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ECONOMIC ANALYSIS OF CO-OPERATIVE MILK PRODUCER UNION IN KARAIKAL REGION

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ABSTRACT:

This study recognizes the Economic Analysis of Co-Operative Milk Producer Union in Karaikal Region. Data was collected from Karaikal Region Milk Producer Union during 2007 to 2016 years. Ratios analysis has applied to find out the performance of Milk Producer union. Descriptive research techniques were used to collecting the information from the balance sheets, profit and loss account cash flow statement. The convenient sampling technique is applied to decide the selection of the Co-Operative Milk Producer Union. It is found that consumer co-operative milk producer union milk met higher level risk towards working capital management.

KEYWORDS: *Economic Analysis, Ratio, Working Capital, Share Capital and Reserve Fund.*

INTRODUCTION

Dairy farming is class of agriculture concerned with production of milk for market. In India, farmers are having raising animals in small scale using traditional method of production. But even though being small scale, India tops the chart of milk production due to a large number of farmers engaged in dairying, (Hasan Cicek and Murat Tandogan, 2008). Ansari (2004) Dairy activities were traditionally been integral to India's rural economy. The India is the world largest producer of dairy products and too their largest consumer. India ranks first among the world's milk producing nations since 1998 and has the largest bovine population in the World with 57% of the buffaloes and 14% of the world's cattle population. Most of which are milch cows and milch buffaloes. India had a large livestock population base constituting 278 million livestock including 180.5 million cattle, 82.8 million buffaloes, 4 million sheep and 9.2 million goats. Ansari (2004) the large livestock population is raised primarily on crop residues and grazing in the common property including basement. India's dairy industry is considered as one of the most successful development programmes in the post-Independence period, (James et, al., 2016; Hasan Cicek and Murat Tandogan, 2008).

Milk production in India during the period 1950-51 to 2014-15, has increased from 17 million tonnes to 146.3 million tonnes as compared to 137.7 million tonnes during 2013-14 recording a growth of 6.26 %, (Hasan Cicek and Murat Tandogan, 2008). This milk production has increased to 163.6 million tonnes in 2016-17 from 137.7 million tonnes in 2013-14. It means that output has grown by 18.81 per cent during this period.

The country milk production grew at an annual rate of 6 per cent during 2014-17 as against 4 per cent during the previous three years 2011-14. Ansari (2004) Income of dairy farmers has increased by

23.77 per cent during 2014-17 compared to 2011-14. The per capita availability of milk in the country which was 130 gram per day during 1950-51 has increased to 322 gram per day in2014-15 as against the world average of 293.7 grams per day during 2013. Hasan Cicek and Murat Tandogan (2008) the per capita milk availability has now increased to 351 gram in 2016-17 from 307 gram in 2013-14. This sustained growth in the availability of milk for our growing population. Ansari (2004) Dairying has become an important secondary source of income for millions of rural families and has assumed the most important role in providing employment and income generating opportunities particularly for marginal and women farmers, (Hasan Cicek and Murat Tandogan, 2008). Most of the milk is produced by animals reared by small, marginal farmers and landless labourers. About 15.46 million farmers have been bring under the ambit of 165835 village level dairy corporative societies up to March 2015, (Ansari 2004).

Currently, more than 80 per cent of the milk produced in the country is marketed by unorganized sectors and less than 20 per cent by the organized sector. The organized sector involves government and co-operatives; the unorganized sector involves private organizations. The role of dairy cooperatives in procurement of milk and providing necessary services to the dairy farmer's make them distinct among the other channels of milk marketing. The dairy farmers selling the milk to the dairy cooperatives get fair prices of their product, (Hasan Cicek and Murat Tandogan, 2008). These centers provided financial security and give the money to the dairy farmers at certain intervals. Thus, the dairy farmers get a consolidated amount from the dairy cooperatives.

The major constraint with this channel is delay in payments by the dairy cooperatives. The poor households are unable to wait for longer periods to get the payments and thereby prefer to transact their marketable surplus through other channels. Helene Hill, and Fidelma Lynchehaun, (2002) the important role played by dairy farming in the sustenance of landless and poor people in the village economy is quiet evident. Marketing of milk through organized sector involves government and co-operatives agencies while the unorganized sector involves the private organizations, (Hasan Cicek and Murat Tandogan, 2008). Major division of milk is marketed through the unorganized sector and the organized sector had a very low share. The government of India has started the Operation Flood programme for the proper enumeration of milk & milk products, Maitah, M., Smutka (2012); (George, 1987). Further, various programs were undertaken for the formation of dairy co-operatives.

