

# *Indian Goat Sector in 'Amrit Kaal'*

*'Passport to Well-Being'*  
*ATM- Milk, Meat, Wool, Money*  
*Moving Refrigerator*

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**ICAR - Central Institute for Research on Goats**  
An ISO 9001:2008 Certified Institution



# 2022 GOAT POPULATION (TOTAL)



# 1.17B



**1** INDIA  
162.26M

**2** CHINA  
135.69M

**3** NIGERIA  
87.37M

- 4 PAKISTAN 82.17M
- 5 BANGLADESH 64.20M
- 6 CHAD 42.57M
- 7 KENYA 41.56M
- 8 ETHIOPIA 37.00M
- 9 MONGOLIA 35.67M
- 10 SUDAN 32.62M
- 11 MALI 28.27M
- 12 INDONESIA 20.98M
- 13 NIGERIA 20.20M
- 14 TANZANIA 20.18M
- 15 UGANDA 17.96M
- 16 BURKINA FASO 17.38M
- 17 IRAQ 16.87M
- 18 MYANMAR 14.61M
- 19 NEPAL 14.19M
- 20 SOUTH SUDAN 13.60M

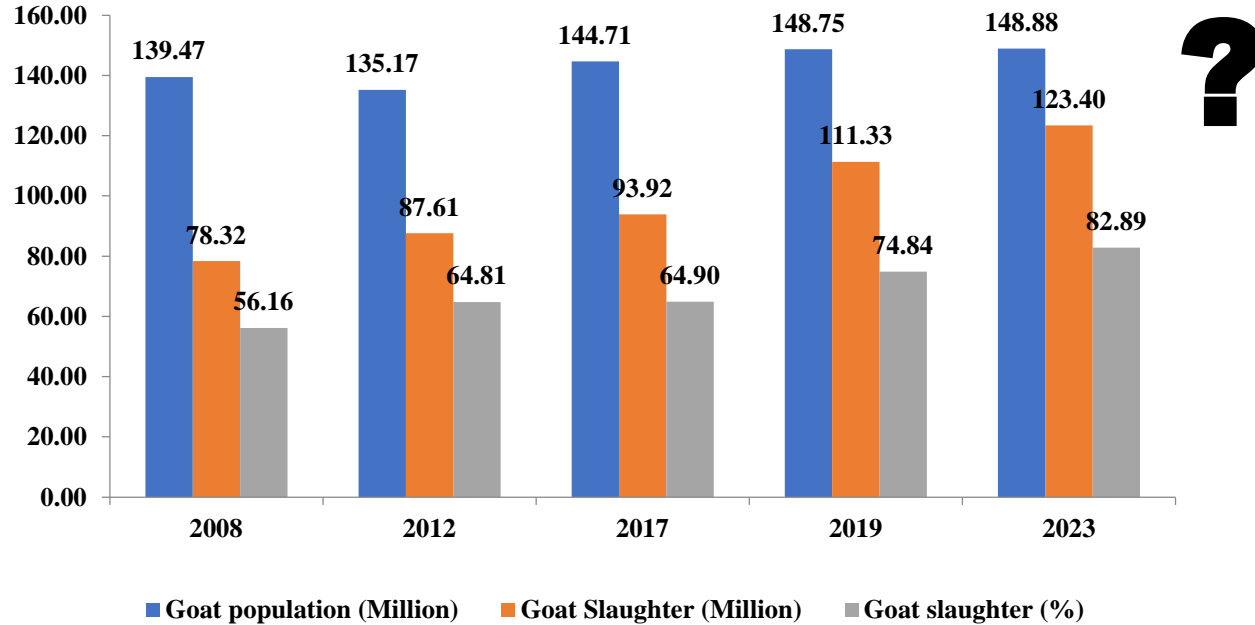


Registered Goat Breeds  
India=39; World =681



## Production Dynamics of Goat meat in India

Goat population since 1951- 215.4%



**NUMBER DRIVEN????**

**World Av Carcass weight: 15.4 kg/animal**

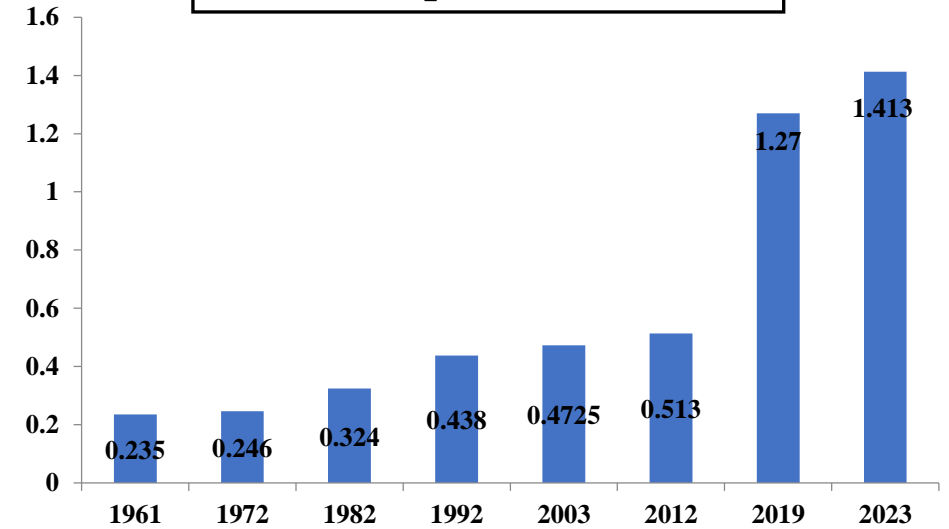
**Oceania -16.5kg/animal**

Rising demand for Goat Meat

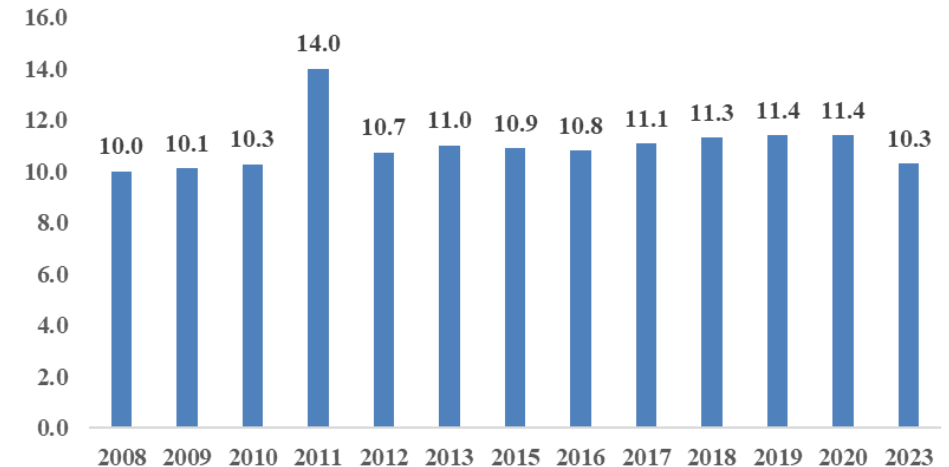
Domestic Price in Metro Cities= Rs 1000/-

Export of Goat Meat= 583.9 cr in 2023

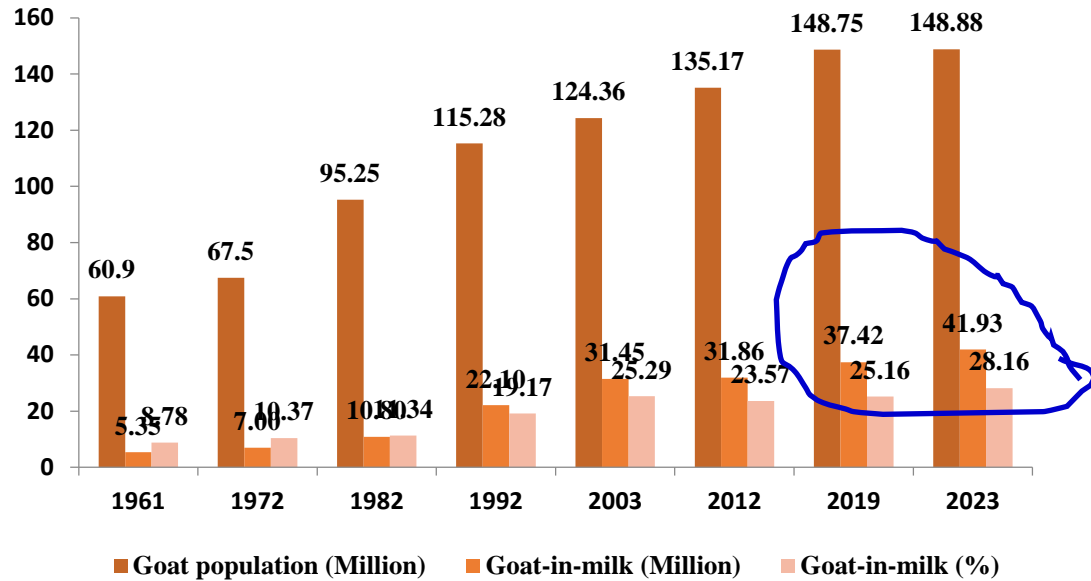
## Goat Meat production (MT)



