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Contributions to books

- Sharma T., Kwatra, G. (2008) Effectiveness of Social Advertising: A Study of Selected Campaigns, Corporate Social Responsibility, Edited by David Crowther & Nicholas Capaldi, Ashgate Research Companion to Corporate Social Responsibility, Chapter 15, pp 287-303.

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- Schemenner, R.W., Huber, J.C. and Cook, R.L. (1987), "Geographic Differences and the Location of New Manufacturing Facilities," Journal of Urban Economics, Vol. 21, No. 1, pp. 83-104.

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- Kelkar V. (2009): Towards a New Natural Gas Policy, Economic and Political Weekly, Viewed on February 17, 2011 http://epw.in/epw/user/viewabstract.jsp

FINANCIAL PERFORMANCE OF MILK UNIONS – A STUDY AT KARNATAKA MILK FEDERATION

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ABSTRACT

Dairying has played a prominent role in strengthening India's rural economy. It has been recognized as an instrument to bring socio-economic transformation. A symbiotic relationship exists between dairy farmers and the milk unions who process the raw milk collected from the farmers. To strengthen the recent gains in milk production, processing calls for new development initiatives and critical analysis of the financial performance of milk unions. Dairying must address itself to issues of profitability, efficiency, solvency, liquidity and turnover. Effective functioning of dairy cooperatives could translate into significant benefits to dairy farmers. Thus this article aims to investigate the financial performance of the milk unions under Karnataka Milk Federation (KMF) over a period of five years (2002-07).The financial analysis of the milk unions was done taking into consideration the ratios which are critical, as it would allow milk unions to capitalize on their strengths and exploit opportunities. The results of the study showed that only 31 percent of the milk unions had a good overall performance score. Also, an attempt is made in this article to identify the reasons for the discrepancies in the financial performance among the milk unions.

KEYWORDS

Dairy, dairy cooperatives, financial performance, profitability, ratios.

INTRODUCTION

India is the world largest milk producer since 1998-99. According to estimates of the Central Statistical Organisation (CSO), milk accounted for 68% of the total value of output from livestock. In terms of value of output, milk is now the single largest agricultural commodity in India.

Dairying is a secondary occupation for about 69 percent of India's farming community. It contributes close to a third of the gross income of rural households and in the case of those without land, nearly half of their gross income.

On the other hand, milk and dairy products are basic food items. Despite a marked slump in the consumption of milk and powdered skimmed milk in recent years, there has been no major change to the underlying strength of demand when viewed generally. While dairy industry manufacturers are able to benefit from this stable demand, they have to invest large sums in production and distribution facilities because they handle highly perishable raw materials and products. Dairy industry can be described as a business with relatively low industry risk, including stability of demand. Profitability at dairy industry manufacturers has remained at a low level compared to other food manufacturers due to such factors as the heavy burden of fixed costs and distribution costs. Moreover, recent hikes in the prices of imported raw materials have also been a factor in pressing earnings down. In addition to rising secondary raw materials, escalating power costs and distribution costs resulting from price increases for crude oil, dairy manufacturers are forced to take a variety of strategies in addition to cost cutting efforts for maintaining profits.

Dairy farming is much more industrialized today than in the past in terms of resources, technology, and organizational structure. Even on smaller operations, dairy farm managers are doing more than just making the production decisions directly related to the animals; they are managing labor and other inputs, and possibly making cost and marketing decisions. Prospects for continued expansion of milk production clearly exist keeping the competitiveness in mind. The financial performance of the milk unions describe the ability of dairy operations to meet short term obligations and to replace capital assets as needed and thus stay in business.

CHALLENGES OF THE DAIRY COOPERATIVES

Dairy cooperatives in general and milk unions in particular face three critical and interrelated challenges:

- First, cooperatives are no longer the only major players in our milk markets. The result is that the cooperatives are capturing an increasing share while the rapid growth of cooperative marketing has slowed.
- Second, today, cooperatives handle only about 17 per cent of the marketable milk surplus.
- Third, many dairy cooperatives need to substantially renew as also enhance their financial performance and professional skills to face the twin challenges of growth in market share and profitability.

In order to remain a part of the agricultural sector today and into the future, a constant effort is required to maintain competitive strength. Maintaining competitive strength today requires an appraisal of the financial results achieved by the milk unions.

