CHAPTER - III

CHAPTER - II

RESEARCH METHODOLOGY AND REVIEW OF LITERATURE

2.1 INTRODUCTION

Shivamrut Sahakari Dudh Sangh, Akluj is one of the important milk sahakari sangh in Malshiras taluka of Solapur district. Malshiras taluka is well developed in agricultural and industrial sector. Sahakar Maharshi Late Shankarrao Mohite-Patil is pioneer of co-operative movement in Malshiras taluka. His motto was to develop social and economical status of not only Malshiras but Maharashtra too. The total milk collection of Dudh Sangh in Malshiras taluka is 1,25,000 litres per day. There are 350 primary milk co-operative societies which are working under the sangh so far as economy is concerned Dudh sangh plays a major role in Malshiras taluka. Shivamrut Sangh provided a subsidiary occupation to agricultural labour, marginal and small farmers.

A little research has been done in the field of dairy enterprises.

At present, the milk co-operative societies are in loss. Hence, attempts have been made to study the socio-economic status of milk producers and Shivamrut Sahakari Dudh Sangh.

2.2 OBJECTIVES OF THE PRESENT RESEARCH WORK

- 1. To examine socio-economic condition of the milk producers.
- 2. To study income and expenditure pattern of milk producers.
- 3. To study impact of co-operative sector on milk production.
- 4. To study the economic condition of Shivamrut Dudh Sahakari Sangh.
- To suggest measures of improvement of milk producers and co-operative milk societies.

2.3 RESEARCH METHODOLOGY

Shivamrut Dudh Sahakari Sangh is one of the milk unions in Maharashtra State. The operation of Shivamrut Dudh Sangh is limited to Malshiras taluka. It has been widely spread over 110 villages of this taluka. There are 350 milk co-operative societies. There are operating in various villages of this taluka. Shivamrut Dudh Sahakari Sangh adopted to implement various schemes like animal health care, cattle feed project, loan provision, artificial insemination (AI), fodder seeds, medicines, ice factory, cattle purchase finance, cattle insurance schemes, milco tester etc. in this taluka. Hence, the economic growth rate is very fast in this taluka.

In Malshiras taluka, 110 villages belong to Shivamrut Dudh Sahakari Sangh. Sampling has been done on milk collection of primary milk co-operatives societies. The specification of sampling of primary milk co-operative societies are tabulated as below:

Table No. 2.1
Selected Primary Milk Co-operative Societies

Sr. No.	Range of milk collection in litres	No. of P.M.C.S,	No. of P.M.C.S. selected to the survey work	Percentage
1	Below 100	56	3	5.36
2	101 to 500	198	11	5.56
3	501 to 2000	90	5	5.56
4	Above 2001	6	1	16.67
	Total	350	20	

Source : Computed

In the present study 20 P.M.C.S. have been selected among 350 primary milk co-operative societies which are operated of the Shivamrut Dudh Sahakari Sangh, Akluj. At random 5 milk producers were selected and interviewed through questionnaire from each primary milk co-operative society.

Secondary data has been referred through Shivamrut Dudh Sahakari Sangh, Akluj District Statistical Abstract, Economic Survey Report, Animal Census, State Level Committees Reports, related Journals and Periodicals. The secondary data has been processed with statistical tools and techniques like percentage and growth rate. Maps,

graphs, and tables have been utilised for suitability of the present studies for a period of 10 years i.e. 1990 to 1999.

2.4 LIMITATIONS OF THE PRESENT RESEARCH WORK

- The cost of milk production is reported as per the verbal information of the selected and interviewed milk producers.
- The cost of milk production is reported for the period of 1999-2000 through questionnaire filled after the selection and interviews of milk producers.
- Major findings and suggestions are only applicable to the milk producers and milk co-operative societies of Malshiras taluka.

2.5 REVIEW OF LITERATURE

In this chapter, an attempt is made to review of literature the important studies on the growth of dairy co-operatives and it's impact on income, employment, milk consumption, feeding, etc. Of the milk producers. The recent and relevant studies conducted for different regions of India and Maharashtra reviewed in this chapter.

