

# General veterinary science

## 1. Role of livestock and their products in Indian economy and human health

Livestock- animals domesticated for useful purposes

Eg buffalo, sheep goats, meat

Cattle- milk, meat

Poultry- meat, eggs

Sheep, goat - wool, fibre

Horses, donkey, ox- transportation, cart pulling, ploughing

# Imp Institutes

Central Institute for Research on Buffaloes, Hisar,  
Haryana

National Equine research centre, Hisar

Central Institute for Research on Cattle (CIRC) Meerut,  
Up

Central sheep and wool research institute (CSWRI)-  
avikanagar, Raj

Central institute for research on goats Makhdoom, up

Central Avian research institute (CARI) izzatnagar ,up

National research centre on camel Bikaner, Rajasthan

# Indian Economy & Livestock Sector

Livestock rearing is a crucial economic activity in rural areas, providing income to landless and marginal farmers.

Around **20.5 million people** are involved in livestock rearing in India

# Why do rear livestock

- Animal products: milk,meat,fibre,wool,leather
- Services: ploughing,cart pulling, transportation
- Income source
- Contribution to GDP
- Exports

# Human health

- Milk- source of calcium, phosphorus, vit D, B complex
- Meat- proteins, vitamins, minerals
  - Vit B12- red meat, organ meat
  - Vit B1- pork
  - Vit B3- poultry
- Eggs-complete proteins(lysine, methionine)

# Basic Animal husbandary statistics 2023-2024

Department of Animal Husbandry & Dairying (DAHD), MOAH\$D  
Responsible for generating Animal Husbandry Statistics through:

Livestock Census (LC) – Conducted every five years in collaboration with states and union territories.

Integrated Sample Survey (ISS) – Conducted annually to estimate livestock production.

Union minister-Shri rajiv rajan(lalansingh)

Mp- shri lakhan patel

Integrated Sample Survey (ISS) Provides production estimates for 4 major livestock products:

**Milk, Egg, Meat, and Wool**

# Livestock production statistics 2023-2024

## Milk Production:

- 239.30 million tonnes (+3.78% growth -py).
- India ranks 1st globally in milk production.
- Per capita availability: 471 g/d (highest- punjab)
- Top milk-producing states: Uttar Pradesh > Rajasthan > Madhya Pradesh > Gujarat > Maharashtra.

Code- U R My Good Mom

- States which showed highest annual growth rate in 2023-2024  
WB>jarkhand>chattisgarh>Assam(JCA)

# Sps. wise contribution to milk

- Buffalo Indigenous: 31.49%- 31.5%
- Cow Crossbreed: 31.11%- 31%
- Buffalo Non-Descript: 13.83%=14%
- Cow Indigenous: 11.36%
- Cow Non-Descript: 10.11%=10%
- Goat: 3.36%
- Cow Exotic: 2.10%



# Egg production

- **142.77 billion eggs** (+3.17% growth).
- India ranks **2nd** globally.
- Per capita availability: **103** eggs/year.

Top egg-producing states: **Andhra Pradesh > Tamil Nadu > Telangana > West Bengal > Karnataka.**

Code- **Andha Ta TEL WE hi KarNa**

- **States which showed highest annual growth rate in 2023-2024**  
-ladakh > manipur >up (LMU)

# Meat production

- **10.25 million tonnes** (+4.95% growth).
- India ranks **5th** globally (after China, USA, Brazil, Russia).
- Top meat-producing states: **West Bengal > Uttar Pradesh > Maharashtra > Telangana > Andhra Pradesh.**

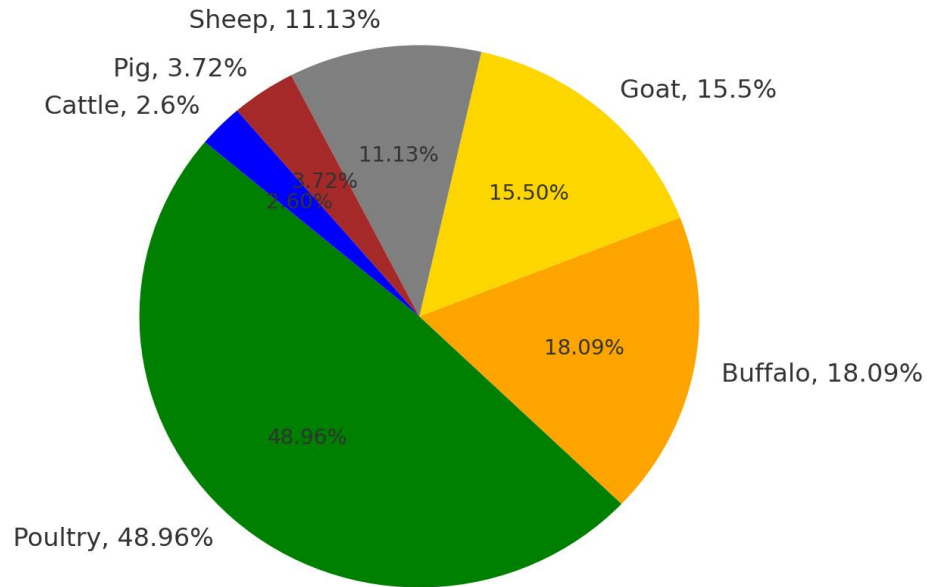
Code- WB, UP, MTA

- States with highest growth rate  
- **Asam > uk > chattisgarh.** (AUC)