IMPORTANCE OF DAIRYING IN KARNATAKA

Karnataka is one of the top ten milk producing states in India. The importance of dairying in Karnataka needs no emphasis in the given structure of the economy and distribution of population and labour force. Dairying is important also because of its substantial contribution to the state's income. Though agriculture is not the mainstay in terms of contribution to state income, it provides substantial employment. Agriculture contributes 19 percent to state's income and the employment in this sector is about 60.6 percent.

Karnataka Milk Producers Cooperative Federation (KMF) is the apex body formed by all the thirteen member unions to coordinate the growth of dairy activities at the state level. Every activity of KMF revolves around meeting one basic objective: 'Achieve economies of scale to ensure maximum returns to the milk producers, at the same time facilitate wholesome milk at reasonable price to urban consumers'.

Milk Unions of Karnataka produce sufficient quantity of milk for domestic processing. Bulk of milk procurement (47.52 %) is concentrated in large milk unions, medium sized milk unions had procured about 44.29 % and small-sized milk unions had procured 8.19%.

OBJECTIVE OF THE STUDY

To strengthen the recent gains in milk production, processing calls for new development initiatives and critical analysis of the financial performance of milk unions. Dairying must address itself to issues of profitability, efficiency, solvency, liquidity and turnover. Effective functioning of dairy cooperatives could translate into significant benefits to dairy farmers. Thus this article aims to investigate the financial performance of the milk unions under Karnataka Milk Federation (KMF) over a period of five years (2002-07).

METHODOLOGY

There are five major areas of financial concern in any business. These are; (i) the ability to service current debt obligations, (ii) the financial efficiency, (iii) the overall debt structure, (iv) profitability and (v) debt repayment capacity. To analyse the financial performance of the milk unions of Karnataka Milk Federation, the annual reports all the thirteen milk unions for a period of five years, 2002-2007 were taken into consideration. The critical ratios which tell about different facets of a company's finances and operations were calculated. The following are some of the more commonly used financial ratios in the financial analysis. They are Current ratio, Quick ratio, Working capital to sales, Total asset turnover, Inventory turnover, Net fixed asset turnover ratio, Equity turnover, Gross Profit margin, Net profit margin, Return on capital employed, Return on equity, Debt –Equity ratio and Long term debt to long term capital. Ratios are used to analyse trends and to compare the firm's financials to those of other firms. The data obtained was further analysed using Factor analysis. An attempt has been made here to use factor analysis to find and describe the underlying factors that determine the financial performance of the individual milk unions.

RESULTS AND DISCUSSION

The variables under study extend from return on capital employed (ROCE) to working capital to sales ratio involving 14 variables. Factor analysis attempts to combine these variables into a set of more comprehensive data. The components matrix of the fourteen ratios extracted are shown below in Table 1.

TABLE 1: SHOWING THE COMPONENTS MATRIX OF THE RATIOS

Ratios	Components				
	1	2	3	4	5
Return On Capital Employed	0.876	0.054	0.203	-0.104	-0.164
Net Profit Margin	0.78	0.251	-0.319	-0.2	-0.037
Operating Profit Margin	0.666	0.578	-0.037	-0.276	-0.04
Net Fixed Asset turnover	0.543	-0.433	0.368	0.203	-0.34
Gross Profit Margin	-0.107	0.805	-0.036	-0.194	0.128
Equity Turnover	0.415	-0.608	0.275	-0.111	0.377
Long Term debt to Long Term Capital	-0.124	0.594	0.694	0.222	0.15
Debt to Equity Ratio	-0.197	0.457	0.689	0.151	0.27
Return On Equity	0.543	0.08	0.554	-0.153	-0.106
Quick Ratio	0.447	0.235	-0.497	0.431	0.298
Total Asset Turnover	0.084	-0.24	0.217	0.631	0.169
Current Ratio	0.371	0.298	-0.379	0.614	0.232
Inventory Turnover	0.302	-0.423	0.096	-0.189	0.689
Working Capital to Sales	0.146	-0.019	0.104	0.484	-0.491
Extraction Method: Principal Component Analysis.					
a 5 components extracted.					

Source: Annual Reports of KMF

The variables are rotated using Varimax with Kaiser Normalization and the Rotation converged in 10 iterations. The logic of rotating the axes so as to maximize the variance of the new factor remains the same. In order to identify the natural groupings of variables, a rotation to an interpretable pattern for the loadings is done, in which the variables load highly on only one factor. The ability to rotate to improve interpretability is one of the advantages of factor analysis. If finding and describing some underlying factors is the goal, factor analysis may prove to be more useful.

