

a) Researchers' Identity

1. Sk. Fazlul Bari, Joint Director
M.Sc. (Veterinary Science.) in Animal Surgery, BAU, Mymensingh
2. Samir Kumar Sarkar, Assistant Director
M.Sc. (Poultry Science), BAU, Mymensingh

b) Objectives

The broad objective of the study was to find out the existing problem of milk production and its marketing system in Sherpur Thana. The specific objectives of the study were to find out:

- i. production of milk;
- ii. marketing of milk;
- iii. problems of milk production;
- iv. problems of milk marketing; and
- v. potentiality for investment in milk production.

c) Executive summary

Sherpur Thana is famous for curd production as milk is easily available in this area. Milkmen, locally called Goalas, usually purchase milk from the milk producers and prepare curds and sweets for sale. The local milk producers therefore, depend on these Goalas for selling their milk. Sometimes these Goalas take this opportunity and exploit the milk market. Consequently, the milk producers do not get the fair price for milk.

Rearing milch cows to produce milk is a popular Income Generating Activity (IGA) in rural Bangladesh. Although, there are many GOs and NGOs, including some projects of RDA, Bogra working at Sherpur Thana that provide credit facilities for rearing milch cows as an IGA, yet such IGA will not sustain unless steps are taken to protect the milk market from the local

Goalas and overcome the problems of milk production. But information on milk production and its marketing in Sherpur Thana is not available. Therefore, this study was undertaken to help the GOs and NGOs, including RDA, Bogra, working in this area to take necessary steps to overcome the existing milk production and marketing problems and to develop the socio-economic conditions of the milk producers.

The objectives of the study were to find out the existing problems of milk production and its marketing system at Sherpur Thana, and also the potentiality for investment in milk production in this area. For this study, five Unions of Sherpur were selected randomly. Out of five Unions, five villages were selected taking one village from one Union on random basis. Complete enumeration of households who rearing cows at these five villages was made. From the list, altogether 91 farm households were identified as respondents for this study. Out of 91 farm households in the five study villages, 25 were landless, 25 small, 25 medium and 16 were large size farm households.

Educational level of the respondents was encouraging in comparison with the national literacy rate but not up to the mark for dairy farming as 33% of them had secondary level of education and onwards, 14.2% primary level and 52.8% had no educational background at all.

Agriculture was the occupation of 52% respondents. Apart from this, 22% were small traders, 16.5% unskilled day laborers, 3.3% Rickshaw /Van pullers and 5.5% service holders. They can neither spare time nor spend more money for the betterment of their cows for more milk.

The lowest and highest ranges of annual income of the respondents of the five study villages amounted up to Tk. 10,000 and Tk. 100,000 and above. More than half of the respondents were poor, their annual income being less than Tk. 20,000.

Average cultivable land size (own land and leased land) of 25 landless households was 0.52 acre. Similarly, average cultivable land sizes of small, medium and large size households were 1.48 acres, 3.46 acres and 9.77 acres respectively.

Total numbers of cattle and buffaloes owned by 91 respondent households of the five study villages were 398 and 20 heads respectively. Out of 398 cattle, 149 (35.6%) were cows, 51 (12.2%) bullocks, 7 (1.7%) bulls/oxen, 39 (8.3%) bull calves, 60 (12.7%) heifers and 92 (19.5%) calves. The ratio between adult and young stock was 5:4. Apart from this, average numbers of cattle and cows per household were 4.73 and 1.64 respectively.

Number of milch cows was 88 (59.1%) and the rest 61(40.9%) were dry cows. The ratio between milch and dry cows was 6:4. Only 12 cross-bred cows were found among 88 milch cows in the five study villages. The ratio between the native and cross-bred cows was 6:1.

During a year, the total production of milk from 88 milch cows was 33,449 liters. Average production of milk per household per year was 368 liters, i.e., production of milk per day was about only one liter. Large households produced more milk from fewer numbers of cows whereas small households produce less milk from more number of cows. It was also found that production of milk per day per cow was 1.26 liters from the native cows whereas 4.74 liters from the cross-bred cows. During peak milking period, highest milk production from the native cows was 4 liters per cow per day and from the cross-bred cows up to 6 liters. Thus, quantity of existing milk production in the five study villages was not satisfactory.

Total production of milk from 91 respondent households was found 33,449 liters. Out of this milk, 32.5% (10,867 liters) was consumed by the producers themselves and the rest 67.5% (22,582 liters) was sold. Out of 22,582 liters of milk, 69% (15,582 liters) was sold among the Goalas, 26.6% (6000 liters) at the local market and only 4.4% (1000 liters) among the neighbors of the milk producers. Out of 15,582 liters, 15.5% (2410 liters) used for curd production and 6.3% (990 liters) used in tea stalls for tea making.

