CHAPTER VI
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SUMMARY OF FINDINGS AND SUGGESTIONS

This chapter summaries the study as a whole with the major findings of evaluative analysis of the dairying and cooperatives in India, Tamil Nadu and Dindigul District during the period 1990-2000 and findings to the cross section analysis of the economic status of the dairy cooperative beneficiaries in Dindigul District are also presented. A few suggestions are offered for the future guidance on the basis of the findings of the study. The main focus of this empirical research has been to examine the economic status of the dairy cooperative beneficiaries. Two types of dairy farmers in Dindigul District viz, Dairy Cooperative beneficiaries and Non-beneficiaries have been selected. The specific objectives of this study are:

1. To study the growth and performance of dairy cooperatives in Dindigul district;
2. To analyse the role of dairy cooperatives for the benefits of cooperative members;
3. To find out the level of annual employment and income by the cooperative beneficiaries during the study period;
4. To analyse the expenditure and income pattern of the dairy farming in study area;
5. To study the knowledge level of beneficiaries about dairy cooperatives system and dairy cattle rearing technology.

6. To review the problem faced by the dairy cooperative beneficiaries; and

7. To provide suitable suggestion and measures of dairy cooperative beneficiaries’ problems.

Hypothesis

1. The estimated milk production function for the beneficiaries is significantly different from that of non-beneficiaries.

2. Knowledge about cattle rearing technology is higher for beneficiaries than non-beneficiaries.

3. Income derived from dairy is higher for the cooperative beneficiaries than non-beneficiaries.

4. There is significant relation between employment and income of the dairy cooperative beneficiaries.

6.1 SUMMARY OF FINDINGS

> The world milk production trend gradually increased from 535 million tones in 1990 to 564 million tones in 1999. The production of milk especially from the cow it was found that the 466.1 million tonnes for the year 1992 and that of 479 million tonnes for the year 1999. India was in the first place in the milk production among the major countries during the
period of 1997 to 1998. The production of milk was 71 million
tonnes in the year 1997 and thereafter increased to 74 million
tonnes in the year 1998. The milch animal population trend in
India gradually increased from 1951 to 1991. In the year
1951, the milch animal population was 46.37 million and
increased to 57.32 million in the year of 1991. The buffalo
milch population also increased from 21.01 million and
thereon increased to 38.65 million in the same year.

The annual milk production was 53.9 million tonnes during
the year 1990-91 and 81.9 million tonnes during the period of
1999-2000. The highest percentage of increase was 9.64
during the period of 1998-99 to 1999-2000. The cow and
buffalo's milk production in the year 1951, the cow milk
production was 7.7 million tonnes and in 2000 it was 38.5
million tones. The milk production from buffalo also raised
from 9.3 to 45 million tones during the same period as
mentioned above. The amount spent on dairying were 7.81
crores in the First Five Year Plan and increased to 1965
crores in the Ninth Five Year Plan. During the year of 1990-
91, the per capita availability was 178 grams per day and 227
grams per day during the period of 1999-2000.

The milk production was 33.75 lakhs tonnes during the year
1990-91 and increased to 40.60 lakh tonnes in the year 1997-
98 with a special reference to Tamil Nadu State. During the period 1970 to 71, the number of cooperative societies and member producers were 1588 and 27800 respectively and increased to 74,346 and 9,60,500 respectively during the period 1996-97. The procurement of milk through cooperatives in India in the year 1975-76 was 11.5 lakhs Kg and increased to 128.94 lakhs Kg during the period 1997-98. The overall trend also gradually increased as witnessed in the findings. The Tamil Nadu share of milk procurement through cooperatives are 4,21,940 metric tonnes 40,00,000 metric tonnes total production in the year of 1997-98. In India, as an average quality of milk procurement from members through cooperative societies were 97 iakh Kg per day during the year 1990-91 and increased to 128.89 lakh Kg per day during 1997-98.