Table 2 below is the rotated component matrix of the ratios under study. This is undertaken to identify the underlying factors that load on one factor. This analysis seems to reveal that the data is composed of five sub-scales: Profitability, Solvency, Efficiency, Liquidity and Turnover.

TABLE 2: SHOWING FACTOR LOADINGS OF THE RATIOS

Ratios	Factors				
	Profitability (1)	Solvency (2)	Efficiency (3)	Liquidity (4)	Turnover (5)
Operating Profit Margin	0.86	0.109	-0.235	0.198	-0.107
Return On Capital Employed	0.842	-0.008	0.327	0.072	0.168
Net Profit Margin	0.786	-0.272	-0.106	0.333	0.033
Return On Equity	0.614	0.32	0.292	-0.21	0.183
Long term debt to Long term Capital	0.059	0.947	-0.002	-0.009	-0.142
Debt to Equity Ratio	-0.047	0.899	-0.054	-0.069	0.011
Net Fixed Asset turnover	0.336	-0.073	0.781	-0.116	0.184
Gross Profit Margin	0.229	0.401	-0.606	0.125	-0.346
Working Capital to Sales	0.047	0.024	0.59	0.123	-0.376
Total asset Turnover	-0.256	0.224	0.516	0.338	0.207
Current Ratio	0.102	0.032	0.081	0.882	-0.08
Quick Ratio	0.185	-0.125	-0.046	0.851	0.035
Inventory Turnover	0.048	-0.041	-0.08	0.075	0.88
Equity Turnover	0.131	-0.088	0.294	-0.094	0.807
Eigen value	**2.747**	**2.136**	**1.954**	**1.878**	**1.866**
Cumulative %	**19.618**	**15.257**	**13.957**	**13.411**	**13.331**
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.					
a Rotation converged in 10 iterations.					

Source: Annual Reports of KMF

Careful examination of these loadings has led to the following conclusions:

1. The data that load highly on factor 1 seemed to relate to Operating Profit Margin (0.860), Return on Capital Employed (0.842), Net Profit Margin (0.786) and Return on Equity (0.614).Hence factor 1 seemed to relate to profitability.

2. The data that load highly on factor 2 seemed to relate to long term debt to long term capital (0.947) and debt-equity ratio (0.899). Hence factor 2 seemed to relate to solvency.
3. The data that load highly on factor 3 seemed to relate to Net fixed asset turnover (0.781), Gross profit margin (0.606), working capital to sales (0.590) and total asset turnover (0.516). Hence factor 3 seemed to relate to efficiency.
4. The data that load highly on factor 4 seemed to relate to current ratio (0.882) and quick ratio (0.851). Hence factor 4 seemed to relate to liquidity.
5. The data that load highly on factor 5 seemed to relate to inventory turnover (0.880) and Equity turnover (0.807). Hence factor 5 seemed to relate to turnover.

With the identification of the group of ratios, the number of variables in each group, eigen value and the percent of variation and the cumulative percent of variation has been explained by each important variable like profitability, solvency, efficiency, liquidity and turnover in Table 3

TABLE 3: FINANCIAL PERFORMANCE VARIABLES OF THE MILK UNIONS

Sl. No.	*Group of Financial Performance Dimensions*	*Number of variables in each group*	*Eigen Value*	*Per cent of Variation Explained*	*Cumulative Per cent of variation explained*
1	Profitability	5	2.747	19.618	19.618
2	Solvency	2	2.136	15.257	34.875
3	Efficiency	3	1.954	13.957	48.832
4	Liquidity	2	1.878	13.411	62.242
5	Turnover	2	1.866	13.331	75.573
	Total	14			
Extraction Method: Principal Component Analysis.					

Source: Data Analysis

The five groups of financial performance of the milk unions explain the performance to the extent of 75.57 per cent. The most important group of financial performance is 'profitability' since its eigen value and the per cent of variance explained by this factor is 2.747 and 19.618 per cent of variation respectively.

This is followed by financial performance variable namely, 'solvency' since its eigen value is 2.136 and the per cent of variation is 15.257 per cent respectively. The next important groups of financial performance are 'efficiency' and 'liquidity' since their eigen values are 1.954 and 1.878 respectively. The per cent of variation explained by these important dimensions are 13.957 and 13.411 per cent respectively. The least important financial performance measure is identified by the factor analysis is 'turnover' with the eigen value of 1.866 and with a per cent of variation at 13.331 per cent. It is concluded from the above analysis that profitability is the most important financial performance measurement variable, followed by solvency, efficiency, liquidity and the least important variable was found to be turnover.

