# Online Training Programme

# **Advancing Understanding of Fisheries Economics for Tomorrow's**

# Leaders

June 12 - 16, 2024





ICAR- Central Institute of Fisheries Education (Deemed University) Panch Marg, Yari Road, Andheri (W) Mumbai, 400061



### **Background**

Fisheries economics plays a critical role in contributing to various aspects of the economy and society. Realising the importance of fisheries economics a training programme on "Advancing Understanding of Fisheries Economics for Tomorrow's Leaders" is being organised by FEES, Division of ICAR-CIFE, Mumbai.

This training is designed to equip participants with the knowledge and skills necessary to navigate the complexities of fisheries economics. From foundational principles to advanced concepts. participants will explore a diverse array of including micro & economics, production economics, and global market & trade dynamics. Through lectures, interactive sessions, field visits, and hands-on data collection activities, attendees will gain practical insights into the role of economics in shaping the sustainable management of fisheries resources.

# Dates: 12<sup>th</sup> June to 16<sup>th</sup> June 2024

# **Objectives**

• To foster a comprehensive understanding of foundational economic tools, techniques and principles in fisheries science.

#### Who should attend?

Anyone interested to learn about fisheries economics. Fisheries students who are preparing for competitive exams are welcome to join.

# **Programme Fees**

A nominal fee of Rs. 800/- only needs to be paid to Account Name: ICAR Unit CIFE, Mumbai, Name of the Bank: State Bank of India (Account Number:

101323552I2, IFSC Code: SBIN0003117) by 12<sup>nd</sup> June 2024 Morning 9 O'clock.

# How to apply

Anyone interested to join the training is requested to fill the registration form and send the form on email <a href="mailto:hod.fees@cife.edu.in">hod.fees@cife.edu.in</a> and copy to <a href="mailto:swadeshprakash@cife.edu.in">swadeshprakash@cife.edu.in</a> with the subject line Fisheries Economics Training Programme.

#### **Registration form**

- 1. Name
- 2. Gender
- 3. Education
- 4. Address for communication
- 5. Mobile
- 6. Email
- 7. Payment Receipt Number

For any query please contact chandni.ypfees@cife.edu.in

# **Programme Director**

Dr. Ravishankar C. N.

Director/Vice-Chancellor ICAR-CIFE, Mumbai

#### **Course Directors**

Dr. Swadesh Prakash, Principal Scientist ICAR-CIFE, Mumbai

Dr. Ankush Kamble, Senior Scientist ICAR-CIFE, Mumbai

Dr. Vinod K. Yadav, Senior Scientist ICAR-CIFE, Mumbai

and

Dr. Arpita Sharma, Head FEES Division ICAR-CIFE, Mumbai

#### **Training Content**

#### **Introduction to Economics**

Basics of fisheries economics, farm management: Concepts, tools and techniques used to optimises the resource use. Contribution of fisheries sector to the economic development of the country. Brief about of various economic indicators and its role for in economic development in general and fisheries sector particulars

#### **Basics of Microeconomics**

Consumer's behaviour, Theories of demand and supply; classification and characteristics of markets, elasticities and it's role (price, income, cross) in fisheries managerial decision.

#### **Concept of Costs and Returns**

Various types cost and returns and its estimation for economic feasibility of production and marketing of fish and fish product.

#### **Introduction to Macro-economics**

Introduction to national income, accounting, measurement and determinants of national income, contribution of fisheries to GNP and employment;

#### **Insights to International Economics**

Balance of payments, economic growth and sustainable development. Globalization: dimensions and driving Forces. Introduction to GATT and WTO, Non-Tariff Barriers (NTBs) and Agreement on Anti-Dumping Procedures, Fisheries Subsidies and WTO, Fisheries Trade and Environment; protests against globalisation and WTO.

#### **Introduction to Production Economics**

Factors of production, various types of cost and return, law of diminishing marginal return, returns to scale, economies of scale and scope, profit maximization. Significance of marginal cost & revenue in fish production.

# **Basic Concepts of Statistics**

Definition of statistics, Concepts of population, sample, Census and sample surveys. Diagrammatic and graphical representation of data - bar diagrams, pie-diagram, histogram, frequency polygon, frequency curve and Ogives. Important measures of central tendency - arithmetic mean median and mode. Relative merits and demerits of these measures. Important measures of dispersion, Range, Mean Deviation, Variance and Standard Deviation. Relative merits and demerits of these measures. Coefficient of variation; Normal Curve, Concepts of Skewness and kurtosis.

#### **Intellectual Property Rights in Fisheries Sector**

In this session participants will learn about the Intellectual Property Rights (IPR) and different forms. Patents and patenting process, GMOs in fisheries, Patents in Indian fisheries sector.

#### **Probability and Sampling in Fisheries Data Collection**

Definitions of probability, mutually exclusive and independent events, conditional probability, addition and multiplication theorems. Random variable, concepts of theoretical

distribution; Binomial, Poisson and Normal distributions and their use in fisheries. Basic concept of sampling distribution; standard error and central limit theorem.

# **Introduction to Statistical Inference**

General principles of testing of hypothesis, types of errors. Tests of significance based on Normal, t, and Chi-square distributions. Bivariate data, scatter diagram, simple linear correlation, measure and properties, linear regression, equation and fitting; relation between correlation and regression, Length weight relationship in fishes; applications of linear regression in fisheries. Methodology for estimation of marine fish landings in India, Estimation of inland fish production in India and problems encountered.

#### Visit to fish market

## Preparation of data collection tools

Preparation of data collection tools, Testing reliability and validity to data collection tools, Basics of Data analysis