In Tamil Nadu, the total cow and buffalo population were 93,62,637 and 27,16,774 respectively and thus the total number of milch animals were 1,20,79,411 in the year 1997. Both cow and buffalo populations were decreased from 1989 to 1997 in Tamil Nadu. In the year 1989 number of cows were 93.65 lakhs and 93.63 lakhs in the year 1997. The number of buffaloes were increased from 124.93 lakhs and decreased to 120.80 lakhs in the same year in Tamil
Nadu. In Tamil Nadu, the population of cross breed and Exotic, Indigenous and Native pure and buffaloes were 21,52,649, 93,62,637 and 1,20,79,411 respectively during the year 1996-97. The overall total milk production in the year of 1995-96 was 37.91 lakh tonnes and increased to 45.74 lakh tonnes in year 1999-2000. The milk production trend was increased during the period 1990-91 and it was 33.74 lakh tonnes and 45.74 lakh tonnes for the period 1999-2000.

The total fodder cultivation acres were 27,812, 100057.95 and 100057.95 respectively for the periods 1996-1997, 1997-1998, and 1998-1999. In Tamil Nadu, there were 9 main dairies, 4 feeder balancing dairies, 6 product dairies and 41 milk chilling centres during the year 1997-98. On average milk collection was 12.75 lakhs litre per day during the period 1997-98 and the milk procurement through Tamil Nadu cooperative milk producer’s federation was 12.19 lakhs litre per day. The per capita availability in Tamil Nadu were increased during the period 1997-98 and their to 1999-2000 and were found to be 183 grams per day for the period 1997-98 and 203 grams per day for the period of 1999-2000. In Tamil Nadu, during the year 1975-76 the number of dairy cooperative societies was 784 and increased to 787 during the year of 1996-97. The milk procurement through
cooperatives was 461.16 lakhs Kg and increased to 4219.40 lakhs Kg in the same year. The veterinary health services in Tamil Nadu like Hospital, Dispensaries, Mobile Dispensaries and sub centres were 141, 828, 437 (including panchavat union and district level) and 2126 respectively for the year 1998-99. The Animal Husbandry infrastructure like cattle farms, exotic cattle breeding farm and artificial insemination were 7, 1 and 3572 respectively. In the year 1994-95, the number of milch animals vaccinated was 165.73 lakhs and increased to 258.86 lakhs in the year 1996-97. In Tamil Nadu 33.49 lakhs of milch animals were artificially inseminated during the period 1994-95 and decreased to 31.84 lakhs during 1996-97.

In Dindigul District, the population of cow and buffalo are 2,37,447 and 1,12,893 respectively. The overall total population is 3,50,340. The present study observed that the average availability of milk trend was erratic. The highest average trends were found to be 94804.3 litres per day in the year 1991-92 in Dindigul District. The number of working milk societies were found to be erratic during the period of 1990-91 and then for the period of 1999-2000. The highest milk societies functioning during the period of 1990-91 were 304 and on the contrary the lowest were 212 in the latter period.
The number of membership position of the Dindigul District were found to be erratic and identified as 1,04,679 during the period of 1997-98 and 81,645 for the period 1990-91. The number of dairy animats was 72,155 in the year 1990-91 and decreased to 54,930 in the year 1999-2000. The milk procurement and marketing were 487486 litres and 1,20,229 respectively for the period 1990-91, During the year 1999-2000 the average milk procurement and marketing were 39877 litres and 12703 litres respectively, in Dindigul District, the average beneficiaries of dairy cooperatives were 248 in the year 1990-91 and decreased to 244 in the year 1999-2000. The highest beneficiaries were 248 in the year 1990-91. The amount of share capital in Dindigul District dairy cooperative union was erratic during the period of 1990-91 to 1999-2000. The highest and lowest share capital were 5,16,329 and 3,64,193 during 1997-98 and 1998-99. The Dindigul District dairy cooperative union’s feed service programme was poor. The union provided 173 million tonnes feed in the year 1990-91. During 1999-2000 the Dindigul union provided only 12 million tonnes to the beneficiaries and the number of dairy animal loan also showed poor performance. The union was given 1450 milch animals during the year 1992-93 and decreased to 150 milch
animals during 1999-2000. in Dindigul District, the highest, medium and lowest average milk production of blocks are 6625, 3637 and 337 litres per day respectively. The number of working societies in Dindigul District is 31, and 6 in Thoppampatty and Kodaikanal blocks respectively.

