



**FACULTY OF AGRICULTURAL SCIENCES AND ALLIED
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Livestock plays an important role in Indian economy. About 20.5 million people depend upon livestock for their livelihood. Livestock contributed 16% to the income of small farm households as against an average of 14% for all rural households. Livestock provides livelihood to two-third of rural community. It also provides employment to about 8.8 % of the population in India. India has vast livestock resources. Livestock sector contributes 4.11% GDP and 25.6% of total Agriculture GDP.

Livestock resources

India is

- World's highest livestock owner at about 535.78 million
- First in the total buffalo population in the world - 109.85 million buffaloes
- Second in the population of goats - 148.88 million goats
- Second largest poultry market in the world
- Second largest producer of fish and also second largest aquaculture nation in the world
- Third in the population of sheep (74.26 millions)
- Fifth in in the population of ducks and chicken (851.81 million)
- Tenth in camel population in the world - 2.5 lakhs

Source : 20th Livestock Census

Contribution of livestock to people

The livestock provides food and non-food items to the people.

1. **Food:** The livestock provides food items such as Milk, Meat and Eggs for human consumption. India is number one milk producer in the world. It is producing about 176.34 million tones of milk in a year (2017-18). Similarly it is producing about 95.22 billions of eggs, 7.70 million tonnes of meat in a year. The value of output of livestock sector at current prices was Rs 9, 17,910 crores at current prices during 2016-17 which is about 31.25% of the value of output from agricultural and allied sector. At constant prices the value of output from livestock was about 31.11% of the value of the output from total agriculture and allied sector. During the financial year 201718, the total fish production in India is estimated at 12.61 Million Metric tonnes.
2. **Fibre and skins:** The livestock also contributes to the production of wool, hair, hides, and pelts. Leather is the most important product which has a very high export potential. India is producing about 41.5 million Kg of wool per annum during 2017-18.

3. **Draft:** Bullocks are the back bone of Indian agriculture. Despite lot of advancements in the use of mechanical power in Indian agricultural operations, the Indian farmer especially in rural areas still depend upon bullocks for various agricultural operations. The bullocks are saving a lot on fuel which is a necessary input for using mechanical power like tractors, combine harvesters etc. Pack animals like camels, horses, donkeys, ponies, mules etc are being extensively used to transport goods in different parts of the country in addition to bullocks. In situations like hilly terrains mules and ponies serve as the only alternative to transport goods. Similarly, the army has to depend upon these animals to transport various items in high areas of high altitude.
4. **Dung and other animal waste materials:** Dung and other animal wastes serve as very good farm yard manure and the value of it is worth several crores of rupees. In addition it is also used as fuel (bio gas, dung cakes), and for construction as poor man's cement (dung).
5. **Storage:** Livestock are considered as 'moving banks' because of their potentiality to dispose off during emergencies. They serve as capital and in cases of landless agricultural labourers many time it is the only capital resource they possess. Livestock serve as an asset and in case of emergencies they serve as guarantee for availing loans from the local sources such as money lenders in the villages.
6. **Weed control:** Livestock are also used as Biological control of brush, plants and weeds.
7. **Cultural:** Livestock offer security to the owners and also add to their self esteem especially when they are owning prized animals such as pedigreed bulls, dogs and high yielding cows/ buffaloes etc.
8. **Sports / recreation:** People also use the animals like cocks, rams, bulls etc for competition and sports. Despite ban on these animal competitions the cock fights, ram fights and bull fights (jalli kattu) are quite common during festive seasons.
9. **Companion animals:** Dogs are known for their faithfulness and are being used as companions since time immemorial. When the nuclear families are increasing in number and the old parents are forced to lead solitary life the dogs, cats are providing the needed company to the latter thus making them lead a comfortable life.

Role of livestock in farmers' economy

The livestock plays an important role in the economy of farmers. The farmers in India maintain mixed farming system i.e. a combination of crop and livestock where the output of one enterprise becomes the input of another enterprise thereby realize the resource efficiency. The livestock serve the farmers in different ways.

1. **Income:** Livestock is a source of subsidiary income for many families in India especially the resource poor who maintain few heads of animals. Cows and buffaloes if in milk will provide regular income to the livestock farmers through sale of milk. Animals like sheep and goat serve as sources of income during

emergencies to meet exigencies like marriages, treatment of sick persons, children education, repair of houses etc. The animals also serve as moving banks and assets which provide economic security to the owners.

2. **Employment:** A large number of people in India being less literate and unskilled depend upon agriculture for their livelihoods. But agriculture being seasonal in nature could provide employment for a maximum of 180 days in a year. The landless and less land people depend upon livestock for utilizing their labour during lean agricultural season.
3. **Food:** The livestock products such as milk, meat and eggs are an important source of animal protein to the members of the livestock owners. The per capita availability of milk is around 375 g / day; eggs is 74 / annum during 2017-18.
4. **Social security:** The animals offer social security to the owners in terms of their status in the society. The families especially the landless which own animals are better placed than those who do not. Gifting of animals during marriages is a very common phenomenon in different parts of the country. Rearing of animals is a part of the Indian culture. Animals are used for various socio religious functions. Cows for house warming ceremonies; rams, bucks and chicken for sacrifice during festive seasons; Bulls and Cows are worshipped during various religious functions. Many owners develop attachment to their animals.
5. **Draft :** The bullocks are the back bone of Indian agriculture. The farmers especially the marginal and small depend upon bullocks for ploughing, carting and transport of both inputs and outputs.
6. **Dung:** In rural areas dung is used for several purposes which include fuel (dung cakes), fertilizer (farm yard manure), and plastering material (poor man's cement).

Livestock population (2019 Livestock census)

Sl. No	Species	Number (in millions)	Ranking in the world population
01	Cattle	192.49	Second
02	Buffaloes	109.85	First
	Total (including Mithun and Yak)	302.79	First
03	Sheep	74.26	Third
04	Goats	148.88	Second
05	Pigs	9.06	-
06	Others	0.91	-
	Total livestock	535.78	

	Total poultry	851.81	Seventh
07	Duck	-	Fifth
08	Chicken	-	
09	Camel	0.25	Tenth

Production of livestock in India 2017-18

Sl. No.	Product	Quantity	Ranking in the world production
01	MILK in million tonnes	176.30	FIRST
02	EGGS in millions Nos.	95,217	THIRD
03	MEAT million tonnes	7.70	NA
04	WOOL in million kgs.	41.50	NA
05	FISH in million metric tonnes	12.61	SECOND

Average Yield Rate for Milk from Breeds

The average yield of milk per day per animal in milk at National level from different species during 2017-18 is given below.

Exotic Cows (kg/day)	Cross bred Cows (kg/day)	Indigenous Cows(kg/day)	Non-Descript Cows(kg/day)	Indigenous Buffalo(kg/day)	Non-Descript Buffalo (kg/day)	Goat (kg/day)
11.48	7.61	3.73	2.41	6.19	4.21	0.47

Source: Annual Report 2018-19, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture and Farmers Welfare, Govt. of India.