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Greetings to all members of the goat fraternity and allied stakeholders!

The New Year 2025 was embarked by vibrant and bountiful scientific, strategic and unparalleled dedication for the goat farming community. With immense pride and satisfaction, I take this opportunity to highlight the remarkable progress and achievements that underscore our collective mission - uplifting livelihoods through excellence in goat research and innovation. We began the period by successfully organizing the National Conference of Indian Society for Sheep and Goat Production and Utilization (ISSGPUCON 2025) from March 05-07, 2025, a grand event that brought together eminent scientists, research scholars, students, policy makers, and stakeholders under single umbrella. We also convened the 31<sup>st</sup> Research Advisory Committee meeting and Second Quinquennial Review Team (QRT) meeting which uphold our continual emphasis on quality research governance and future roadmap planning. One of the most notable accomplishments was overwhelming participation of our scientists in the Vikasit-Krishi Sankalp Abhiyan (VKSA) as envisioned by our Honourable Agriculture Minister. VKSA was a great learning experience and two way dialogue among scientists and farming communities focussed on actual problem driven research.

We were also engaged in our flagship National Training Programs and other customized productive training modules. At the research front, our work continues across over 40 ongoing projects, addressing domains like gene editing, herbal products, diagnostic kits, methane mitigation, reverse vaccinology and CRISPR applications. These innovations are aimed at making goat farming more resilient, productive, and profitable. The institute also remained steadfast in empowering SC/ST and women farmers, ensuring that development is inclusive and equitable. Our presence at several technology demonstration and extension platforms reinforced our commitment to farmer outreach and technology dissemination. From policy level dialogue to grassroots training, ICAR- CIRG remains at the forefront of every initiative that strengthens goat farming in India. I extend heartfelt thanks to the editorial team of this newsletter, our dedicated scientists, staff, and all stakeholders for their tireless efforts. Your commitment is the cornerstone of every success story that emerges from CIRG. Let us continue our journey with even greater vigor, embracing innovation and inclusivity to ensure that goat farming remains a cornerstone of rural prosperity in India and beyond.

With best wishes,

(Manish K. Chat







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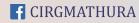


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# Finger Millet Cultivation for Goat Feed Arvind Kumar\*, Ravindra Kumar and Sugad Singh Animal Nutrition Management and Products Technology Division \*Email: arvindkr30@yahoo.com

Finger millet (Eleusine coracana) also known as ragi or mandua in hindi is a crop of millet group, which is termed as "Shree Anna" in India. Millet is a group of small-grained cereal crops known for their high nutritional value and adaptability to harsh growing conditions. They are known for their resilience and ability to grow in various climates and soil conditions with minimal water and inputs. Millets are increasingly being recognized for their nutritional value and potential role in promoting sustainable agriculture. Finger millet is very well recognized for good source of calcium (344 mg), potassium (408 mg) and other nutrients. It is beneficial for individuals with low haemoglobin levels as it is also good source of iron. Finger millet is naturally gluten-free, making it a suitable grain for individuals with celiac disease or gluten sensitivities. Due to their fibre content and low glycaemic index finger millet is helpful in managing diabetes and cholesterol levels. Finger millet can be used in various forms, including flour, porridge, and traditional dishes. It can also be incorporated into baked foods like biscuits. Millets have been a staple in traditional diets for centuries and are now experiencing a resurgence in popularity due to growing awareness of their health and environmental benefits.

#### **Cultivation Practices**

It is known as the oldest food and first cereal grain used for domestic purpose. It can be grown in dry weather and can withstand severe drought conditions and adaptable to higher elevations. These are short duration, ready to harvest in about 65 days and can be grown throughout the year. Variety of soil ranging from rich loam to poor shallow upland soil with good organic matter is suitable for cultivation of finger millet. Finger millet grows best in soil having pH 4.5-8. Appropriate crop rotation is very important in finger millet as it gives high yield and help to maintain fertility of soil. In north India finger millet crop rotation with gram, mustard, barley and linseed is commonly followed. Intercropping of finger millet + soybean in kharif and oats in rabi is an ideal and remunerative cropping sequence. It is grown in all cropping seasons in different parts of the country but more than 90% of area is under rainfed conditions, grown

during kharif season. In the region of high rainfall, it can be cultivated on well-drained soil as transplanted crop. Transplantation is generally adopted in areas of adequate moisture.



