

A Study of Livestock and Poultry Population and Production in North Western Bangladesh*

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Abstract

This paper contains a study of livestock and poultry population and production in Bangladesh and its northwest region. It is found that the livestock sector composed of cow-buffalo and goat-sheep registered very slow growth rate while the poultry sector made of fowl and duck grew at an appreciable rate though this is still inadequate to meet their demand. It is argued that neglect of the livestock sector can have serious consequences in terms protein deficit and it is suggested that this sector be given the importance it deserves.

1. Introduction

There has been a continuous fall in the size of farms in Bangladesh and many farmers have been rendered landless. For those who have but a small plot of land, crop production no more seems a viable production option. Instead, livestock and poultry production that require much smaller space offers a good alternative. In this paper, we examine the state of livestock production in Bangladesh as a whole and in the northwest Bangladesh in particular and look into the possibility of expansion of livestock and poultry population and its production in Bangladesh, which may offer a better livelihood to many.

This paper is divided into nine sections. Section 2 contains an analysis of contribution to GDP by the agriculture sector as a whole and by the crop and the livestock sectors. Section 3 provides a general picture of livestock and poultry population of Bangladesh while Section 4 contains a description of the livestock

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and poultry sector in the northwest Bangladesh. Section 5 explores the possibility of expansion of the livestock and poultry sector in Bangladesh and in the northwest region. Production of meat, milk, and egg are considered in section 6. An analysis of value added is given in section 7. The goat distribution programme is discussed in section 8. Our concluding remarks are given in section 9.

2. Contribution to GDP: Agriculture, crop, and livestock

In this section, we consider contribution of the livestock sector in relation to contribution of the crop sector and agriculture as a whole. Table 1 contains these data. It is seen that contribution of agriculture as a whole declined from 37.6% in 1991 to 31.8% in 2001.

There is one interesting trend. Contribution of the crop sector to GDP has gone down from 29.7% in 1991 to 22.8% in 2001 but contribution of the livestock sector, small as it is, rose from 2.7% in 1991 to 3.3% in 2001.

Table 1: Contribution to GDP: Agriculture, Crop, and Livestock (in percentages), 1991-2001

Year	Agriculture	Crop	Livestock
1991	37.6	29.7	2.7
1992	36.9	28.9	2.7
1993	35.9	27.3	2.8
1994	34.6	26.4	2.9
1995	32.8	24.3	2.9
1996	32.2	23.6	3.0
1997	32.4	23.8	3.1
1998	31.6	22.8	3.2
1999	31.6	22.6	3.3
2000	32.2	23.2	3.3
2001	31.8	22.8	3.3

Source: Ministry of Finance, Bangladesh Economic Review 2001

In order to make the thing clearer, it is worthwhile to compare the trend in relative share in value added of crop and livestock. This is done in Table 2. It is seen that share of livestock rose from 15.22 % in 1995 to 18.99 in 1999 while the share of crop fell from 84.78 to 82.11. Such a fall within the span of only four years is somewhat startling but it is consistent with increasing contribution of the livestock sector that was observed above in Table 1.

Table 2: Relative Share (%) in Value Added of Crop and Livestock, Bangladesh

Year	Crop	Livestock
1995	84.78	15.22
1997	82.57	17.43
1999	82.11	18.89

Source: Computed from Statistical Yearbook of Bangladesh.

The above observation regarding growing importance of the livestock and the poultry sector is intriguing as we shall see below that the livestock population rose very slowly. The increasing share in value term has perhaps come about due to the heavy rise in livestock and poultry prices.

3. Livestock and Poultry Population of Bangladesh

In this section, we provide a picture of the livestock and poultry population of Bangladesh. Table 3 contains data on this aspect. As is customary this population is divided into three categories: Cattle and Buffalo, Goat and Sheep, and Fowl and Ducks.

Table 3: Livestock and Poultry Population of Bangladesh, 1984 and 1996

Category	1984	1996	Growth over the period (%)	Average growth per year (%)
Cow and Buffalo	21.49	22.29	3.72	0.31
Goat and Sheep	13.56	14.61	7.74	0.65
Fowls and Ducks	73.72	126.66	71.67	5.98

Source: Yearbook of Agricultural Statistics 2000; Bangladesh Census of Agriculture 1996.

Cattle and buffalo population rose from 21.49 million in 1984 to 22.29 million in 1996. The goat and sheep population rose from 13.56 million in 1984 to 14.96 in 1996. This means that average annual growth rate of cow and buffalo over the period was only 0.31% while that of goat and sheep was 0.65%. It is quite clear that growth of goat and sheep and cattle and buffalo was very low. It was much lower than the rate of human population growth rate that was around 1.8%.

