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NEED/IMPORTANCE OF THE STUDY

STATEMENT OF THE PROBLEM

HYPOTHESES

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SCOPE FOR FURTHER RESEARCH

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A STUDY ON WORKING CAPITAL MANAGEMENT IN TAMILNADU SUGAR CORPORATION LIMITED (TASCO)

DR. P. KANAGARAJU ASST. PROFESSOR THANTHAI HANS ROVER COLLEGE PERAMBALUR

ABSTRACT

Indian sugar industry, second agro-based processing industry after the cotton textile industry in India, has a lion's share in accelerating industrialization process and bringing socio economic changes in under developed rural areas. Sugar industry covers around 7.5% of total rural population and provides employment to 5 lakhs rural people. About 4.5 crore farmers are engaged in sugar cane cultivation in India. Sugar mills (co-operative, private and public sector) have been instrumental in initiating a number of entrepreneurial activities of rural India. Tamilnadu public sector sugar mills incurred losses because its two mills are under the heavy interest burden on funds borrowed from the government and other public sector undertakings. Sector sugar mills could reduce the working expenditure, the sugar mills should also be allowed to diversify their operations to increase the revenues.

KEYWORDS

Capital management, Sugar industry, TASCO.

INTRODUCTION

ugar industry in recent times has acquired great significance in India. It has been developing by leaps and bounds. The sugar industry is the second largest agro-based industry in India located in rural areas. The effective administration of working capital helps in understanding the survival and growth of sugar industry. Apart from this, many a times, problem arises as to how effectively the working capital be managed to obtain the results in terms of higher return on investment. Very often paucity of working capital is considered as the potent factor for the failure of the unit. About 50 million farmers, their dependants and a large number of agricultural labourers are involved in sugarcane cultivation, harvesting and ancillary activities, and constituting 7.5 per cent of the rural population. Besides, the industry provides employment to about 2 million skilled and semi skilled workers and others employed in ancillary activities are mostly from rural areas. India with around 4.25 million hectares of land on sugar cane produces around, 280 million tonnes of sugarcane. The production of sugar has witnessed a dramatic increase to around 27.00 million tonnes during 2006-2007 against 1.10 million tonnes during 1950-51. When we feel proud of the improvement in the production of sugar over the years, we are pained to note that this sector has not been nourished on sound lines.

DEVELOPMENT OF SUGAR INDUSTRY IN INDIA

The Portuguese first cultivated sugarcane in Brazil in 1532. Most cane-sugar from countries with warm climates, such as Brazil, India, China, Thailand, Mexico and Australia, the top Sugar producing countries in the world. Brazil over shadows most countries, with roughly 30 million tonnes of cane sugar produced in 2006, while India produced 21 million, China 11 million and Thailand and Mexico roughly 5 million each.

Out of 453 sugar mills in the county, 252 are in cooperative sector, 134 in the private sector and 67 are in the public sector. Besides 136 units in the private sector are in various stages of implementation. A few such units are under implementation in the cooperative sector as well. But no new units have been proposed in the public sector.

DEVELOPMENT OF SUGAR INDUSTRY IN TAMIL NADU

Sugar industry in Tamil Nadu is an important agro-based industry. It plays a vital role in the Economic development of the state and particularly in rural areas. The Sugar industry provides large scale direct employment of several thousands and indirect employment to several lakhs of farmers and agricultural labourers in the rural areas who are involved in cultivation of cane harvesting, transport and other services. There are 38 sugar mills in Tamil Nadu of which 16 are in cooperations sector and 19 in the private sector. Apart from this, the Tamil Nadu Sugar Co-operative Limited, a public sector company set up in 1974 under the Companies Act is running three public sector sugar mills namely, Arignar Anna Sugar Mills, Perambalur Sugar Mills and Madura Sugar Mills. The total crushing capacity of the 38 factories in Tamil Nadu is 1,04,550 tonnes crushing per day (TCD) and about 180 lakh tonnes per annum. Out of 16 co-operative Sugar Mills, two mills viz., Madurantakam Co-Operative Sugar Mills Ltd., and National Co-Operative Sugar Mills Ltd., are not working from the season 2001-2002 and 2002-2003 respectively. Madura sugar mill in public sector is not working from 2002-2003 season and Arunachalam Sugar Mill private sector is not working from 2003-2004 seasons.