Considering the loadings, the profitability factor scores of individual milk unions are multiplied with the respective eigen values to arrive at the profitability scores for each milk union. The profitability scores of the milk unions are given in Table 4.

TABLE 4: TABLE SHOWING THE PROFITABILITY SCORES OF THE MILK UNIONS, 2002-07

Milk Union	2002-03	2003-04	2004-05	2005-06	2006-07	Average
Bangalore	2.45	2.89	-0.34	0.96	0.33	1.26
Kolar	-1.09	-1.15	-2.51	1.89	-33.26	-7.22
Mysore	1.09	0.95	0.44	-0.49	-0.35	0.33
Mandya	5.57	10.77	1.13	-0.04	-1.06	3.27
Tumkur	0.9	1.05	-3.78	-1.49	1.8	-0.3
Dakshina Kannada	1.1	0.42	-0.2	-0.87	-1.05	-0.12
Hassan	-0.19	-0.02	-0.6	-0.32	-1.02	-0.43
Shimoga	-0.48	-0.19	-0.98	-0.36	-1.63	-0.73
Bijapur	-7.48	-5.53	-2.03	1.72	-0.58	-2.78
Gulbarga	-0.73	1.24	4.36	0	-1.17	0.74
Dharwad	1.07	-4.72	1.84	-2.36	-1.3	-1.09
Raichur-Bellary	3.84	1.58	-5.28	0.53	6.54	1.44
Belgaum	1.48	-0.05	-5.22	1.17	-1.07	-0.74

Source: Data Analysis

Improvement in the profitability rating of few plants can be attributed to decrease in processing cost, procurement cost, procurement transportation cost and selling and distribution cost. It can be observed that Bangalore Milk Union has maintained its profitability ratings over the period of five years. Kolar Milk Union has seen a sudden increase in profitability rating in the year 2005-06 with increase in gross profits, due to decrease in procurement transportation cost, purchase cost and cost of goods sold in the same year. Kolar Milk Union has declined in terms of profitability rating in the year 2006-07 mainly attributed to decline in gross profits, increase in procurement transportation cost and decline in return on equity. Milk Unions which declined in terms of profitability rating could be attributed to decrease in return on equity and increase in operating costs in terms of increase in processing cost and selling and distribution costs. The profitability of plants have declined further due to increase in purchase cost of milk in the year 2006-07.

Despite the decline in processing cost, the profitability rating of few milk unions has been affected in the year 2006-07 due to increase in milk purchase cost, administrative cost and selling and distribution costs. Similarly the solvency factor scores of individual milk unions are multiplied with the respective eigen values to arrive at the solvency scores for each milk union shown in Table 5 below.

TABLE 5: SOLVENCY SCORES OF MILK UNIONS, 2002-07 AND THE AVERAGE SCORES

Milk Unions	2002-03	2003-04	2004-05	2005-06	2006-07	Average
Bangalore	4.37	3.22	1.97	0.73	0.86	2.23
Kolar	1.11	0.4	1.28	-0.53	-62.45	-12.04
Mysore	-1.63	-2.79	-2.09	-1.37	-2.93	-2.16
Mandya	0.96	1.03	-0.18	0.47	-0.17	0.42
Tumkur	-1.78	-2.34	-1.86	-2.3	-2.13	-2.08
Dakshina Kannada	-0.48	-0.59	-0.3	0.18	-0.52	-0.34
Hassan	-0.91	-2.32	-2.69	-2.42	-1.08	-1.88
Shimoga	0.11	-1.17	-1.48	-1.87	-1.32	-1.15
Bijapur	2.97	2.59	2.34	1.84	0.81	2.11
Gulbarga	4.45	2.05	6.53	4.9	3.29	4.24
Dharwad	1.21	1.06	0.61	-1.64	0.16	0.28
Raichur-Bellary	-0.53	-1.34	-1.31	-1.81	-5.01	-2
Belgaum	2.15	0.54	-0.1	-0.34	-0.87	0.28

Source: Data Analysis

Gulbarga Milk Union has emerged as the most solvent milk union over the period of five years. This is due to the good debt equity ratio and a better long term debt to equity ratio. Mysore Milk Union, Tumkur Milk Union and Raichur-Bellary Milk Union have remained less solvent over the same period due to low debt equity ratio and lower long term debt to equity ratio.

The efficiency factor scores of individual milk unions are multiplied with the respective eigen values to arrive at the efficiency scores for each milk union shown in Table 6.