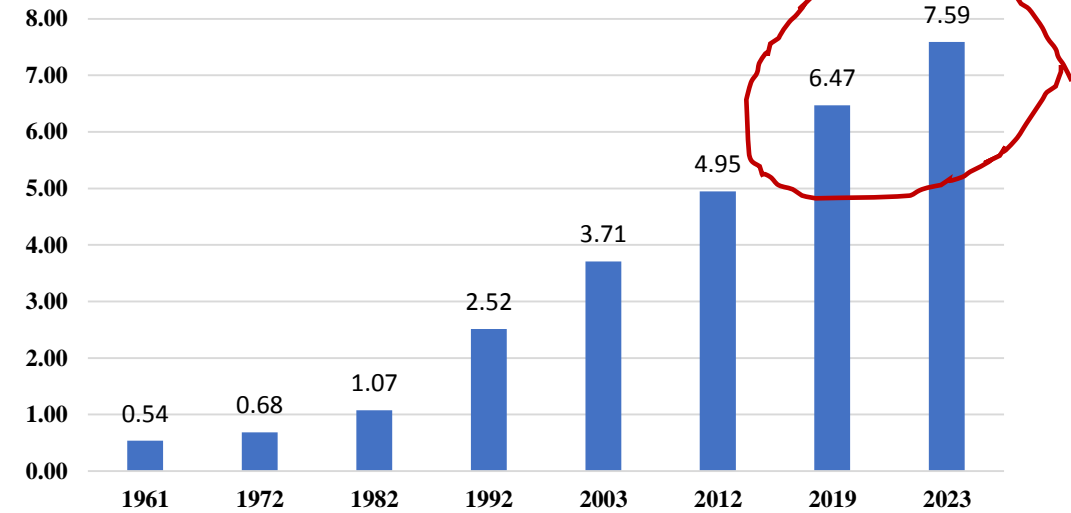
## Carcass Yield (kg/animal)



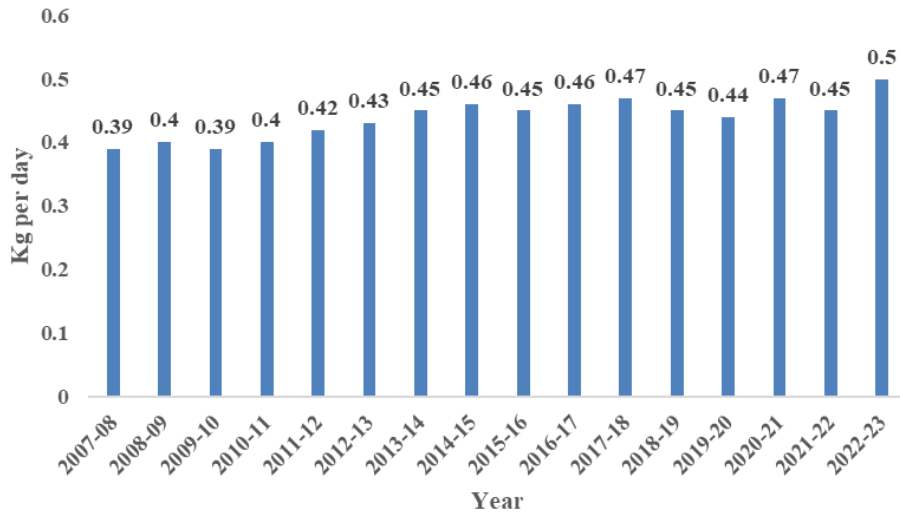
# Production Dynamics of Goat milk in India



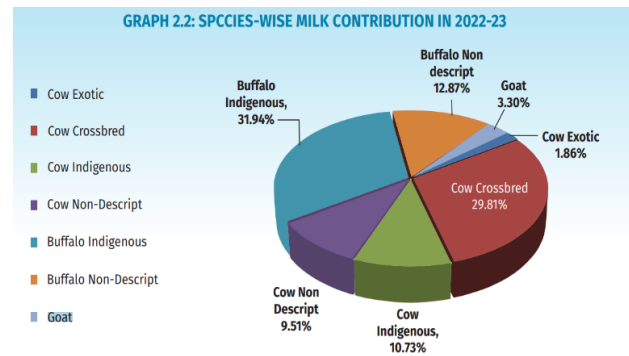
## Goat milk (Million tonnes)



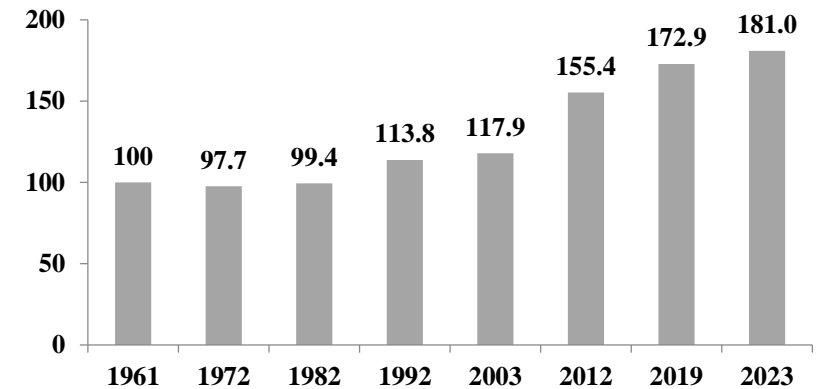
## Average yield per animal (g)