STATEMENT OF THE PROBLEM

India ranks first in sugar consumption and second in sugar production in world but its share in global sugar trade is below 3%. Indian sugar industry has been facing raw material and resources as well as infrastructural problems. Globalization has brought a number of opportunities but at the same time posed certain challenges before sugar industry. Most of the sugar units utilize production capacity below 50%. Low capacities utilization and inadequacy of raw material led to closer of 100 sugar mills in India. Mounting losses and decreasing net worth of sugar mills have been responsible for sickness of sugar industry. Sickness in sugar industry has reached to an alarming proportion. Indian sugar industry has been cash striven for decades. Low cash inflow due to pilling stocks leads to serious financial crisis and finally to closing sugar mills. Sugar prices have been a political issue and rather than economical issue many a time it worsens economy of sugar mills.

Tamil Nadu is one of the major producers of sugar in India next to Utterpradesh and Maharastra. Though the present scenario in Indian and global sugar industry is looks very good, returns gained by India Sugar Mills are very low compared with international level. The profits earned by sugar mill in Brazil, Thailand are very high due to the operating environment. But most of the sugar mills in India particularly in Tamil Nadu are incurring losses due to many reasons. Some of the reasons are increase in cost involved during production and recovery of sugar per tonne sugar cane crushed also not up to the international level.

The sugar industry in India has certain peculiar characteristics than other manufacturing industry. As far as the industry concerned the sugar mills have to go on purchasing sugar cane during session, crush and produce user only to stock it and waiting for the government orders to release for sale throughout the year bit by bit. The sales function in sugar industry differs from other industries. The release of sugar is fully under the control of union government currently sugar mills are required to surrender 10 percent of the sugar produced by them as levy for public distribution system. The remaining 90% free sale sugar can be sold in the open market, but even here it is the government (the sugar Directorate) that decides the quantum of sugar to be off loaded every month. Accordingly, mills are released a monthly Free Sale Quota (FSQ) beyond which they cannot sell in the open market.

Inspite of this success the sugar industry in Tamilnadu is facing various problems and has become a centre of criticism due to several reasons. It has been common observations that sugar corporation limited in the state are lagging behind in management efficiency. They are not able to control their cost. Madura Sugars one of the mills under TASCO limited are carrying huge losses. The experts in this fields attributes these losses to several factors like short supply to

quality sugarcane, under utilization of capacity, low sugar recovery rate, shortage of funds and inefficient management. It should be noted that working capital deficit is stated as the common problem of all mills. The fact is adequate working capital finance is provided to every public sector sugar mills. State government do not hesitate in providing finance consider the role of sugar mills in rural economic development. Inspite of encouraging policy and strong financial support of the state government, public sector sugar mills in the state over carrying huge losses since several years. This implies that the problem lies in management. This reveals that not the shortage but the mismanagement of working capital is the real problem that led public sector sugar mills to losses.

OBJECTIVES OF THE STUDY

The present study is designed to examine management of working capital in Sugar Corporation Limited in Tamil Nadu State. Following are the specific objectives of the study.

- 1. To examine the working capital trends and liquidity of working capital in Sugar Corporation Limited in Tamil Nadu state.
- 2. To evaluate inventory management in sugar corporation limited in Tamil Nadu state.
- 3. To analyse receivable management in sugar corporation limited in Tamil Nadu.
- 4. To examine the cash management practice, in Sugar Corporation Limited in Tamil Nadu state.

PERIOD OF THE STUDY

To be more precise in analysis it was necessary to define the period of study. The study period is taken as ten years from 1997-98 to 2006-2007. These are the financial years, commencing 1st April and ending 31st March every year. The period of ten years is quite enough to determine the trend of working capital and to examine the problem of management working of capital.

SAMPLE DESIGN

The present study pertains to only public sector sugar mills in Tamil Nadu state. Three public sector mills are selected for study are Arignar Anna Sugar Mill, Kurungulam, Thanjavur District, Madura Sugar Mill, Pandiarajapuram, Madurai District and Jawaharlal Nehru Sugar Mill, Eraiyur, Perambalur District, All public sector sugar mills are continuously in operation during the study period but, Madura Sugar Mill did not operate from 2002-2003 for reducing cane registration and some administration problems. Arignar Anna sugar Mill have crushing capacity 2500 TCD per day, Madura sugar Mill have crushing capacity 1250 TCD per day and Perambalur Sugar Mill have crushing capacity 3000 TCD per day.

RESEARCH METHODOLOGY

The present study, management of working capital in Tamil Nadu Sugar Corporation Limited is based on secondary data. Three public sector sugar mills are selected as sample for the study. The data was collected from sample sugar mills mainly through annual reports for the study period of ten years i.e. from 1997-98 to 2006-07. Some data were also collected from the office. Data related to sugar mills are also collected from the books, journals and periodicals, such as India sugar, cooperative sugar and annual reports of Tamil Nadu Sugar Corporation Limited.

