

Goat Population: A Comparative Study Based on Livestock Census

Author¹ – Mr Hanumant Vishnu Shingade, Research Scholar, Ness Wadia College of Commerce, Pune, India.

Author² – Dr Suresh Dharane, Research Guide, Ness Wadia College of Commerce, Pune, India.

Abstract

The Department of Livestock and Dairy Industry within the Ministry of Fisheries, Livestock and Dairy attaches great importance to animal husbandry and the collection and availability of up-to-date and accurate data related to animal husbandry in the rural economy. Valid data are required at all stages of the decision-making process for the proper planning and development of programs aimed at bringing about further improvements in this area, as well as their effective implementation and monitoring. The goat population is increasing day by day and the demand for meat also increased that is why the study of goat population in a comparative form of livestock census is required. The Comparative Study of the Livestock Census 2012 and 2019's is done in this paper. The population of goat farming, state-wise population, Male-Female Population, in Milk population and lastly Maharashtra State's District-wise Population study is done in this paper.

Keywords: Livestock Census 2019, Goat Population, Animal Husbandry

Introduction:

India is a major player in the world in the agricultural sector, 58% of the population is based on the agriculture sector. Agriculture-employed people are searching second income source and the first choice of every farmer is livestock and Agri-allied businesses. Farmers, landless & Marginal workers, small-scale and progressive farmers, young youth, professionals, housemakers, and uneducated and educated unemployed people are Choosing the same. Low Investment and high returns is the key feature of this business. Goat farming is now not only traditional activity now many people are specialised in this sector, and some farmers/shepherds do this business as a primary source of income and for commercial purposes. Agricultural activity is the base of human life. Agriculture is the most important source of raw materials, food, and minerals. More than 58% of India's population makes a living from agriculture. India has the world's largest cattle herd, the largest land available for wheat, rice and cotton plantations, and the largest producer of milk, legumes and spices. It is the second-largest producer of fruits, vegetables, tea, farmed fish, cotton, sugarcane, wheat, rice, cotton and sugar. India's agricultural sector is the world's second-largest agricultural area and provides employment for about half of the country's population. In this way, farmers become an integral part of the sector that provides us with food. [1]

Livestock plays an important role in the Indian economy. 20.5 million people depend on livestock for their livelihoods. Animal husbandry contributes 16% of his income to a small farmer, compared to 14% of the average for all households in rural areas. Animal husbandry provides the livelihood of 2/3 of the rural population. It also provides employment to approximately 8.8% of India's population. India has huge livestock. The livestock sector accounts for 4.11% of the GDP and 25.6% of the total agricultural GDP. [2]

Goats are raised for milk and meat. Goats are multifunctional animals that play an important role in a country's economy and the livelihoods of landless smallholders and marginal farmers. Goat farming is a business practised by a large portion of the population in rural areas. Goats can survive efficiently in low-fertility countries where other crops cannot be grown, in unfavourable harsh environments and available shrubs and trees. There are many people. Also, more people eat chevon (goat meat) than beef. According to the World Health Organization, over 70% of the world's population has a cow's milk allergy. Allergy symptoms include abdominal pain, gas, rashes, and ear infections. Goat milk allergy is very rare. According to many historians, goats were the first domesticated animals. For thousands of years, it has been used all over the world for milk, meat, hair and skin.

