chennai (19-06-23 to 23-06-23)	05	10	5500	Crustacean Culture Division
05	Histopathological techniques for brackishwater aquatic animal disease diagnosis	(10.07.00)	05	10	5500	Aquatic Animal Health Division
06	Biofloc production technology	CIBA HQ Chennai (05-12-23 to 09-12-23)	05	10	5500	Crustacean Culture Division

Sl.No.	Title of the Course	Place & Date	Duration (in days)	Minimum Number of Participants	Course Fee /person in ₹ excluding 18% of GST	Division / Section / Centre to organize
01	Farming and seed production technology of brackishwater fishes.	KRC Kakdwip (23-08-23 to 29-08-23)	07	10	3000	KRC Kakdwip West Bengal
02	Recent advances on diagnosis and management of EHP in brackishwater shrimp aquaculture		06	10	6500	Aquatic Animal Health Division
03	Hands on training on shrimp and mud crab culture in East India	KRC Kakdwip (21-09-23 to 27-09-23)	07	10	3500	KRC Kakdwip, West Bengal
04	Recent advances in soil and water management in brackishwater aquaculture	CIBA HQ Chennai (09-10-23 to 13-10-23)	05	10	5000	Environment Section
05	Advances in hatchery seed production and farming of pearlspot, <i>E. suratensis</i>	NGRC Navsari, Gujarat (09-10-23 to 13-10-23)	05	10	5500	NGRC Navsari, Gujarat
06	Diversificationofshrimpfarmingcomplementarynativeshrimpswith P.indicusand P.japonicusshrimps		06	10	6500	Crustacean Culture Division
07	Nutrition, feed formulation and management for brackishwater shellfish and finfishes	KRC Kakdwip (20-11-23 to 25-11-23)	06	10	3500	KRC Kakdwip West Bengal

08	Recent advances on diagnosis and management of brackishwater fish diseases	CIBA HQ Chennai (06-11-23 to 11-11-23)	06	10	6500	Aquatic Animal Health Division
09	Bacteriological techniques for detection of pathogenic bacteria in brackishwater shrimp farming	CIBA HQ Chennai (11-12-23 to 16-12-23)	06	10	6500	Aquatic Animal Health Division
10	Disease diagnosis and management in brackishwater aquaculture farming	KRC Kakdwip (11-12-23 to 16-12-23)	06	10	3500	KRC Kakdwip West Bengal
11	Cell culture techniques for detection of brackishwater fish viral pathogens	CIBA HQ Chennai (29-01-24 to 03-02-24)	06	10	6500	Aquatic Animal Health Division
12	Genetics & Biotechnology: Tools and their application in aquaculture	CIBA HQ Chennai (05-02-24 to 09-02-24)	05	10	8500	Genetics and Biotechnology Division
13	Best management practices in shrimp hatcheries and farms	CIBA HQ Chennai (12-02-24 to 17-02-24)	06	10	6500	Crustacean Culture Division
14	Advanced training in aquaculture nutrition and feed technology	CIBA HQ Chennai (20-02-24 to 01-03-24)	10	10	8500	Nutrition Section
15	Entrepreneurship development through brackishwater aquaculture farming	CIBA HQ Chennai (04-03-24 to 08-03-24)	05	10	5500	Social Sciences Division

## Analytical services offered by ICAR-CIBA

- > Analyses of water and soil quality parameters
- > Analyses of shrimp / fish feed and their ingredients

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- Microbiological and pathological analyses of shrimp / fish tissue samples.
- ➢ Genetics, genomics & bioinformatics

For further details, please contact

The Director ICAR-Central Institute of Brackishwater Aquaculture 75, Santhome High Road, Raja Annamalaipuram, Chennai-600 028, Tamil Nadu Email: director.ciba@icar.gov.in

Published by

Dr. Kuldeep Kumar Lal Director ICAR-CIBA, Chennai -600 028

# **ANNEXURE-I**

### ICAR-Central Institute of Brackishwater Aquaculture, Chennai Application for Training Course

1. Title of the course	
2. Nature of training required in	
brackishwater aquaculture	
3. Name of the candidate (in Capital	
Letters)	
4. Sex	
5. Date of Birth	
6. Nationality	
7. Highest Educational Qualification	
8. Category	
(Aqua Farmer / Fisher / Farmer / Aqua	
Technician / Input Dealer / Input Supplier	
/ Aqua Industry / Aqua Marketing / State	
Government / Central Government /	
Development Boards/ Commercial Banks	
/ Other Financial Institutions / Research	
Scholar / Student / Others (Please	
specify)	
9. Designation if employed and	
name and address of the employer	
10. Complete postal address with	
Pin code	
11. Individual Email id	
12. Mobile Number	
13. Whether belong to SC/ST	
Category (if yes, please attach the	
relevant proof)	
14. Particulars of the course fee DD /.	
NEFT UTR Number etc.	
15. Are you being sponsored? If yes	
please give the name and address	
of the sponsoring organization	

### Recommendations of the sponsoring Authority and signature with office seal

Date:

Place:

### ICAR - Central Institute of Brackishwater Aquaculture- Contact details

### Headquarters

Director ICAR-Central Institute of Brackishwater Aquaculture 75,Santhome High Road Raja Annamalai Puram Chennai- 600 028 Tamil Nadu

Telephone: 044-24610565, 24618817, 24616948

Fax: 091-44-24610311 E-Mail: director.ciba@icar.gov.in Web site: <u>https://ciba.icar.gov.in</u>

### **Muttukadu Experimental Station**

Officer-in-Charge Muttukadu Experimental Station of ICAR-CIBA Kovalam Post Muttukadu - 603 112 Tamil Nadu E-Mail: director.ciba@icar.gov.in

### **Kakdwip Research Centre**

Head of Research Centre (HoR) Kakdwip Research Centre of ICAR-CIBA Kakdwip - 743 347 West Bengal Telephone: 03210-255072 Fax: 03210-257030 E-Mail: krckakdwip@yahoo.co.in

### Navsari Gujarat Research Centre

Scientist-in-Charge ICAR-CIBA – Navsari Gujarat Research Centre, First Floor, Building of Polytechnic in Animal Husbandry, Navsari Agricultural University Navsari, Gujarat 396 450 Telephone: 02637-283509 Email : oic\_ngrc.ciba@icar.gov.in

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