
Inaugural and Valedictory functions:

A National Seminar on Prospects and Challenges in Small Ruminant Production in India was jointly organized by the Tamil Nadu Veterinary and Animal Sciences University and the Indian Society for Sheep and Goat Production and Utilization (ISSGPU) at Sheep Breeding Research Station, Sandynallah on 11.12.2014 and 12.12.2014 as part of the Silver Jubilee Celebrations of TANUVAS. Dr.M.Babu, Director, Centre for Animal Production Studies, TANUVAS presided over the inaugural function and delivered the inaugural address. The keynote address of Dr.S.M.K.Naqvi, Director, Central Sheep and Wool Research Institute, Avikanagar, Jaipur was presented by Dr.H.K.Narula, Principal Scientist, CSWRI Dr.Sarfaraz A.Wani, Dean, Faculty of Veterinary Sciences, SKAUST, Kashmir, Dr.A.K.Patel, Principal Scientist, CSWRI and Dr. Saket Bhusan, Principal Scientist, Central Institute for Research on Goats, Makdoom have delivered felicitation addresses. A total of 101 delegates from various parts of the country have participated in the seminar. Earlier Dr.M.Iyue, Professor and Head, Sheep Breeding Research Station welcomed the gathering and Dr.N.Murali, Professor, Department of Animal Genetics and Breeding,VC&RI, Namakkal proposed the vote of thanks. In the valedictory function Dr.M.Babu, Director, CAPS distributed prizes and certificates to the participants. Dr.D.Balasubramanyam, Professor, Directorate of CAPS had given the welcome address and Dr.R.Anilkumar, Professor, Dept, of AROG, VC&RI, Namakkal proposed the vote of thanks.

Proceedings of the seminar:

The proceedings of the seminar were conducted in three technical session and one poster session as detailed below.

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<th>Technical sessions</th>
<th>Chairman</th>
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<th>Rapporteur</th>
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<td>Advances in small ruminant production and conservation</td>
<td>Dr.M.Babu, Director CAPS</td>
<td>Dr.S.N.Sivaselvam, Professor and Head AGB, MVC</td>
<td>Dr.L.Lelie Leo Prince Sr.Scientist, CSWRI, Avikanagar</td>
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<td>Dr.A.K.Patel, Principal Scientist ARC,Bikaner</td>
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<td>Recent trends in small ruminant health</td>
<td>Dr.L.Gunaselan Professor and Head Dept Veterinary Public Health and</td>
<td>Dr.Y.K.M.Reddy Professor and Head VRC-VV, DCAHS, TANUVAS</td>
<td>Dr.C.Sreekumar Professor PGRIAS, Kattupakkam</td>
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The following recommendations were formulated based on the knowledge acquired from the presentation of lead papers, oral presentations, articles published in the compendium and discussion held during the scientific sessions.

**Recommendations of the Seminar:**

- **Existing Farm and Field units must be strengthened and new units created for important indigenous sheep and goat breeds with active participation of Department of Animal Husbandry Dairying & Fisheries, Government of India, ICAR, Veterinary and Agricultural Universities, State Animal Husbandry Departments for genetic improvement of native breeds by selection.**

- **Farmers participatory approach should be followed by working closely with small ruminant farmers on their flock with scientific data recording for genetic improvement.**

- **Selection on body weight gain or live weight at market age which is heritable should be encouraged to improve the body weight gains and feed efficiency of indigenous sheep and goat breeds.**

- **Possibility of incorporation of prolificacy in sheep may be explored in breeds having higher milk yield and mothering ability.**

- **Crossbred strains having exotic inheritance may be popularized for upgrading non-descript breeds in areas were climatic conditions are suitable for rearing with respect to climatic conditions and feed & fodder availability for better expression of production potential.**
Knowledge of scientific management of breeding, feeding, housing, healthcare, processing and value addition must be propagated to end users (Sheep and goat farmers and entrepreneurs) for increasing the return from small ruminant rearing.

Co-operative approach in small ruminant husbandry at village level may be tried for better breeding practices and to derive more economic benefit.

A general health calendar need to be adopted for protecting sheep against infectious diseases

Targeted selective treatment has to be practiced against important parasitic diseases as an alternative to indiscriminate dosing.

An eradication strategy is to be worked out for eradication of PPR.

Proactive strategies with preventive health care, national programmes, informed public and sustainable follow up are needed for effective control of infectious diseases in small ruminants.

Estrous synchronization and fixed time AI, increase economic benefit to the farmers and to be considered for inclusion in poverty alleviation programmes.

The plasma membrane and acrosome integrity evaluation add quality assurance to frozen goat semen. Fertilizing ability of the spermatozoa is to be taken into consideration in addition to the routine tests done before freezing of semen in small ruminants.

Expression profile of pre-implantation embryo development related genes P57KIP and DLK1 be included for assessing the developmental competencies of embryos.