LIVESTOCK POPULATION IN INDIA BY SPECIES (MILLION NUMBERS) 2019 Census														
Species	1951	1956	1961	1966	1972	1977	1982	1987	1992	1997	2003	2007	2012	2019
Cattle	155.3	158.7	175.6	176.2	178.3	180.0	192.5	199.7	204.6	198.9	185.2	199.1	190.9	192.5
Adult Female Cattle	54.4	47.3	51.0	51.8	53.4	54.6	59.2	62.1	64.4	64.4	64.5	73.0	76.7	81.4
Buffalo	43.4	44.9	51.2	53.0	57.4	62.0	69.8	76.0	84.2	89.9	97.9	105.3	108.7	109.9
Adult Female Buffalo	21.0	21.7	24.3	25.4	28.6	31.3	32.5	39.1	43.8	46.8	51.0	54.5	56.6	55.0
Total Bovines	198.7	203.6	226.8	229.2	235.7	242.0	262.2	275.7	288.8	288.8	283.1	304.4	299.6	302.3
Sheep	39.1	39.3	40.2	42.4	40.0	41.0	48.8	45.7	50.8	57.5	61.5	71.6	65.1	74.3
Goat	47.2	55.4	60.9	64.6	67.5	75.6	95.3	110.2	115.3	122.7	124.4	140.5	135.2	148.9
Horses and Ponies	1.5	1.5	1.3	1.1	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.6	0.6	0.3
Camels	0.6	0.8	0.9	1.0	1.1	1.1	1.1	1.0	1.0	0.9	0.6	0.5	0.4	0.3
Pigs	4.4	4.9	5.2	5.0	6.9	7.6	10.1	10.6	12.8	13.3	13.5	11.1	10.3	9.1
Mules	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.2	0.1
Donkeys	1.3	1.1	1.1	1.1	1.0	1.0	1.0	1.0	1.0	0.9	0.7	0.4	0.3	0.1
Yak	NC	NC	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1
Mithun	NA	NA	NA	NA	NA	NA	NA	NA	0.2	0.2	0.3	0.3	0.3	0.4
Total Livestock	292.9	306.6	336.5	344.5	353.2	369.4	419.6	445.2	470.9	485.4	485.0	529.7	512.1	535.8
Poultry *	73.5	94.8	114.2	115.4	138.5	159.2	207.7	275.3	307.1	347.6	489.0	648.8	729.2	851.8

Table No. 01

A decade after decade goat population has been raised but still, the price of goat meat is increasing daily because of heavy demand in the market. The above table is showing the growth of goat farming in the last 69 years. As well as the proportion of goats in the total livestock of India. As per the 2019 census goats has a 17.48% share of total livestock. The total contribution of goats to livestock is 27.8%. The total goat population as the per 2019 census is 144.88 million in 2019.

The Objective of the Study:

- 1) To Study of Goat Population as per the Livestock Census 2012 & 2019
- 2) To Study of Goat Population of Maharashtra as per the Livestock Census 2019

Research Methodology:

This Research is based on Primary and Secondary Data. Data for the Study (secondary data) is gathered from Livestock Census Website, research papers, newspaper articles, books, Internet Blogs, and videos. Primary data has been collected through news platforms and discussions with experts.

Statistics Analysis:

In India, with a total goat population of 135.2 million, Maharashtra ranks sixth in terms of goat population in India, with approximately 8.44 million goats living in Maharashtra. It supplements family income and creates employment in the rural sector, especially for landless and smallholder farmers. Few farmers practice modern intensive goat-rearing systems and benefit from modern

technology such as high-performance breeding, modern irrigation systems, mechanization, and ready-to-use animal feed. Farmers sell their goats at good prices during religious holidays and Eid celebrations, making good profits. [3]

