# Online Training Programme on

# "Smart Dairy Farming: Boosting Productivity through Innovations"





# **≈** Sponsored by **≈**

ICAR- National Agricultural Higher Education Project (NAHEP)

#### **○ Organized By**

Centre for Advanced Agricultural Science and Technology (CAAST),
Directorate of Research,
Navsari Agricultural University, Navsari-Gujarat (INDIA)







#### NAHEP-CAAST



The Navsari Agricultural University, Navsari, Gujarat bagged a CAAST project entitled "Establishment of Secondary Agriculture Unit for Skill development in Students and Farmers" on competitive basis during 2017-18. In 2019-20, Navsari Agricultural University had organized 8 Hands-On-Training Programmes on different aspects of secondary agriculture.

#### BACKGROUND



India is the largest milk producing country in the world with milk production of 187.75 MMT (2018-2019) and it has grown @ 6.5 percent per annum during this period. Heat stress, housing, herd management and production performance is fundamental for economic environmental sustainability of the dairy chain. For economic and environmental sustainability welfare of the animals should better, reduction in environmental footprints, reduction in cost of production and improved farm management is necessary. Newer and effective tools have been explored to cope with these challenges which is nowadays increasingly applied to control qualitative and quantitative parameters related to production, health, behaviour of individual animal. The main challenge is to turn these data into knowledge to provide real-time support system to the dairy farmers. Smart dairy farming is such key concept that can satisfy the increasing demand of quality dairy products. Smart dairy farming can reduce the environmental issues, decrease the use of resources, and raise the animal health by using advanced sensing and data analysing technologies. Therefore, looking into the importance of the topic CAAST- NAU is organizing a five days online training programme on "Smart Dairy Farming:

Boosting Productivity through Innovations" at NAU, Navsari during August 18-22, 2020.

# **OBJECTIVES**

This online training programme has been conceptualized to acquaint participants about status and scope of smart dairy farming.

# **COURSE CONTENT**

This training programme will broadly cover diverse topics related to smart dairy farming *viz*.

- Application of AI, machine and deep learning in dairy farming
- Application of ANN in smart dairy farming
- Dairy cattle welfare assessments tools and techniques
- Blockchain technology for Indian dairy sector
- Energy efficient dairy farm
- Water accounting and budgeting for dairy animals
- Avenues of product innovations and wealth creation
- Climate smart dairy farming: sustainable production & low-carbon future
- Disease prediction, early warning systems and herd health management in dairy farming
- Concept of Body condition scoring etc.

#### **EXPERT**

- Prof. David Kelton, DVM, PhD, DFO Research Chair in Dairy Cattle Health Professor of Epidemiology, Department of Population Medicine, University of Guelph, Ontario, Canada
- 2. **Prof. Don Kulasiri,** Professor, Faculty of Agriculture and Life Sciences, Lincoln University, Lincoln, Christchurch, New Zealand
- 3. **Dr. Smita Sirohi**, Adviser (Agri. & Marine Products), Embassy of India to the EU, Belgium and Luxembourg, Brussels, Belgium

- 4. **Dr. Rahul Kosarwal,** Ph.D, M.E(IT), B.E(ECE), Founder, OAARs CORP, United Kingdom
- Dr. Abdul Samad, Director, Vetware Private Limited, Ex-Dean, Faculty of Veterinary Sciences and Director, MAFSU, Maharashtra
- 6. **Er. Akhil Garg,** IIT Kharagpur and Massachusetts Institute of Technology alumnus (Cambridge, USA), Navi Mumbai, India
- 7. **Prof. Pennan Chinnasamy,** Center for Technology Alternatives for Rural Areas, Indian Institute of Technology Bombay, India, Visiting Professor University of Oulu, Finland
- 8. **Dr. Mukesh Singh,** Principal Scientist, Livestock Production and Management Section, ICAR-Indian Veterinary Research Institute, Izatnagar, Bareilly U.P.
- 9. **Dr. Thanammal Ravichandran,** Scientist International Livestock Research Institute (ILRI), India
- 10. **Dr. Samant Saurabh,** Information Systems, Analytics and Decision Science, Indian Institute of Management, Bodh Gaya, Bihar

# **DURATION**

This is five days online training programme, which includes interactive lectures and assignments.

# ELIGIBILITY



Faculty members, veterinary officers, SMSs, postgraduate students from Veterinary Sciences / Agriculture / Forestry / Horticulture / ABM discipline of Navsari Agricultural University and other SAUs, Deemed universities, Central institutes / centres, KVKs, Dairy Cooperatives etc are eligible for this course. The candidate should have scored at least 60% marks in their last degree programme.

Total 500 seats are available in this training, which would be distributed as under:

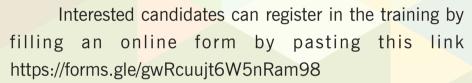
- A. Faculty members and currently enrolled/former PG students of NAU: 250
- B. Faculty members and currently enrolled PG students of other institutes/organizations: 250

If seats remain vacant in category A, they would be filled from category B and vice versa. Further, all rights pertaining to selection of candidates lies with the organizers.

# **REGISTRATION FEES**

There is no registration/course fee for this event. This training course is fully funded by NAHEP-CAAST.

#### **HOW TO APPLY**



All participants will be issued certificate of participation provided they attend minimum 80 percent of the lectures.

# **IMPORTANT DATES**



Last date for registration: August 10, 2020

Date for displaying eligibility list: August 13, 2020

# ADDRESS FOR CORRESPONDANCE:



#### **CAAST Secretariat**

Directorate of Research

Navsari Agricultural University,

Navsari (Gujarat)-396 450

Mobile: 9099062296

E-mail: nahepcaastnau3@gmail.com.



# **Patrons**



Dr. Sunil R Chaudhary
Hon'ble Vice-Chancellor,
Navsari Agricultural University,
Navsari, Gujarat.



Dr. R. C. Agrawal
DDG (Edu) &
National Director-NAHEP,
ICAR, New Delhi.

# **Advisors**



**Dr. Habibar Rahman ILRI Regional Representative,**South Asia, New Delhi, India.



Dr. Prabhat Kumar
National Coordinator
NAHEP-CAAST, ICAR, New Delhi.

# **Course Director**



Dr. Timur Ahlawat
PI and Nodal officer: NAHEP-CAAST sub project
NAU, Navsari.

# **Course Co-Director**



Dr. Rana Ranjeet Singh Associate Professor & Head, Co-PI, NAHEP-CAAST sub project NAU, Navsari.