N. R. Kumar et. al.¹ an economic analysis of milk production in tribal area of Bihar indicates stratified random sampling technique during the year (1999) 75 household were selected from two blocks of the Singhbhum district the study related that on an average of tribal

household maintained 2.55 percent heads of milk cows. Average investment per milk animal was of the order of Rs. 929 in tribal household and Rs. 1318 in non-tribal household. The cow maintenance average expenditure was about Rs. 1352 and Rs. 1725 for the tribal and non-tribal household respectively. The net income per animal during a year when imputed value of family labour was excluded from the total cost Rs. 402 and Rs. 612 respectively for tribal and non-tribal.

The study done by K. K. Jain et. al.² in 1989-90 showed that there is need for reorganisation of resources. More paddy and sugarcane crops on small and medium farmers should be taken than cash crops. The study highlights in favour of more fodder in the both the sessions. The study revealed that the farmers can increase their income through dairy and poultry along with crop cultivation in the income would be 172 percent and small farmers 48 percent on large farmers. This could be possible by increasing milk animals from 2.82 to 4.41, 3.52 to 6.45, and 4.20 to 9.52 small, medium and large farms respectively. Supplying adequate amount to the farmers through different credit programmes could do this.

As per P. Margoob Hussein et.al.³ for the year 1989-90 to 1990-91, each dairy unit varied milk yield from 3000 to 4000 litres per cow per lactation. The expenditure for the purpose of cow feeding, breeding, management, health care etc. varied from Rs. 8000 to 9000 for each year for each cow. Net profit range for the above said

expenditure is 100 to 200 percent, which lead to income and job opportunities to the rural people.

As per Singh (1991) studied the economics of milk production through different type of animals in Rajouri district of Jammu and Kashmir state. They examine 40 selected farmers from two blocks. He found that the total cost of production with the maximum from Murrah buffalo and lowest for non-discriet cow and returns over variable cost were the highest for Murrah buffalo and lowest non-discreet cow. Net profit were also highest from Murrah buffalo and lowest from Haryana cow.⁴

As per Koshy et. al.⁵ (1991) study conducted in Kerala among the farmers engaged in dairying who are members of the primary milk co-operative society. They studied 280 milk producers. The result also made a small cattle-holding size it is possible to make small profit and scope for reducing the production cost of milk. Hence, they increasing profit.

As per Parthasarthy⁵ (1991) has studied the impact of dairy co-operatives on weaker sections of India. In India, dairy development is very faster. Milk cattle are more equitable distributed than cropland as supplementary income from tend to reduce the overall inequalities, further landless labour are found to benefit and by large, the policy of integration of marketing input and veterinary services is well

conceived. It has to be agro-economic situations and adaptation of the crossbreed to the local conditions has been taking place and this need to be encouraged.

According to Reupendarkumar et. al.⁶ a survey of "Village diary co-operative" has been done during the (1991) by them selecting 36 numbers from 4 district dairy co-operative societies. This was randomly selected. It has been concluded that dairy farming is the most of the respondents are either small or medium farmers in terms of land holding (33.33 percent) and only (16.67 percent) of them were large farmers. As far as educational status is concerned (22.22 percent) of the respondents has studied up to high school level or above. None of them was found to be illiterate. Moreover, category status of dairy farmers is concerned majority of them (91.6 percent) belonged to general category. Which means that SC, ST and OBC categories are needed to inspire to be a member of dairy occupation.

According to the study done by K.P.S. Sungu during the year 1991-92 in relation to two talukas of Meerut district. The milk productions per capita, milk consumption and monthly income of the members was more than non-members. It is higher in large household and low in both the groups. Milk consumption, production, and the size of milk stock had a positive relation with the size of holding of the sample household. Small farmer's contribution was maximum to milk production in both the study groups. The contribution to marketed surplus of the milk of the

sample household, the high figure was obtained for landless labourer (25.41 percent) in the member group and for small farmers (26.90 percent) in non-members group. In both member groups the maximum contribution was of the buffaloes.⁷

As per M. B. Koppad et. al.⁸ the statistical data for the year 1995 indicates the net returns of Rs. 49544 annually for the dairy project to crossbreed cow from the profitability analysis it is clear that the project will be sufficient.

As per G. M. Gaddl et. al.⁹ study conducted in Dharwad and Hubali talukas of Dharwad district in Karnataka, during the year 1994-95. Result proved that the crossbreed cows were found to be more economical and superior over local breeds of cows in terms of yearly production and more number of economical calving with high employment opportunities to farmers.