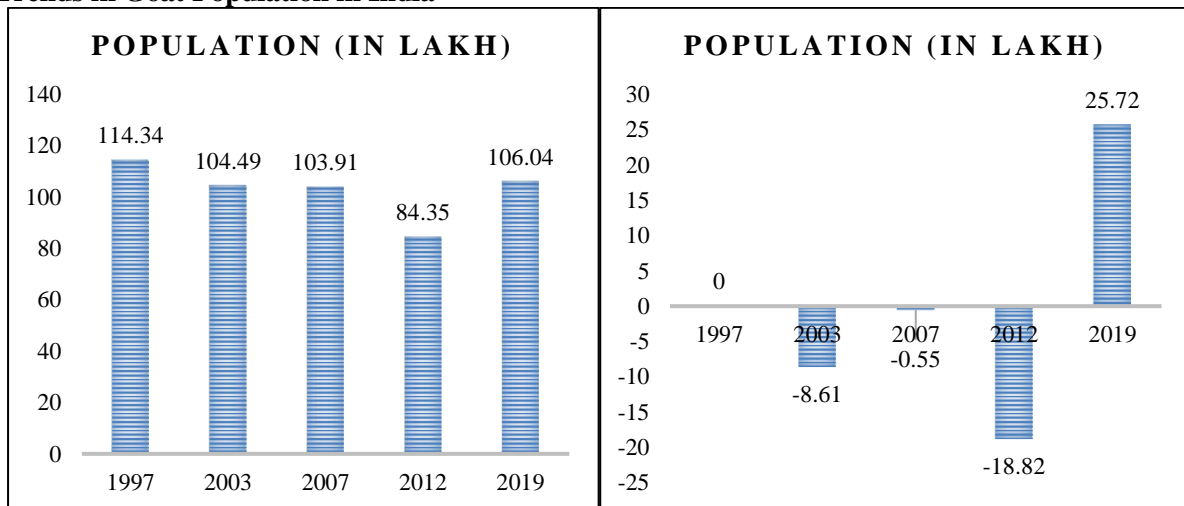
Goat Population of Major States in India

Rank	State	Population (Lakh) 2012	Population (Lakh) 2019	% Changes
	India	1351.7	1488.8	(+) 10.14
1	Rajasthan	216.7	208.4	(-) 3.81
2	West Bengal	115.1	162.8	(+) 41.49
3	Uttar Pradesh	155.9	144.8	(-) 7.09
4	Bihar	121.5	128.2	(+) 5.49
5	Madhya Pradesh	80.1	110.6	(+) 38.07
6	Maharashtra	84.4	106.0	(+) 25.72

Table No. 02

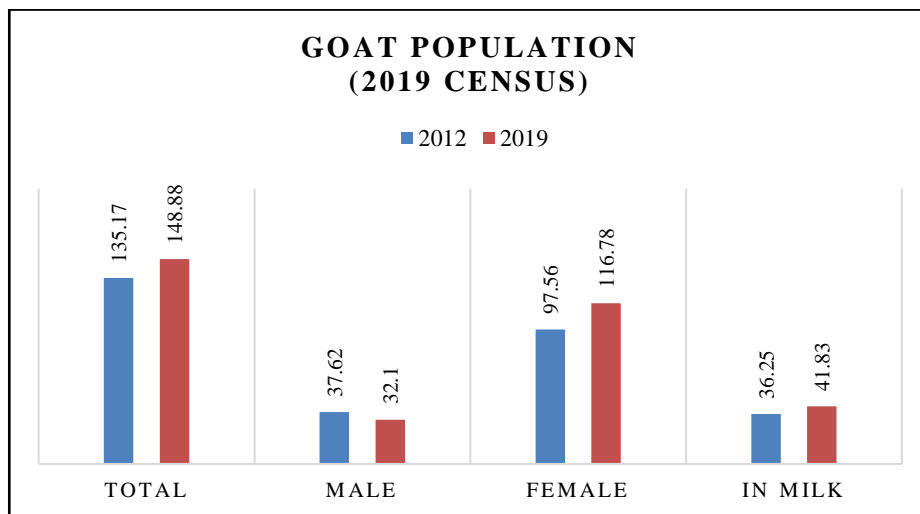
Goat population as per the livestock census, 2019 Maharashtra stand in 6th Rank in India and Rajasthan got first place in India. In the comparison of the livestock census 2012 & 2019, Maharashtra’s Goat population increased by 25.75% and overall, in India, it increased by 10.14%. the highest increasing rate in West Bengal and it’s 41.49%. and Bihar has the lowest increasing rate. Uttar Pradesh and Rajasthan two-state’s Goat populations decreased by 7.09 & 3.81 respectively. Out of the total population of goats in India, Maharashtra’s contribution is 7.12% and day by day goat populations in Maharashtra are increasing.

