

LIVESTOCK AND HUMAN RATIO: A STUDY

Dr. Rajendra Kumar Meena*

ABSTRACT

Livestock industry shares 19% income of Rajasthan which comes in various forms like milk, ghee, wool, meat, bones, hides etc. Livestock is one of the important source of income in rural Rajasthan. Indian people have adopted dairying as an important and subsidiary occupation of agriculture. The increasing population of livestock signals planners and authorities to provide better investigation, effective planning and fast growing infrastructure to the dairy industry. The livestock population of India was 29.28 crore in 1951 which has increased by 46.44 crore in 2003. There are 92.65 million cattle, 78.55 million buffaloes, 44.40 million sheeps and 117.0 million cattle in the country. Out of the total 53% of the buffaloes 20% of goats, 4% of sheep and 9% of camel of the world are found in India.

Keywords: Livestock Industry, Occupation of Agriculture, Livestock Signals, Growing Infrastructure.

Introduction

The livestock is mainly composed of cattle, buffaloes, sheeps, goats, camels, horses, mules and pigs. Cattle and buffaloes are the major source of milk and thus they are very important for the study. Rajasthan is the second largest state in animal wealth in India accounting 4.91 crore livestock population during 2003 with the density of 159 animals per km². The state has 10.60% of India's animal population and leading state in having the largest number of sheeps (100.31 lakh) and goats (169.71 lakhs). It has 16.30% of sheeps, 14.66% of goats, 6.07% cattle and 11.30% of buffaloes in the country.

According to livestock census 2003 there are 108.53 lakh cattle, 104.13 lakh buffaloes, 100.54 lakh sheep, 168.08 goats, 0.25 lakh horses and ponnies, 1.42 lakh donkeys, 4.98 lakh camel, 0.026 lakh mules and 3.37 lakh pigs population in Rajasthan.

Livestock rearing is the primary occupation and the principal source of livelihood for the people in the arid and semi-arid region. In the sub humid and humid conditions, it is practised in the form of mixed farming. It supplements farmer's income and some small scale industries like dairy farming, bone-crushing, carpet weaving etc. The mixed farming practices has gained momentum through the cooperative farming. Co-operative dairying and poultry farming as it provides cash in hand to the farmers. Due to the unfavourable condition such as hot and dry climate lack of water, electricity and transportation, uneducated people and low agricultural productivity the industrialization is not in progress.

Livestock Population

Rajasthan state having 10.60 per cent of the total livestock of India while it covers about 10.14% of the total area. The total livestock population of India is 46.44 crore in 2003 and 4,91,45,989 (10.60%)

* Associate Professor, Department of Geography, BND Government Arts College, Chimanpura (Shahpura), Jaipur, Rajasthan, India.

in the state. The livestock population rapidly increased from 1951 to 1983. Due to drought and famine condition during 1983-1988 livestock population declined but increased between 1988-1997 and again it decreased due to famine and drought between 1997 and 2003.

The cattle population increased by 20% during 1977-83 but it decreased by 18% during 1983-88 and again increased again by about 16.9% during 1988-92. In 1992-1997 the increase in cattle population has been of the order of 14.4%. The unprecedented famine and drought conditions of 1987-88 were responsible for drastic decline in the cattle population in 1988 as compared to 1983. During the period of 1992-97 the growth recorded among buffaloes 25.8% followed by sheep 46.6% goats 10.82% cattle 4.11%. According to the 1992 census there were 1100 livestock heads as compared to 1000 persons in the state but at present the livestock population is less than human population i.e. 961 livestock heads for 1000 persons.

The cattle population was 1.2 crore in 1997 by constituting 22.20 per cent of the state's total livestock. Nearly 31.04 per cent consists of goats sheep 26.67 per cent. The livestock is distributed unevenly in the state. Out of this total number 41.76 lakh heads registered in Barmer, 32.27 lakh in Nagaur, 27.10 lakh in Bhilwara, 37.89 lakh in Jodhpur, 27.38 lakh in Pali, 14.27 lakh in Sriganganagar. Low distribution of livestock was found 4.53 lakh in Kota 6.56 lakh, Dausa 7.92 lakh, Bharatpur 9.1 lakh, Baran 8.25 lakh etc. The Aravalli Ranges divide cattle distribution in Rajasthan. To the west of it sheeps goats, camels and donkeys are dominant while cattle, buffaloes, horses, ponnies and pigs are dominant in the east.

According to livestock census 2003, the maximum number of bovine population is found in Udaipur (15.68 lakh), Jaipur (13.01 lakh), Chittorgarh (11.02), Alwar (11.0 lakh) while the minimum bovine population is found in Dholpur (3.64 lakh), Sirohi (3.32 lakh) and Jaisalmer (2.45 lakh). In cattle population Udaipur (10.38 lakh), Chittorgarh (6.94 lakh), Banswara (6.58 lakh), Bikaner (6.08 lakh) and Bhilwara (6.02 lakh) are the leading districts whereas Alwar (9.17 lakh), Jaipur (8.89 lakh), Bharatpur (6.96 lakh) and Udaipur (5.30 lakh). Jaisalmer districts has only 2205 buffaloes..