In contrast to the livestock population, poultry population rose appreciably from 73.72 million in 1984 to 126.66 million in 1996 registering an average annual growth rate of 5.98 per cent outstripping the growth rate of human population by a wide margin. This growth has come about as a result of introduction of modern varieties of fowls that have replaced the old varieties. The change has been quite massive and pervasive. This has kept the chicken meat (of the new variety) price fairly low and also favourably affected egg production that we shall see later. The changes in terms of modernization that have taken place in the poultry sector have not been observed in cow and buffalo production and very little in the production of goat and sheep.

4. Livestock and Poultry Population of Northwest Bangladesh

We now consider the picture of livestock and poultry population in northwest Bangladesh. This is given in Table 4. There are three categories. These are cow-buffalo, goat-sheep, and fowl-duck. Our emphasis is to consider relative growth of the three varieties and see which one has made the largest progress.

Table 4: Livestock and Poultry Population in North-West Bangladesh (in million)

Category	1984	1996	Growth over the period (%)	Average growth per year (%)
Cow and Buffalo	6.51	6.95	6.76	0.56
Goat and Sheep	5.45	5.72	4.95	0.41
Fowls and Ducks	19.29	34.17	77.17	6.43

Source: Yearbook of Agricultural Statistics 2000; Bangladesh Census of Agriculture 1996.

The cow and buffalo population rose from 6.51 million to 6.95 million showing an average annual growth rate of 0.56%. The goat and sheep population increased from 5.45 to 5.72 million indicating an annual growth rate of 0.41%. The growth rate of cow and buffalo at 0.56 is slightly greater than that for Bangladesh as whole that was 0.31. The growth rate of goat and sheep at 0.41 is lower than 0.65 for Bangladesh. Like the nation as a whole, the northwest region has registered very slow growth rates in the livestock sector.

The growth rate of the poultry population that rose from 19.29 million to 34.17 million during the period registering an annual growth rate of 6.43% was greater than the national rate of 5.98%. The poultry revolution that was seen for the nation was also evident in this region.

5. Possible Scope for Expansion of the Livestock and the Poultry Sector

It is seen that the picture of the livestock and the poultry sector is almost the same in Bangladesh and northwest Bangladesh. The main feature of the sector is poor growth in cow-buffalo and goat-sheep population and quite appreciable growth in the fowl-duck population.

The very slow growth in cow-buffalo population has had a devastating effect. Due to the failure to keep the supply of beef apace with population growth, the price of this item increased steadily and this meat has gone out of the reach of the bulk of the middle class people for whom it was the main item containing protein. At the time of writing this paper, beef price was rising fast and was nearing the disturbing figure of Taka one hundred per kg.

In order to reverse the trend of slow growth in cow and buffalo production, it is necessary to make huge investment, set in motion extensive research programme, and develop pastureland of which there are very few left now. Today, Bangladesh is flooded with aged Indian cows brought both legally and illegally, whose meat cannot be considered to be good but which people buy and eat because there is hardly any alternative.

Slow growth of cow and buffalo has retarded adequate growth of milk production. This is detrimental to the health of the nation as milk is one of the most nutritious and liked food items. Any research would reveal that a bulk of our population can not afford to have milk now.

Since goat population increased very slowly, the price of mutton has gone up and the meat has gone out not only of the reach of the poor class but also of the lower middle class. Mutton is an important part of Bengali dish and a compulsory item in festive occasions. But has not it become too expensive? Is not it often dropped because it is too costly? The answer, unfortunately, is in the affirmative.

It follows from the above discussion that attempts should be made to raise cow-buffalo and goat-sheep population growth rate. A concerted attempt is needed to achieve this.

It was observed above the poultry population registered the largest annual growth. While the growth rates of cow-buffalo and goat-sheep were below 1%, growth rate of the poultry sector was around 6%. The high growth rate was accompanied by introduction of the modern varieties of fowl and ducks. This has kept the meat prices of the new varieties reasonably low at around 60 taka per kg. The good growth of the poultry population has also helped raise egg production, particularly of the new varieties.

While one can praise the appreciable growth of poultry population and the resulting rise in the supply of chicken meat and egg, the situation remains far from satisfactory and a higher growth rate is necessary. In order to carry the poultry revolution ahead, the problems that bedevil the sector ought to be carefully tackled. Some of these problems are shortage and high price of poultry feed, lack of medicine, and inadequate supply of newborn fowls that, at the time of writing this paper, was a widely discussed problem.

6. Production of Milk, Meat, and Egg

We have identified three areas of livestock and poultry production that relate to food in order to get an idea of their relative position and need and scope for expansion. Of the three components, meat occupies the highest position having 55.28% of the total value for Bangladesh and 57.04% for the northwest region. Milk and milk products comes second with 32.23% of the value for Bangladesh and 32.04% for the northwest region. Poultry eggs come last and have 12.28% of the value for Bangladesh and 10.92% for the northwest part.

Considering scarcity of all three items, there is dire need for expansion of production in all areas. At present, milk, meat, and eggs have gone out of the reach of majority of the people of Bangladesh. Except a very small proportion, those who can buy these items, can do so with great difficulty have to use them frugally.