It gives higher yield compared to direct seeded crop. Transplanted crops do not lodge during heavy rains. The optimum plant population can be achieved by following 25 cm row spacing and 15 cm plant to plant spacing. Sowing can be done manually by broadcasting, line sowing, drilling or transplanting in the main field. Some of the varieties cultivated in India are VL 376, GNN-6, VL Mandua 348, KMR 340, Indira Ragi 1, GPU 66, and VL 124. To get optimum yield, a seed rate of 10 kg/ha can be used. One weeding can be done after 20-30 days of sowing, when plants are properly established in the field. Fertilizer @ N (62 kg), P (30 kg) and K (30 kg) is recommended for optimum yield of crop. Other than this 5-10 tons of FYM can also be applied one month before sowing. Finger millet is a rainy season crop and generally does not require irrigation. During the stage of tillering and flowering, if rain stops for long period then irrigation is required for good plant growth and yield.

#### **Plant Protection and Harvesting**

Cutworms that cut base of plant in early stage of crop can be controlled with the release of Trichogramma parasiticide weekly once. Aphid and white Stem borer may also cause damage to the crop. Blast and Mosaic are the two common disease infestations in which plant gives a blasted or burnt appearance. To avoid this blast

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resistant varieties may be used and seed treatment with fungicide like carbendazim @ 2 gm/kg can be used before sowing. Crop matures in 120-135 days, duration may vary depending upon variety use. Harvesting is done in two stages. Earheads are harvested with sickles and straw is cut close to ground. In some places whole plant along with earhead is cut, heaped and dry in sun for 2-3 days and then threshed.

#### **Use in Animal Feed**

Finger millet is a valuable component in animal feed, particularly for dairy cattle, sheep, and goats. It can be used as both a forage source and a grain supplement, offering nutritional benefits to the animals. Finger millet straw and green foliage can be used as a forage source for livestock. Straw is considered to have a lower nutritional value, it can be effectively used when supplemented with

energy and nitrogen sources, such as urea-treated straw, green maize, or para grass. Finger millet straw can be a valuable component of diets for cattle, especially when combined with wheat bran and groundnut cake. Finger millet grain is a good source of energy due to its high carbohydrate content, similar to maize. It can be used to supplement dairy cows, goats and other lactating animals to increase milk yield, fat, and solids-not-fat content. Finger millet is 11% water, 7% protein, 54% carbohydrates, and 2% fat. In 100 g reference amount, finger millet supplies 305 calories, and is a rich source of dietary fiber and several dietary minerals. It has a higher fiber content than maize. Finger millet is a good source of antioxidants, which can be beneficial for animal health. Millets, including finger millet, are considered a sustainable feed option, especially in the regions of fodder scarcity.



#### Brucellosis Diagnostics in Small Ruminants: Current Landscape and Future Perspectives K. Gururaj\*

Sr. Scientist, Animal Health Division \*Email: guruvet@gmail.com

Brucellosis, caused predominantly by *Brucella melitensis* in goats and sheep, remains one of the most challenging zoonotic diseases worldwide. It leads to significant reproductive losses, reduced milk yield, and persistent infection cycles, while also posing a public health threat through animal-to-human transmission. Despite extensive control efforts, timely and accurate diagnosis remains a bottleneck, especially in smallholder systems with limited infrastructure. Current diagnostic tools, while reliable under laboratory conditions, often fall short when rapid, field-level decision-making is required. This article presents an overview of existing diagnostic methods, their advantages and limitations, and the future direction of next-generation diagnostics aimed at addressing these challenges.

#### **Current Diagnostic Landscape**

#### **Bacteriological Culture**

Considered the gold standard due to its specificity and ability to confirm species and biotypes, culture methods are slow, hazardous, and dependent on BSL-3 laboratories-making them unsuitable for field or mass surveillance.

# Brucellosis diagnostic tests ranked by speed and complexity



#### **Serological Tests**

These remain the primary diagnostic tools for herd-level screening:

- RBPT is rapid and affordable but suffers from false positives due to cross-reactivity and inability to distinguish vaccination from infection.
- STAT quantifies antibodies but is less sensitive in chronic infections.
- CFT offers high specificity but is complex and labbound.
- ELISA (indirect and competitive formats) is highly

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sensitive and widely used in surveillance but requires lab infrastructure and a cold chain.