The data so collected were tabulated and comparisons were made on the basis of growth indices, average and percentage. Some ratios are used for analysis of working capital. The ratios mainly used are working capital, turnover ratio, current ratio, quick ratio, inventory turnover ratio and receivable turnover ratio. The collected data is grouped, processed and presented in tables, diagrams and charts. The statistical tool like the simple average, percentage, correlation and 't' test are used to interpret the results of analysis and substantiate and establishes certain truth and facts.

SCOPE AND LIMITATIONS OF THE STUDY

While considering research on a particular area of the vast field of financial management, a researcher has to face certain difficulties which put limitation on research work. Following are the limitations of the study.

- 1. The study is limited only public sector sugar mills in Tamil Nadu State. Sugar mills other than public sectors are not considered.
- The public sector sugar mills chosen are those which were in operation during the study period. The mils which were not in regular operation during the study period were not considered.
- 3. The analysis is based on the data published in annual reports of the public sector sugar mills.

WORKING CAPITAL TURN OVER RATIO ANALYSIS

Working capital turnover ratio is an important indicator of efficiency of working capital. It shows the movement of working capital. Working capital turnover ratios of the sugar mills studied, year wise, for the study period of ten years are shown in Table 1. Generally the formula used to compute this ratio is net sales divided by net working capital. Madura sugar mill is a negative working capital. That means current liabilities exceed current assets. Working capital turnover ratio is calculated by following formula.

 $\mbox{Working capital turnover ratio} = \frac{\mbox{Net} \quad \mbox{Sales}}{\mbox{Gross} \quad \mbox{Working} \quad \mbox{Capital}}$

TABLE 1: WORKING CAPITAL TURNOVER RATIO IN TASCO

Years	Arignar Anna Sugar Mill	Madura Sugars	Perambalur Sugar mill	Sugar Mills Average
1997-98	1.90	0.71	1.80	1.47
1998-99	1.68	0.68	1.59	1.31
1999-00	1.05	1.03	1.10	1.06
2000-01	0.63	0.92	0.91	0.82
2001-02	1.03	0.56	1.58	1.05
2002-03	1.05	No Operation	1.37	1.27
2003-04	0.85	No Operation	0.76	0.80
2004-05	1.24	No Operation	0.89	1.06
2005-06	1.27	No Operation	1.34	1.30
2006-07	1.71	No Operation	1.72	1.71
Average	1.24	0.78	1.30	1.18

Source: Annual Reports from TASCO

MILL-WISE DISCUSSION OF WORKING CAPITAL TURNOVER RATIO

The interpretation of working capital turnover ratio can be made like higher the ratio higher the gross working capital turn over – higher the efficiency of working capital; and lower the ratio – lower the turnover – lower the efficiency of working capital. When interpretation is applied to the ratio of the mills

studied, it seems that the efficiency of working capital management of three sugar mills studied is very poor. This ratio is recommended as sales, 2 times of working capital (or) current assets. All mills have less than 2 times or working capital.

In Arignar Anna sugar mill the average working capital turnover ratio observed was 1.24, which is significantly lower than the standard of 2 times of sales. It was found that sales of mill registered a fluctuating trend during the study period. The same trend observed was in case of current assets. The lowest working capital turnover ratio was recorded 0.63 in 2000-01 due to considerable lower sales and highest ratio was registered 1.90 in 1997-98, due to higher amount of sales.

It is clear that the mill has maintained huge stock of finished goods blocking heavy amount. Thus higher portion of working capital as compared to sales shows the poor performance of the mill. It may be suggested that the mill must try to enhance the sales volume reducing the investment particularly in sugar stock.

Table 1 indicates that the average working capital turnover ratio of Madura Sugar mill 0.78:1, is significantly lower than the standard of 2 times of sales. The mill did not operate from 2002-03 not operate for reducing cane registration and some administration problem. The lowest ratio ascertained was 0.56 in 2001-02, due to lower sales volume. The highest ratio appeared was 1.03 in 1999-2000, which is slightly less than the standard ratio.

The average working capital turnover ratio of Perambalur sugar mill 1:30:1, is lower than the standard ratio. The lowest ratio was recorded 0.76 in 2003-04, due to little sales volume. The highest ratio was recorded 1:80:1 in 1997-98, which is slightly less than the standard ratio. It indicates good financial position of the mill.