Adoption rate of A.I. for breeding purpose was very low. Out of 91 respondents, only 18 respondents (19.8%) were found to use A.I for breeding their cows and 63 (69%) used local bulls. As reason for this, 69% respondents complained that they had not used A.I because their cows failed to conceive. Other reasons such as calf could not survive (54%), distance of A.I centre was far (26%), it created dystocia (12%) and A.I technician demanded more money (7%), preventive measures taken by the respondents were inadequate. Out of five preventives, only two types were used by 37% of the respondents. Knowledge level of the respondents about the preventive was also very poor.

Cattle feeds used by the respondents were also found to be inadequate. None of the respondents of the five study villages was found to use balanced ration for their milch cows. Their animals were mostly dependent on rice straw and rice bran. Sometimes they used only two or three ingredients, such as rice husk/bran and pulses husk/bran though in inadequate quantity. Besides, all the respondents of the five villages could not supply green grass to their cows. As problem of getting cattle feeds, 8% respondents mentioned that cost of feed was high, 55% said about shortage of money, 53% expressed that

they had no land for fodder cultivation. Moreover, 12% of the respondents reported that green grass was not always available.

It was found that 67% of the produced milk was sold and 85% of this milk was purchased by the Goalas. Therefore, the Goalas were the chief buyers of milk in the study areas and they regulated the milk market and therefore, the milk producers could not get the fair price for milk. Thus the milk producers were dependent upon the Goalas.

The lowest and highest purchase prices of milk in Summer, Rainy seasons, Winter and during the Ramadan month of the year, 1995 were Tk. 8 to 10, Tk. 10 to 12 and Tk. 12 to 13 respectively. The Goalas sold this milk always at a profit of Tk. 2/- per liters.

In the five study villages only two respondents were found to have participated in the livestock rearing and primary treatment courses. During the survey, huge demand for training was observed among the respondents.

Out of 91 respondents, 64 (70%) showed interest to increase their number of cows. That range varies from 1 to 6 cows. Only two expressed that they wanted to increase 20 cows in each case to establish small scale commercial dairy farms. For procurement of these cows, 69% of the respondents desired for credit facilities. The range of credit facilities varied from Tk. 4000 to 1000,000. Respondents who required credit of an amount varying from 4000 to 10,000 was at the top of the list (43%), while 34% required Tk. 10,001 to 20,000. Only five respondents required Tk. 50,000/- to 100, 000.

Gradually the demand of milk in Sherpur Thana is increasing. In near future, the demand of milk would be much higher with the increase of the demand for famous curds throughout the country in due course of the development of communication system. Therefore, there is a great potentiality for investment in milk production at Sherpur Thana. It is possible to identify and organize the interested dairy cow farmers through the GOs and NGOs who are working in these areas and provide necessary trainings, credits, other support services and marketing facilities with a view of increasing the production of milk. Thus present production of milk at Sherpur would be increased at least three times more very rapidly. For ensured marketing, small-scale commercial milk processing industries can be established locally in course of time. Until then, the Milk Vita of Baghabari Ghat can open a milk purchasing centre at Sherpur for stable milk market and fair milk price.

d) Conclusion

The study on "Production and Marketing of Milk at Sherpur Thana" revealed that on an average per household possessed 4.37 cattle and only 1.64 cows. Average milk production per household per day was found only 1 liter. This quantity of milk can hardly be used for producers own requirement but in this study it was found that only 33% of the produced milk was consumed by the producers themselves and the rest major portion (67%) was sold in the market due to necessity of money. The overall conditions of milk production in the study villages were not satisfactory. It was evident that 86% of the milch cows in the study areas were native breeds and they yield only 1.26 liters of milk (average per cow per day). On the other hand, only 14% of the milch cows was cross-bred and they yield on an average 4.74 liters per cow per day. It was found that the adoption rate of A.I in the study areas was very unsatisfactory. It was also found that the nutritional level of the cows maintained by the farmers for milk production was extremely poor. Moreover, they had not possessed up-to-date knowledge on health care measures of their productive cows. In addition, there was a problem of milk marketing. In spite of all these problems, it was found that there is a potentiality of investment and increase milk production in the study areas. Therefore, it is necessary to take an initiative to overcome the existing problems regarding milk production.

To develop the overall situation in milk production the farmers should be motivated for rearing cross-breed cows. They have to be trained and necessary credit should be provided for procurement of quality cows, balanced rations, drugs, vaccines and other necessities for increasing production. For ensured milk marketing, small scale milk processing industries can be established locally in future. Until then, the Milk Vita of Baghabari Ghat can open a milk purchasing centre at Sherpur for stable milk market and fair milk price. And for this, concerned authority or the government departments as well as NGOs should come forward with promoting A.I, prevention and control of diseases, provide credit and other support services as well.