Trends in Goat Population in India



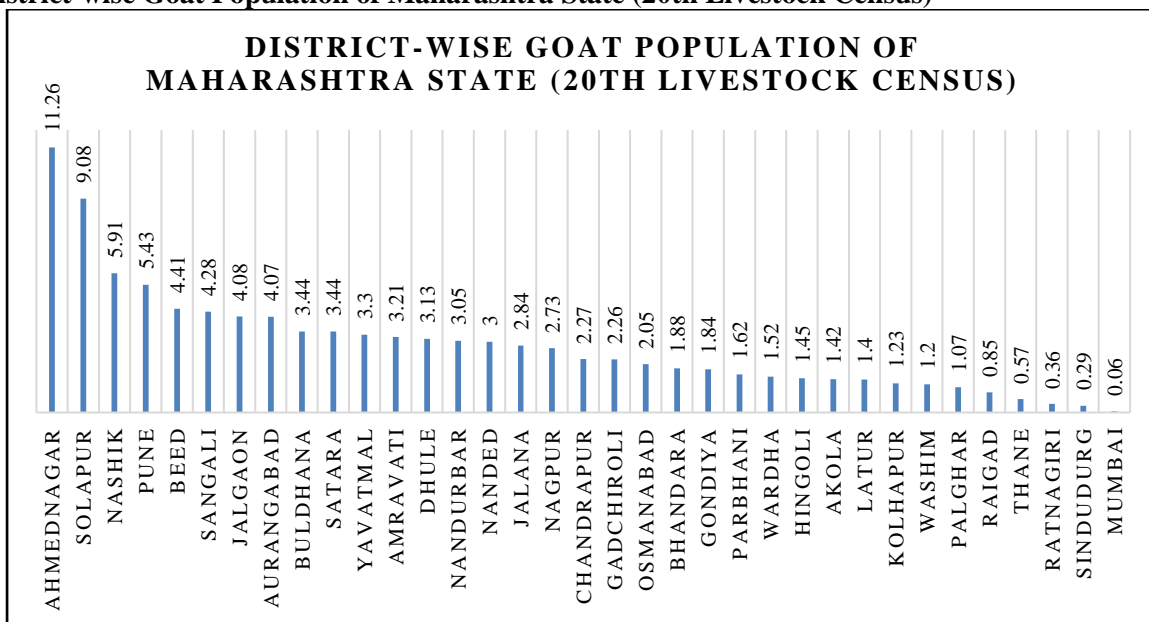
The above two charts show goat population growth in India. In 1997 goat population in India is 114.64 Lakh after 1997 to 2012 continuously population of the goat has been decreased and in 2019 it has been increased to a very high volume. This chart shows the opportunities for goat farming in India. [4]

Goat Population of Males, Females and Milk



The Livestock census, in 2019 found goat population has increased by 10.14%. as per the 2012 livestock census total goat population is 135.17 million and in 2019 it increased by 10.14% means as per the 2019 census total goat population is now 148.88 million. The Male population of male goats decreased by 5.52% and female goats increased by 19.22. in milk goats the ratio is improved as per the 2012 census Milk goat is 36.25% but as per the 2019 census it's now 41.83%. Overall, we can say the goat population is day by day increased because of the high return in this business and people are moving toward this business which is why the goat's contribution to livestock is more than 25%.

District-wise Goat Population of Maharashtra State (20th Livestock Census)



In Maharashtra State, a total of 35 Districts are found, the total goat population in Maharashtra State is 10604883 Nos. out of this total population of Maharashtra, in the only Ahmednagar District, 11.26% were found. After that Solapur, Nashik, Pune Beed and Sangali's goat population is 9.08%, 5.91%, 5.43%, 4.41 & 4.28% respectively. The lowest goat population is found in the district of Mumbai which is 0.06%. total 5 Districts in Maharashtra their goat population is below 1%. In the Palghar, Thane, Ratnagiri, Sindhudurg & Mumbai Districts are there, the goat population of these districts are 0.85%, 0.57%, 0.36%, 0.29% & 0.06% respectively.

