

MILK AND MILK PRODUCTS

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Milk Production Strategy Cattle Management and Consumer's Safety

by Khd Syed Alef Hossain

In order to increase agricultural production to meet the increasing demands for animal protein, development of livestock and poultry industry is an urgent necessity. But the land and capital are limited, therefore it is essential to utilise these resources efficiently and wisely for maximum production. It has been recognised, in order to improve the nutritional status of the people, the diet needs inclusion of animal protein. Poultry and animal products have received people's attention over the last few decades. Consequently the livestock production has increased substantially thus reducing the need to import milk products resulting in considerable savings of foreign exchange. However, yet per capita consumption of these items is lower than the recommended levels. Again, because of this particular reason an inclusion of these items in the diet is essential for the average population.

Poverty and malnutrition is a serious national problem in Bangladesh. About 43.6% of the people live in below the poverty line level. The extent of malnutrition is more among the poor income families.

Specially, malnutrition is severe in infants and women. Malnutrition not only harms the intelligence, livability, working ability and immunity against diseases, but also stands as obstacle in development of socio economic condition of the country. The rural economy as well as the problem of malnutrition may be improved through poultry and livestock development programme.

The role of livestock in the agricultural sector is secondary to crop production, but is, nevertheless, crucial in at least one respect, as the power furnished by animals is the most important source of non-human power in this sector, since it delivers the needed energy for most of the heavy farm work, such as ploughing, thrashing and transport. Though the livestock sector is the primary source of power for land preparation, the sector also provides substantial meat, milk, hides, skin, manure and fuel. This sector has grown more rapidly than crops as the demand for livestock products has sufficiently increased. The index of production of livestock products grew 4.1 per cent from 1990 to 1995, while the index of cereal production declined

slightly over this period (FAO, 1997).

The sub-sector has also been an important foreign exchange earner through the export of raw hides and skins, and also leather products. In 1995-1996 the export of hides and skin and leather products earned US 212 million dollar and accounted for 5.5 per cent of foreign export earnings (the fourth largest foreign exchange earner after garments, jute and shrimp as per Export Promotion Bureau's information). The value of these exports grew at the rate of 9.5% per year from 1990-1991 to 1995-1996. The livestock sub-sector is labour intensive and provides full time employment to about 20% of the rural population (MOFL: 1999, Alam Pg). With the advancement of nutritional knowledge and income of the people, the cereal consumption is gradually coming down and the milk and meat consumption is going up day by day. The present production of milk and meat is 1.62 and 0.62 million metric tons respectively.

Land and feed are the chief constraints for developing livestock but maintaining them in ensured condition is a must for health, productivity and performance so that maximum benefit can be derived from them. Fodder and feed are no longer available in sufficient quantities. Grazing land is becoming increasingly scarce. To meet the food needs of a growing population, and which were once used for grazing, is now being used for human food and cash crops production. The consequence is deterioration of livestock.

Internal parasites are reported to be causing harm to livestock. There have been a marked debilitating effect on the animals resulting in slow growth rate and reduced capacity for production in animals. Animal health services are almost nonexistent being limited to vaccinations for the prevention of contagious diseases. Insemination service is insufficient (only 1%). Livestock are generally infested with parasites, and these coupled with deficient diets, result in poor production of meat and milk. Internal parasites alone consume 25 to 50 per cent of the digestible nutrient intake of the animal. Removing this impediment along with other debilitating diseases would surely increase productivity by as much as 50 per cent.

Livestock in Bangladesh is mostly nondescriptive indige-

nous type (98% local, 2% cross bred). The average milk yield is only 1.3 kg in local stock and 2.16 kg in cross bred animals. This is too poor a performance for an animal needed to yield profit for the keeper. Considering the associate factors of the price of feed, labour and management cost, a cow must give average 8.0 kg of milk per day to compensate for its up keeping and the other cost factors with tendency of further going up. These days of breeding technique the production of 20 kg or more milk from individual cow is not uncommon. Over the past few years many dairy farms have come up but unfortunately due to poor management, want of poor feeding and lack of scientific breeding techniques desire achievement was obviously not attained. Milk is highly perishable in nature though it contains high nutritional value. For want of proper marketing infrastructure and lack of milk processing, preservation and failure in quick distribution, the producers often deprive themselves from getting remunerative price of their product.

