Venue
Univesity Auditorium
On 2nd day
NCLBG&G
Rawat - Rawalpindi
[GT Road | Near SB Feed Mill]

NCLBG&G

November, 19-20 2025

Livestock Genetics & Genomics Conference

From Genes to Sustainability

Patron-in-Chief: **Prof. Dr. Qamar uz Zaman**
Vice Chancellor of PMAS Arid Agricultuer Univesity Rawalpindi

Registration Link
https://forms.gle/8gZaqob91GmMnwdE8

IThe Livestock Genetics & Genomics Conference (LGGC-25) under the theme “From Genes to Sustainability” provides a platform for scientists, industry stakeholders, and students to exchange knowledge on how advanced genetic and genomic research can transform livestock production. By linking genetic innovations to practical sustainability outcomes, the conference aims to accelerate progress in improving dairy cattle, calves, heifers, meat animals, sheep, and goats while ensuring resilience and long-term industry growth. Pakistan stands among the world’s leading livestock-producing nations and is currently recognized as the fifth largest milk-producing country. The livestock sector contributes significantly to the national economy, rural livelihoods, and food security. The country is home to a rich genetic resource base comprising 3 well-known buffalo breeds, 11 cattle breeds, 35 goat breeds, 28 sheep breeds including 14 fat and 14 thin tail, and 20 camel breeds, along with a diverse range of poultry breeds, both indigenous and commercial. According to recent statistics, livestock populations are steadily increasing. Cattle numbers grew from 55.4 million in 2022–23 to 59.7 million in 2024–25, while buffaloes increased from 45.0 to 47.7 million over the same period. Similarly, goats remain the largest small ruminant species, rising from 84.7 to 89.4 million, followed by sheep with an increase from 32.3 to 33.1 million. Populations of camels, horses, asses, and mules have remained relatively stable, reflecting their niche role in transport and draught power. This genetic diversity offers vast opportunities for improving milk, meat, and fiber production while ensuring adaptability to Pakistan’s diverse agro-ecological zones. The expansion of commercial farming further protein supply. Harnessing this biodiversity through modern genetic and genomic tools is vital for sustainable livestock development and food security.

Organized by
National Center for Livestock Breeding, Genetic & Genomic (NCLBG&G)
In Asscoiation of Institute of Animal Sciences
PMAS Arid Agriculture Univesity Rawalpindi Pakistan

Contact Persons:
Dr. Ghulam Bilal | Conference Chair | 0333 9926030 | ghulam.bilal@uaar.edu.pk
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Introduction

The livestock sector plays a pivotal role in ensuring global food security, rural livelihoods, and economic development. With the rapid expansion of dairy, beef, sheep, and goat production systems, there is a growing need to address sustainability challenges related to productivity, efficiency, animal health, and environmental stewardship. Genetics and genomics have emerged as powerful tools to drive innovation in breeding programs, enabling precise selection for traits such as fertility, growth, disease resistance, and adaptability to changing climates.

The Livestock Genetic & Genomic Conference (LGGC-25) under the theme “From Genes to Sustainability” provides a platform for scientists, industry stakeholders, and students to exchange knowledge on how advanced genetic and genomic research can transform livestock production. By linking genetic innovations to practical sustainability outcomes, the conference aims to accelerate progress in improving dairy cattle, calves, heifers, meat animals, sheep, and goats while ensuring resilience and long-term industry growth.

Aims

- To highlight the role of genetics and genomics in advancing sustainable livestock production.
- To provide a forum for sharing research and innovations related to dairy, beef, sheep, and goat breeding.
- To strengthen collaboration between researchers, students, and industry for application of genomic tools.
- To foster dialogue on integrating sustainability goals with genetic improvement in diverse livestock species.

Objectives

- To explore the genetic and genomic advancements contributing to improved productivity, efficiency, and profitability in dairy, beef, sheep, and goat production systems.
- To discuss the application of genomic selection in calves, heifers, and meat animals for enhanced fertility, growth, and disease resistance.
- To evaluate strategies for conserving indigenous and native breeds while promoting genetic diversity.
- To identify ways genomics can reduce the environmental footprint of livestock production and contribute to climate-smart agriculture.
- To provide young researchers and students with a platform to present their work and connect with global experts in livestock genetics.
- To formulate actionable recommendations for aligning genetic research with the broader vision of sustainable livestock development.

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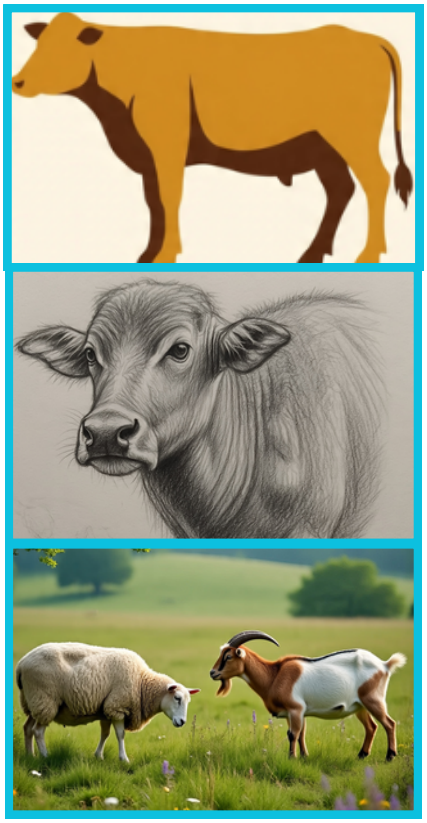
Estimated Milk and Meat Production In Pkaistan

Species	2022-23[1]	2023-24[1]	2024-25[1]
Milk (Gross Production)	**67,873**	**70,071**	**72,343**
Cow	25,151	26,099	27,083
Buffalo	40,678	41,887	43,132
Sheep[2]	42	42	43
Goat	1,046	1,074	1,103
Camel[2]	956	956	981
Milk (Human Consumption)[3]	**54,707**	**56,474**	**58,300**
Cow	20,121	20,880	21,667
Buffalo	32,542	33,509	34,505
Sheep	42	42	43
Goat	1,046	1,074	1,103
Camel	956	968	981
Meat[4]	**5,504**	**5,809**	**5,967**
Beef	2,544	2,630	2,548
Mutton	799	817	835
Poultry meat	2,160	2,362	2,583

Estimated Livestock Population of Pakistan

Species	2022-23[1]	2023-24[1]	2024-25[1]
Cattle	55.4	57.5	59.7
Buffalo	45.0	46.3	47.7
Sheep	32.3	32.7	33.1
Goat	84.7	87.0	89.4
Camels	1.1	1.2	1.2
Horses	0.4	0.4	0.4
Asses	5.8	5.9	6.0
Mules	0.2	0.2	0.2



Join hands and collaborate to develop the native breeds of livestock

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