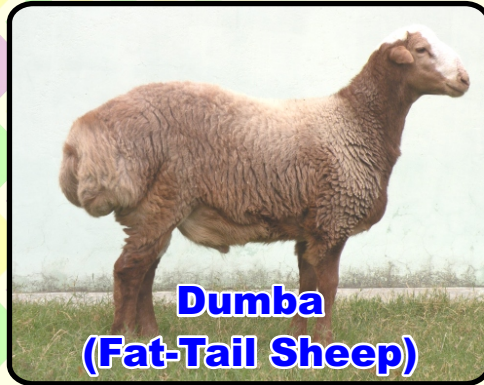


Glimpse of CSWRI Technologies



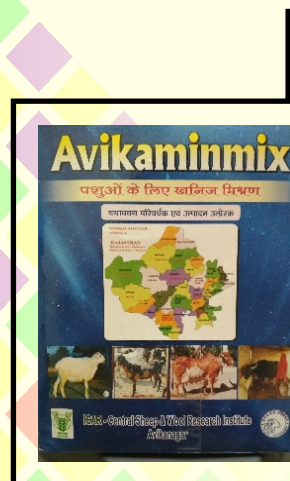
Avishaan (Prolific Sheep)



Dumba (Fat-Tail Sheep)



Meat Spread



Avikaminmix



Wool Products



अविस्वाद



Mozzarella Cheese



Avikesil-S (Intra-Vaginal Sponge)



Meat Products



Memnprash (Milk Supplement for Lambs)



Organizing Committee:

- Chairman** : Dr Arun Kumar Tomar, Director, ICAR-CSWRI, Avikanagar
- Co-chairman** : Dr Raghvendar Singh, Head, AP&B
Dr S.K. Sankhyan, In-charge, HRD
- Member** : Sh Suresh Kumar, CAO
- Course Director** : Dr Krishnappa Balaganur, Scientist
- Co-coordinators** : Dr Davendra Kumar, Pr. Scientist
Dr Sanghratna Bahire, Scientist

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Announcement-cum-information Brochure
for



ICAR-SPONSORED SHORT-COURSE
ON

**LAPAROSCOPE AIDED ARTIFICIAL INSEMINATION
AND EMBRYO TRANSFER IN SHEEP**

(14th to 23rd January, 2019)



ICAR-Central Sheep and Wool Research Institute
Avikanagar-304501 Rajasthan

Introduction :

Artificial Insemination (AI) and embryo transfer (ET) are the important reproductive techniques for genetic improvement program in farm animals. However, their use in sheep husbandry has progressed rather slowly in comparison to the other domestic species in India. The major impending reason for poor success of AI could be due to low shelf life of chilled semen. Moreover, unlike other domestic species trans-cervical AI (TCAI) and ET has failed consistently over many years because of complex anatomy of sheep cervix unlike other domestic species. However, use of laparoscopy to bypass the cervix and deliver the elite semen and embryo directly into the uterus has revolutionized the sheep industry in many European countries. Laparoscopic AI is the skill based minor invasive surgery by which sperm is placed directly into a uterus with help of camera through the key holes made over the abdomen. The technique opens the avenue to use low dose cryopreserved semen of high pedigreed rams or endangered species. Only 20- 50 million live sperm are required for laparoscopic AI versus 200-400 million for TCAI and 400-800 million for vaginal insemination. Moreover the technique involves less time and least complications compared to TCAI. Hence this technology would yield rapid genetic progress of low producing non-descript sheep which is accounting to 38.6 percent of the Indian sheep population. These technologies not only aid in doubling the farmer income but also help in controlling many reproductive diseases associated with natural breeding thereby directly or indirectly help in meeting the nation's demand for mutton. Thus in need of time, this training programme is proposed to help the researchers and scientists to learn and sense the scope and importance of laparoscopic AI and ET in fulfilling the nations demand for mutton and conserving the endangered Indian sheep breeds.

About the Division:

The division of animal physiology and biochemistry, ICAR-CSWRI, Avikanagar was started as Physiology section in the year 1965. Later, in the year 1975 the section was upgraded to the division to carry out both basic and applied research in the area of adaptive and reproductive physiology and biochemistry in sheep. Over the last five decades the division has emerged one of the leading research centres on sheep in India. Number of externally funded projects from DBT, DST, NATP, NAIP and NFBSFARA has been successfully completed in the

division. The division has achieved several milestones such as production of first embryo transferred lamb, production of 24 embryo from a single ewe by multiple ovulation technique, development of indigenous low cost technology for estrus synchronization in sheep, outstanding lambing of 60 per cent with laparoscopic insemination of frozen thawed semen. The division is well equipped with advanced research facilities such as computer assisted semen analyser, programmable cell freezers, laparoscope, ultrasound, RIA facility and other facilities of molecular and embryo/cell culture studies. The division has well qualified and trained scientific and technical staffs who are working on various aspects of reproduction and adaptation physiology in sheep. Therefore, the participants will have a good exposure to the various aspects of sheep reproductive technologies.

Course contents:

- An overview of Ovine Reproductive Technologies
- Collection and cryopreservation of ram semen
- Laparoscope aided artificial insemination
- Superovulation and surgical embryo collection in sheep
- Grading and preservation of sheep embryos
- Laparoscope aided embryo transfer
- Estrus synchronization methods in sheep
- Early Pregnancy Diagnosis in sheep by ultrasonography
- Minimum essentials for establishing semen collection and AI laboratory, standard operating procedures (SOP) for production of frozen semen and certification of centre.

Course Fee:

Participants have to pay a registration fees of Rs 50/- (Rupees fifty only) either in the form of Indian postal order or demand draft drawn in the favour of ICAR UNIT CSWRI, payable at Malpura.

Travel:

TA will be provided for the to and fro journey restricted to AC-II tier train fare/bus or any other means of govt. transport. TA will be paid for the shortest route from the place of duty to the short-course location and back. **No air fare is admissible.**

Accommodation:

The training is sponsored by the education division, ICAR, New Delhi. The boarding and lodging will be free.

Location and weather:

ICAR-CSWRI, Avikanagar is located in Malpura Tehsil of Dist. Tonk, Rajasthan. It is about 90 km away from Jaipur on Jaipur-Malpura state highway and connected by Rajasthan Roadway buses which are frequently available from Sindhi camp bus stand which is about 2 km away from Jaipur Railway junction. The weather at Avikanagar during January is moderate in daytime (15-20° C).

Eligibility:

University faculties or researchers not below the rank of Assistant professors or Scientists working in the ICAR, KVK's or any other government institutes are only eligible to apply for this short-course.

How to apply:

Eligible and interested participants are requested to apply online through capacity building programme portal (<http://cbp.icar.gov.in>) only. After login by the candidate, short course will be selected by clicking apply and fill the necessary required information. Generated application form shall be uploaded after dully recommend and signed by the competent authority of the institute where the candidate is employed. No other mode of application will be entreated. For any other clarification for applying, candidate may contact Course Director my email. The total no. of participant shall be limited to 25 only. The selected candidate will be intimated by the email. Cancelled at the last moment for casual region after acceptance will be regarded as serious breach of ethical conduct since it may deprive other eager candidates who could have availed the opportunity.

Last Date to Apply :

Last date to apply for short course is 31st December, 2018.

