DAIRY CO-OPERATIVE – VIABLE TOOL FOR RURAL DEVELOPMENT

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ABSTRACT

Indian dairy sector contributes the large share in agricultural gross domestic products. Presently there are around 70,000 village dairy cooperatives across the country. The co-operative societies are federated into 170 district milk producers unions, which in turn have 22-state cooperative dairy federation. Milk production gives employment to more than 72 million dairy farmers. In terms of total production, India is the leading producer of milk in the world followed by United State of America.

An attempt is made to identify which are working more efficient and performance in ratio analysis like Operational Efficiency, Economic Viability and Managerial Competency. In the case of MPCSs of Mysore-Chamarajanagar district milk union, which shows positive impact of all the three measures of ratio analysis. Among the society Thandavapura MPCSs is one of the leading and well performing society in terms of operational efficiency in both the measures, economic viability and managerial competency. Taluru milk society earned more profits compared to the other MPCSs in terms of economic viability. But in terms of managerial competency shows Taluru MPCS declined and coming to the 5th place compared to the other MPCS. The Vyshampalyam MPCS occupy first place in terms of managerial competency.

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INTRODUCTION:

Indian dairy sector contributes the large share in agricultural gross domestic products. Presently there are around 70,000 village dairy cooperatives across the country. The co-operative societies are federated into 170 district milk producers unions, which in turn have 22-state cooperative dairy federation. Milk production gives employment to more than 72 million dairy farmers. In terms of total production, India is the leading producer of milk in the world followed by United State of America. The milk production in 2005-06 is estimated at 97.1 million Metric Tons as compared to 192.5 million MT in the previous year. This production is expected to increase to 100mn Metric Tons by 2007- 08. Of this total produce of 89mn cows' milk constitute 56mn MT while rest is from other types cattle.

HISTORY OF DAIRY CO-OPERATIVES IN INDIA:

The Co-operative movement started in India in the last decade of the 19th Century with two objects in view, i.e. to protect the farmers from the hands of the private money lenders and to improve their economic condition. Madras province was the birth-place of this movement. With the setting up of an Agricultural Co-operative Banks there the movement took root in our Land and slowly gained strength. However, the growth of Co-operative movement in India during British rule was very slow and haphazard one. In most of the cases, the provincial governments took the lead. The foreign ruler had only made some committees or framed a few rules and regulations. But they did not take any wide-ranging programme to spread the movement all over the country. The golden era of Co-operative movement began after India had won freedom. Within two decades of independence the membership of primary societies had increased four times while the share capital and working capital increased 23 and 31 times respectively. The history of Dairy Development Movement in India is a new one. During the pre-independence period this movement was limited to a few pockets of Calcutta, Madras, Bangalore and Gujarat. The most notable of this venture was Kaira District Co-operative Milk Producers' Union Limited of Anand, Gujarat. But after independence the National Government took great initiative in setting up new Dairy Co-operatives in many parts of the country. The National Dairy Development Board (NDDB) was set up to make the ambitious project a success.

Macro-Snap of Dairy Status in India

Particulars	Figures
Per Capita Availability of Milk by States (gms/day)	263
Artificial Inseminations Performed	44621 (000 Numbers)
Share of Agriculture in GDP	16.04%
Livestock Sector in GDP	4.02 %
Estimates of Milk Production	112540 (000 Tonnes)
Adult Female Bovine Population	127390 (In Thousands)

Source: NDDB Annual Report 2010-11

COOPERATIVES AND ECONOMIC DEVELOPMENT:

Before the cooperative movement began, the dairy industry in the Kaira District was being exploited by middlemen who supplied milk to the consumer. It began as a response to this exploitation and put an end to it. It grew mainly because it responded to the farmers' financial needs as well as service. It has thrived because it is owned by farmers who have a stake in its success. And because it has been managed by capable professionals and strengthened by dedicated scientists, technologists and workers, it has forged ahead. Now a day in India, there are 75,000 dairy co-operative societies, spread all over the country with a membership of 10 million. The farmer in the village is now assured of a better future thanks to these cooperatives. Recently one of the European Embassies in Delhi requested us for information on the five biggest "companies" in the dairy business. The first three are in the cooperative sector The Gujarat Co-operative Milk Marketing Federation (GCMMF). The Kaira District Cooperative Milk Producers' Union Limited and The Mehsana District Cooperative Milk Producers' Union. The Kaira District Cooperative is the second best in the country. It helped to create GCMMF, the apex body of all cooperatives in Gujarat.