Scarcity of milk and its high price have affected the health of the young population of the country. A poor boy in shanty area was once asked about milk. His reply was that he never saw milk and never had a single cup of milk. Dramatic and pathetic as it is, this is not far from true and applies to hundreds of thousands of children in our country.

Now, the country is witnessing an increased scarcity of meat and eggs. Prices of these items have risen by as much as 20% during the last three months. Unlike the situation in the developed countries where the impact of modern research on meat and egg production have been substantial and pervasive and unlike even India, our neighbour, Bangladesh has not embarked upon any substantial programme of research and extension in these areas.

One could say that during the last three decades, our attention was mostly focused on the crop sector. This sector, of course, registered good progress but this was achieved while the livestock sector registered very poor growth.

The values of the key components, given in Table 5, are considered to get an idea

of their position. All these components will have to be improved, but it is meat and milk production that should receive the most attention. Production of eggs that had both quantitative and qualitative change has to be maintained and enhanced.

Table 5: Value of Key Components of Livestock and Poultry Production, 1997-1998 (in million)

	Milk and Milk Products	Meat	Poultry Eggs	Total
Bangladesh	22699.83 (32.23)	38928.6 (55.28)	8790.5 (12.48)	70418.9
N-W Bangladesh	6546.6 (32.04)	11656.0 (57.04)	2232.4 (10.92)	20435.0

Source: Yearbook of Agricultural Statistics 2000

7. A Study of Value Added and Productivity: A Failed Attempt

We made an attempt to analyse differences in value added in the livestock and poultry sectors in Bangladesh in the northwest region. Since value added is the difference between value of output and value of input, data on which are available, this would have also enabled us to estimate productivity.

When we considered the data, we encountered an intriguing situation. The value in this sector was found to be nearly the same, 73% or very close to it for Bangladesh as a whole and its different divisions and districts. The value of input was found to be nearly always 27% of the value of output across Bangladesh. How could it be so? It appears that the people at the Bureau of Statistics were just putting some preconceived values everywhere in order to lessen the burden of their work and thus putting an end to effective research on this aspect.

We also wanted to examine and compare value added in the crop and the livestock sectors. Contrary to our expectation, we found that value added in the crop sector was greater than that of the livestock sector and stood around 83%. But the intriguing aspect was that it was again almost the same across Bangladesh. The persons at the Bureau of Statistics, however, put different value added figures for different crops. For example, lentil had a higher value added figure of 93% than rice at 83%. But these figures were more or less the same across Bangladesh.

Value added in production is not the same as the value added tax in which case government can put a uniform figure for the whole country. Value added figures in production across a country like Bangladesh can be, and usually are, different. But these differences have not been captured in the official data but have been cunningly, we would say dishonestly, bypassed by the statistician at our official organizations.

8. The Goat Distribution Programme

The Government of Bangladesh, especially on the encouragement of the Prime Minister, has, of late, started a programme of distribution of goat among the poor. Although the programme is still in its initial stage and has not widely spread, it recognizes the possibility of poultry and livestock production by the poor and the landless.

The programme mentioned above remains essentially a poverty alleviation effort and it has been declared as such. This is unlikely to have a major impact on goat-sheep population growth unless production of this item becomes commercially viable and taken up by a large number of our farmers both poor and rich. Substantial research and investment, extension work, and other logistic support are needed to achieve these. Some time back, we saw a programme in an Indian TV channel about a goat research institute designed to improve quality of goats. We think that a similar, perhaps even greater, effort is needed in our country.

9. Conclusion

Most of the researchers devote a major part of their research time on the crop sector of our agriculture giving little attention to the livestock sector. If one considers the papers presented in our professional seminars including the national conferences of the Bangladesh Economic Association, the truth will be borne out. Our paper is a modest and humble attempt to shed some light on this sector that has so far received less attention than it deserves.

Our food self sufficiency is defined as sufficiency in rice. Such a definition lays exclusive emphasis on the carbohydrate aspect of our food leaving out the protein aspect. Only carbohydrate will make us fat, flabby, and lazy. True, we are a poor nation and our prime emphasis is to have two meals of rice (du bela bhat) a day, but sustained disregard of the livestock and the poultry sector can have long run devastating effect that we are encountering today.

At the beginning of this paper, we mentioned about the prospect of the poor and the landless farmers taking up livestock and poultry farming. By this we meant that opportunities for small farmers lay in poultry farming and there was evidence of an increase in such small-scale operation in both the rural and the urban areas. But the large poultry farms of which there are many now might have also substantially contributed to the increase in poultry population in Bangladesh.

Modernisation of the livestock and the poultry sector can take place rather swiftly. Great advances have been made in the world. Bangladesh has to take advantage of these. While our crop sector received great attention and has been substantially modernized in terms of introduction of the high yielding varieties of seeds, chemical fertilizer, pesticide, and irrigated water, there has not been any such major advance in the livestock sector. Time has come to reverse this trend in the livestock sector and to give more concerted effort to sustain the good progress that the poultry sector attained.

References

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