The study done by I. P. Bhagwat et. al.¹⁰ during the year 1994 shows that the milk production has increased in rural areas because of crossbreeding programme for cows. However, the benefits have not yet reached the poor. Though the milk production is increased, their personal nutrition is not improved because most of the milk production is sold for income, rather than keeping adequate quantity of milk for family consumption. Especially in the state of Gujarat, Rajasthan, Maharashtra there is need to correct this imbalance. Rural

people must be aware of nutritional benefits of milk through health education.

As per Deepak Shah (1996) study convicted in the Jalgaon and Kolhapur district of Maharashtra. It is clear that the dairy co-operative in Maharashtra have played an important role in raising the social and economic status of farmers particularly landless, marginal and small farmers. In Kolhapur district, these co-operative societies are favourite among the members. However, their functioning, the kind of input, services extended by them in Jalgaon district is quite dissatisfied, and the members demand for more and better facilities. The household in Kolhapur district believe that dairy co-operative had improved their economic status. In Jalgaon district many diary co-operative are closing down because of their wrong functioning and operation (i.e. 50 percent) milk societies have been closed down in the past 10 years.¹¹

Mahendra Dev et. al. (1996) clearly indicates that Maharashtra State is a pioneer in the field of dairy development in the country. The crossbreed cow is the main milch cattle in the state. Source of income from diary co-operative gave through out the year; it has good potential for employment generation. The dairy sector in the state has going losses due to the under utilisation of the capacities in the backward area and providing consumer subsidy and the burden of interest and depreciation on the investment made in dairy sector.

In the 8th plan, the dairy operation in the state would be able to function on at least a no profit no loss basis.¹²

As per Ravendra Mattigatt et. al.¹³ in 1989 the percentage of crossbreed cows to total cows increased from 29.2 to 80 percent. Replacing less potential local cows by the crossbreed cow resulted in quantitative milk production, which provided human labour in addition to good economic to the farmer. The research study of Ravendra Mattigatt et. al.¹³ is good agreement with the result reported by A. K. Chatterjee et. al.¹⁴.

As per Biradar et. al.¹⁵ the comparative economic analysis of different breeds of milking buffaloes indicated Pandharpuri buffaloes is the most economical in terms of yield. If calving period of Pandharpuri buffaloes is increased, it will more beneficial. In Kolhapur district, the crossbreed cows are more economical and profitable upto 6th calving period.

As per B. R. Pawar et. al. ¹⁶ in 1993-94, it is necessary to provide loan for the purchase of goats to the landless moreover, the loan provision should be made to the small and large farmers for the purchases of crossbreed cows and buffaloes. In addition, financial agencies have to give the first priority to the loan provision for the enhancement of milk production, consumption, and export. So that this sector will be helpful to the farmers as well as our nation. The results

reported by B. R. Pawar et. al.¹⁶ are good agreements with Jadhav A. Y. et. al.¹⁷ and R. Shing et. al.¹⁸

Dr. B. Subbulakshimi, according to his study of dairy farming the year 1996. Dairy farming was an important source of livelihood for more than two third of the small farmers families, majority of the farmers has cows than buffaloes. Jersey is the most preferred variety of cows. The average productivity of buffaloes is higher than the cows. Buffaloes produces 7.07 litres milk per day and cow 5.92 litres milk per day. Dairy farming in his study area is profitable. The profit from milch animal is being equal to Rs. 423 per month for the members of the society and Rs. 378 for the non-members. The dairy farming in his study area is very profitable. The profit farming in his study area is very

2.6 SUMMARY OF THE RESEARCH WORK

Agriculture is the main occupation of Indians. Since 80 percent, population is engaged in agricultural sector. Dairy occupation is one of the most important subsidiary occupations. It brings about significant change in socio-economic structure of rural economy. Dairying provides employment to the rural landless, small and marginal farmers with supplementary employment and regular source of income. Hence, the present research work is an attempt of the socio-economic study of the Shivamrut Sahakari Dudh Sangh, Akluj in Malshiras taluka, district Solapur.

Chapter I is an introductory chapter. It deals with importance of agriculture as the relation of dairying as a subsidiary occupation. Moreover history of the dairying occupation, its importance and growth after independence has been explained.