RESEARCH PROBLEM

Dairy co-operatives should be playing a commendable role in future in re-generating the rural life. The need of the hour for the Co-operative sector in the era of liberalized environment is to seize every opportunity available. The Major problems faced by Cooperatives are:

- Inadequate support from government,
- Low capacity utilization of dairy plants,
- Non-viability due to losses,
- Lack of working capital,
- Lack of financial support

Inappropriate marketing strategy had to met competition due to lack of training and knowledge. Jeremy Franks (2003) Government should provide technical and financial support to dairy cooperatives in the areas of strengthening co-operative business, productivity enhancement, quality assurance, building dairy infrastructure and for creation of a national information network by developing various schemes Helene Hill, and Fidelma Lynchehaun, (2002).

SCOPE OF THE STUDY

The NDDB implements the National Dairy Production, which primarily focused on increasing animal productivity and will be conducted in two phases. From 2011-12 to 2016-17, phase I is focused on 14 major milk producing states: Andhra Pradesh, Bihar, Gujarat, Haryana, Karnataka, Kerala, Madhya Pradesh,

Maharashtra, Orissa, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh and West Bengal, (Thakur, and Singh, 2004). Vinod (2004) these states account for over 90 per cent of total milk production, 87 per cent of the total buffalo population, and 98 per cent of total forage production. Key components of phase I are productivity enhancement through genetic improvement, improving animal nutrition, and strengthening village based milk procurement systems, (Vinod 2004). The NDDB is also likely to import Holstein Friesian and Jersey bulls to improve local livestock genetics. Phase I has a total financial outlay of $416 million, Jeremy Franks (2003).

Sudheer (1999) the success of the dairy industry has resulted from the integrated co-operative system of milk collection, transportation, processing and distribution, conversion of the same to milk powder and products, to minimize seasonal impact on suppliers and buyers, retail distribution of milk and milk products, sharing of profits with the farmers, which are ploughed back to enhance productivity and needs to be emulated by other farm produce/producer, (Vinod 2004). In the poultry segment, the Government focus, besides framing suitable policies for enhancing commercial poultry production, is for strengthening the family poultry system, which addresses livelihood issues. Singh and Rekha Dayal (2004) both egg and fish production has also registered an increasing trend over the years. Egg production was around 78.48 billion eggs in 2014-15, while poultry meat production was estimated at 3.04 MT.

Fisheries constitute about 1 % of the GDP of the country and 5.08 per cent of agriculture GDP. The total fish production during 2014-15 was 10.16 Millian Tonnes, an production during the last quarters of 2015-16 has also shown an increasing trend and is estimated at 4.79 Millian Tonnes. There is increasing significance of poultry and livestock products in the context of diversifying farm and non-farm activities in the agriculture sector to increase livelihood, (Srikant, 2007). There is scope to improve the milk production of crossbred cows, indigenous cows and buffalos across dairy farm using the existing resources.

REVIEW OF LITERATURE

Hassanpour (2012) analyzed the technical and allocate efficiencies under the current technological change in agriculture. It helps to formulate adequate marketing, appropriate pricing, extension services, credit, and distribution policies.

Monika, et. al., (2013) analysed the technical efficiency of the milk production. Totally, 83 cattle herds in the period 2006-2010. Non-parametric approach was used to evaluate the technical efficiency of the milk production. Average value of technical efficiency in the analysed period was 0.96, i.e. evaluated herds reached 96% of technical efficiency in milk production. For, reduction of inputs by 4% is recommended to reach the efficiency at the given level of milk yield. Total feed costs, material costs, labour costs, repair and service, depreciation, other direct costs and overhead costs were reduced by 3.7, 10.0, 3.3, 15.8, 2.1, 2.9 and 8.5% respectively, while maintaining the same level of outputs.