• MRT is useful for lactating animals but limited in sensitivity for small ruminants.

#### **Molecular Diagnostics**

PCR and real-time PCR provide high accuracy and speciesspecific detection but are cost- and infrastructureintensive. A notable example is the OMP31-based TaqMan® real-time PCR assay developed by ICAR-CIRG, capable of detecting B. melitensis with 98% sensitivity and 100% specificity, down to 100 fg DNA or 1 cfu/ml.

#### **Limitations of Current Tools**

Despite widespread use, current tests face key drawbacks:

- Cross-reactivity and false positives in serology.
- Reduced sensitivity in chronic infections.
- Inaccessibility of PCR and ELISA in remote areas.
- Delay due to sample transport to labs.

#### **Comparison of Current vs. Next-Generation Diagnostics**

Test	Time	Sensitivity / Specificity	Infrastructure	Cost / Test	Field Suitability
RBPT	5 min	Moderate/Low	None	Very low	High
ELISA	2–3 hrs	High/High	Laboratory required	Moderate	Low
PCR	3–4 hrs	Very High/Very High	Advanced lab	High	Low
LFA (Next-Gen)	5–15 min	High/High	None	Low	Very High
LAMP	<1 hr	High/High	Simple heater	Low- Moderate	High
CRISPR-Based Assays	<1 hr	Very High/Very High	Minimal	Moderate	Emerging

#### Why Next-Generation Diagnostics Are Needed

Future diagnostics must provide rapid, accurate results at the point-of-care (POC), without the need for electricity or trained technicians. The ideal test would be:

- Rapid (minutes)
- Infrastructure-Free
- Highly Sensitive and Specific
- Stable at Room Temperature
- Low-Cost and User-Friendly

Such tools would allow timely decisions for isolation, culling, or treatment-curbing disease spread and economic losses.

#### **Emerging Technologies**

#### Nanoparticle-Enhanced Lateral Flow Assays (LFAs)

These "dipstick-style" tests mimic pregnancy kits and are being adapted for brucellosis using recombinant antigens (e.g., OMP31, BP26) and signal-enhancing nanoparticles (quantum dots, silica). Newer LFAs are validated on serum, milk, and blood, and deliver results in 5-10 minutes. Indian prototypes are priced between ₹40-₹250.

Challenge Area	Conventional Methods	LFAs and Novel Diagnostics
Specificity	Cross-reactivity with other bacteria due to LPS antigens	Highly specific recombinant protein antigens
Infrastructure	Laboratory setup, cold chain, and trained personnel required	Portable, infrastructure-independent field use
Speed	Hours to days for results (ELISA, PCR)	Results in minutes at point-of-care
Sample Flexibility	Primarily serum-based testing	Multiple sample types (serum, blood, milk)

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#### **Loop-Mediated Isothermal Amplification (LAMP)**

LAMP enables DNA amplification at constant temperatures, without thermocyclers. ICAR-CIRG's colorimetric vLAMP detects Brucella spp. with high sensitivity and field-readiness.

#### **CRISPR-Based Diagnostics**

CRISPR-Cas systems paired with isothermal amplification promise high specificity and rapid results in under 60 minutes. They can be formatted into simple lateral flow devices.

#### **Biosensor Platforms**

Optical / electrochemical biosensors using aptamers or SPR offer real-time, label-free detection but are still under validation.

#### Outlook

By 2028-30, ICAR-CIRG's upcoming field-deployable LFA aims to provide >95% sensitivity, ambient shelf life (12-18 months), and ease of use. Hybrid tools integrating LAMP or CRISPR with LFAs may soon deliver lab-grade accuracy to remote areas, transforming brucellosis diagnostics in small ruminants.



