

CHAPTER VIIISUMMARY OF MAJOR FINDINGS AND CONCLUSION8.1 MILK PRODUCTION

The set up of dairy cooperative societies and provision for technical input services under the dairy development programme have provided a number of benefits, which have directly or indirectly created certain positive impact on the economy of the rural milk producers in the cooperative villages in the three milksheds. The contribution in dairy farming can be assessed from the increasing trend reflected in the milk production, cash incomes, employment generation, and cooperative infrastructure set-up in the project area. The details of these benefits and their impact on rural masses are detailed in the succeeding paras.

(i) Regular daily payment on pre-determined price for the milk procured by the dairy cooperative was a great attraction to dairy members for increasing milk production, as compared to non-members of control villages where payments were not regular and prices were unreasonably low. In all three districts, the landless category of farmers have benefitted substantially through organised dairying in terms of average milk yield per milch animal in milk. Through their increased income through dairying, they are able to increase their total real income.

(ii) The landless groups have been able to marginally raise the quantity of milk consumed by their families. In fact the per capita milk consumption in their households has gone up. It was also found that this category of members try to sell as much of their milk production as possible, retaining a small proportion for their household consump-

tion in order to earn larger cash income and utilise the proceeds for other food items which have higher nutritional value.

(iii) The per capita milk production per animal per day (milk productively) is higher in this category when compared to the other categories viz. marginal, small, intermediary and large in the cooperative village.

(iv) The proportion of milk sold to total milk produced was substantially higher in the cooperative villages than in the control villages. In fact in the control villages of Bhopal, there were no sales at all. However, liquid milk retained for consumption in the Bhopal control village was highest.

(v) Thee conversion was less among the landless categories and more among big farmers, whereas home consumption of milk was more among the landless than among the big farmers. This indicates that the landless groups consume relatively more milk. Home consumption and ghee conversion was almost same in case of marginal and small farmers.

## 8.2 DAIRY INCOME

(i) The overall picture reveals that the landless category has benefited substantially through organised dairying. It can, therefore, be stated that the impact of organised dairying on this category has been positive and beneficial.

(ii) The marginal category of farmers have also registered substantial increase in their income through organised dairying. They have also exhibited significantly high income. The increase in income through dairying among all the categories has been proved more than explicitly.

(iii) The producers' price of milk in the cooperative village was about 27% higher in Guntur, about 30% higher in Surat than in the corresponding control villages. In the Bhopal control village there were no sales. It follows therefore that the gross revenue per milch animal in milk in the cooperative village was substantially higher than in the control village in all the three districts for all the households and for both the landed and the landless households separately.

(iv) The average per litre relevant cost of milk production in the cooperative villages was substantially higher than in the control village in all the three milksheds.

(v) The average daily contribution from milk in the cooperative village was substantially higher than in the control village in all the three milsheds.

(vi) The average contribution from milk per milch animal in milk in the cooperative village was markedly higher than in the control village in all the three milksheds.

(vii) The average household income from all the sources for all the households in the cooperative village was about 4% higher than in the control villages.

(viii) The average income from milk for all the households in the cooperative villages was about 32% and 11% higher than in the control villages of Guntur about 9% higher in Surat and 4% in Bhopal.

(ix) The average income from milk for the landless group in the cooperative village was about 26% and 28% higher than in the control village in Guntur and 41% and 28% higher in Surat and Bhopal respectively.

(x) The average income from crops in the cooperative village was substantially higher than in the control villages. Besides income from sale of milk, the dairy societies also distributed a part of their profit to their members in the form of bonus every year in proportion to the milk sold by them to the dairy cooperative societies, which not only increased cash incomes of the members but also created a feeling of completion with their counterparts in supply of milk.

### 8.3 EMPLOYMENT GENERATION

(i) The landless have been benefitted substantially by increased employment (both part-time and full time) through dairying. More women in the families of this category of farmers have taken to dairying and have improved their economic position.

(ii) The dairy programme has also provided employment opportunities both at district and village level. More staff was recruited by dairy unions at district level, whereas at the village level more persons have engaged themselves in Animal Husbandry as a subsidiary occupation.

(iii) The total employment of family labour in dairying, crop farming and other activities for all the households in the cooperative village was 9% and 24% higher in Guntur, 20% and 24% higher in Surat and Bhopal respectively.