Masuku, et. al., (2014) analyzed the economic efficiency of smallholder dairy farmers in Swaziland. The aimed of the study were to estimate the economic efficiency of smallholder dairy farmers; recognize factors affecting the economic efficiency of smallholder dairy farmers; and determine the profitability of the smallholder dairy enterprise. Descriptive and quantitative survey was used. The target population was smallholder dairy farmers registered with the Swaziland Dairy Board. A purposive and random sampling technique was applied. Three methods of data analysis were computed namely descriptive statistics, econometric analysis and gross margin analysis. The mean level of Economic Efficiency was 79.8%. The farm's location, pasture size, 133 fertility, water availability, the farmer's years of experience in dairy farming, membership to dairy farmers' association and training on dairy farming were factors that influenced the level of Economic Efficiency for smallholder dairy farmers in Swaziland.

James Mutura, et. al., (2016) analyzed the determinants of vertical and horizontal integration among smallholder dairy farmers in Lower Central Kenya. A multistage sampling technique was employed. The data was collected from 288 small holder dairy farmers. Fixed investment cost, storage type, milk cost share, percentage of milk sold and dairy enterprise turnover were vertically integrate in dairy enterprise. An

increase in total fixed investments, turnover and volume of output are contributed to the probability of a household integrating vertically.

Marta Guth (2016) evaluated the factors determining the variability of milk production in selected macro regions of the European Union. It was resulted that the factors have a decisive impact on milk production in dairy farms from areas with a pre-dominance of intensive production.

Dilamar Dallemole et, al., (2017) test the growth milk production in Mato Grosso at Brazil. Results showed the family activity in the limited stage, mostly in view of managerial problems. The productivity is low because the operational factors and the prices charged do not allow suitable investments to overcome these limitations.

METHODOLOGY

This study identifies the Economic Analysis of Co-Operative Milk Producer Union in Karaikal Region. Data was collected from 2007 to 2016 balance sheet in Karaikal Region Milk Producer Union. Ratios analysis has applied to find out the performance of Milk Producer union. Descriptive research techniques were applied. The data collected from the Karaikal Milk Producer Union balance sheets, profit and loss account cash flow statement. The convenient sampling technique is used to decide the selection of the Co-Operative Milk Producer Union in Karaikal Region. This research has taken the variables for the study like Share capital, Reserve fund, Subsidies fund, Loan & Deposits, Purchase and Sales funds. Further, this research had analyzed the working capital management and also current ratio, sale turnover, inventory ratio, gross profit ratio and net profit ratio. Minimum, maximum, mean, standard deviation and cumulative growth rates are applied.

OBJECTIVE OF THE STUDY

1. To find out the level of total performance in karaikal co-operative producer union.
2. To evaluates the working capital management of co-operative milk producers union in karaikal.
3. To analyse the financial ratio of producer union in karaikal.

Analysis and Discussion

Table 1 Total Performance of primary societies in Karaikal Cooperative producer Union

	Share capital	Reserve	Subsidies	Loan & Deposits	Purchase	Sales
2006-07	26860918	5615258	9148106	2288861	37619154	45063443
2007-08	26860918	5975258	9448106	2804077	39102744	51346348
2008-09	26910918	6335258	9969106	3464843	46706364	62913128
2009-10	26910918	7523975	12699106	2718128	54401695	75124486
2010-11	31910918	8723975	17049105	3368128	66520305	95850699
2011-12	36910918	21365767	17049105	3116278	73423912	99518181
2012-13	36910918	24255373	17049105	3073108	86040021	120223760
2013-14	41910918	26849786	20699105	2910688	88406780	128772669
2014-15	46910918	31440055	23199105	2459128	89350339	138385212
2015-16	47086733	33614839	25699105	2403258	107497385	157027566
Mean	33014007	171699544	16200905	2860650	68906869.9	97422549.2
S.D	7.79	1.43	5.85	4.02	2.39	3.84
CGR	0.52	0.27	0.12	0.02	0.10	0.13

Source: Secondary data

Table 1 point out the total Performance of consumer Co-Operative Milk Producer Union in Karaikal Region for 2007 to 2016. The calculated CGR (Cumulative Growth Rate) value of share capital was 0.52; it is implied that the share capital increased at 52 per cent during fiscal years 2007 to 2016. Further, reserve was 0.27; it is indirect that the reserve at 27 per cent. The followed by subsidies (0.12), loan & deposits (0.02),

purchase (0.10) and sales (0.13). It is meant that the growth of subsidies 12 per cent, loan & deposits 02 per cent, purchase 10 per cent and sales 13 per cent.

