



Time Series Analysis of the Contribution of Livestock Sector to the National Economy

KEYWORDS

Livestock sector – economy - contribution

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ABSTRACT Livestock are an important source of income and employment in rural areas. Besides complementing and supplementing agriculture, animal husbandry often provides security to farmers, especially when agriculture fails. Livestock sector has the potential to address issues of poverty reduction, protein-energy balancing and achieving much needed inclusive growth of agricultural sector. Keeping all these things in mind, the study on time series analysis of the contribution of livestock sector to the national economy was conducted. The time series data pertaining to the contribution of various primary sectors of economy viz., agriculture, livestock and fishery were collected from the National accounts statistics, CSO, Ministry of statistics and programme implementation. The data collected was tabulated and analysed by percentage analysis. The contribution of livestock sector to the country's GDP was 4.36 per cent of the total GDP in the year 2006-07. Contribution of livestock sub-sector to agricultural GDP has shown an impressive growth in the last three decades from just less than 20 per cent in the 1985-86 to 26.07 per cent in 2006-07, while the contribution of agricultural sector to total GDP was in decreasing trend from 27.52 per cent to 16.74 per cent during the same period.

INTRODUCTION

India's strong economic growth has consistently sought to include the rural poor, who are concentrated in areas where rainfed agriculture is the main economic activity. However, poverty persists because of limited and inequitable access to productive resources, such as land, water, improved inputs and technologies and microfinance, as well as vulnerability to drought and other natural disasters. Low levels of literacy and skills conspire to keep people in the poverty trap, preventing them from claiming their basic rights or from embarking on new activities to earn income or build assets.

In an agrobased developing country like India, natural resources provide basic livelihood support to rural people. Our rural families are dependent on land, water, livestock and forests for generating employment and for earning their livelihood. Livestock are an important source of income and employment in rural areas. Besides complementing and supplementing agriculture, animal husbandry often provides security to farmers, especially when agriculture fails. Livestock are essential to millions of poor households across the country not only as a source of income but also as a major source of protein and supplementary nutrition, draught power, fertilizer, fuel and a store of wealth. In the past three decades, the livestock sector has undergone a major shift, mainly due to the introduction of new technologies. Livestock sector also play an important role in the country's income and exports.

Livestock is the major source of animal protein in the Indian diet. India produces about 112.5 million tonnes of milk, 59.8 billion eggs and 4.0 million tonnes of meat per annum. Livestock sector has maintained a steady growth particularly in dairy (4.5%) and poultry (8%). Its strength may be seen in terms of economic and social security provided to households and also as an important source of insurance coverage to 60 per cent of India's population engaged in animal-farm sector. This sector engages 70 million people in producing quality food for 70 per cent of the country's population (882 million consumers), has potential to address issues of poverty reduction, protein-energy balancing and achieving much needed inclusive growth of agricultural sector. Keeping all these things in mind, the study on time series analysis of the contribution of livestock sector to the national economy was conducted.

DATA AND METHODOLOGY

The time series data pertaining to the contribution of various primary sectors of economy viz., agriculture, livestock and fishery were collected from the National accounts statistics, CSO, Ministry of statistics and programme implementation. The data collected was tabulated and analysed by percentage analysis.

RESULTS AND DISCUSSION

Contribution of Livestock sector to National economy

The contribution of livestock and agriculture sector to the national economy is given in table 1. And the corresponding share in percentages was given in table 2.