(iv) The proportion of female labour in the total labour input in dairying was higher for the landless households as compared to the landed households in all the seven villages.

(v) The average level of employment in crop farming for the landed group in the cooperative village was higher in the cooperative villages.

(vi) The average level of employment in dairying for the landless households in the cooperative village was 113 and 118% higher than in the control village in Guntur, about 47% and 108% higher in Surat and Bhopal respectively.

(vii) The average level of employment in dairying for the landed groups in the cooperative village was about 32 and 26% higher than in the control village in Guntur and about 93% and 90% higher in Surat and Bhopal respectively.

(viii) There is a strong positive perception in all the three areas about the ability of organised dairying in generating additional employment opportunities and increasing income of members.

#### 8.4 SOCIO ECONOMIC IMPACT

(i) There has been substantial improvement in the economic condition particularly among the landless and marginal groups of farmers in the cooperative villages.

(ii) Purchasing capacity among the milk producers in the cooperative villages was substantially higher owing to increased income accruing from dairying. More than 19% respondents purchased Transistors, 36% utensils and 21% got their houses repaired in the cooperative villages. As compared to 7%, 8% and 8% respectively in the control villages.

(iii) SC/ST and other backward castes are treated as equals and no discrimination was made on the basis of caste, creed and religion.

(iv) Women also gained social status in the family. There was no binding on their movement outside the village in 65% of the cases. About 36% have abandoned the parda and about 75% are effectively involved in domestic matters. This was more so in Guntur.

#### 8.5 FEED & HEALTH COVERAGE

- (i) Average feed consumption per animal per day was about 10 kg of fodder and 0.8 kg of concentrate in the cooperative villages. Differences in feed quantity observed was very nominal, but was more in the case of big farmers. In the control villages, the quantity fed to animals was 8-9 kg of fodder and a negligible quantity of concentrates. Except for the big farmers, the lower groups did not feed their milch animals with concentrates.
- (ii) Veterinary first aid and emergency services were availed of to the maximum extent by all groups in the cooperative villages though it was higher in the case of big farmers. Artificial Insemination services were shared more or less equally among all groups. The control villages did not enjoy these facilities which to a large extent was provided free in the cooperative villages.
- (iii) Organised dairying has substantially increased the awareness and adoption of improved animal management practices, including scientific feeding, breeding and health care in all the cooperative villages. Innovations have been widely accepted and their profitability valued. Farmers who had previously less faith in the efficacy of scientific and modern methods of treating animal diseases were now aware of the importance of such approaches.
- (iv) The importance of qualitative and quantitative aspects of feed and fodder was widely recognised in the cooperative villages. In the control villages the feed and fodder fed to milch animals fell far short of actual requirements, therefore, resulting in long yields. Except for big farmers the lower concentrates from the market but met the requirement of their animals from their own produce.

(v) The survey also revealed that the milk producers in the cooperative villages possess a few high breed animals which helped in cross breeding of high yield animals. The control villages were generally found rearing local breeds which have low yielding capacity.

(vi) Free and timely services of veterinary first aid, emergency services on concessional rates and livestock feed on subsidised rates have encouraged milk producers to expand the size of their animals to have increased milk production and remuneration as well.

#### 8.6 IMPROVED NUTRITION AND HEALTH CARE

(i) Organised dairying has also given the benefit of improved nutrition, particularly to children owing to increased intake of milk and other food items. In terms of calorie and protein intake from milk and milk products and other food items, the cooperative villages had a lead over the control village.

(ii) Organised dairying has been greatly instrumental in reducing disparities in consumption of milk between seasons in the cooperative villages. People in both the control and cooperative villages were very much dependent on milk and milk products, as a source of calories. Control villages were subject to substantial seasonal fluctuations in milk production which is made worse by lack of milk market. In contrast, the cooperative villages maintained a more uniform level of consumption not only of milk and milk products but also other food items.

(iii) The respondents in the cooperative villages now had less faith in the efficacy of traditional methods of treating human diseases. They are very much aware of the importance of a scientific approach to human health care.

(iv) Farmers were also aware of the benefits of collective power. The organisational structure strengthened the spirit of cohesiveness and reduced petty differences. Such cohesiveness in a country such as ours which has diverse traditions, culture etc. have far reaching implications.