Table 2 Working Capital Management in Karaikal Co-operative Milk Producers for 2006 to 2016

Working Capital Management	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
A) Current assets										
Cash on hand	353530	216448	215485	378545	476710	430083	476710	491422	443780	523010
Cash at bank	1312229	626145	179878	399287	383521	166410	383521	4088163	1111942	2460595
Stocks	706429	209048	754973	549012	750139	754177	947273	1213380	1110062	1268709
Total	2372188	425496	1150336	1326844	1610370	1350670	1807504	491422	2665784	4252314
B) Current liability										
Interest	262302	600646	603230	1158544	1461587	1729205	2045606	2305854	2578922	2855555
Estt. & cont. due	-	-	1250	-	2250	11677	-	3737	-	-
Trade charges due	72640	31194	60588	21256	43539	48606	54188	60078	60078	
Audit fees due	6000	9250	-	45200	50218	50636	57054	54854	60436	33220
III pay committee pay due	1919	1919	1919	1919	1919	1919	1919	1319	1919	1919
Bonus due	489589	495282	534141	570253	661948	691799	691685	676071	654017	643223
Total	832450	1138291	1199878	1797172	2219211	2522165	2850452	3098176	3355372	3533917
A-B	1537819	-714714	1148417	-472247	-610760	-1173414	-1044867	-2608073	-691507	718397
Growth Rate	-	-1.46	-2.61	-1.41	0.29	0.92	-0.11	1.50	-0.73	-2.04
CGR										-0.63

Table 1 indicates the working capital management of consumer co-operative milk producer union in karaikal region for 2007 to 2016. The compute Cumulative Growth Rate value working capital management was -0.63; it is implied that the WCM negative at 63 per cent. It is inferred that consumer co-operative milk producer union milk met higher level risk towards working capital management. The produce had not maintained the current assets and respective current liability for every fiscal year. It is suggest that a low ratio indicates more dependency on external fund, which is dangerous during the period of depression. Hence, it will improve that ratio.

Table 3 financial ratio level of karaikal producer union

Year	Current Assets	Sale Turnover	Inventory Ratio	Gross profit ratio	Net profit ratio
2005-06	2.85	0.44	63.79	0.21	-0.47
2007-08	0.37	0.43	245.62	0.27	-0.47
2008-09	0.96	0.32	83.33	0.28	-0.41
2009-10	0.74	2.06	136.84	0.29	-0.39
2010-11	0.73	2.19	127.78	0.34	-0.44
2011-12	0.54	2.24	131.96	0.29	-0.50
2012-13	0.63	2.54	126.92	0.26	-0.45
2013-14	0.16	2.34	106.13	0.25	-0.47
2014-15	0.79	2.22	124.66	0.30	-0.44

2015-16	1.20	2.06	123.77	0.33	-0.35
Max	2.85	2.54	245.62	0.34	-0.35
Min	0.16	0.32	63.79	0.21	-0.5
Mean	0.897	1.684	127.08	0.282	-0.439
S.D	0.74	0.89	47.78	0.037	0.44
Compound Growth Rate (CGR)	0.46	0.51	0.27	0.07	0.03

The table 3 elaborates the financial ratios level in Karaikal Co-operative Milk Producers during 2007 to 2016. The computation of CGR, current Ratio was 0.46; it is implied that the current assets increased at 46 per cent for economic years 2007-16. Followed by Sale Turnover (0.51), inventory turnover (0.27), gross profit (0.07) and net profit (0.03). It is suggest that the ratio is more appropriate for evaluating the efficiency of internal management. The working capital was non-efficiently managed by dairy co-operatives to improve its sales.

CONCLUSION

The dairy animals constitute an important component of the farming system for sustaining the agricultural economy of the country. India is the world's largest producer of bovine milk. Buffaloes contribute around 57 percent to total milk production and are increasingly preferred as dairy animals over cows. Buffaloes can be used for milk production, meat and also as a work animal for small farmers. Though, the karaikal milk producer has met higher level financial crisis. Hence, The Government should provide the necessary input supplies at subsidized rates to the dairy farmers so that these breeds can be reared cheaply and commercially.

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