REVIEW OF LITERATURE:

Urs (2009), in his study reveals that the contribution of co-operatives in dairy development plays a very significant role. Therefore, he suggested that the government needs to further strengthen it.

Veerakumaran (2009), in his paper mentioned about the focused on co-operative milk production and marketing network in the state of Kerala. Further he has identified the problems of milk co-operatives in Kerala, like escalating cost of production, occupational mobility and structural setbacks of the milk co-operatives.

Selvamani and Rani (2008), opined that Dairy Co-operatives and Development of Rural Women in the Era of Globalisation, identified relation between dairy co-operatives and women. According to their study highlighted women participation, problem faced by dairy co-operatives for development of rural women in the globalization environment. In order to survive and sustain in the new economic era of liberalization dairy co-operatives require both financial assistance and technical assistance from central and state governments, state and national level co-operative organizations, incase the co-operatives need to serve in the new economic era of globalization.

Soundarapandian and Gayathri (2008), according to their paper Karukkampalayam Milk Producers co-operative Society – A Case Study reflects purchase and sales of milk, income and expenses and financial position of the milk society. Also their study highlighted milk producers' society is strengthened by increasing the sale time this will also increase the sales to improve the performance of the milk society. Reducing expenses will also increase the profit and reduce the liabilities will improve the financial position of the society.

Ramanijam and Periaswamy (2008), according to their paper Development of Dairy Co-operatives focus on achievements of operation flood I, II and III. The dairy co-operatives, which are unique, have changed the social economic conditions the farmers in rural areas of India. They have linkages in development of agricultural employment, income, health and nutrition and education level in rural areas. But government and dairy co-operatives are essential for the development of rural people and their participation are essential for the development of rural people and their participation are essential for the development of rural people and their participation in development processes. So dairy co-operatives are more suitable for rural development of developing countries like India.

Jeykumari (2008), in her paper Dairy Co-operatives – Crafting India's Economic Development, she pointed out the achievement of the dairy co-operatives in India. The dairy development activities have the twin objectives of encouraging milk production for gainful employment, improvement of socio economic conditions of the rural people by procuring milk at a remunerative price and simultaneously supplying good quality milk and milk products at reasonable price to consumers. The hygienic quality of raw milk needs to be improved to ensure milk products of higher standards. Payment for milk in India is generally based on its FAT and SNF content. Payments for milk on the basis of microbial loads need to be initiated to enhance quality of milk and make India's milk globally acceptable.

Patil (2008), he pointed out the paper Co-operative Dairy Movement and Operation Flood in Maharashtra: an overview, the operation flood have increased employment, income and consumption of milk of rural people in Maharashtra state. Thus the operation flood has very deep and strong positive impact on Indian dairying in particular and sector in general. Also studied about the operation flood programmes, the operation floods have increased employment, income and consumption of milk of rural people in Maharashtra state. Thus the operation flood has very deep and strong positive impact on Indian dairying in particular and on Indian agriculture sector in general.

Ghanekar (2008), his paper Strengthen dairy Co-operatives to tackle agrarian Crisis covered dairying in India is an integral part of the total farming system. Symbiotic relationship exists between agriculture and dairy farming. The agricultural by products provide feed and fodder for the cattle, whereas cattle provide necessary drought power for various agricultural operations. Hence, promoting co-operative dairy sector by providing policy support will definitely be a right strategy to tackle the agrarian crisis.

OBJECTIVES OF THE STUDY

Based on the existing review of literature the following objectives were formulated by the researcher.

1. To Examine the Performance of milk union of MYMUL in Karnataka
2. To Examine the Growth and Profitability of the milk societies in selected MYMUL of Karnataka.
3. To identify the reasons for differential performance of MPCSs in MYMUL.

RESEARCH METHODOLOGY:

The present study has been carried out by an empirical investigation by canvassing a structured schedule during the year 2009-10. Appropriate statistical tools were used in accordance with needs to analyse various aspects of Mysore-Chamaraja Nagar Milk Union Limited (MYMUL) of Karnataka covers two districts namely Mysore and Chamaraja nagar districts. Based on the location, the National Dairy Development Board in Karnataka has grouped Dairy Co-operative Societies in to thirteen milk unions. Multistage stratified random sampling technique was adopted for selecting the sample. In Mysore and Chamarajanagar districts of Karnataka State, two taluks in each district are selected based on the performance of dairy co-operative societies. Further, two milk producers' co-operative societies (MPCSs) from each of the taluk, based on their performance were selected. However, out of the eight

MPCSs four good working societies and another four average working societies were selected in terms of membership, share capital, purchase of milk and sale of milk.