# Sps wise contribution

- Poultry-49%
- Buff-18%
- Goat-15.5%
- Sheep-11.13%
- Pig-3.7%
- Cattle-2.6%

Species-Wise Meat Contribution in 2023-24



# Wool production

- 33.69 million kg (+0.22% growth).
- Top wool-producing states: Rajasthan > Jammu & Kashmir > Gujarat > Maharashtra > Himachal Pradesh.
- States which showed highest annual growth rate in 2023-2024  
**punj>Tn>Gujarat**  
(Code-PvTG)

# Global Comparison (2023-24)

Milk:

India produces **25%** of the world's milk.

Key competitors: USA (11.04%), Pakistan (6.73%), China (4.34%).

Eggs:

India ranks **2nd** globally, **12%** to global egg production

Top producers: **China > India > USA.**

Meat:

India ranks **5th** but lags behind China > USA > brazil > russia > india

Poultry dominates India's meat consumption.

# Indian Economy & Livestock Sector

Livestock rearing is a crucial economic activity in rural areas, providing income to landless and marginal farmers.

Around 20.5 million people are involved in livestock rearing in India.

The livestock sector is a vital part of India's economy, growing at a Compound Annual Growth Rate (CAGR) of **8%** at constant prices. It employs about **8.8%** of the total population

**Livestock's** contribution to total GVA in agriculture and allied sectors increased - **30.23%**

**Contribution to total GVA  
(current prices).**

**Livestock-5.5%**

**( Constant prices)**

**4.7%**

**Crop sector-10.1%**

**8.3%**

**Agri, forestry, fishing-18.2%.**

**15.3%**

# Livestock census

- Conducted after every **5 years**
- 1st time-**1919**
- 1st digital census-2019(20th census)
  
- 2024(oct)-2025(feb): **21st** census :Fully digitalized  
It will include **16 species** (cattle, buffalo, mithun, yak, sheep, goat, pig, camel, horse, ponies, mule, donkey, dog, rabbit, and elephant, poultry)
  
- **219** breeds
- The census will depict participation of women in animal rearing
- Pastoralist data- contribution to livestock



# Common offenses against animals

- **Mischief:** includes
  - 1 Killing
  - 2 Poisoning -most common
    - Eg datura leaves, arsenic
    - Snake venoms
  - 3 Maiming: making an animal useless by the use of violence
    - Eg fracture of bone
    - Injury to udder in milch animals
    - Stab wounds

**Cruelty :** Beating , Overloading , Starvation

**Bestiality** : means carnal intercourse with man, women, or animal against the order of nature.

# Laws

IPC: punishment against these crimes is dealt in various sections of ipc

- Section 44: illegal harm to animals
- Section 77: def of animals
- Section 192: False entry in the records
- Section 197: False certification of animals
- Section 204: Destruction of any documents
- Section 269: Done by negligence to spread infectious diseases
- Section 270: done by intentions to spread infectious disease
- Section 271: Not following quarantine rules
- Section 272: Adulteration of any food or drink
- Section 273: Sale of unfit drink or food
- Section 274: Adulteration of medicinal item
- Section 275: Sale of adulterated medicines
- Section 289: Disobey an order vd any animal in his possession
- Section 304: Negligently causing the death of any person
- Section 377: Voluntary carnal intercourse/bestiality with any animal
- Sections 428, 429, : Mischief, maiming, killing by poisoning
- Section 460: Causing the decrease of water supply for animals

# Animal welfare board of india

PcA, 1960 prevent the infliction of unnecessary pain or suffering on animal

Under this act , Animal welfare board of india was formed in 1962 under MOAH\$D

HQ-chennai (originally) presently: ballabgarh, haryana

Rukmini devi Arundale participated in setting up of this board

# Govt programs

National Animal Disease Control Programme (NADCP)

- launched by Hon'ble Prime Minister in 2019
- for control of Foot & Mouth Disease and Brucellosis by vaccinating 100% cattle, buffalo, sheep, goat and pig population for FMD and 100% bovine female calves of 4-8 months of age
- Central sector scheme
- The overall aim of the National Animal Disease Control Programme for FMD and Brucellosis (NADCP) is to **control** FMD by **2025** with vaccination and its eventual **eradication** by **2030**

# National livestock mission

Implemented in the country since 2014. The scheme has been realigned during 2021-22.

The objectives of the National Livestock Mission are:

- Employment generation through entrepreneurship development in small ruminant, poultry, piggery and Fodder sector.
- Increase of per animal productivity through breed improvement
- Increase in production of meat, egg, goat milk, wool and fodder. Increasing availability of fodder and feed to substantially reduce the demand – through strengthening the fodder seed supply chain and availability of certified fodder seeds.
- Encouraging establishment of fodder processing units to reduce the demand supply gap
- Promoting risk management measures including livestock insurance for farmers.