GRAPH 2.2: SPECIES-WISE MILK CONTRIBUTION IN 2022-23

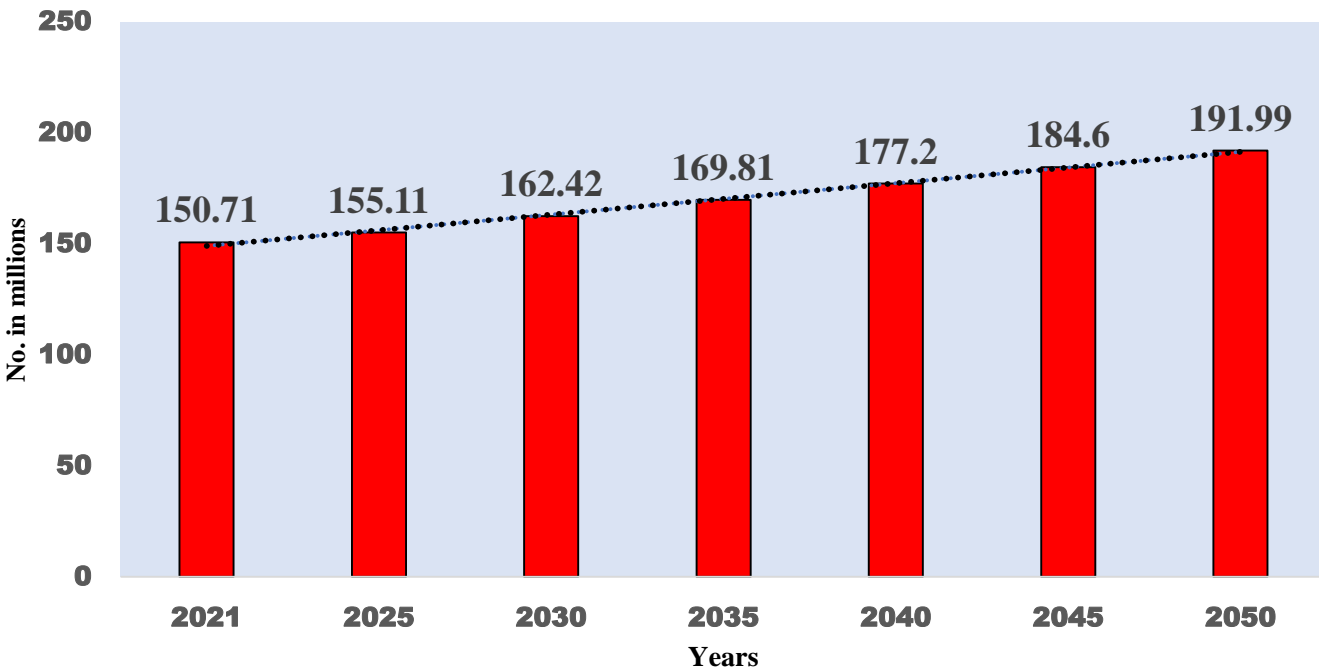


## Milk/head (kg)



# Estimated Goat Dynamics

**Goat Population in Millions**



**Autoregressive Integrated Moving Average Models (ARIMA)- forecasting based on a historical time data (FAOSTAT& BAHS).**

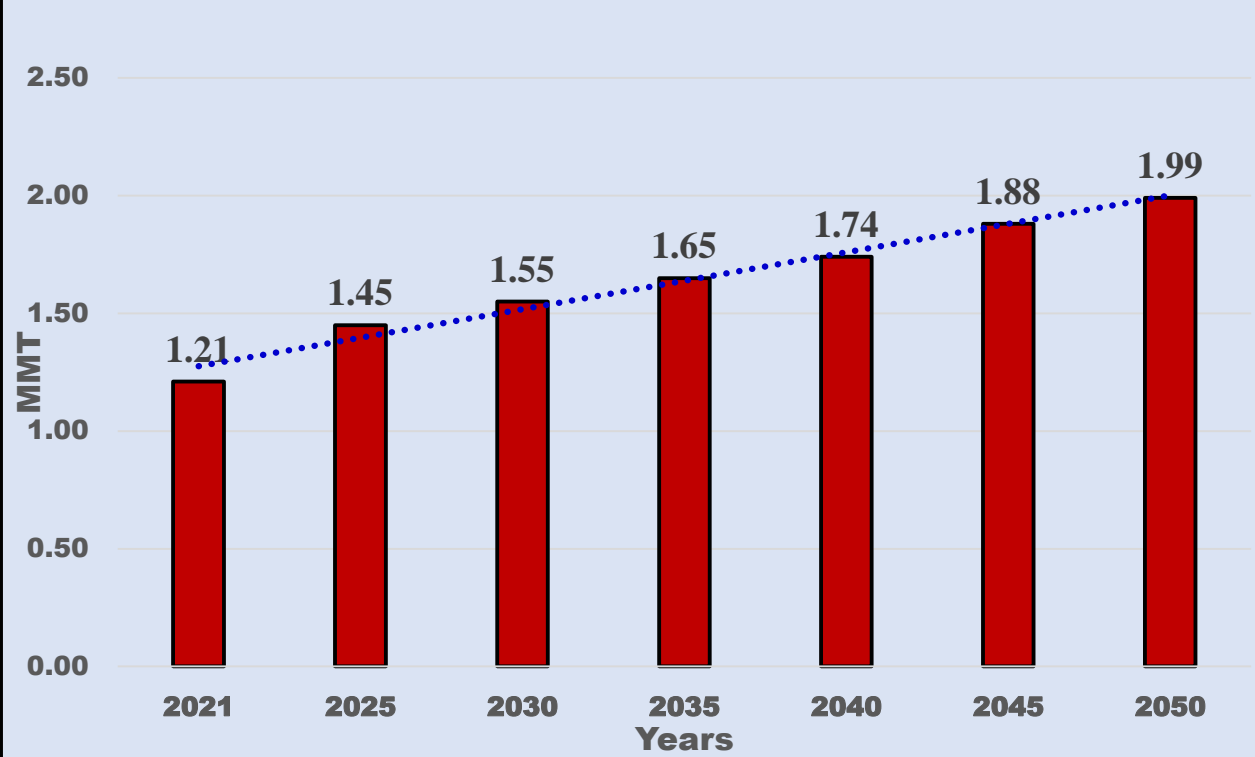
**Statistical concept of serial correlation, where past data points influence future data points.**