Pregnancy Diagnosis Methods for Goats S.P. Singh\*, Y.K. Soni, and Juhi Pathak
Animal Physiology and Reproduction Division
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The early and precise pregnancy analysis can be a useful strategy for checking that reproductive performance plays an important role in order to screen reproductive losses, and in this manner, it improves the reproductive proficiency of goats. Accurate pregnancy diagnosis in goats is essential for effective herd management, nutrition planning, and overall reproductive efficiency. Timely identification of pregnant and non-pregnant does allows farmers to make informed decisions regarding breeding schedules, culling, and resource allocation. There are several methods for pregnancy diagnosis, like hormonal profiling of progesterone, but sometimes it results are inaccurate. Embryo-specific pregnancy markers, which delineate the presence and viability of the embryo, are considered perfect for accurate pregnancy diagnosis. Typically, given the limitations of the previously delineated pregnancy determination techniques, as transabdominal palpation and ultrasonography, a considerable polymorphic placentally communicated protein has been found and used for pregnancy findings in goats. Diagnosing pregnancy in goats can be done using several methods, each varying in accuracy, cost, timing, and practicality. The most common methods for pregnancy determination include ultrasonography and assays of pregnancy-related hormones such as pregnancy-associated glycoproteins (PAG), progesterone, and estrone sulfate. The related details of these methods are presented as follows.

- 1. Ultrasonography: Transabdominal ultrasound is highly accurate from around 30 days post-breeding, with nearly 100% reliability after ~45 days. It also allows fetal counting, viability checks, and even fetal sexing between days ~55-70 when done by skilled operators. Transrectal ultrasound can detect pregnancy as early as 26 days post-breeding, though with somewhat less reliability and greater technical difficulty. A novel study on Murciano Granadina goats tracked fetal biometric growth indices and umbilical artery Doppler flow from ~28 days onward, illustrating potential for monitoring fetal health and development beyond simple presence detection. Ultrasonography is also critical to distinguish pseudopregnancy versus true pregnancy.
- 2. Pregnancy Associated Glycoproteins (PAG) assay: PAG (also known as PSPB) assays reliably detect pregnancy starting around 21-25 days, with recommended field use after 24-30 days. In goats, multiple isoforms (caPAG 1 to caPAG 11) are expressed in early trophoblastic tissues. Tests based on specific antisera and ELISA formats can distinguish pregnant from non-pregnant does as early as around 20 days post-mating. A comparative field study reported ~96-100% accuracy in goats tested via PAG ELISA from 24-26 days onward, outperforming progesterone assays in terms of false positives and specificity. Plasma PAG was identified as the most reliable predictor variable of fetal number and birth weight of kids as compared to plasma progesterone and estrone



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sulfate.

- **3. Serum progesterone assays:** Serum progesterone measured around 20-22 days post-breeding can indicate luteal function; pregnant does often show elevated levels, but this method lacks specificity cannot reliably distinguish pseudopregnancy or mid-cycle luteal activity.
- **4. Estrone sulfate testing (Plasma or Urine):** Estrone sulfate is a conjugated estrogen produced by the placenta and fetus during pregnancy. It can be measured in blood, milk, or urine and becomes elevated only when a viable fetus is present. Estrone sulfate rises from 15-20 days, but most labs recommend waiting till 50-60 days of gestation for sampling to avoid false negatives and to provide reliable results. Higher values correlate with multiple gestations and viability monitoring. Because of its decreasing levels upon early embryonic loss, estrone sulfate assays can also inform on conceptus viability
- 5. Abdominal palpation method: Transrectal +

abdominal bi manual palpation can detect uterine changes at 28-30 days, with moderate accuracy (~56% earliest, increasing with later gestation). A classic review found 83% palpability of ovarian structures, though results depend heavily on skill and animal condition. Ballottement palpation around 60-75 days onward can detect fetal movement in experienced hands, achieving ~90% accuracy, but carries risk and requires caution.

In conclusion, the best reproductive management in domestic animals is possible by precise pregnancy diagnosis. Various methods are available to diagnose pregnancy in goats, ranging from traditional observation to advanced technological tools such as ultrasonography and blood-based assays. Each method differs in terms of accuracy, cost, timing, and practicality. Understanding these diagnostic options is crucial for optimizing reproductive outcomes and improving the productivity of goat farming operations.