TABLE 6: EFFICIENCY SCORES OF THE MILK UNIONS, 2002-07AND THE AVERAGE SCORE

Milk Unions	2002-03	2003-04	2004-05	2005-06	2006-07	Average
Bangalore	-1.08	-1.43	0.23	0.27	-0.51	-0.5
Kolar	0.98	1.2	1.41	0.72	38.14	8.49
Mysore	-0.86	-0.72	-0.85	-1.16	-1.05	-0.93
Mandya	4.63	6.02	3.34	1.36	2.12	3.49
Tumkur	0.25	0.23	0.72	0.6	-0.13	0.33
Dakshina Kannada	0.93	0.04	0.86	0.89	0.85	0.71
Hassan	-0.29	0.06	-0.14	-0.65	-1.45	-0.49
Shimoga	0.48	6.49	2.89	2.01	-0.87	2.2
Bijapur	0.18	-0.29	-0.73	-0.9	-0.26	-0.4
Gulbarga	-0.13	-2.35	-2.17	-1.93	-1.08	-1.53
Dharwad	-0.43	0.03	-0.66	-0.05	-0.68	-0.36
Raichur-Bellary	-3.98	-0.87	-1.13	-2.91	-6.76	-3.13
Belgaum	-1.34	-0.76	0.25	-0.7	0.1	-0.49

Source: Data Analysis

Mandya Milk Union has remained as the most efficient milk union. This can be associated with increased sales with lower working capital requirements. Increased investments in total assets have further enhanced the sales and added to the increase in gross profits of this milk union. Shimoga Milk Union too has been one of the efficient milk unions although in the year 2006-07, it has seen a small fall. This is due to increased investments in total assets and marginal decrease in sales. However the return on total assets in the form of sales could be realized in the years to come. Kolar Milk Union has emerged as the most efficient milk union in the year 2006-07, largely due to decrease in cost of goods sold, investment in total assets and working capital in spite of decrease in sales and gross profits. Bangalore Milk Union has ranked average in terms of efficiency. However it has improved its sales with only a marginal increase in working capital requirements and investment in total assets. Sales have grown at a faster rate than the investments in total assets. There has been an increase in gross profits in spite of an increase in cost of goods sold. In the year 2006-07, the sales have marginally declined with additional investment in total and especially in fixed assets; the efficiency of Bangalore Milk Union is likely to increase in the future.

The liquidity factor scores of individual milk unions are multiplied with the respective eigen values to arrive at the liquidity scores for each milk union in Table 7.

TABLE 7: LIQUIDITY SCORES OF MILK UNIONS, 2002-07 AND THE AVERAGE SCORE.

Milk Unions	2002-03	2003-04	2004-05	2005-06	2006-07	Average
Bangalore	1.39	0.87	-0.18	0.47	1.13	0.74
Kolar	0.98	1.42	0.37	-0.15	59.18	12.36
Mysore	1.88	0.79	2.31	6.81	4.17	3.19
Mandya	-0.87	-1.95	0.18	-0.38	0.55	-0.49
Tumkur	1.06	0.25	-0.07	1.55	1.23	0.8
Dakshina Kannada	-0.48	0.38	2.19	3.28	1.1	1.29
Hassan	-0.65	-2.69	-2.05	-1.79	-0.99	-1.63
Shimoga	-1.91	-1	-1.1	-2.05	-0.92	-1.4
Bijapur	-2.63	-2.5	-2.17	-1.72	-2.11	-2.23
Gulbarga	-4.33	-2.07	1.83	1.99	0.84	-0.35
Dharwad	-0.21	-0.26	0.78	-1	0.98	0.06
Raichur-Bellary	-0.99	-0.21	-1.37	-0.84	-4.42	-1.57
Belgaum	2.05	1.32	0.28	0.06	-0.05	0.73

Source: Data Analysis

Kolar Milk Union has been the most liquid milk union over the period of five years. The reason could be due to increased current assets in relation to current liabilities particularly in the cash and bank balances of this union. Kolar Milk Union has lower liquidity in 2004-05 due to increased current liabilities. Dakshina Kannada Milk Union has better liquidity position as compared to Kolar Milk Union during the same period due to increased current assets in terms of better cash and bank balances. In 2006-07, Kolar Milk Union is more liquid than Dakshina Kannada Milk Union because the current liabilities like sundry creditors, provisions and other liabilities have seen an increase for Dakshina Kannada Milk Union than Kolar Milk Union. Bijapur Milk Union has been the least liquid milk union as the current liabilities have been more than current assets all over the five year period.