**Goat population increased from 61 million to 149 million between 1961 and 2019.**

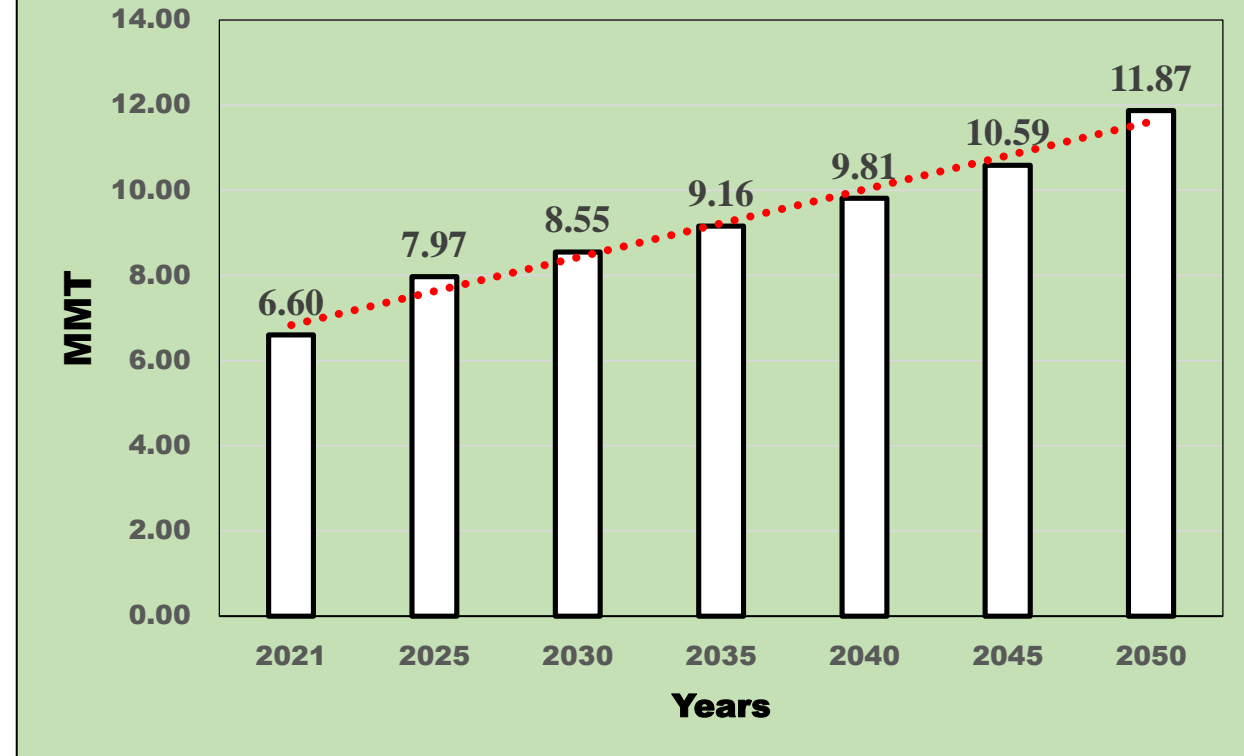
**Goat sector will be more organized and shift to semi-intensive or intensive rearing systems**

