EXTENSION EDUCATION INSTITUTE

(SOUTHERN REGION)

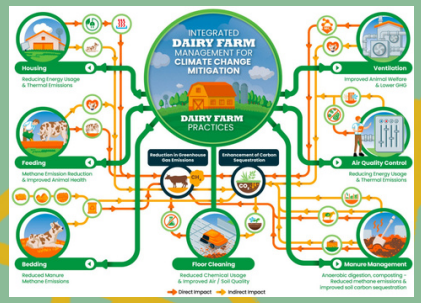
DIRECTORATE OF EXTENSION, DEPT. OF AGRICULTURE & FARMERS WELFARE
MINISTRY OF AGRICULTURE & FARMERS WELFARE, GOVT. OF INDIA, PJTAU,
RAJENDRANAGAR, HYDERABAD-500 030

On campus Training Programme on

Climate-resilient interventions in Dairy sector For the Officers of Department of Dairy Sector Kerala

(13th -17th May, 2025)

Climate resilient dairy farming focuses on adapting and mitigating the impact of climate change on dairy production. This involves developing strategies to protect dairy cows from heat stress, improving feed quality and availability, and reducing greenhouse gas emissions from the dairy sector.



Here's a more detailed look at key aspects of climate resilient dairy farming:

1. Heat Stress Management:

·Shade and Cooling:

Providing shade and cooling systems, such as fans and water sprinklers, can help reduce heat stress in dairy cows, which can lead to lower milk production and reproductive issues.

·Breeding for Heat Tolerance:

Selecting and breeding for heat-tolerant breeds can help improve the resilience of dairy herds to climate change.

·Optimizing Feeding Times:

Feeding cows during cooler periods of the day can help reduce heat stress and improve milk production

2. Improving Feed Quality and Availability:

·Climate-Resilient Forages:

Research and development efforts are focused on identifying and promoting forages that are more resilient to drought and other climate-related stress factors.

Diversifying Feed Resources:

Exploring alternative feed sources, such as crop residues and industrial byproducts, can help ensure a more stable feed supply during times of climate-related stress.

·Improving Forage Digestibility:

Improving forage digestibility can help maximize the utilization of feed resources and reduce methane emissions from ruminants.

3. Reducing Greenhouse Gas Emissions:

·Optimizing Ruminant Feed Management:

Strategies for improving feed efficiency and reducing methane emissions from dairy cows, such as optimizing feed composition and using additives that reduce methane production, are being explored.

·Renewable Energy Integration:

Using renewable energy sources, such as solar and wind power, on dairy farms can help reduce the carbon footprint of the dairy sector.

·Sustainable Land Management:

Practices that improve soil health and carbon sequestration, such as cover cropping and no-till farming, can help reduce greenhouse gas emissions.

4. Other Important Considerations:

·Genomic Tools:

Using genomic tools to identify genes associated with heat tolerance and other climate-related traits can help accelerate breeding programs for climate resilience.

·Disease Management:

Climate change can impact the distribution and prevalence of animal diseases. Implementing robust disease surveillance and management strategies is crucial for maintaining the health and productivity of dairy herds.

·Policy Support:

Government policies and incentives that support the adoption of climate-resilient farming practices can play a crucial role in accelerating the transition to a more climate-resilient dairy sector.

By implementing these strategies, the dairy industry can become more resilient to climate change and ensure the long-term sustainability of dairy production. Hence a five day oncapus training on Climate-resilient interventions in Dairy sector for the officers of Department of Dairy Sector Kerala will be organized at EEI from 13th -17th May, 2025.

Objectives: By the end of the training the participants will be able

· To know the Concepts of climate resilient dairy farming.

· To understand the Risk management strategies to combat climate change in dairy sector

· To gain knowledge on precision dairy farming, climate smart feeding strategies and value addition to milk and milk products to combat climate change

The training content covered various topics viz.,

- Climate Resilient Dairy Farming – An overview
- Risk management strategies to combat climate change in dairy sector
- Climate smart dairy enterprise
- GoI schemes, programs, initiatives in Dairy sector
- Climate-Resilient Housing for Dairy
- Visit to the practically operated livestock unit
- Visit to the practically operated livestock unit, sids farm
- Climate smart ITKs and information dissemination through digital tools in dairy sector
- Extension strategies to overcome the effects of climate change in dairy sector,
- Precision dairy farming
- Climate-resilient Smart Feeding Strategies
- Early warning and advisory systems for climate smart dairy farming
- Value addition for milk and milk products to combat change
- Gender mainstreaming and budgeting in dairy sector,

Methodology

« Presentation by eminent speakers/Experts.
« Interim interactive sessions.
« Simulation excercises
« Brain storming
« Individual and Group assignment

Participating Officers

Officers of Department of Dairy, Kerala State

Duration: 13th -17th May, 2025. (both days inclusive)

Further Information can be obtained from

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