



# Relevance of Feed Processing Technologies to Improve the Economics of Livestock Farming

(An Advanced Short Course for Researchers and Teachers in Animal Nutrition and Allied Disciplines)

February 20- March 12, 2019



**CENTRE OF ADVANCED FACULTY TRAINING IN ANIMAL NUTRITION  
ICAR-INDIAN VETERINARY RESEARCH INSTITUTE  
IZATNAGAR – 243 122, BAREILLY, UP**

## **COURSE OBJECTIVE**

The mixed farming involving crops and livestock integration has been a way of life since the beginning of agriculture and it is widely realized that this is the only way of providing additional income and employment to the marginal, small and land less farmers. One of the bottlenecks in improving livestock production is acute shortage of feeds and fodder that has lowered the productivity and fertility of Indian livestock. There is very little scope for increasing area under green fodder production. It is well established that feed represents the most significant cost of animal production. Selection of reasonable priced, good quality feed ingredients and appropriate processing technologies of these feed ingredients into complete diets is equally important for overall profitability of the livestock owners. Although feed processing is often given little emphasis, it represents a significant portion of feed costs and likely gives the greatest opportunity for influencing animal performance and health. The cost associated with feed processing includes a wide range of unit operations including receiving, grinding, proportioning, mixing, pelleting, load out and delivery. Nearly every one of these operations can have either a negative or positive influence on subsequent animal performance and can certainly influence final profitability of livestock owner. The present short course is, therefore, proposed to disseminate the recent advances in feed processing technologies to provide knowledge, skills and opportunities for sharing and exchanging views in light of recent global advancements in this field.

## **COURSE DESCRIPTION**

This course is designed for researchers and teachers of Animal Nutrition working in the National Agricultural Research and Education System including State Agricultural/Veterinary Universities. The course is especially applicable to professionals involved in animal nutrition research activities. The course objectives will be achieved through a combination of presentations, practical exercises and group discussions. It will particularly focus on:

- Principles of feed processing technologies
- Detoxification methods of anti-nutritional factors
- Influence of feed processing on utilization of nutrients and methane emissions
- Preparation of economic and balance ration for different categories of livestock
- Formulation of compressed complete feed blocks and urea molasses mineral blocks using locally available feed resources and their utilization in ruminants
- Analytical techniques for assessing the nutrient utilization and metabolism in different processed feeds

Each participant will be required to deliver a short seminar highlighting his or her activities in their parent organization and also feedback on the course.

## COURSE LOCATION

The course will be held at the Centre of Advanced Faculty Training in Animal Nutrition, ICAR-Indian Veterinary Research Institute, Izatnagar. Established in 1921, the Animal Nutrition Division of the institute has been the torchbearer for scientific and human resource development in the areas of Animal Nutrition and Feed Sciences in the country. In the process, it has evolved into a premier seat of learning and recognized as Centre of Advanced Studies in Animal Nutrition by the Indian Council of Agricultural Research in 1995 with a mandate for human resource development in the frontier areas of Animal Nutrition to train scientists and teachers of National Agricultural Research System, which has subsequently been rechristened as Centre of Advanced Faculty Training since 2009. The proposed course ***Relevance of Feed Processing Technologies to Improve the Economics of Livestock Farming*** is the 51<sup>st</sup> course in the series of short courses organized successfully so far by this centre.

## IMPORTANT DATES

- Course duration: 21 days from Feb 20-March 12, 2019
- Last date of receipt of application: January 31, 2019

## COURSE PERSONNEL

### *Patron*

**Dr. R. K. Singh**, Director  
ICAR-Indian Veterinary Research Institute, Izatnagar

### *Course Director*

**Dr. A. K. Verma**, Director  
Centre of Advanced Faculty Training in Animal Nutrition  
ICAR-Indian Veterinary Research Institute, Izatnagar  
E-mail: vermaak62@gmail.com

### *Course Coordinator*

**Dr. Putan Singh**, Principal Scientist  
Centre of Advanced Faculty Training in Animal Nutrition  
ICAR-Indian Veterinary Research Institute, Izatnagar

### *Core Faculty*

**Dr. Anju Kala**, Scientist  
**Dr. S.E. Jadhav**, Senior Scientist  
**Dr. V.B. Chaturvedi**, Principal Scientist  
Centre of Advanced Faculty Training in Animal Nutrition  
ICAR-Indian Veterinary Research Institute, Izatnagar

## APPLICATION PROCEDURE

Desirous participants not below the rank of Assistant Professor and equivalent in the concerned subject under Agricultural University /ICAR institutes need to apply online using the CBP portal of ICAR as per the following steps:

1. Log on to <http://iasri.res.in/cbp> or under the link Capacity Building Program at <http://icar.org.in>
2. Fill up the online application following the on screen guidelines.
3. Take a printout of the filled-in application and get it approved by the Competent Authority of your Organization/Institution.
4. Upload the scanned copy of approved application at the CBP portal.

However, applicants may send an advance copy (via e-mail) directly to the Course Director as per the format given in this brochure. Selection of participants will be done from online applications and the list of selected participants will be uploaded/ displayed on the portal. The selected candidates will also be informed individually.

## FINANCIAL IMPLICATION

No course fee will be charged for this course. The participants joining the course will be paid TA as per entitled class, but restricted to AC-II Sleeper Class and DA for the journey period, provided they produce a certificate from the parent organization to the effect that they are not being paid any TA/DA for this course. The participants will have to produce documentary evidence of traveling in the entitled class. Lodging and boarding for all the outside participants will be arranged free of cost in one of our guest houses for the period of their stay during the course.

## TRAVELING

Indian Veterinary Research Institute, a premier National Institute of Indian Council of Agricultural Research is situated at Izatnagar, a satellite town of Bareilly city, 8 km North of Bareilly Junction. One can also reach Izatnagar from Bareilly Railway Junction by auto rickshaw or OLA Cab. The weather in February & March will be pleasant, temperature ranging from 18-25°C.

## CONTACT FOR FURTHER DETAILS

### **Dr. Putan Singh**

Principal Scientist & Course Coordinator

CAFT in Animal Nutrition

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**APPLICATION FORM**

**CAFT Short Course (February 20-March 12, 2019)**

1. Title of course : *Relevance of Feed Processing Technologies to Improve the Economics of Livestock Farming*
2. Full Name (in block letters) :
3. Designation :
4. Present employer with address :
5. Address for correspondence with telephone, fax and e-mail :
6. Professional qualification :

Name of degree	University	Major subject offered	Year of passing

7. Signature of applicant
8. Date and place
9. Certificate from employer :

The application of Dr/Mr/Ms \_\_\_\_\_ is hereby recommended for attending the course entitled *Relevance of Feed Processing Technologies to Improve the Economics of Livestock Farming* being organized by the CAFT in Animal Nutrition, IVRI, Izatnagar from *February 20 to March 12, 2019*. It is further certified that the information furnished by him/her has been verified and found correct.

10. Signature of recommending authority with designation and official seal