and send a hard copy to the Course Director along with a sum of Rs. 50.00 (Rupees Fifty only) as registration fee (non-refundable) in form of Demand Draft drawn in favour of ICAR Unit, NRC on Yak payable at Dirang. Selection of the participants will be from online applications and the list of selected participants will be uploaded/displayed on the CBB portal and also at www.nrcri.org.in on 5th June, 2017. Selected candidates will also be informed by email. However, candidates may send an advance copy (by email) to the Course Director/Co-coordinators.

Accommodation and Traveling
Free boarding and lodging will be provided to the participants during the training period at the guest house and scientist home of ICAR-NRC on Yak, Dirang. Travel allowance to the participants will be paid as per their entitlement for the class of travel, restricted to the maximum of AC II tier fare by the shortest route. Participants are requested to produce original money receipts/tickets in support of their claim. The reimbursement will be made as per ICAR guidelines.

Participants are also requested to reach Guwahati latest by 6.30 AM on 19th July 2017.

The organizers will arrange their journey from Guwahati to Dirang which will start by 7 AM from Guwahati on 19th July 2017 (takes at least 10 hours).

During the month of July the temperature in Dirang will be ranging from 10°C to 20°C. Therefore, participants are requested to bring warm clothing accordingly.

Introduction
Livestock rearing is one of the most important avenues for the highlanders and they are using these practices traditionally without having any scientific knowledge which limiting their productivity. Ruminants in hill ecosystem comprises of yak, sheep and hill cattle which survive under harsh environmental conditions like extremes of climate and feed and fodder scarcities. Besides, their reproductive physiology is also different which affected by season, climate, day length and availability of feed and fodders compare to animals in the plains. Thereby, they do not reproduce round the year due to nutritional and environmental stress. This is a major hindrance to their reproductive performance. ICAR-NRC on yak since day one of its inception developed some technologies for the betterment of highland animals, which can be disseminated to different parts of the country through conduction of some training programmes on nutritional, managemental and some improved biotechnological tools that can be suitability be applied to optimize the performances in the livestock of hill ecosystem. Hence, the training programme not only be helpful for livestock farmers of hill ecosystems but also it will helps transferring the technologies to different parts of the country through involvement of veterinary and its allied professionals of the different states of the country that will ultimately helps in upliftment of the socio-economic and nutritional status of the highlanders.

ICAR-NRC on Yak: An overview
This ICAR institute was established in the year 1989 at Dirang in the West Kameng district of Arunachal Pradesh with a vision of conservation and improvement of yak for higher productivity and profitability through innovative research. The experimental yak farm of the institute is located at Nykmasung (2750 meter above mean sea level and 31 km away from Dirang). Scientists of the institute have contributed tremendously in development and application of modern approaches in yak husbandry practices. Some of the notable achievements in this field includes: implementation of Complete Feed Block technology, Area Specific Mineral Mixture, Artificial Insemination, production of Embryo Transfered calf, Oestrus Synchronization and fixed timed A.I., trans-vaginal ovum pick up, birth of first IVF yak calf etc. For their untiring work, the scientists of the institute were awarded with Jawaharlal Nehru Award, Fakhruddin Ali Ahmed Award, CSIR Award for Science & Technology innovations for Rural Development and many others awards from different professional societies for their scientific contribution to yak husbandry.

Course Content
This short course will expose the participants to different animal husbandry, breeding, nutritional and reproductive biotechnological practices for highland animals which can be also be applicable in other livestock in the form of lectures and hands on training comprising following broad fields-

- Effect of climate change on animal production and reproduction.
- Nutritional interventions to augment fertility in livestock of hill ecosystems.
- Sperm transcripts: markers for male fertility.
- Application of reproductive biotechniques in high altitude animals.

The ultimate goal of implementing these technologies will help up-liftment of the socio-economic and nutritional security of the farmers relating livestock farming.

Venue
ICAR-National Research Centre on Yak, Dirang, West Kameng District, Arunachal Pradesh-790101

Duration of the Course
The course has been approved for 10 days from 20th to 29th July, 2017. It will comprise of lectures and practical sessions.

Who can participate?
The course is open for the professionals working not below the rank of Scientist/Assistant Professor and equivalent including Subject Matter Specialists of KVKs in the concerned subject under Agricultural/ Veterinary/ Dairy/ Home Science/ General Universities, ICAR institutes and State Departments having at least master’s degree in those areas. The working knowledge of computer is essential. The number of participants for the course will be limited to maximum 20 (Twenty) and selection of participants will be first come first basis.

How to apply
The interested candidate should submit their application online using CBB portal (www.cbb.icar.gov.in). After filling the online application, participants need to take a print out of the application and get it approved by the competent authority of their organization. Upload the scanned copy of the approved application through CBB portal on or before 31st May, 2017.