Table 1. Contribution of Agriculture, Livestock and Fisheries sector in GDP – At current prices (Rs. in billions)

Year	GDP			
	Overall Economy	Agriculture and Livestock	Livestock Sector	Fisheries
1980-81	1325	425	59	9.66
1985-86	2544	700	139	21.70
1990-91	5150	1352	308	45.58
1995-96	10832	2778	650	118.66
2000-01	19250	4089	1047	213.36
2005-06	32757	5571	1432	328.88
2006-07	37901	6345	1654	340.50

Source : National Accounts Statistics, CSO, M/O Statistics and Programme implementation - various years

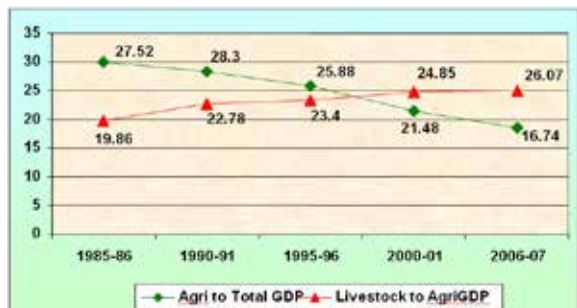
Table 2. Share of Agriculture, Livestock and Fisheries sector in GDP (IN %)

Year	Percentage Contribution			
	Agri to total	Livestock to Total	Fisheries total	Livestock to Agri
1980-81	32.08	4.45	0.73	13.88
1985-86	27.52	5.46	0.85	19.86
1990-91	26.25	5.98	0.89	22.78
1995-96	25.65	6.00	1.10	23.40
2000-01	21.24	5.44	1.11	25.61
2005-06	17.01	4.37	1.00	25.70
2006-07	16.74	4.36	0.90	26.07

Source : National Accounts Statistics, CSO, M/O Statistics and Programme implementation - various years

Contribution of livestock sub-sector to agricultural GDP has shown an impressive growth in the last three decades from just less than 20 per cent in the 1985-86 to 26.07 per cent in 2006-07, while the contribution of agricultural sector to total GDP was in decreasing trend from 27.52 per cent to 16.74 per cent during the same period as depicted in figure 1.

Figure 1. Share of agriculture and livestock sector to the national GDP (in per cent) at current prices



The contribution of livestock sector to the country's GDP was 4.36 per cent of the total GDP in the year 2006-07. The contribution to the GDP in percentage is on the decreasing trend from 1985 onwards. There are many lacunae in livestock sector which hinder the growth of livestock sector in the country.

Problems faced by Livestock sector

1. Poor Rate of Conception: Chilled semen sent from the collection centres in the morning reached the AI Centres late due to poor transport facilities, while a majority of the farmers brought their cows for AI in the morning.
2. Poor Quality Germplasm: In the absence of performance recording of cows, it was impossible to select the bulls of desired merit in large numbers.
3. Inadequate Feed Resources and Health Care: Most of the farmers owning livestock do not have adequate fodder and feed resources to nurture their animals. As a result, the animals are not able to exhibit their genetic potentials. Inadequate health care further affected the production capabilities.

4. Lack of Motivation: For a long time, most of the rural people were unaware of the merits of AI technology and the advantages of crossbreeding, while others who were aware about this programme had lost trust in the technology due to repeated failures
5. Poor Marketing Outlet: In the absence of effective marketing network, farmers had no opportunity to sell the surplus milk.

CONCLUSION

To summarise, the livestock sector in India, registered a significant contribution to the national economy. Livestock are the vital source of employment in rural India, especially for women. The value of output from livestock Sector contributed about one third of the total value of output from agriculture and allied activities. Keeping in view of significant potential of the livestock sector to the national economy, suitable policy implications may be formulated for strengthening the infrastructure, improving the feed and fodder availability, increasing the productivity and production, improving the quality standards of the products, regularizing the markets and accelerating the export potential and augmenting the consumption of livestock and fisheries products.

Over the last few decades, Indian farmers have been letting their animals out in the forests and community pastures for free grazing. Most of these animals maintained by both rich and poor farmers have been receiving vaccinations and veterinary services free of cost from the Government. Thus, the farmers have an incentive to expand their herd size without any financial burden, while seriously threatening the environment and eco-system.

The livestock sector has a high potential for growth, which can provide the much-needed gainful employment for the rural poor and youth and can become the basis for the necessary invigoration of rural economy without which sustainable aggregate growth is not possible. Livestock, in short can contribute significantly to achieving the Millennium Development Goals of eradicating extreme poverty and hunger.