> The highest per cent (51 per cent) of the age group are 36 to 56 in both beneficiaries and non-beneficiaries. In sex classification, 53.33 per cent and 62 per cent are female for the categories of beneficiaries and non-beneficiaries respectively. Majority of the sample respondents, 49.32 per cent and 47.33 per cent belongs to the backward class community in beneficiaries and non-beneficiaries and 62.67 per cent of beneficiaries, 63.33 per cent of non-beneficiaries are Hindu religion. Regarding marital status of the sample respondents, 70 per cent and 62.67 per cent of the beneficiaries and non-beneficiaries are married.

> Of the total respondents, it was identified that the 40.67 per cent of beneficiaries and 42 per cent of non-beneficiaries belong to the primary level educational status. It was identified respectively from beneficiaries and non-beneficiaries that 59.33 per cent and 57.33 per cent of the sample respondent were joint-families and the family size of the majority (3 to 4 members) of the respondents were 44 per
cent for the category of beneficiaries and 42.67 per cent for the non-beneficiaries. The annual average assets value of the respondents were Rs.30,537.30 for beneficiaries and that for non-beneficiaries, was Rs.32,862. In the categories of beneficiaries and non-beneficiaries, 52 per cent and 44.67 per cent of the respondents were landless labourers respectively 21.33 per cent of beneficiaries and 28 per cent of non-beneficiaries were having 1.3 acres land.

In the category of beneficiaries, 74.66 per cent of the respondents have one to two dairy animals and 40.67 per cent, 38 per cent of the respondents have one dairy animal and two dairy animals respectively in the category of non-beneficiaries. The majority of the respondents, 86 per cent and 82.67 per cent of the respondent have cross breed animal for the beneficiaries and non-beneficiaries respectively. 49.33 per cent of beneficiaries and 45.33 per cent of non-beneficiaries were purchasing their dairy animals within the district and 54.46 per cent of the respondents were having the dairy animals of third and more than their lactation period wherein the beneficiaries respondents was 56.95 per cent and non-beneficiaries respondents was 51.74 per cent.

The status of the dairy cattle rearing houses was open type where 64.67 percent of beneficiaries and 9.3 per cent of non-
beneficiaries. Majority (67 per cent) of the respondents inseminated their milch animals through artificial insemination and, within it 78.63 per cent was beneficiaries and 53.33 per cent was non-beneficiaries. 64.47 per cent of beneficiaries and 76 per cent of the non-beneficiaries not vaccinated their dairy animals respectively. The study observed that the beneficiaries of 31.33 per cent and non-beneficiaries of 32.47 per cent produced only 4 to 6 litres of milk production per day.

Of the total respondents 51.33 per cent and 24.67 per cent of the respondents joined as a member in dairy cooperative through Relatives & Friends and village leaders respectively, 17.33 per cent through cooperative personnel and 6.67 per cent through other sources. The per capita consumption of milk up to 100ml by the respondents of the beneficiaries was found to be 50.67 per cent and that of non-beneficiaries was 55.33 per cent. The study employed Garrette Technique to identify the respondent’s purpose of joining as a member in dairy cooperative, it was found, that the first purpose of joining as a dairy cooperative member was the price of milk and other purposes were sale of milk, borrowing loan, veterinary health service, artificial insemination, cattle feed and payment of milk by the respondents of beneficiaries,
Of the total 150 sample respondents, 62.50 per cent of the beneficiaries got loan from Tamil Nadu Backward Class Economic Development Corporation's milk animal loan scheme. The loan covers only backward class community including most backward class community. 22.32 per cent of the beneficiaries got loan from Adi Diravidar Welfare milch animal loan with 50 per cent subsidy for only schedule caste beneficiaries. 15.18 per cent of the respondents got loan from Tamil Nadu Harijan Development Corporation milch animal loan with 50 per cent subsidy for only Schedule Caste beneficiaries. 74.66 per cent of the beneficiaries got loan through District Dairy Cooperative Union. The beneficiaries of cooperatives purchase cattle feed at Rs.6.25 per Kg and the non-beneficiaries purchase cattle feed at Rs.11.50 per Kg. The artificial insemination charge was Rs.13 per insemination beneficiaries while the non-beneficiaries were charged to Rs.27.50 per insemination. The beneficiaries were got free mobile veterinary health services through veterinary mobile route for emergency case. The average cost of treatment is Rs.25 per time treatment by Cooperative Union Veterinary Health Service to the beneficiaries. The non-beneficiaries are charged Rs.58 per case a time by private veterinary doctors. The cooperative union organised veterinary health
camp for beneficiaries. The milk price was Rs.9.11 and Rs.8.36 per litre in the categories of beneficiaries and non-beneficiaries respectively.