# Estimated Goat Meat Dynamics

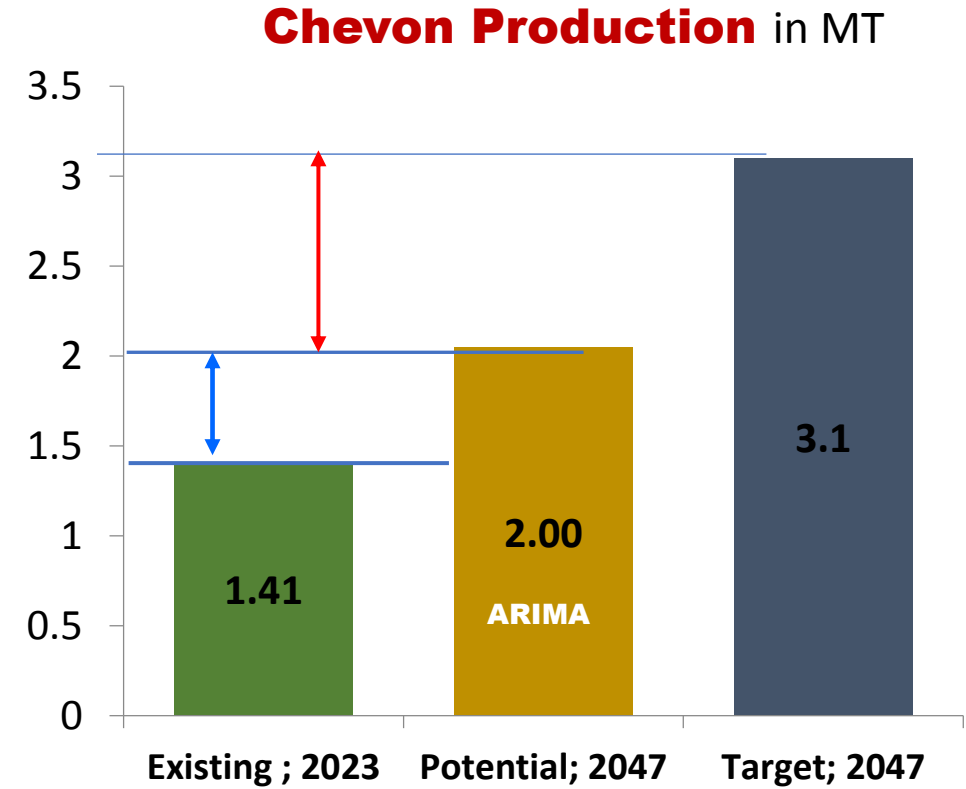
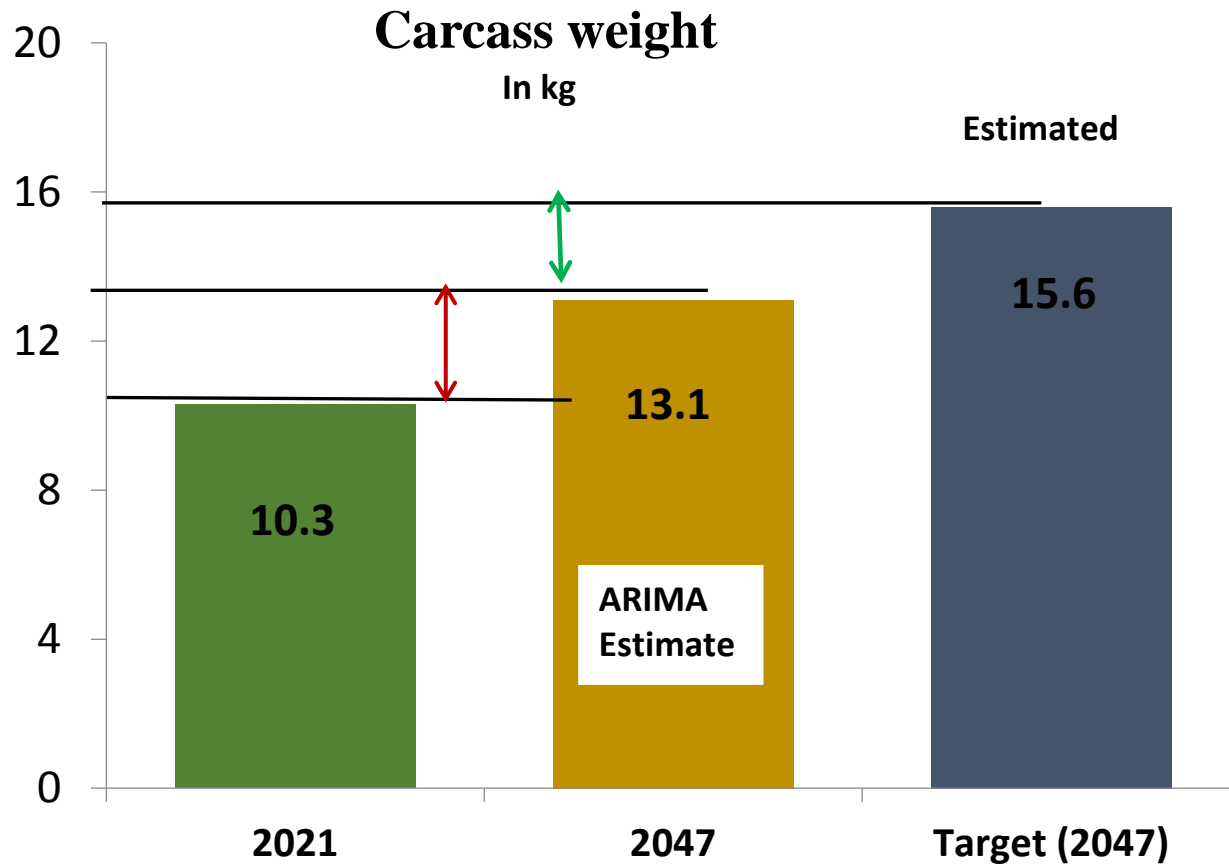
## Goat meat in Million Tonnes