# Promotion of Goat Husbandry in North Eastern Hill Region Arvind Kumar\*, Ravi Ranjan and Tarun Pal Singh

Animal Nutrition Management and Products Technology Division \*Email: arvindkr30@yahoo.com

Field Level Demonstration (FLD) unit on goats has been established at NRC on Yak for demonstration to the goat farmers and providing the goat progeny to the farmers of Arunachal Pradesh for promoting goat rearing and livelihood improvement in the NEH region. 8 goat kids born at the FLD unit were distributed to the local farmers of Dirang on 25 June, 2025 for their livelihood improvement through goat rearing.



Goat based FLD unit established in Dirang and distribution of kids to the farmers of Arunachal Pradesh

The inputs required for improving goat rearing were also

distributed to the goat farmers of Arunachal Pradesh. These inputs included adult pellet feed 18,000 kg, kid pellet feed 2000 kg, mash feed 2000 kg, mineral mixture 600 kg, medicines including Fentas plus, Lorexane tube and Diarok Powder and vaccines (Raksha goatpox, Raksha ET, Bloatosil Liq) were distributed during November, 2024. About 20 tons of goat feed was also distributed to the goat farmers of Dirang on 25 June, 2025.

Training and exposure visits are also organized for the farmers of NEH region to make them aware about the latest technology of goat rearing. A training on scientific goat farming was organized for the goat farmers of Dirang on 27.11.2024 at ICAR-NRC on Yak. On this occasion the Director of ICAR- CIRG and the Director of ICAR- NRC on Yak were present. The training was attended by 100 goat farmers of nearby Dirang area. In this training the farmers were sensitized about local feed and fodder resources for proper nutrition, health management and vaccination schedule, and protection of goat kids from extreme cold weather of the reason. An exposure visit of 10 Nos. of progressive farmers of Nagaland was organized to ICAR-

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NEH, Nagaland Centre for demonstration and exposure to latest technology of hill farming at exhibition hall and interaction with scientists during National Conference held at ICAR-Nagaland Centre, Jharanapani on 29-30 November. 2024.



Input distribution to the goat farmers of Dirang (Arunachal Pradesh)

# Farmers Training Organized

#### **National Training Programme**

Organised a total of 4 National training programme (7 days) on Scientific Goat Farming during January to June 2025. In these training programmes, a total of 347 (13 women farmers) trainees were participated from 14 states.



#### **Sponsored Training Programme**

Organised a total of 2 Sponsored training programme



(5 days) on Scientific Goat Farming during January to June 2025. In these training programmes, a total of 80 farmers trainees from ATMA Bharatpur and Ajmer (Rajasthan) were participated.

# Three-Day Training Programme on Artificial Insemination Technology

A three-day training programme on artificial insemination technology was conducted at the Institute from January 13-15, 2025 sponsored by the Department of Animal Husbandry, Odisha. The Director of the Institute, Dr. Manish K. Chatli familiarised the participants with various scientific activities carried out at the Institute and discussed in detail the role of artificial insemination in breed improvement. In this programme, 19 veterinary officers from Odisha (15 men and 4 women) were trained in artificial insemination in goats. The trainees highly appreciated the programme and expressed their commitment to using artificial insemination technology to improve goat breeds in the state of Odisha. Programme Coordinators of this programme were Dr. Ravi Ranjan, Dr. S.P. Singh and Dr. Y.K. Soni.



# Five-Day Training Programme on Goat Management and Artificial Insemination Technology

A five-day training programme on goat management and artificial insemination technology successfully organised at the Institute from May 5-9, 2025 sponsored by the Department of Animal and Fisheries Resources, Patna, Bihar. The programme was inaugurated by the Institute's Director, Dr. Manish K. Chatli, who familiarised the participants with the diverse scientific activities being undertaken at the Institute and emphasised the importance of breed improvement in goats through artificial insemination. The programme was attended by 20 veterinary officers (18 men and 2 women) from various districts of Bihar. Participants appreciated the programme and expressed their commitment to applying the knowledge and technical skills acquired to effectively



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improve goat breeds in the state of Bihar. Programme Coordinators of this programme were Dr. Ravi Ranjan, Dr. S.P. Singh and Dr. Y.K. Soni.



