



**HANDS-ON-TRAINING**  
**on**  
**ESTRUS SYNCHRONIZATION AND**  
**ARTIFICIAL INSEMINATION IN**  
**SHEEP**

**Schedule**

**Batch 1: 23.11.2020 to 02.12.2020**

**Batch 2: 14.12.2020 to 23.12.2020**



**Co-Sponsored**  
**by**

**Central Wool Development Board, Jodhpur**  
**Ministry of Textiles, Govt. of India**

**Division of Animal Physiology and**  
**Biochemistry**  
**ICAR- Central Sheep and Wool Research**  
**Institute, Avikanagar, Tehsil Malpura,**  
**District Tonk (Via- Jaipur),**  
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**Chairman and Course Director**

Dr. Raghvendar Singh, Director (Acting),  
ICAR-CSWRI, & Head, Division of  
Animal Physiology & Biochemistry,  
ICAR-CSWRI, Avikanagar

**Course Coordinators**

Dr. Vijay Kumar, Senior Scientist  
Dr. Sanghratna V Bahire, Scientist  
Dr. Arpita Mohapatra, Scientist

**Course Co-coordinators**

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Dr. Rajani Kumar Paul, Scientist  
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**Hands-on-training on**  
**Estrus Synchronization and**  
**Artificial Insemination in Sheep**

**Introduction**

Estrus synchronization and Artificial Insemination (AI) are reproductive techniques having high potential to provide economic benefits to the sheep farmers. By adopting these techniques farmers can breed their ewes' round-the-year in groups of their desired size. This allows them easy management of the newborn lambs and pregnant ewes. They can produce animals at desired selling age in batches. Moreover, farmers will get additional lambs per ewe which provides extra income.

**Division of Animal Physiology and**  
**Biochemistry**

The division is well equipped with advanced facilities on semen collection, processing, evaluation and artificial insemination in sheep. The division has developed a simple, low-cost and handy technique for estrus synchronization in sheep at farmers' flock. This highly effective technique was also standardized for application in other ruminant species like cattle, buffalo and goat. The vaginal sponges used for oestrous synchronization in these species are being produced by our division and have been widely tested at different parts of the country. The training would enable the participants to apply estrus synchronization, AI and other related techniques in these species in addition to sheep. The division has well qualified and trained scientific faculty and technical staff who are regularly imparting

training on estrus synchronization and AI in sheep to the various stakeholders. Therefore, the training will be highly useful to field veterinarians, KVK scientists, Assistant Professors of Universities/Colleges and Extension officials engaged in sheep husbandry.

### **Course contents**

Briefly, the course covers topics on ovine reproductive physiology, hands-on-practice on induction and synchronization of estrus in sheep, preparation of vaginal sponges (demo), preparation of semen diluents, semen collection, subjective evaluation of semen, semen dilution and short-term preservation, transport of semen and fixed time AI at farmers' flock, ultrasonography for pregnancy diagnosis in sheep, laparoscopic artificial insemination (intrauterine) in sheep, lectures on risk and control of disease transmission through AI, factors affecting success of AI and care of ram and ewes, import-export regulations of semen, recent techniques of semen evaluation, advances in augmentation and improvement of fertility in rams and ewes.

### **Who can apply**

Veterinarians working as Veterinary Officers in the State Animal Husbandry Departments, Subject Matter Specialists (SMS) of KVKs, Scientists and Assistant Professors of Animal Science disciplines, Post Graduates in Veterinary Disciplines/working as Training Associates, Veterinary Officers working in NGOs, Senior as well as middle level extension officials and livestock assistants with keen interest to carry out artificial

insemination and extension of sheep husbandry activities are eligible to apply.

### **Number of Candidates per batch**

Maximum number of candidates per batch is 25. The applicants will be allotted to the batch on first come first serve basis. On filling up slots in a batch, automatically the vacant slots in the next batch will be allotted.

### **Registration Fees**

There is no registration fee for this course.

### **Boarding Facilities**

Facilities of boarding are available at ICAR-CSWRI, Avikanagar on payment basis as given below:

#### **Lodging charges**

Guest house (AC room with attached toilet & bathroom) @ Rs. 300/- per day

P.G. Hostel (Non-AC Rooms with attached toilet & bathroom) @ Rs 200/- per day

Kisan hostel (Non-AC room with attached toilet & bathroom) @ Rs. 40/- per day

**Food charges** @ Rs. 210/- per day.

No TA/DA will be given to the participants. It has to be borne by the parent organization/department of the trainees.

### **How to Apply**

Applications with the choice of batch must reach the course coordinator Dr. Vijay Kumar by e-mail to [vijay.kumar2@icar.gov.in](mailto:vijay.kumar2@icar.gov.in) by 20<sup>th</sup> October 2020. Hard copy should also be sent so as to reach the coordinator by 5<sup>th</sup> November 2020. Applicants serving in Central or State Govt Departments/Universities and

Institutes, NGOs must forward their application through their controlling authorities. In case of difficulty, application can also be mailed to [drarpita.cswri@gmail.com](mailto:drarpita.cswri@gmail.com)

### **Intimation to the selected candidates**

Intimation to the selected candidates will be sent by 23.10.2020.

### **How to reach**

ICAR-CSWRI, Avikanagar is located in Malpura Tehsil of District, Tonk, Rajasthan. It is about 90 Km away from Jaipur on Jaipur-Malpura state highway. The best option to reach Avikanagar from Jaipur is to board a RSRTC Bus (Jaipur-Malpura) from Sindhi Camp Bus Stand Jaipur. Rajasthan roadways buses ply frequently from Sindhi Camp Bus Stand which is about 2 Km away from Jaipur Railway junction. Taxi Services are available to reach Avikanagar from Jaipur.



**Weather** The weather at Avikanagar during November to January is relatively cold with 10-25 °C temperature and 50-70 % relative humidity.