



Livestock Production in Rural Development

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Livestock plays a major role in shaping the socioeconomic fabric of rural communities. It also affects the lives of marginal and small-scale farmers as well as landless labourers. This influence is especially significant since roughly 70% of all livestock are owned by these demographic groups. This highlights how important livestock are to rural economies, especially in situations where there aren't many other options for employment. (Ali, 2007).

In various production systems, livestock plays a multifaceted role, providing security and serving as a form of insurance, as noted by Kitalyi *et al.* (2005). A positive trend was noted in 2011–12, as livestock wealth increased towards greater equality while maintaining a relatively equitable distribution. This demonstrates the livestock industry's potential to increase farmers' revenue.

Livestock is a major contributor to the country's economy and income, making up a sizable amount of its foreign exchange earnings. Additionally, this industry is vital to improving the nation's overall welfare, food security, and nutritional status. The livestock industry in India employs about 8.80% of the workforce and provides livelihoods for two thirds of rural communities. 25.60% of the GDP is derived from the agriculture sector, and 4.11% of the GDP is from the livestock industry. About 20.50 million people in India rely on cattle for their livelihood; these animals provide 16% of the income for small farm households and 14% for all rural households. Livestock is regarded as a sector for women's empowerment and equity because of its enormous potential to provide non-farm employment and income in rural areas. Compared to other assets like land and other agricultural activities or small industries, women are better suited to manage livestock and livestock products. Undernourished children's anthropometric indices, cognitive function, and nutritional deficiencies improve with the consumption of animal source foods (ASFs). (Randolph *et al.*, 2007).

Current Status of Livestock in India

The total number of pigs in the country is 9.06 million, down 12.03% from the previous Census, according to the most recent Census. There are 2.5 lakh camels in the nation as of 2019, a 37.1% decline from the previous Census. There are 851.81 million poultry in the nation as of 2019, a 16.8% increase from the previous Census. In 2019, there were 317.07 million backyard poultry in the nation, up 45.8% from the previous Census. There are 534.74 million commercial poultry in the nation as of 2019, up 4.5% from the previous Census. (20th censuses, <https://dahd.nic.in>).

Livestock production and role in Indian economics: (DAHD, 2019)**Species-wise total livestock population:**

Product	Annual Production		Growth Rate (%)	CAGR (%) during 2014-15 to 2020-21
	2020-21*	2019-20		
Milk ('000 Tonnes)	209959.88	198404.80	5.81	6.20
Egg (Lakh Nos.)	1220486.44	1143831.01	6.70	7.64
Meat ('000 Tonnes)	8797.91	8599.40	2.31	4.67
Wool ('000 Kgs)	36930.72	36760.57	0.46	-4.32

(20th Livestock Census Report)**Livestock in Rural Development**

A large section of the populace in India, who work in unskilled jobs and have lower literacy rates, depend on agriculture as their primary source of income. Nonetheless, due to its seasonal nature, employment in agriculture is only possible for a maximum of 180 days annually. Lean agricultural seasons make the livestock sector vital for people without large land holdings or small farmers with limited land. The livelihoods of about 70% of people living in rural areas are derived from agriculture and related industries. Therefore, it is acknowledged that additional jobs like raising chickens, sheep, and goats are necessary to provide stable sources of income when agricultural labour is scarce. (Kaware, 2017). This diversification helps address the challenges posed by the seasonal nature of traditional agricultural practices, contributing to the overall economic resilience of rural communities.

Species-wise Total Livestock Population

Category	(In Population million) 2012			(In Population million) 2019			% Change*		
	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
Cattle	183.74	7.17	190.90	185.27	8.19	193.46	0.83	14.33	1.34
Buffalo	104.10	4.61	108.70	104.84	5.02	109.85	0.71	8.88	1.06
Sheep	63.78	1.29	65.07	72.23	2.03	74.26	13.25	57.28	14.13
Goat	129.08	6.09	135.17	142.44	6.44	148.88	10.35	5.78	10.14
Pig	9.23	1.07	10.29	8.17	0.88	9.06	11.40	17.44	-12.03
Mithun	0.29	0.007	0.30	0.38	0.009	0.39	29.45	32.40	29.52
Yak	0.08	0.0004	0.08	0.06	0.0001	0.06	24.62	75.06	-24.90
Horses & Ponies	0.56	0.06	0.62	0.30	0.04	0.34	46.04	37.68	-45.22
Mule	0.18	0.014	0.20	0.08	0.008	0.08	58.09	43.63	-57.09
Donkey	0.27	0.05	0.32	0.10	0.02	0.12	60.99	-62.48	-61.23
Camel	0.39	0.010	0.40	0.25	0.005	0.25	36.78	48.03	-37.05
Total Livestock	491.69	20.37	512.06	514.11	22.65	536.76	4.56	11.19	4.82

Factor Influencing the Adoption of Livestock Farmers

Several household factors, such as the farmer's experience, occupation, land, labour endowments, and the surrounding socioeconomic environment, such as social group, credit availability, media exposure, etc., influence decisions to keep livestock. According to a 2007 study by Kumar and Singh, labour had a positive and significant impact, suggesting that having enough family labour on hand made raising livestock easier. The choice of whether or not to raise livestock was significantly influenced by the household's occupation. The total family income was positively and significantly impacted by the share of dairy income to total income, indicating that marginal and land-poor households place a greater value on dairy than do larger farmers. (Yasmeen *et al.*, 2020). The effect of caste (general) had a positive and significant influence on the decision of livestock rearing. It could be because of better resource endowments available to the general caste (Kumar and Singh 2007). Recognizing the potential of this industry, NABARD recently launched a training program for farmers (20 to 30 people per batch) involved in cattle rearing, dairy activities, and the rearing of sheep, goats, and country fowl using the most recent farming technology in collaboration with Tamil

Nadu Veterinary and Animal Sciences University (TANUVAS). Additionally, they will be taken on exposure visits to progressive farms, with training and exposure visit expenses covered by NABARD. In addition, the Union Government recently announced the creation of the Animal Husbandry Infrastructure Development Fund (AHIDF), which will provide interest subsidies and amount to Rs. 15000 crores. The aim of this initiative is to encourage private companies and MSMEs to invest in animal feed, dairy, and meat processing facilities, with the goal of creating 35 lakh new jobs. The government had previously approved an Rs 10,000 Dairy Infrastructure Development Fund (DIDF) to be used for the development of dairy infrastructure.

Conclusion

Livestock is vital to the rural economy. A rural household's socioeconomic development is significantly influenced by its livestock. According to the most recent data reports, 17% of the total income earned by marginal farmers came from the livestock sector, which accounted for 62% of their total livestock-related activities. Livestock rearing helps rural households overcome poverty and provides nutritional security in addition to income. Small ruminant owners saw a greater percentage of poverty reduction than cattle owners, but it's important to keep in mind that raising livestock is a prerequisite, not an adequate one, for improving nutritional security. Intra-household consumption, which is significant in improving food security.

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