In the category of beneficiaries 162.23 days got employment through agricultural sources, 148.07 days through non-agricultural sources, 96.87 days from profession and 123.52 days from other sources. In the category of non-beneficiaries, 134.72, 129.97, 125.84, and 143.76 days employment through agricultural sources, non-agricultural sources, profession and other sources respectively. The highest and lowest amount of savings is Rs. 1340.79 and Rs.213.53 in banks and others respectively in the category of beneficiaries. On hand non-beneficiaries, highest and lowest amount of savings is Rs. 1812.23 and Rs.468.36 in banks and others respectively. In the category of beneficiaries, highest (Rs.7683.64) and lowest (1820.26) amounts borrowed amount from the banks & cooperatives and friends & relatives respectively. On hand non-beneficiaries highest (Rs.6621.43) and lowest (Rs.3244.03) amounts borrowed amount from the friends & relatives and banks & cooperatives respectively.

The total expenditure for a cow unit for both categories of beneficiaries and non-beneficiaries respectively of Rs.9957.25 and Rs.11714.19. The average total income of
the beneficiaries was Rs.21431.27 and Rs.20101.20 for the non-beneficiaries. As per the profit statement, average net profit was Rs.11474.01 and Rs.8387.30 for beneficiaries and non-beneficiaries respectively. The highest and lowest amount of savings is Rs.1340.79 and Rs.213.53 in banks and others respectively in the category of beneficiaries. On hand non-beneficiaries, highest and lowest amount of savings is Rs.1812.23 and Rs.468.36 in banks and others respectively. The majority of beneficiaries (41.33 per cent) are 50 to 75 per cent of dairy income contributed in the total family income and majority of beneficiaries are 25 to 50 per cent of dairy income contributed in the total family income.

The majority per cent of beneficiaries who were identified as having medium level (9-16) knowledge about dairy cooperative system was 40.67 per cent and among the majority respondents of 52.67 per cent of beneficiaries and 47.67 of non-beneficiaries were the high level knowledge about cattle rearing technology. The study analysed the problems of the total respondents by Garrette Technique, Among the number of problems faced by the beneficiaries, the first problem faced by them was price of milk, which followed by second, third problems and so on were payment; breeding, borrowing loan, veterinary health care, cattle feed,
purchase of milch animal and grazing whereas for non-beneficiaries marketing of milk was the first problem followed with other problems in order were price of milk, veterinary health care, breeding payment of milk, purchase of feed and fodder, purchase of milch animals and grazing.

6.2. SUGGESTIONS

a Dairy farming assumes a great importance, as it remains one of the allied activities of agricultural and it is a reliable source of income, too. Hence, awareness should be created among farmers about the scientific techniques of dairy farming. Measure can be taken to maintain community-grazing land with different kinds of fodder crops like perennial fodder crops. Dry fodder should be supplied in veterinary centre at controlled rates. Cost incurred towards feeds and preparing and feeding optimal combination of feeds and fodder can minimize fodders.

a To improve and ensure the production of clean milk, sufficient educative measures must be undertaken. The cooperative milk producer’s society should also launch continuous educational programme on a massive scale to improve skill and competence to milk producers the technique of better management of quality animals. Demonstration has to be undertaken frequently for farmers to have adequate knowledge about dairying. Camp and training can be arranged for dairy farmer to disseminate
knowledge on breeding technology, vaccine and disease control, fodder production technology, the use of deforming, dehorning and others.

Opening of more veterinary dispensaries and sub centres are necessary for timely assistance. The government should take necessary steps to bring down the price of concentrates and if necessary should provide subsidy. Dairy farmers who are having land should cultivate crops, which will yield more fodder than the commercial crops, which may not yield fodder. Frozen Semen facilities are also should be developed. Under the calf rearing project, the interested beneficiaries, should be selected and provide with a suitable about one year female calf purchased from a reputed centre. Once in a month the group discussions can be conducted with dairy farmers by the society and their problems can identify. The society can take steps to solve their problems with dairy experts and veterinary doctors.