Tools Used:

Ratio Analysis:

Ratio analysis helps the management in taking fair and quick decisions for planning, controlling and monitoring of societies operations. Through the same method Operational Efficiency, Economic Viability and Managerial Competency of society may be judged. There are some ratios, which portray the picture about utilization of human resources at the bank and there are some other ratios which reflect the position about prudent utilization of funds. There are also many ratios through which overall profitability and performance of a society is analyzed.

The following ratios were calculated based on the frame work suggested by Sabnani (2001).

Operational Efficiency:

It is calculated by the following two methods

A. Operating Expenses as Percentage of Yearly Business.

$$\text{Operational Efficiency} = \frac{\text{Operating Expenses}}{\text{Yearly Business (Deposit + Advances)}} \times 100$$

This ratio is used to find out whether the share of operating expenses to yearly business of the society is increasing or decreasing. Theoretically, as the yearly business increases, per unit operating expenses should decrease. If the ratio is showing increasing trend, efforts must be made to increase yearly business. Detailed analysis of this ratio will enable milk society to find out reasons for increase in operating expenses as compared to increase in yearly business.

B. Per Employee Establishment Expenses.

This ratio is worked out dividing total annual establishment expenses by the number of employees.

$$\text{Operational Efficiency} = \frac{\text{Total Yearly Establishment Expenses}}{\text{Number of Staff Members}}$$

This ratio is used for making comparison of per employee establishment expenses among the society. If this ratio is very high, efforts should be made to control the cost by redeployment of staff.

Economic Viability:

Understanding economic viability is very important to know whether the society will be sustained or not. Therefore an effort is made to understand the same by using following method.

Gross profit as a ratio of working funds is used.

$$\text{Economic Viability} = \frac{\text{Gross profit/loss}}{\text{Working Capital}} \times 100$$

This ratio indicates profits of a society in relation to the working funds. Even though the gross profit of a bank in absolute terms may be increasing but in terms of the percentage to working funds it may be shrinking. This ratio will indicate whether the funds of the society are being used with prudence.

Managerial Competency:

Per Employee Business

Per Employee Business shows the efficiency of the bank in human resource management. Greater the per employee business, better the efficiency. This ratio can be worked out as under;

$$\text{Managerial Competency} = \frac{\text{Yearly Business}}{\text{Total Number of Staff}}$$

This ratio indicates productivity per employee. Comparison of productivity may be made among the banks through this ratio. If productivity at certain banks is low as compared to other banks efforts should be made to improve the level of business or staff should be redeployed.

Analysis and Discussion:

Profitability analysis of the selected Milk Producers' Co-operative Societies (MPCSs) is based on the ratio analysis that is presented below. Profitability is measured in terms of Operational Efficiency (OE), Economic Viability (EV) and Managerial Competency (MC).

Operational Efficiency:

Operational efficiency of all the MPCSs located in Mysore-Chamarajanaga district milk union has been calculated by using two indicators. According to the first indicator (OE_1) operational efficiency is the ratio of operating expenses and yearly business of the milk society. Greater share of operating expenses in the total yearly business shows lower efficiency of the milk society. Accordingly, operational efficiency is measured by this ratio analysis in Mysore-Chamarajanaga milk union.

Table 1, Operational Efficiency of MPCSs in Mysore-Chamarajanagar District Milk Union.

Mysore –Chamarajanagar District Milk Union		
Milk Societies	OE_1 (in % age)	OE_2 (in Rs)
Hulumvu	5.83	31150
Kadakola	3.05	14666.6
Thandavapura	0.05	10240
Taluru	3.22	13500
Vyshampalyam	2.25	19890
Karinanjanapura	0.06	28706
Tomiyarpalyam	1.87	19725
Mangala	4.17	13978
Average	**2.56**	**18981.95**
CV	**76.76**	**39.53**

Source: Compiled from field data

$$OE_1 = \frac{\text{Operating Expenses}}{\text{Yearly Business (Deposits + Advances)}} \times 100 \qquad OE_2 = \frac{\text{Yearly Establishment Expenses}}{\text{Number of Staff Members}}$$

The analysis shows that the milk society located in Karinanjanapura is more efficient than the other seven MPCSs. While operating expenses is 0.06 per cent of the total yearly business of MPCS in Mysore-Chamarajanagar milk union.

The co-efficient of variation is more in OE1 (76.76%) than in OE2 (39.53). While the operational efficiency is between 0.05 per cent and 5.83 per cent in the case of Mysore-Chamarajanagar milk union. Among the milk societies in Mysore-Chamarajanagar district milk union, Hulumvu MPCS shows least efficiency and Thandavapura MPCS shows maximum efficiency.

