



# ICAR-NATIONAL INSTITUTE ON FOOT AND MOUTH DISEASE

International Centre for Foot and Mouth Disease (FAO Reference Centre for FMD)

Arugul, Bhubaneswar- 752050, Odisha, India

### **ORGANIZES**

National Training program
on
ADVANCES IN
SURVEY RESEARCH AND DATA ANALYSIS
USING
OPEN-SOURCE SOFTWARE

15th-24th Sep., 2025



## Patron

## **Dr Rabindra Prasad Singh**

Director
ICAR-National Institute on Foot and Mouth Disease,
Bhubaneswar

# **Coordinator Dr Samarendra Das**

Senior Scientist ICAR-NIFMD, Bhubaneswar

&

## **Co-Coordinator**

## Dr Rajeev Ranjan

Senior Scientist ICAR-NIFMD, Bhubaneswar

## Contact us:

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#### ADDRESS FOR COMMUNICATION

Dr Samarendra Das, ICAR-National Institute on Foot and Mouth Disease, Arugul, Bhuabaneswar-752050, Odisha

#### About ICAR-NIFMD

ICAR-National Institute on Foot and Mouth Disease (NIFMD), established as an All India Coordinated Research Project (AICRP) for FMD in 1968, has played a pivotal role in FMD research in India. Over the five decades of its existence, the project's scope got expanded, achieving numerous milestones. Initially an AICRP, it evolved into the Project Directorate on FMD in July 2001, upgraded as Directorate of FMD in 2015-16 followed by ICAR-National Institute on FMD (NIFMD). Presently, there are 32 state FMD Centers, technically supported by ICAR-NIFMD, and financially by DAHD. ICAR-NIFMD having BSL-3 Ag containment facility. The institute has developed scientific expertise in conventional and cutting-edge areas related to diagnosis, epidemiology, and vaccine research. Its mandate includes conducting research on FMD epidemiology, developing technologies to control the disease, and working toward eventual eradication. Additionally, the institute provides technical support, scientific input, and information to planners and strategy-making agencies involved in FMD control in India and the SAARC region. It also has a recognition as FAO reference center for FMD.



## **About the training program**

The 21st century is known as the "century of data", as data is becoming increasingly valuable and central to scientific advancements, decision making, understanding socio-economic status, shaping public policy, driving economic growth, etc. Surveys have become very crucial in research including disease surveillance and monitoring, socio-economic, public policy studies, etc. to gather large amount of data in a cost-effective and efficient way for understanding complex scientific, social and behavioural phenomena. Further, the survey can be used to test hypotheses, describe populations, and evaluate interventions. The success of survey studies primarily depends on the proper planning, designing, implementation, data analysis and interpretations. Thus, the researchers need to be equipped with essential skills in designing, analyzing, and interpreting surveybased research across diverse domains, including scientific disciplines, disease surveillance, socioeconomic development, healthcare, education, and financial awareness. The scheduled training programme will focus on bridging research with practical applications by providing hands-on training in various open-source statistical software(s) essential for survey research and data analysis thereon. Therefore. this training programme will be extremely helpful to the research scholars, students, faculty members, researchers/scientists. industry partners equipping them with advanced state-of-the-art tools for effective survey designing, data collection, and analysis.

### Course content at a glance

Day 1 (September 15, 2025): 2.00-5.30 PM

Topic 1: Transboundary Animal Disease

Topic 2 Basics of data and big data in survey research

Topic 3: Survey designing

#### Day 2 (September 16, 2025): 2.30-5.30 PM

Topic 1: Online Survey platforms

Topic 2: Questionnaire setting & preparation for survey

Topic 3: Probabilistic sampling techniques/methods

#### Day 3 (September 17, 2025): 2.30-5.30 PM

Topic 1: Purposive sampling techniques/methods

Topic 2: Data cleaning & preparation

Topic 3: Data pre-processing & standardization

Topic 4: Case study/ hands on

#### Day 4 (September 18, 2025): 2.30-5.30 PM

Topic 1: Basics of R & R studio

Topic 2: Data visualization/graphical analysis using R & R studio

Topic 3: Data summarization and inferential statistics

#### Day 5 (September 19, 2025): 2.30-5.30 PM

Topic 1: Parameters estimation in survey research

Topic 2: Introduction to Python

Topic 3: Data visualization using Python

Day 6 (September 20, 2025): In-house practice Day 7 (September 21, 2025): In-house practice

#### Day 8 (September 22, 2025): 2.30-5.30 PM

Topic 1: Statistical models in survey research

Topic 2: Machine learning in Python

Topic 3: Case study/hands on data analysis using R & Python

#### Day 9 (September 23, 2025): 2.30-5.30 PM

Topic 1: Statistical models in survey research

Topic 2: Time-series modeling & analysis

Topic 3: Case study/hands on modeling using R

## Day 10 (September 24, 2025): 2.30-5.30 PM

Topic 1: Forecasting

Topic 2: Case study/hands on

Valedictory and Feed Back

#### WHO WILL APPLY?

Students, Research Scholar, Scientists, Faculties, Industry personnels etc.

#### **HOW TO APPLY?**

Interested participant please register yourself below link. Registration is mandatory to attend the training program.

https://forms.gle/XFXY7o1dboNLgGSAA

#### **REGISTRATION FEE**

Students/Research Scholar : Rs. 1000/-Scientists/ Faculties : Rs. 2000/-Industry Personnel : Rs. 2500/-Overseas Participants : Rs. 4000/-

#### **PAYMENT DETAILS**

All payments are to be made through NEFT/IMPS/DD. The DD shall be drawn inf favour of "ICAR Unit PD on

FMD" payable at SBI, Jatni, Odisha.

Name of the Bank: State Bank of India, Jatni

**Account No.:** 11576142063

Account name: ICAR Unit PD on FMD

Account Type: SB

IFSC Code: SBIN0002071 MICRO Code: 751002046

#### **IMPORTANT NOTE**

- Last date of registration: 12.09.2025
- Mention your name in net banking transaction comments
- Registration confirmation will be send through email.
- Certificate will be provided to all participant after filling feedback form.