## Goat Milk in Million Tonnes



# Goals, Targets and Approaches



**GOAT MISSION**

# GOAT MISSION: Goals, Targets and Approaches

## Research Priorities

- **Focus on the higher meat yielding breeds; Beetle, Sojat, Sirohi, Osmanabadi etc. & Upgradation of germ plasm;**
- **Development of Broiler Goat Breed/climate resilient meat breeds**
- **Genomic tools for early selection**
  
- **Nutrigenomics : Low-cost complete feed: Improve FCR, Beta agonists, synbiotics, age/breed/area specific feed**
- **Precision Goat Farming**
  
- **Gene Edited Goats; Knocking out of myostatin gene to improve carcass Yield**
  
- **Field diagnostics/Vaccines/Therapeutics**
- **Reproductive Efficiency/AI/IVF technologies**



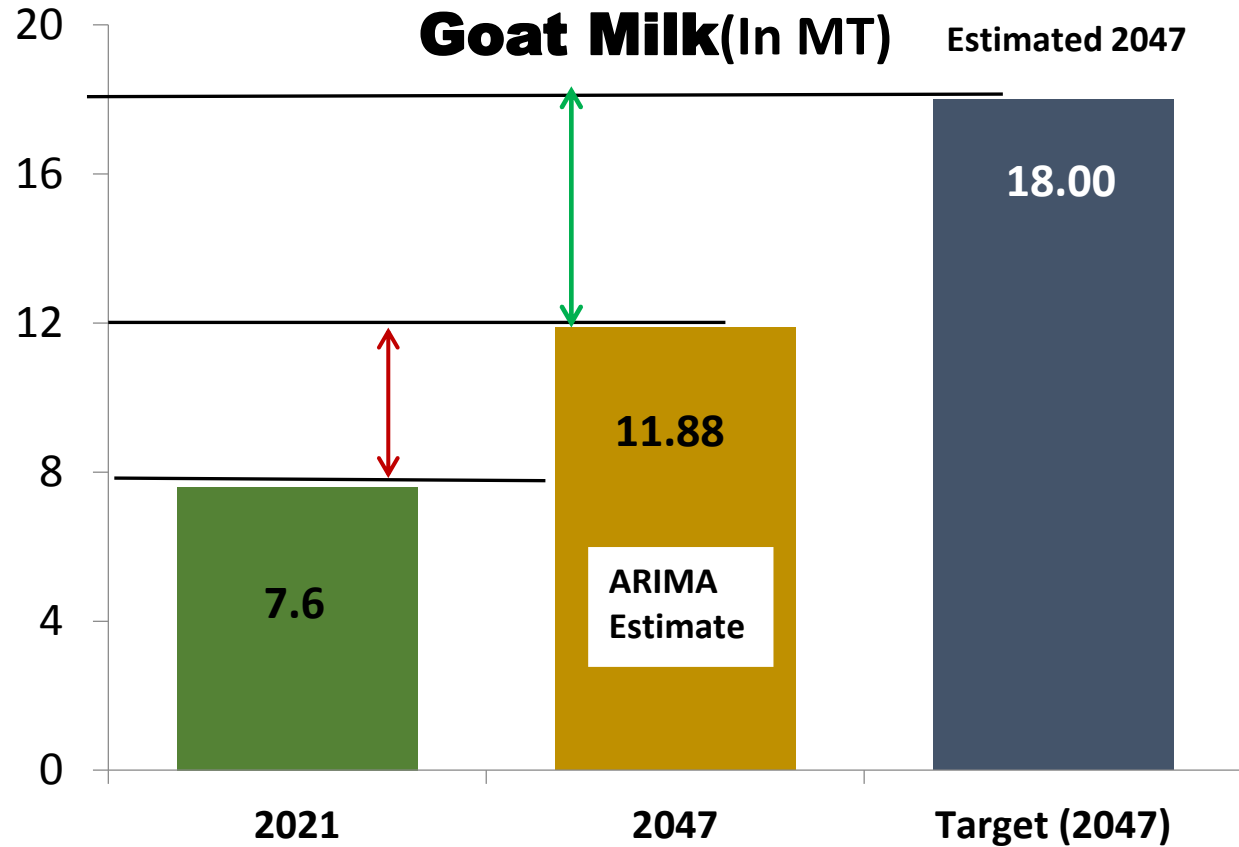
## Policy & Infrastructure Priorities

- **Establishment of Nuclear breeding farms to Ensures horizontal spread of quality germplasm,**
- **Strengthening of community Breeding Programme**
  