Second measure of operational efficiency (OE_2) is in terms of establishment expenses per employee. MPCSs in Mysore-Chamarajanagar district milk union analysis shows highest efficiency in the case of Thandavapura MPCS. Among the milk societies Hulumvu MPCS shows lowest efficiency.

Across the MPCSs of Mysore-Chamarajanagar district milk union, greater correlation could be observed between $OE_1$and OE_2. For example, Thandavapura, which has achieved greater efficiency in terms of share of operating expenses, also showed greater efficiency in terms of per employee average yearly establishment expenses (Rs 10240). In case of Hulumvu MPCS also, greater correlation could be observed between OE1 and OE2, which has achieved greater inefficient in terms of share of operating expenses, that also showed lowest efficiency in terms of per employee average yearly establishment expenses. Both the measures show inefficiency of the overall societies activities. But in the case of Karinanjanapura MPCS, such positive association is not observed. While Karinanjanapura MPCS showed highest efficiency in terms of OE_1, its per employee expense is high (Rs 28706). Similarly, in the case of Hulimavu MPCS, which shows higher share of operational expenses in yearly business compared to other MPCSs (5.83%), per employee business is also high (Rs 31150) because number of employees is less.

Economic Viability:

Economic viability of the Society is calculated by using following methods. Economic viability (EV) according to the following method shows the viability of the society in terms of the share of gross profits in working funds. Almost all the MPCSs in Mysore-Chamarajanagar district milk union show profits. The share of profits shows the intensity of economic viability of the MPCSs.

Table 2, Economic Viability of MPCS in Mysore-Chamarajanagar District Milk Union

Mysore –Chamarajanagar District Milk Union	
Milk Societies	EV
Hulumvu	6.45
Kadakola	7.05
Thandavapura	9.51
Taluru	11.46
Vyshampalyam	8.40
Karinanjanapura	10.08
Tomiyarpalyam	4.08
Mangala	9.58
Average	**8.33**
CV	**28.37**

Source: Compiled from the field data

$$EV_1 = \frac{\text{Gross profit/loss}}{\text{Working Capital}} \times 100$$

Among the MPCSs of the Mysore-Chamarajanagar district milk union, not shows much difference could not be observed. All the MPCSs earned profits, but it shows lowest variation across the societies. Co-efficient of variation registered 28.37 per cent in the case of MPCSs. Taluru, Karinanjanapura, Mangala and Thandavapura MPCSs registered 11.46, 10.08, 9.58 and 9.51 per cent respectively. Among the MPCSs of the Mysore-Chamarajanaga district milk union Tomiyarpalyam MPCS operates least performance compared to other MPCSs.

Managerial Competency:

Managerial competency is one of the indicators of profitability of the milk society. In the present study, managerial competency (MC) is calculated as a ratio of Yearly business to total number of staff. The measure of managerial competency is based on the per employee total yearly business. The analysis showed that average per employee yearly business is more in Vyshampalyam MPCSs in Mysore-Chamarajanagar district milk union. The average per employee business is low in Tomiyarpalyam MPCS (Rs 384591).

Table 3, Managerial Competency of MPCSs in Mysore-Chamarajanagar District milk Union.

Mysore –Chamarajanagar District Milk Union	
Milk Societies	**MC**
Hulumvu	416392
Kadakola	702021
Thandavapura	550261
Taluru	456777
Vyshampalyam	934249
Karinanjanapura	558679
Tomiyarpalyam	384591
Mangala	391571
Average	**549317.63**
CV	**34.39**

Source: Compiled from the field data

$$MC = \frac{\text{Total Yearly Business}}{\text{Total Number of Staff}}$$

While the average per employee business is Rs 5.49 lakhs in Mysore-Chamarajanagar district milk union. Co-efficient of variation showed 34.39 per cent in the above said milk union of Karnataka.

CONCLUSION:

Profitability of selected MPCSs is analyzed by using ratio analysis. An attempt is made to identify which are working more efficient and performance in ratio analysis like Operational Efficiency, Economic Viability and Managerial Competency. In the case of MPCSs of Mysore-Chamarajanagar district milk union, which shows positive impact of all the three measures of ratio analysis. Among the society Thandavapura MPCSs is one of the leading and well performing society in terms of operational efficiency in both the measures, economic viability and managerial competency. Taluru milk society earned more profits compared to the other MPCSs in terms of economic viability. But in terms of managerial competency shows Taluru MPCS declined and coming to the 5th place compared to the other MPCS. The Vyshampalyam MPCS occupy first place in terms of managerial competency.

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