The turnover factor scores of individual milk unions are multiplied with the respective eigen values to arrive at the turnover scores for each milk union as shown in Table 8.

TABLE 8: TURNOVER SCORES OF THE MILK UNIONS, 2002-07

Milk Unions	2002-03	2003-04	2004-05	2005-06	2006-07	Average
Bangalore	0.87	2.37	0.54	0.59	2.34	1.34
Kolar	-0.08	0.04	1.05	-0.84	-15.83	-3.13
Mysore	-0.94	-1.17	-0.78	0.38	-0.28	-0.56
Mandya	-0.66	1.62	1.61	1.87	1.82	1.25
Tumkur	-1.07	-1.45	-1.27	-0.88	-0.56	-1.05
Dakshina Kannada	0.85	1.22	1.61	1.76	1.31	1.35
Hassan	1.09	1.52	2.22	5.06	8.89	3.76
Shimoga	0.7	-5.05	-1.2	-0.21	0.86	-0.98
Bijapur	-0.28	0.06	-0.37	-0.98	-0.46	-0.41
Gulbarga	-1.01	-0.69	-0.68	-0.92	-0.8	-0.82
Dharwad	-1.68	-1.45	-1.72	-1.09	-1.53	-1.49
Raichur-Bellary	-1.53	-2.9	-1.16	-0.25	-1.9	-1.55
Belgaum	-0.46	-1.35	-1.12	-0.57	-0.45	-0.79

Source: Data Analysis

Bangalore Milk Union had a decrease in turnover in 2004-05 due to increase in purchase cost of milk and processing cost during that year. Also sales had not increased in relation to increased investment in equity. Kolar Milk Union had seen a steep fall in turnover during 2005-06.Increased investment in equity might not have been directed towards inventory investment thereby, leading to a decrease in sales. Mysore Milk Union had seen a steep rise in turnover during 2003-04.This is due to increased sales despite a decrease in equity investment and inventory investment.

Considering the average of overall scores achieved by these milk unions Table 9 describes the overall performance of the milk unions over a period of five years.

TABLE 9: AVERAGE OF OVERALL SCORE OF THE MILK UNIONS, 2002-07

Milk Unions	Scores
mandya	7.95
bangalore	5.06
dakshina kannada	2.89
gulbarga	2.29
mysore	-0.13
hassan	-0.68
belgaum	-1.01
kolar	-1.55
shimoga	-2.05
tumkur	-2.29
dharwad	-2.61
bijapur	-3.7
raichur bellary	-6.8
Grand Total	-0.2

Source: Data Analysis

It is striking that only four milk unions have good overall performance out of the thirteen milk unions. That is only 31% of the milk unions have performed well. Based on overall scores, Mandya Milk Union, Bangalore Milk Union, Dakshina Kannada Milk Union and Gulbarga Milk Union have emerged as the best milk unions in terms of profitability, efficiency, turnover and solvency. The remaining milk unions however showed poor performance in terms of profitability, efficiency, turnover and solvency.

SUMMARY OF FINDINGS

The financial performance of the milk unions under Karnataka Milk Federation is not sound with only 31 percent of the milk unions maintaining a good overall financial performance score. Increasing input costs have put pressure on milk unions to maintain profits. Two large milk unions combine 47.52 percent of the whole milk procured by the federation, while medium sized milk unions procured 44.29 percent and small milk unions procured 8.19 percent of milk. This favours strong price competition in the milk procurement price. Interestingly, 8 out of the 13 milk unions are located in the southern part of Karnataka, of them, only 38 percent of the milk unions have shown a good overall financial performance.5 out of the 13 milk unions are located in the northern part of the State. Here, only 20 percent of the milk unions showed a sound overall financial performance. Milk unions under Karnataka Milk Federation usually focus on standardized low cost and low price mass market articles like milk and milk products. This results in a weak market position and limited financial resources for establishing international business activities.

CONCLUSION

Findings from this study point to significant differences in the resource base, in the structure of profitability, and in management practices among the milk unions. To conclude the reasons for the discrepancies and what should less financially efficient milk unions do differently in order to improve their future prospects needs to addressed. Some of them could be the weak competitive position of a few milk unions when compared to large milk unions. Some of the milk unions stick to their traditional structure and the aforesaid problem remains unsolved. On other hand, some of the milk unions have transformed themselves by adopting new technology and innovative marketing plans and milk products.

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