- **Pragmatic uniform slaughter Policy and its implementation**
  
- **Slaughter Houses with backward linkages to ensure traceability issues; Meat Processing Inedible byproduct processing units**
  
- **Marketing Infrastructure & System**
  
- **Strengthening of Veterinary/AI services**

**Public Research Funding**



# Goat Mission: Goals, Targets and Approaches



## Research Issues

Selection criteria & genetic markers for early selection for the development of Milk Line

Goat Lactation Physiology

Genes related with Milk production (APOB polymorphism, CSN1S2, LPIN1, GH1, CDKN1A, SEC 13 etc.)

Ration formulations & supplementations especially for milk production

Small milk processing units; Validation of therapeutic and nutraceutical potential of goat milk

## Policy Issues

- Marketing & Branding
- Awareness programme
- Value addition
- Processing infrastructure
- Entrepreneurship Development
- Promotion of milch breeds (Surti, Jakhrana, Jamunapari, Beetel etc.)

# Gross Value Added at Current Basic Prices (Estimates)

	2023		2047 (ARIMA Estimates)		Target 2047* (30%processed GP)	
Products	Production ( MT)	Value (crores)	Production ( MT)	Value (crores)	Production ( MT)	Value (crores)
<b>Milk</b>	<b>7.59</b>	<b>26,410</b>	<b>11.88</b>	<b>85,536</b>	<b>18.0</b>	<b>1,52,400</b>
<b>Meat</b>	<b>1.42</b>	<b>63,900</b>	<b>2.0</b>	<b>1,80,000</b>	<b>3.0</b>	<b>4,50,000</b>
<b>Skin/Hide</b>	<b>1.16 (123 million no.)</b>	<b>14,760</b>	<b>1.51</b>	<b>33,220</b>	<b>1.51</b>	<b>33,220</b>
<b>Byproducts (goat hair+SH offals)</b>	<b>1.22</b>	<b>5,785</b>	<b>1.74</b>	<b>14,616</b>	<b>2.2</b>	<b>18,480</b>
<b>Goat manure</b>	<b>45</b>	<b>4,500</b>	<b>60</b>	<b>12,000</b>	<b>60</b>	<b>29,820</b>
<b>Others</b>	<b>-</b>	<b>3,500</b>	<b>-</b>	<b>7,000</b>	<b>-</b>	<b>7,000</b>
<b>Total</b>		<b>1,18,855</b>		<b>3,32,372</b>		<b>6,90,920</b>

**GOAT MISSION**

# Key Insights

- Establish nucleus herds & multiplier flocks with clear breeding plan.
- Disorganized supply chain, marketing & branding of goat products
- **Poor processing & marketing infrastructure**
  - Neo-natal Mortality, Disease diagnosis, veterinary services
- Initiate mission on Reproductive management & Fodder Management. **Depletion of natural feed resources (pasture lands)**
- Provide technologies and services at farmer's door especially domestic & small farmers.
  - **Lack of credit services and infrastructures to scale-up the size of operation & production**

## Infrastructure

- Presently Govt. Farms =175 GBF +89 SBF=265
- Establishment of **Goat semen station=25**
- Establishment of Integrated Milk Processing Units



**THANK YOU**



### APEDA Approved Sheep/Goat Slaughter House(20/08/2024)

1. Al Kabeer Exports Private Limited, Village Sangareddy, Hyderabad
2. Ahmednagar Dist. Goat Rearing Processing Co-op Fed Ltd, Ralegaon,
3. Al Dua Food Processing Private Limited, Amarpur Kondla, Aligarh
4. AOV Agro Food Private Limited, Mewat, Nuh, Haryana
5. Vizg Foods Private Limited, Paradesipalem, Visakhapatnam
6. M.U.N Agro Industries Pvt Ltd., Vikramgadhi, Palghar, Navi Mumbai,
7. Frigerio Conserva Allana Private Limited, Palghar, Maharashtra
8. Marya Frozen Agro Food Products Pvt Limited, Sahajahanpur, Bareilly
9. Zareen Foods Private Limited, Madhi, Haryana
10. Suguna Foods Private Limited, Lalru, SAS Nagar, Punjab
11. Hihd Agro Industries Limited, Aligarh, U.P.
12. Indagro Foods Private Limited, Saharanpur
13. Fair Exports India Pvt Ltd, Barabanki, U.P.
14. Fair Exports India Pvt Ltd, Rampur, U.P.
15. Deonar Municipal Abattoir, Mumbai
16. Agricom Foods Pvt Ltd, Unnao, U.P.

Domestic  
Production >2000  
RSH;



U.P.=7  
MRS=4  
Telegana & HRV=2  
Punjab=1

