



Role of Livestock Sector in Rural Development

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The importance of livestock in India goes beyond the function of food production. It is an important source of draught power, manure for crop production, and fuel for domestic use. Near about 70 percent of livestock in India is owned by 67% of small and marginal farmers and by the land thus supplementing family incomes and generating gainful employment in the rural sector, particularly among the landless laborers, small and marginal farmers, and women. Livestock also makes significant contributions towards the conservation of the environment. The livestock sector supplements income from crop production and other sources and absorbs income shocks due to crop failure. It generates a continuous stream of income and employment and reduces seasonality in livelihood patterns, particularly for the rural poor (Birthal and Ali, 2005).

Benefits of the livestock sector

About 75% of the Indian rural households are keeping the livestock out of which the resource-poor farmers own nearly 80% of the livestock. Livestock production in India is largely an output of smallholders and more than 70 million rural households depend either directly or indirectly on livestock for their livelihoods. The smallholders and landless laborers together control about 71% of cattle, 63% of buffaloes, 66% of small ruminants (sheep and goat), 70% of pigs, and 74% of poultry. Even more importantly, livestock provides a major source of supplementary income for a large majority of rural households and this sector is, therefore, highly livelihood intensive and more importantly provides sustenance during drought and other natural calamities to rural families.

Table 1. Livestock Population Dynamics (million)

Year	Cattle	Buffalo	Sheep	Goat	Pig	Poultry
1997	198.9	89.9	57.5	122.7	13.3	347.6
2003	185.2	97.9	61.5	124.4	13.6	489.0
2007	199.1	105.3	71.5	140.5	11.1	648.8
2012	190.9	108.7	65.06	135.17	10.29	729.2
2019	192.5	109.8	74.2	148.8	9.06	851.8

Source: livestock census (various issues), Ministry of Agriculture, GOI.

The animal husbandry sector provides large self-employment opportunities. Presuming that one family member is employed in looking after the livestock, 25 million people are estimated to be employed in livestock-rearing activities. This sector is playing very important role in the rural economy as support sector of the economy. Especially 70 million rural households primarily, small and marginal farmers and landless laborers in the country are getting employment opportunities in dairy. Dairying has become an important secondary source of income for millions of rural families.

Milk Production

Milk provides relatively quick returns for small-scale livestock keepers. Smallholders produce the vast majority of milk in developing countries where demand is expected to increase by 25% by 2025. Milk is the primary source of animal protein for the vast vegetarian population of the country. Thus, the demand of milk is ever increasing and that buffaloes are considered as the preferred milch animal throughout the country.

India is the world's largest milk producer, accounting for 25% of total production. India's milk output has climbed by 58% over the last nine years, between 2014-15 and 2022-23, reaching 230.58 million tonnes in 2022-23. Dairying has become an important secondary source of income for millions of rural families and has assumed the most important role in providing employment and income-generating opportunities.

Table 2. Estimates of production and per capita availability of milk

Year	Milk production (million tonnes)	Human population (million no.)	Per capita availability (gram/day)
2014-15	146.3	1244	319
2015-16	155.5	1260	333
2016-17	165.4	1275	351
2017-18	176.3	1290	375
2018-19	187.7	1305	394
2019-20	198.4	1324	406
2020-21	209.9	1338	427
2021-22	221.1	1353	444
2022-23	230.6	1417	459

Source: Animal Husbandry Department.

Meat and Meat Products

The meat industry in India is largely in the unorganized sector. With rapid urbanization, higher income levels, and lifestyle changes, the market for scientifically produced and hygienically packed meat and meat products is expanding rapidly. There is a huge scope for expanding exports, especially in buffalo and poultry meat, eggs, and dairy products. The slaughter rate for cattle as a whole is 20%, for buffalo it is 41%, for pigs 99%, for sheep 30%, and 40% for goats.

Table 3. Estimates of production and per capita availability of meat

Year	Meat production (million tonnes)	Human population (million)	Per capita availability (Kg/annum)
2014-15	6.70	1244	5.32
2015-16	7.02	1260	5.51
2016-17	7.38	1275	5.72
2017-18	7.65	1290	5.86
2018-19	8.11	1305	6.15
2019-20	8.59	1324	6.45
2020-21	8.79	1338	6.52
2021-22	9.29	1353	6.82
2022-23	9.76	1417	7.1

Poultry and egg production

Poultry is also another way of getting food and food security in India. apart from food security, it employs about 1.5 million people. The livestock sector not only essential protein

and a nutritious human diet through milk, eggs, meat etc but also plays an important role in the utilization of non-edible agricultural by-products.

Poultry is one of the fastest-growing segments of the agricultural sector in India today. Their growth rate has been rising at 8-10% per annum. As a result, India is now the world's fifth-largest egg producer and the eighteenth-largest producer of broilers. Table eggs and broiler meat are the major end products of the poultry sector in India.

The organized sector of the poultry industry contributes nearly 70% of the total output and the rest 30% in the unorganized sector in India. Andhra Pradesh, Tamil Nadu, and Maharashtra produce nearly 70% of the country's egg production.

Fish Production

The fisheries sector contributes significantly to the national income while providing livelihood to approximately 14.49 million people. India has about 8041 km of coastline and about 5.70 million ha of fresh water suitable for fisheries production. It has been recognized as a powerful income and employment generator as it stimulates the growth of several subsidiary industries and is a source of foreign exchange-earners. Most importantly, it is the source of livelihood for a large section of the country's economically backward population.

Table 4. Estimates of production and per capita availability of egg and fish

Year	Egg production (million tonnes)	Per capita availability (eggs/annum)	Fish production (Lakh tons)
2014-15	78.48	62	102.6
2015-16	82.93	65	107.62
2016-17	88.14	68	114.31
2017-18	95.22	73	125.90
2018-19	103.8	79	137.58
2019-20	114.38	86	141.60
2020-21	122.05	90	147.3
2021-22	129.6	95	162.48
2022-23	138.38	101	175.45

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