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C H A P T E R - I

INTRODUCTION : DAIRY INDUSTRY

1.1 GENERAL :

India accounts for largest livestock population in the world. India's share in world milk production is only 6.4 % .
 Out of the total bovine milk production ~~of~~ about 468 million tonnes in the world, the bovine milk production in India was only 29.7 million tonnes in 1980, which of course ^{has} increased from 1970 level of 21 million tonnes. During the decade the annual average growth rate was above the population growth 2.6 percent. This enabled per capita availability to ^{with} boast up from 110 grams per day in 1969 to 122.9 per day in 1979-80. Nevertheless, a miserable improvement of 12 grams over 10 years can hardly be regarded as satisfactory. In fact going by the national advisory Committee's recommendations of 280 grams per capita per day milk consumption, the requirements for the present population should be around 70 million tonnes, ~~but~~ ^{Even} taking the minimum requirement of 150 grams per day, we should at least have annual milk production to the tune of 30 million tonnes.

A deeper ^{look} into the structure of milk consumption pattern reveals a disquieting picture. The per capita per day availability in metro ^{poli}tan areas is 290 grams and in small cities it is 170 grams, while it is as low as 63 grams in rural areas. The demand for milk is inel^astic for infants, old and sick

persons whereas it is more elastic to poor class people. True, low purchasing power of rural masses is responsible for lower milk consumption. But hardly have any attempts been made to reach the poor section of the society.

India is over-populated with bovine animals just like human population, having 17 percent of the world bovine animals and 50 percent of buffaloes. Out of 240 million bovine animals, one third is the breedable stock while the rest is young and male stock. Out of 82 million female animals above 3 years breedable cows are about 54 millions and buffaloes are about 28 million. Yet buffalo milk holds a higher proportion in the total of India's milk production.

Maharashtra is one of the top five states in order of their breedable cattle population. As per 1978 live stock census, livestock population in the State was 29.6 million. Out of this bovine population was 19.1 million which comprises of 15.3 million Cattle and 5.8 million buffaloes. Total milk production in 1979-80, was 1.5 million tonnes and per capita availability of milk per day was 69 grams.¹

1.2 DAIRY AS SUBSIDIARY OCCUPATION :

Subsidiary Occupation like dairying, Poultry keeping, Sheep rearing cattle breeding etc. Generally provide a continuous income to the farmers and therefore play an important

role in Farmer's Subsistence economy. While pointing out the importance of live stock, Chatterji has stated that the major source of income in agriculture next to cultivation of the crops is animal husbandry and dairying which contribute about 7 % of the total income also cattle rearing is complementary to certain extent to crop production. Higher yields of crops can be obtained by utilising the F.Y.M. produced on the dairy farms. Bullocks are necessary for the cultivation and small transport. By keeping a few dairy cows and farmers can raise bullocks of his own and use them as draught animals.²

Thus dairy as a subsidiary enterprise not only give additional income from milk but also provides required bullock power for the cultivation of crops. The by product of crop husbandry as well as the surplus labour and other idle resources can be gainfully utilised for the milk production as supplement income of small farmers.

In India 60 to 70 percent of cultivators are uneconomic holders. Heavy pressure of population on soil has been responsible for the predominance of uneconomic holders in our agriculture problem of low income group farmers are numerous low income farmers possess very small units of holding and so they cannot get enough income for their living lack of resource is another problem before them. They cannot get enough capital

for cultivation of land and the problem of employment is also there. They have to remain idle for some period because agriculture is not providing them employment throughout the year. This is due to the fact that agricultural work is - seasonal in nature.

Due to the above facts, marginal and sub-marginal farmers are economically very poor their standard of living is very low. In view of this dairy activity is a subsidiary occupation assume greater importance. Due to this the idle labour force will be utilised fully throughout the year. Dairy activity will provide them an extra source of income, other than agriculture which will ultimately help them to increase the standard of living of such low income farmers. The area under study namely Hatkanangale tahsil of Kolhapur district is characterised by low income farming groups as it is a scarcity area. Dairy as subsidiary occupation can become important in Hatkanangale tahsil in the light of the above.

1.3 DAIRY DEVELOPMENT IN INDIA AND MAHARASHTRA STATE :

The Government of India has recognised importance of dairy business in rural uplift and has taken many steps in increasing milk yield. The most effective way of increasing milk yield is by cross and controlled cattle breeding i.e. development of better milk breeds. This is being practised since first five year plan. During this period Rs.78 million

was utilised for initiate the dairy development. During second five year plan, expenditure on dairy development shot up to Rs.177 million. The expenditure during third five year plan was Rs.360 million, in fourth~~the~~ plan period it was Rs.1410/- million and in the fifth five year plan there was a provision of 5393 million for the development of animal husbandary and dairying. In the 6th five years plan, Government made a substantial provision for Rs.851.38 crores.³

In addition, Government has introduced different programmes like cattle breeding programme with foreign collaboration, Pregnancy^{en} testing scheme, fodder development project, and operation flood programmes Ist, and IInd. Besides this, Government has arised Central cattle breeding farms, exotic cattle breeding farms, animal health centres and artificial insemination centre for producing better cattle breeds.