# Important Meetings, Events and Other Activities

# Important Meetings

#### QUINQUENNIAL REVIEW TEAM (QRT II) MEETING

The Quinquennial Review Team (QRT) was constituted by Indian Council of Agricultural Research with Dr H. Rahman, Ex-ILRI (South Asia Representative) as Chairman and Dr Kusumakar Sharma, Former ADG, ICAR, Dr S.M.K. Naqvi, Former Director, CSWRI Avikanagar, Dr R.S. Gandhi, Former ADG(APB), ICAR, Dr Dinakar Raj, Professor Translational Research, TANUVAS, Dr S. M. Shivprakash, Director Extension, KVAFSU, Bidar as external members and Dr. K. Gururaj, Sr. Scientist, CIRG as member secretary to carry out a comprehensive review of the institute every five years. The two-day QRT II meeting at Institute concluded successfully on April 7-8, 2025. All the HDs/In charges, scientists, SAO and FAO attended the QRT meeting. The visit comprised a series of presentations, meetings, discussions, and interactions aimed at reviewing the progress and achievements of the institute during the period 2019-2024. Institute Director presented the institute profile, outlining its vision, infrastructure, and key accomplishments. This was followed by a comprehensive overview of projects, activities, and action taken reports for the period 2019-2024, presented by Dr. K. Gururaj, Member Secretary, QRT. The Head of the division /sections also presented the division progress report, ATR and next year research programme. Hon. Chairman and QRT Members provided initial recommendations for each research area, offering valuable suggestions for growth and improvement in the functioning of institute in the years to come. The visit

concluded with a field visit to Yuvaan Agro, India's Biggest Goat Farm in Agra, allowing the QRT members to observe the institute's extension activities.



#### **RESEARCH ADVISORY COMMITTEE (RAC) MEETING**

The 31st Research Advisory Committee (RAC) Meeting was organised on May 05, 2025 under the chairmanship Dr. R.K. Singh, Former Director, ICAR-IVRI, Dr. Manish Kumar Chatli, Director ICAR-CIRG, RAC members, and Dr. G.K. Gaur, ADG (Animal Production and Breeding), ICAR Hq, New Delhi, were also present during the meeting through online/offline mode.



Dr M.K. Chatli, Director, ICAR-CIRG presented progress of the Institute during 2024 and also highlighted the research achievements and other activities. Dr K. Gururaj, Sr. Scientist cum I/c PME, Member Secretary RAC, ICAR-CIRG presented the action taken report on recommendation made by last RAC. The Head of the divisions / sections presented the progress of last year, action taken on recommendations and next year research programme. The committee gave several recommendations on various research projects being undertaken by scientists at this Institute. Scientists and other officials also participated in the meeting.

#### INSTITUTE RESEARCH COMMITTEE (IRC) MEETING

The Annual IRC meeting 2024-25 of Institute was successfully held on May 8-9, 2025 at the K.P. Pant Committee Room under the chairmanship of Dr Manish

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K. Chatli, Director, CIRG, Makhdoom. Dr K. Gururaj, Sr. Scientist cum I/c PME Cell of the Institute extended formal welcome to the Director, that IRC is an important meeting at Institute level to review and modify the technical programme, which can fulfil the expectation and commitment of ICAR and Government of India. The Director in his introductory address highlighted the importance of Institute IRCs, provides an opportunity to interact with the scientists of other divisions, to know about their work, projects running in different divisions and overall research achievements of the institute.



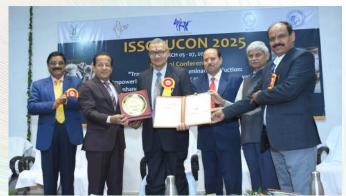
All the scientists presented the annual progress reports of their ongoing research projects. The presentations were reviewed with an emphasis on project deliverables, research impact, and alignment with institutional and National priorities. Dr. K. Gururaj, In-charge PME Cell, emphasized the importance of integrating the suggestions from previous IRC, QRT, and RAC meetings into both ongoing and newly proposed research activities.