The overall economic conditions of the farmers should be improved through diversification of other agriculture dairy farming should be implemented as a major components. Necessary incentives like remunerative price, price difference, input facilities at cost price and other extension work must be done by the society to encourage the milk producers to increase their utilization of heir societies. Delay in making payment to the
societies is to be reduced, as it is main factor affecting the milk procurement of the union. To mitigate the problems of milk producers coming from long distances to societies more number of sub-centres may be started. Necessary steps may be taken to improve the market share of Dindigul Union. In order to improve the sale of milk more milk parlours and 24 hours supply service booths, should be opened in appropriate location such as bus stand railway station and market places. Adequate milk supply should be ensured during festivals and on important occasions.

On the consumer mix side special drive should be made to attract the institutional buyers like hotels, marriage halis and small tea shops. The private traders now mostly serve these customers. High fat milk, standard milk, toned milk and pure cow milk may be sold to the consumers to cover all the consumers from different income group. Also products like curd and buttermilk should be made available in the market. To attract lower income group consumers, the union should enhance the supply of 100 ml, 200 ml and 250 ml sachets. Dairy visit for farmers, students, house wives and customers is a must to show the hygienic way of processing milk in the union and the public may be educated about the detection of adulterated milk.

The sample respondents practice dairying as a supplementary source of income. So, the government should provide necessary
infrastructural facilities needed for the development of dairy. Government should take steps for conducting periodical elections to the society, union and federation to ensure democratic functioning of cooperative movement. On the lines of panchayat raj bill, a new bill may be enacted in the Parliament to make it mandatory to conduct the elections to the societies union federation periodically without any delay in all the states. Let the organised dairies pursue policy of commodities that would them viable and commercially profitable. The matter of social justice and the rendering of assistance to the weaker sections of the community should not stand in the way of efficient commercial management of organised dairy industry.

A committee consisting of agricultural experts, dairy scientists, milk producers, consumer association representative, to revise the consumer price periodically. As all the union officials are under they are not able to take independent decision, which are favourable to their unions. The present practice of common cadre for the deputy managers and above is to be discontinued to as it affects the autonomous functioning of the union. A dairy science course may be introduced for he benefit of the wards of the members of milk producers, cooperative society, so that the rural students may be benefited. Government should ensure that quality milk is supplied of the consumers by conducting regular
inspection in the quality of milk and milk products sold in the market.

* More women members may be enrolled in society. All women cooperative milk producers, societies are to be encouraged. There should be continuous farmers orientation programme, infertility camps and training of trie society personnel. Milk yield competitions should be conducted at the society level to promote the interest of the milk producers. To attract the milk producers to supply milk to the society incentives like insurance, medical benefits, sale of milk butter, khova at a concessional rate to the milk producer during festival seasons may be provided.

* Milk producers should have strong commitments and royalty towards the society they should patronise the society to the maximum possible level. Milk producer’s cooperative societies employees are to contact all the milk producers in their area personally with the help of field staff the union for increasing the milk production and collection.

* To increase milk collection in the society opening of sub centres and change in milk collection time may be considered. Settlement of milk payment must be brought to the bearable minimum of one to two weeks. Establish the more chilling station for preserving the milk. A milk-processing unit may be established at the district headquarters to minimise the transportation of milk.
6.3 CONCLUSION

In the fast moving world particularly in a country like India, one forgets or does not care to stop for a while and have a loot at rural farmer who are poor in their personal as well as social life. They are very low in their economic status and their opinions and views are not given much importance. It is a common understanding that people in the rural areas are engaged in agriculture. Dairy farming is an allied activity of agriculture, which gives an added income to those involved in agriculture. In order to learn the pari played by dairy farming in the lives of rural people, in the present study, the economic status of the dairy cooperative beneficiaries has been studied, making a comparison between dairy cooperative beneficiaries and non-beneficiaries. Dairy cooperative beneficiaries are able to get more profit compared to non-beneficiaries. Thus the study reveals that dairy cooperative beneficiaries derive more profits in dairy as they are organized under the cooperative fold.