Conclusion:

Based on the study of goat population as per the Livestock Census in 2012 and 2019, it can be concluded that there has been a significant growth in the goat population over the years. This indicates a positive trend in the goat farming sector, which plays a crucial role in the rural economy and livelihoods of many people.

Livestock Census conducted in 2012, the goat population was found to be at a certain level. However, according to the Livestock Census of 2019, there has been a notable increase in the goat population, indicating an upward trajectory. This growth can be attributed to various factors such as increased awareness about the profitability and sustainability of goat farming, improved access to veterinary services, and the availability of better breed varieties.

The study also focused on the goat population in Maharashtra as per the Livestock Census 2019. Maharashtra, one of the prominent states in India, showed promising results in terms of goat population growth. The state has witnessed a substantial rise in goat numbers, which highlights the potential and viability of goat farming in the region.

Suggestions:

1. To boost the goat farming sector, it is essential to provide training and capacity-building programs to farmers. This will enable them to acquire knowledge about improved breeding techniques, healthcare management, and modern farming practices.
2. Training programs can be conducted by agricultural universities, government agencies, and non-governmental organizations (NGOs) to enhance the skills of farmers and improve their overall productivity.
3. Emphasize the importance of breed improvement to enhance the quality and productivity of goats.
4. Encourage farmers to adopt superior goat breeds that are known for higher milk production, meat yield, and disease resistance. This can be done through awareness campaigns, subsidies on superior breed procurement, and establishing breeding centres for the availability of quality breeding stock.
5. Ensure the availability and accessibility of veterinary services in rural areas.
6. Establish veterinary clinics or mobile veterinary units to provide healthcare facilities, vaccinations, and timely treatment for goats. This will help in reducing mortality rates and improving the overall health of the goat population.
7. Strengthen market linkages for goat farmers by establishing direct market access, creating farmer-producer organizations, and supporting the formation of cooperatives. This will enable farmers to sell their products at fair prices, avoid middlemen exploitation, and explore export opportunities. Additionally, providing marketing infrastructure and organizing periodic goat fairs can further enhance market connectivity.
8. Provide financial support and subsidies to goat farmers for setting up infrastructure, purchasing improved breed stock, and accessing veterinary services.
9. Financial assistance can be offered through government schemes, grants, and loans at subsidized rates, enabling farmers to invest in the development and expansion of their goat-farming enterprises.

Reference:

- i. <https://dahd.nic.in/documents/statistics/livestock-census>
- ii. farmingX, G. e. (2022, April 16). *Goat farming in Maharashtra Incredible Tips*. Retrieved from
- iii. <https://www.farmingx.in/goat-farming-in-maharashtra/#:~:text=In%20India%20the%20total%20population,million%20goats%20are%20in%20Maharashtra>.
- iv. Foundation, I. B. (2023, January 06). *India Brand Equity Foundation*. Retrieved from www.ibef.org:
- v. <https://www.ibef.org/industry/agriculture-india#:~:text=Introduction,about%2058%25%20of%20India's%20population>.

- vi. Mahamandal, P. A. (2019, August 1). Retrieved from Punyashloka Ahilyadevi Maharashtra Mendhi Va Sheli Vikas Mahamandal: <http://mahamesh.co.in/en/Menu/SheepAndGoatPopulation>
- vii. Vikaspedia. (2020, March 03). *Vikaspedia.in*. Retrieved from <https://vikaspedia.in/agriculture/livestock/role-of-livestock-in-indian-economy#:~:text=Livestock%20provides%20livelihood%20to%20two,25.6%25%20of%20total%20Agriculture%20GDP>.
- viii. Mr Hanumant Vishnu Shingade & Dr Suresh Dharane, Ness Wadia College of Commerce, Pune An Overview of Goat Rearing as a Self-Employment Madhya Pradesh Journal of Social Sciences, A biannually Journal of M. P. Institute of Social Science Research, Ujjain ISSN: 0973-855X (Vol 28 No. 1(iii), June 2023) Madhya Pradesh Journal of Social Sciences 28:1(iii) (2023) 62 (Page No. 62 to 65)