Table 1: Livestock in Rajasthan (1951-2003)

Year	Livestock (in lakh)	Growth Rate (%)
1951	255.16	—
1956	324.16	27.04
1961	335.09	3.54
1966	374.76	11.83
1972	388.78	3.74
1977	413.59	6.38
1983	496.5	20.04
1988	409.01	-17.62
1992	477.73	-16.80
1997	543.48	13.76
2003	491.46	-9.57

Source: Department of Animal Husbandry, GOR, Jaipur.

Livestock and Human Ratio

The livestock density in Rajasthan was 144 (2003) per km² which was less than population density 165(2001) person per km². It was the highest in Dungarpur 303 per km² and the lowest 46 per km² in Jaisalmer district. In the east of Aravallis, the density of livestock ranges 118 to 303 per km². The density was heighest (more than 250) in the districts of Dungarpur (274) and Dausa (271) Rajsamand (260) Bhilwara (260) whereas low density has been recorded in the districts of Jaisalmer (64) and Bikaner. (App. 3.3). According to 2003 livestock census very high (200- 250) density of livestock population was found on both sides of Aravalli ranges except Nagaur (149) and Sirohi (189). The districts belong to density of livestock group were Ajmer (190), Banswara (278), Sikar (241) Pali (172) Jaipur (213) and Jhunjhunu (200). This belt along the Aravallis provide good and extensive grazing grounds to the sheep, goat and other animals. Medium density (100-150) per km² of livestock was concentrated in the districts of Kota, Baran, Jhalawara, Hanumangarh, Sriganganagar, Churu and Barmer. The animal to human population ratio is 1:1 which is almost double to the ratio of country. It illustrates the far greater role of livestock in providing employment to the rural population and supporting their livelihood to the rural mass in the state.

The livestock population in Rajasthan exceeds the human population and this trend has been noticed in the livestock enumeration since 1956. According to the 1992 census there were 1100 livestock leads for 1000 persons in the state but at present the livestock population is less than human population 961 livestock heads for 1000 persons.

Bovine Livestock

Cattle and buffaloes have been an integral part of livestock system in Indian farm economy for thousands of years. Possessing 272.3 million bovines (1990) India claims first position in the world accounting 51 per cent of the Asian bovine population (530.1 million) and 19.2 per cent of the world population (1,420 million). Cattle and buffaloes provide economic stability to farmers in the rainfed cropped areas which constitute 70 per cent of the arable land of the country. The bovine is an important source of draught power, milk, meat, hides and skins and the much needed organic manure for the sustainability of soils. About 6.07% of the total cattle population of the nation is available in Rajasthan.

The cattle population numbering about 1.08 crore in 2003 constitutes 6.07 per cent of the country's cattle population. Rajasthan ranks sixth in order to number of buffaloes after U.P, M.P, A.P. Punjab and Bihar. The sub-humid parts of the state is suitable for buffalo rearing due to availability fodder and forage.

The districtwise density of bovine population is of very low category (under 25 bovines per sq. km.) in Barmer, Churu, Jaisalmer districts. In the low category (26-50 bovines) are Bikaner, Jodhpur, Nagore, Pali districts. Further, in the medium category (51-75 bovines) are Ajmer, Baran, Sriganganagar, Hanumangarh, Jalore, Sirohi, Tonk. In the high category (76-100 bovines per km².) are Bhilwara, Bundi, Jhunjhunu, Kota, Rajsamand, Sawaimadhopur, Karoli, Sikar. While in the very high category of 100 and above bovines are the remaining districts of Alwar, Banswara, Bharatpur, Dausa, Dholpur, Chittorgarh, Dungarpur, Jaipur, Jhalawar, Udaipur. Thus the average density of bovine population in Rajasthan comes to 62 per km² with a maximum of 168 per km² in Dungarpur. It is due to the availability of sufficient rainfall and natural vegetation cover. A minimum of 7 bovines per km² is found in Jaisalmer.

It is very important to note that the share of cattle population out of the total livestock population was 42.26% in 1951 has decreased to 22.08% in 2003, while the overall cattle population increased by only 0.66% during the same period. The share of buffalo population is showing the increasing trend from 11.93% in 1951 to 21.28% in 2003 with a very fast growth rate (242%) in the same period. The sheep population has almost the same proportion while share of goat population increased 21.80% to 34.17% in the same period. The goat population increased from 55.62 lakh in 1951 to 168.09 lakh in 2003 with 202.21% growth rate.

References

1. Department of Animal husbandry, Govt. of Rajasthan. Annual Report 2004- 2005.
2. Dairy Year Book 2000-2001.
3. Statistical Abstract, Rajasthan, Directorate of Economics and Statistics Govt. of Rajasthan 1992-2002.