The impact of power milk is gradually declining. The total powder milk import in the year 1989-90 was 0.65 million metric tons which dropped to 0.35 million metric ton in 1993-94. It is presumed that it has further drop in later years (statistic of which could not be shown here). Reasons for these achievements are some government initiative, private participation in dairy farming and financial support from financial institutions.

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Development of Rural Co-operatives: Milk Co-operative Structures

by Gobinda C Saha

Two major objectives of the project are:

a) To replace old, inefficient, worn-out and technologically obsolete machinery and equipment of the existing five plants, installed about 15-20 years back under the original 'Cooperative Dairy Complex' in order to cooperate in and maintain the increasing demand of production as well as marketing of different dairy products.

b) To add new machinery and equipment and to increase production, transportation and marketing facilities of the ongoing project in order to expand the production capacity and efficiency.

Overall Goal and Purpose

The project was designed and prepared to meet the need of milk producing poor and landless cooperative farmer members. Through the implementation of the project the milk producing farmers would be able to increase their income by way of selling increased volume of milk at a fair price. This milk will then be processed in the dairy plants and safe and hygienic milk products marketed to the potential consumers at reasonable price.

The project infrastructure further could drive away middle men who used to exploit the farmers paying low price for their produce. The cooperative farmers are also given incentive bonus against their milk supply. In addition to that the organization extends the following services to the farmers:

- Free medicare (preventive and curative) for all cattlehead by qualified veterinarians.

- Free vaccination against common epidemic diseases.

- Free artificial insemination service with deep-frozen semen for upgrading local breed.

- Fodder extension services for high yield of raw milk.

- Arrangement of Bathan (pasture land) for milk cooperative farmers' cattle grazing.

- Distribution of balanced concentrated cattle feed on 'no-profit-no-loss' basis.

- Training for better animal husbandry practices.

Display of audio-visual shows for imparting knowledge and information regarding cattle and cooperative management.

- Arrangement of national and international training/study tours by the farmers to acquire updated knowledge in the dairy sector and cattle keeping practices.

All these programmes are designed for the benefit of the farmers to a great extent.

On the other hand Milk Vita products are mainly marketed in the major cities of the country through the established marketing network of the organization which includes Rickshaw Van Cooperative Societies in addition to the retail agencies and wholesale distributors. The major products of Milk Vita include Pasteurised Liquid Milk, Flavoured Milk, Butter, Full Cream Milk Powder, Skimmed Milk Powder and different types of Ice-Creams, Ghee, Sweet Curd, Rasa Malai (sweet meat) etc. With the gradual expansion of the organization the Milk Vita authority is paying due attention to the issue of adding new items in the product range maintaining overall quality and hygienic condition.

Soon after the organization started profit making a project under the title BMRE (Balancing, Modernisation, Rehabilitation and Expansion) of the Cooperative Dairy Complex was approved by the government for implementation during the financial period of 1994-96. The original cost of the project was Tk 1741.42 lakh and through widening the scope of the project the cost was further revised to total Tk 2636.85 lakh with the extension of project period by further one year.

The project envisaged purchase of milk from the individual poor, marginal and landless milk producing farmers under the fold of Primary Milk Producers' Cooperative Societies at fair price and guaranteed market, transportation of the collected milk to the rural plants for preliminary processing and further transportation of the milk to the production plants for final processing and marketing of milk and milk products under the brand name 'Milk Vita'.

Under the project, a co-operative infra-structure for the milk producing farmers was created in four milk-shed areas of the country viz Tangail, Takerhat, Baghbari (Sirajgonj) and Manikgonj. During the project period (1973-78), at a total cost of Tk 155.61 million (including the foreign currency), five dairy plants at Dhaka, Tangail, Takerhat, Baghbari (Sirajgonj) and Manikgonj were established. Thereafter with the help of the organization, two more plants were added in the line at Sreenagar (Munshigonj) and Rangpur in the recent years.

During the period of its activities, the organization has further succeeded in bringing together over 50,000 farmer members into the fold of 350 village milk producers' cooperative societies who deliver milk to the organization twice a day. Thus, around 300,000 farmer family members are being benefited by this organization. Moreover, the activities of Milk Vita has created about 4000 job opportunities in the urban and rural areas. The cooperative members get reasonable price of milk produced by their cattle.

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