Chapter II deals with the objectives and research methodology. The objective includes examining the socio-economic conditions of the milk producers. Study of the income and expenditure of the milk producers, study of the cost and profit in milk production and to suggest the measures for the improvement of the dairy occupation.

The research methodology included collection of data from primary source through questionnaire. Where as secondary data has been collected from the offices of the Shivamrut Sahakari Dudh Sangh, Akluj. The present data has been appropriate various statistical tools.

Chapter III deals with economic analysis of milk production and trends, profit, cost, and break even, which deals with Shivamrut Sahakari Dudh Sangh, Akluj.

Chapter IV deals with the socio-economic status of milk producers and milk processing industry by inspecting Shivamrut Sahakari Dudh Sangh, Akluj.

Chapter V deals with the study of the burning problem of dairy occupation, the use of animal fodder by means of chope cutters, rearing of highly breeded cows and buffaloes instead of traditional low breeded.

Dairy should be provided a fixed and reasonable rate of milk, motivation should also be made regarding to insurance of milch animal and loan schemes required for present occupation various suggestions are given in this chapter.

REFERENCES

- N. R. Kumar, "An economic analysis of milk production in tribal area of Bihar", Journal of Dairying food and Home Science, Vol. 18, No. 3 and 4, 1999.
- K. K. Jain, "Prospects in Agriculture through dairying and poultry:
 A case study for Jalandhar district in Punjab", Indian dairyman, Vol. XLVI, No.8, August 1994.
- P. Margoob Hussein, "Dairy farming A subsidiary occupation for small farmers agricultural labourers", Agricultural Banker, July-September, 1993, Vol. 16, No.3
- R. S. Sing, "An Economic Evaluation of milk production in Rajouri district of Jammu and Kashmir", Indian Dairyman, Vol. XLII, No.7, 1991
- 5. Abraham Koshy and Gopalakrishnan, "Managing dairy development insights from a study of dairy farmers in Kerala", Indian dairyman, Vol. XLII, No.10, 1991
- 6. Parthasarathi G., "White Revolution, Dairy Co-operatives and Weaker Section", Economic and Political Weekly, Vol. XXVI, No.52, 1991

- K.P.S. Sangu, "Impact of dairy co-operative societies on production, consumption and marketed surplus of milk," Indian Dairyman, Vol. XLVII, No.8, August 1995, p.43
- B.N. Koppad and Dr. G. K. Hiremath and S. D. Kallolgi,
 "Economic analysis of dairy project unit, Units of 10 cross breed cow", Agricultural Banker, July-September, Vol. 19, No.3, 1995
- G. M. Gaddi, "Comparative Economic analysis of different breed of cow and constraints in milk production in Karnataka", Agricultural Banker, Vol. 20, No.1, January 1997
- I. P. Bhagwat et. al., "Pattern of milk consumption in rural households of five selected states of India", Indian Co-operative Review, Vol. XXX, Oct. 1992, No.2
- Deepak Shah, "Perception towards working of milk co-operative in Maharashtra", Indian dairyman, Vol. LII, NO.6, June 2000
- Mahendra Dev and Mungekar B. L., "Maharashtra agricultural development", A Blueprint Economic and Political Weekly, Vol. XXXI, No.13, 1996

- Ravendra Mattigatt, "Resource Productivity in cow milk production, An impact of Operation flood Programme", India Co-operative Review, Vol. XXX, Oct. 1992, No.2
- 14. Chatterjee A. K. and Acharya R. M., "Dairy Industry in India : A profile", Dairy India, 1987, pp 3-20
- R. D. Biradar and Dr. S. S. Wadkar, "A comparative economic analysis of different milch animals in Kolhapur district:
 Maharashtra", Agricultural Banker, December 1995,
 Vol. 19, No.4
- B. R. Pawar, "Economic feasibility of investment in dairying",
 Agricultural Banker, Jan-March, 1998, Vol. 22, No.1
- 17. Jadhav A. Y., 1993, "Impact of cross breeding of the cow on milk production in Sindhudurg district", M.Sc.(Agri) submitted to Kokan Agricultural University.
- Singh R. and Singh J., 1988, "Resource Management and commercial dairy herds", Financing Agricultural 20(4), 15-18
- Dr. B. Subbulakshmi, "Profitability of dairy farming, A case study",
 Kisan World, Vol. No. XXV, No.6, June 1998