#### **Events**

#### **ISSGPUCON-2025**

National Conference of the Indian Society for Sheep and Goat Production and Utilization (ISSGPUCON-2025) was organised at our Institute from 5-7 March 2025. The conference, themed "Transforming Small Ruminant Production: Empowering Precision Farming and Genomic Innovations for Enhanced Productivity and Sustainable Development", brought together over 300 delegates, including scientists, academicians, policymakers, industry partners, and farmers from across India. Dr. Raghavendra Bhatta, DDG (AS), ICAR, graced the inaugural function as Chief Guest. In his address, he stressed the importance of integrating precision technologies, genomic tools, and sustainable practices into small ruminant farming. Distinguished Guests of Honour included Dr. G.K. Gaur, ADG (AP&B), ICAR; Dr. A.K.

Gahlot, Former Vice Chancellor, RAJUVAS; and Dr. K.M.L. Pathak, Former Vice Chancellor, DUVASU and Former DDG (AS), ICAR. They emphasized CIRG's leadership role in small ruminant research and the need for enhanced industry-academia partnerships. The conference publications were released, and the ISSGPU awards were conferred during the inaugural session. The event was convened by Dr. Manish K. Chatli, Vice President, ISSGPU and Director, CIRG, with Dr. K. Gururaj and Dr. Gopal Dass as Organizing Secretaries. Across one plenary and seven technical sessions, the conference featured 14 lead papers, 40+ faculty oral presentations, and 50+ posters and student presentations, covering breeding, genomics, nutrition, reproduction, health, product development, and socio-economic aspects.



Concluding on a high note, ISSGPUCON-2025 reinforced CIRG's role as a national hub of goat research, successfully bridging science, farmers, and industry for a resilient future.

#### **Lohri Celebration**

The Lohri festival was celebrated with great joy and enthusiasm at Institute on Jan 15, 2025. On this occasion, Dr. M.K. Singh, Principal Scientist, welcomed the Director of the Institute, Dr. Manish Kumar Chatli, by presenting him with a flower bouquet. The Director extended his greetings and best wishes for Lohri and Makar Sankranti. All Principal Scientists, Scientists, Administrative Officers, and staff members of the Institute also participated in the celebration and enjoyed the event.



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#### **World Veterinary Day Celebration**

The Institute celebrated the World Veterinary Day-2025 with the theme "Animal Health Takes a Team" on April 26, 2025. Dr Manish K. Chatli, Director, ICAR-CIRG briefed about the theme of the World Veterinary Day. In this celebration 50 farmers with 250 goats participated.



All goats were de-wormed and each goat farmer was provided medicine kit, mineral mixture and varshik bakri palan vivarnika calender under DAPSC project.

#### **Republic Day Celebration**

The Institute celebrated the 76th Republic Day with joy and happiness on 26th January, 2025. Dr Manish K. Chatli, Director of the Institute hoisted the National flag.



In his address, he congratulated the scientific, technical, administrative and supporting staff of the Institute for the occasion. He hailed the contribution of scientists in uplifting goat farmers of the country by providing scientific knowledge and skills to the goat farmers. Different personnel for their Institute contribution were felicitated by Director of the Institute.

#### **International Yoga Day Celebration**

On June 21, 2025, Institute celebrated the International Day of Yoga 2025 with the theme "Yoga for One Earth, One Health". The celebration aimed to promote health and well-being for the entire world through the practice of yoga. On this occasion, the Director, Principal Scientists, all officers, and staff members of the Institute

participated and contributed to the success of the yoga camp.



The program was presided over by the Institute's director, Dr Manish K. Chatli, and all senior scientists, scientists, officers, and employees of the institute were present on the occasion of International Yoga Day. The program was coordinated by Mr Satish Chandra, ACTO cum Member secretary, Staff welfare association.

#### Other Activities

#### **World Intellectual Property Day**

Institute celebrated World Intellectual Property Day under WIPO-2025's theme "IP and Music: Feel the Beat of Intellectual Property" on May 1, 2025. The event highlighted the interrelationship between intellectual property rights and music. The programme was organised by the Intellectual Property & Technology Management Unit (ITMU) under the guidance of the Institute's Director, Dr. Manish K. Chatli. ITMU coordinators Dr. Ravi Ranjan, Dr. Anil Kumar Mishra, and Dr. Tarun Pal Singh successfully conducted the programme. The keynote speaker, Dr. Pinky Chakravorty, Patent Associate, United & United, New Delhi, delivered an informative lecture on "Practical Guidance for Patents: Drafting, Filing, and Processing." More than 42 participants, including scientists, students, technical staff, and other employees, attended the programme. In his inaugural address, Director Dr. Manish K. Chatli



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emphasised the relevance of the theme, stating that intellectual property rights can empower creative works such as music. The event concluded with a vote of thanks delivered by Dr. Anil Kumar Mishra.