The operation flood I was launched with the aid from World Flood Programme in terms of skimmed milk powder^d and butteroil in July 1970 with a view to bring about a real breakthrough in milk production. To start with, a sum of Rs. 400 crores was allocated for milk processing under this scheme in 1970. As against this actually Rs.628/- crores were disbursed till August 1979. On the other hand while Rs.497/- crores were allocated for increasing milk production, only



Rs.210 crores were disbursed up to August 1979. However, the organised production and procurement of milk under this scheme even after 10 years of its operation is only 80 lakhs litres and 30 lakhs litres per day respectively- As against the estimated, All India total daily milk production of 810 lakh litres (1979-80) Moreover the project suffers from urban bias. Initially, this project was introduced as a five year project (1970-75) it was finally concluded on March 31,1981 after 11 years.⁴

The operation flood IInd was started in July 1978. It is the largest ever dairy development project undertaken in any country covering more than 155 districts in the country. The programme with the total outlay of Rs.485/- crores is expected to enable some 10 million rural milk producers families to increase their milk production and income. The project will also produce a national milk herd of about 10.2 million crossbreed cows and upgraded buffaloes and is expected to improve the life of nearly 55 million people both economically and socially.⁵

Government of Maharashtra had also taken positive steps in initiating dairy development programme in the State, and the first milk scheme was started at Pune in 1950. Since farmers are spread out in the villages, Government had made arrangement for collection and purchase of milk produced by the farmers and

undertake further steps in processing till, it is sold to consumers in large cities, the Government of Maharashtra has started milk schemes in the important towns of the State, and has provided an assured market capable of giving reasonable returns to the milk producers. At present 7 lakh producers are engaged in supplying of milk to the Government milk schemes in the State. By the end of 6th five years plan their number would increase to about 10 lakhs. The co-operatives at village play vital role in this scheme. There were 6300 primary dairy co-operatives at village levels covering approximately 5 lakh members in 1979-80.

The total outlay for dairy development sector in the State during 1980-85 is Rs.3,287 lakh inclusive of Tribal Area Sub Plan (TASP) share of Rs.357.72 lakhs while, the provision for the expenditure on animal husbandary programmes is Rs.18.32 crores.

The area under study from Hatkanangale tahsil of Kolhapur district has an advantage of having fodder resources especially green fodder as the most of the area is under canal irrigation. As fodder sources are plenty dairying activity as a subsidiary occupation, is coming up on a large scale. Due to the establishment of milk chilling centre at Warananagar in the area and co-operative Milk collecting centres almost in each village the problem of selling milk has been solved.

The break even in crop production comes only after high yielding varieties were evolved, likewise a breakthrough in milk production can be expected only if high yielding dairy cattle are available. Thus it is necessary to find out comparative economics of cross breeds local cows and buffaloes to show profitability of crossbreed cows over other bovine milch animals. Several studies have been carried out in this respect but result of this studies was confined to specific milk, producing pockets of the country. Thus it is felt necessary to verify these results in the study area.

Secondly in recent years milk prices have become a burning problem in our country, as prices of various inputs like concentrates fodder and medicine etc have gone up in last 2/3 years. Milk producers claim that prices fixed by the Government for the milk are not remunerative. Hence, the efforts are made to find out per litre cost of milk in the study area. It is also proposed to find out efficiency of different resources, especially feed stuffs and labour for different types of milch animals. As the study is carried out at the farm level the result may help in advising farms about efficient use of deficit resources. The result of proposed study may help in promoting crossbreeding programme for economic and efficient milk production and to frame appropriate milk price policy. It is, therefore, felt to study " cost structure of milk with

special reference to Warana Co-operative Dairy Societies in the Kolhapur district".

1.4 OBJECTIVES OF STUDY :

The specific objectives of the study are as under:-

1. To study the maintenance cost of Jersey cow,
2. To find out per litre cost of milk production and net income per litre of milk production from Jersey cow,
3. To study of various aspects of the dairy farmers, education, income, occupation, milk production level etc., and
4. To find out the output- input ratio.

1.5 SCOPE AND UTILITY OF THE STUDY :

Now a days there is an increased demand for milk all over the country, due to increased population and as one of the important ingredients of human diet. Government trying to encourage milk production so as to provide milk for its millions at least to fulfil the minimum requirement of milk. The main emphasis now a days is to increase milk production in rural area by encouraging farmers and landless labourers to undertake dairying as a subsidiary occupation and to get sufficient income. Efforts are being made to develop enterprise in rural areas of scientific basis so as to increase the

productivity of indigeneous dairy animals by proper breeding, feeding and management to ensure reasonable returns to the milk producers.

This will also provide lot of useful information to see the concerned dairy authorities in particular and to those interested in taking up cow milk production as a business in general. The study will help in improving the economy of dairy enterprise by suggesting some sound guideline and recommendation to overcome the bottle-necks of dairy activity. Investigation may be useful in clearly bringing out the hidden problems of economic maintenance of high milk yielding cow breeds.

Findings of this study will be useful to the Government to provide guidelines in fixing prices of feeds ^{and fodder}. The results will also be useful as to individual farmers to improve their decision moving ability. So as to attain optimum level of milk production ^{which} ~~with~~ will give maximum profit and minimum per litre cost by selecting suitable type of milch animal and improving feeding and management.

1.6 LIMITATIONS :

This study has following limitations :-

- 1) Cost of milk production is related to a sample of selected milk producers.
- 2) In this study, we have included those cost items, on which cost had been actually incurred by



reporting milk producer. If other cost items are included, the cost structure of milk production will change.

3. The cost of milk production is calculated, by using price of factors of production, prevailing to the survey year, 1981-82.
4. The findings and suggestions of this study are applicable to milk producer, of having Jersey cows of Hatkanangale Tahasil.

R E F E R E N C E S
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