#### Hindi Karyshala

A Hindi Karyashala was organized on March 20, 2025 at the Institute. The Institute's Director, Dr. Manish K. Chatli, inaugurated the event with a warm welcome to the attendees. The programme witnessed enthusiastic participation and highlighted the significance of Hindi in academic and professional settings. On this occasion, Shri Satish Chandra, ACTO, AKMU conducted a special session on the use of computers in Hindi, which was well-received by the participants.



The event concluded with a vote of thanks by Dr. Tarun Pal Singh (Scientist-cum-Rajbhasha Adhikari), leaving the participants enriched and motivated to integrate Hindi more effectively into their professional lives.

#### Viksit Krishi Sankalp Abhiyan - a Nationwide Campaign

The Ministry of Agriculture and Farmers' Welfare, Government of India, has launched the Viksit Krishi Sankalp Abhiyan across the country from May 29 to June 12, 2025. The main objective of this campaign is "Lab to Land" - to transfer technologies from laboratories to farmers' fields, enabling farmers across the nation to benefit from new scientific techniques and government schemes. This will help improve both the quality and quantity of agricultural produce and increase farmers' incomes. Under this campaign, teams from the Institute, in collaboration with scientists from Krishi Vigyan Kendras (KVKs) in Mathura and Hathras districts,

conducted meetings in various villages. These interactions with farmers covered topics such as preparation for Kharif crops, use of organic manure to maintain soil fertility, natural farming, seed treatment, scientific methods of animal husbandry, and other agriculture-related issues. Farmers were engaged in direct dialogue, and their concerns were addressed with appropriate advice. Honourable Member of Parliament and Padma Bhushan Ms. Hema Malini, participated in a special programme of the Viksit Krishi Sankalp Abhiyan, organised on June 5 at Pandit Deen Dayal Dham, Farah.



Further, she emphasized to adopt goat rearing as a means of livelihood along with other means of agriculture.



# Award & Recognition

Dr Anupam Krishna Dixit Principal Scientist honoured with Green Scientist Award-2024 for exceptional contribution in the field of Environmental Research and Development at International Conference on Nature Science & Modern Lifestyle in Lucknow.



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### **NEWSLETTER**

#### **VOLUME XXVII I JANUARY - JUNE, 2025**



Dr. Om Prakash Chaudhary, former Joint Secretary and former Chairman of the Animal Welfare Board of India, visited ICAR-CIRG on February 17, 2025, and inaugurated the institute's newly established library.



Dr. Rajender Prasad, Director of ICAR-IASRI, New Delhi, visited the Institute on 12th May 2025 and graced the closing ceremony of the 118th National Training Programme on Scientific Goat Farming as the Chief Guest.



A team from the FAO, led by Mohammad Hasib, One Health Programme Coordinator, visited ICAR-CIRG on May 12, 2025, to discuss and explore potential collaborations in developing the goat milk value chain and other areas of mutual interest.



Dr. A. C. varsnney, Former vice Chancellor of DUVASU, Mathura, visited the Institute on July 21, 2025, and graced the occasion as the Chief Guest at the Closing Ceremony of the 119th National Training Programme on Scientific Goat Farming. In his address, he encouraged farmers and goat keepers to expand goat farming as a means to achieve sustainable income growth.



Dr. Nagendra Sharma, Former Director, ICAR-NDRI and ICAR-CIRG, visited the Institute on Feb 11, 2025 and graced the occasion as the Chief Guest at the inauguration of the 115th National Training Programme on Scientific Goat Farming. He highlighted the advantages of the training programme to the farmers.



The Hon'ble Union Minister, Prof. S. P. Singh Baghel, Minister of State for Fisheries, Animal Husbandry & Dairying and Panchayati Raj, Government of India, New Delhi, visited the Institute on Jan 27, 2025 and formally released the Annual Goat Farming Brochure - 2025.



#### ICAR - Central Institute for Research on Goats

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