It can be seen from the table 1 that the ratios are minimum in the year 2003-04 and maximum in the year 2006-07. The industry average of 2003-04 was 0.80 and that 2006-07 was 1.71. It can be seen from the same table that profit making mill have higher ratio and loss making mill have lower ratio. The general trends of working capital turnover ratio seem varied every year. No continuous increase or decrease were shown by any mills. There are ups and downs in the ratios over all the years in all the sugar mills studied

SUGGESTIONS

The present study finds that public sector sugar mills under study are running in losses. Financial position of the sugar mills found very weak. The public sector sugar mills are facing various problems and has become a centre of criticism due to several reasons. It has been a common observation that public sector sugar mills are lagging behind in managerial efficiency. They are unable to control their cost. Hence, Tamil Nadu public sector sugar mills are carrying huge losses. Considering the significant role of public sector sugar mills in the economic life of rural Tamilnadu, the present study recommends the following suggestions to improve the financial position of sugar mills and efficient control over working capital.

1. FINANCIAL MANAGEMENT

Public sector sugar mills have no permanent internal sources of working capital finance except a small amount of refundable and non refundable deposits and reserves. Hence, they have to depend upon the bank finance for working capital every year. Internal sources like, deposits, may be credited for sound financial position. This type of deposits and funds may be credited through the cane bills payable to the cane growers.

2. SALE OF SUGAR

It is observed that the government control over the sale of sugar slows down the speed of sales. Hence three mills have to hold huge stock of its production. This lengthens the duration of operating cycle which results in cash shortage. To overcome this problem the study recommends the mill should formulate very suitable sales policies and government should help the mills in augmenting the sales volume. Government should lift the levy quota in time and release the significant free sale quota to reduce the huge stock of sugar. It will help in uplifting the mills in all respect.

3. CONTROL RECEIVABLES

Regarding control over advances, it is found that strict control over receivables are not exercised by the mills. There is much interference of directors in policy making and disbursement of advances. But they show less interest in recovery of out standing advances. Sugar mills are lagging behind in formulating return-oriented policies, regarding receivables. So there is need to formulate return-oriented, effective and strict policy regarding receivables, so as to recover the loans and advances in time.

4. PROPER CASH MANAGEMENT

The nature of cash management in public sector sugar mills is entirely different from other industries. Government and bank regulate cash inflows and cash outflows of sugar mills. The mills always feel short of cash and their current liabilities exceeded current assets throughout the study period.

As cash inflows and cash outflows are regulated by government, adequate cash was not left in the hands of management of public sector sugar mills. To improve the liquidity position of public sector sugar mills, cash inflows and outflows are to be managed properly.

The sugar mills have maintained huge stock of sugar. Therefore, government should release appropriate quota, under free sale, to improve the cash position of the sugar mills.

5. NEED FOR MORE LIQUIDITY

Liquidity is the most alarming problem in public sector sugar mills. It is found that there is lack of liquidity in most of the sugar mills studied. The current assets are not found sufficient for the payment of current liabilities. The main reason for this is the government restrictions on sale of sugar. Another one is, all the public sector sugar mills are seasonal and this also affects the liquidity position of the mills. The sugar mills must pay the amount of the cane price to sugarcane grower in proper time. If mills could not pay the cane price in time, they do not believe in public sector sugar mills.

6. QUALITY MANAGEMENT SYSTEM

These regulations impact many aspects of operations, including cane production, construction of new equipments and facilities, workers safety, and the environment. If rationally conceived and implemented, such ordnances are desirable for the industry to be good citizen.

7. IMPROVE PROFITABILITY

Public sector sugar mills should reduce the working expenditure, the sugar units should also be allowed to diversify their operations to increase the revenue. By-products of the sugar mills viz, baggage, molasses and press mud should be gainfully utilized for increasing the revenue of the mills. At present many sugar mills home set up baggage based co-generation units for generating electricity.

8. EXPERT MANAGEMENT PERSONNEL

The very success of these public sector sugar mills depends upon the competence and caliber of the officers who are working management as well as technical level. The study indicates that almost all the mills have registered net losses around 5 to 8 years over period of time. It shows that there is a need to have a competent and efficient staffs at managerial level. The successful working of these mills can only be achieved if there is an expert management personnel.

CONCLUSION

Indian sugar industry, second agro-based processing industry after the cotton textile industry in India, has a lion's share in accelerating industrialization process and bringing socio economic changes in under developed rural areas. Sugar industry covers around 7.5% of total rural population and provide employment to 5 lakhs rural people. About 4.5 crore farmers are engaged in sugar cane cultivation in India. Sugar mills (co-operative, private and public sector) have been instrumental in initiating a number entrepreneurial activities of rural India.

Tamilnadu public sector sugar mills incurred losses for the five years ended 31st March 2005 and their paid up capital as on that date had been completely eroded by the cumulative losses. Arignar Anna sugar mill has incurred a loss of Rs. 6.04 crores (provisional) in 2004-05, while Perambalur sugar mill incurred a loss of Rs. 5.80 crores. The main reason for the losses incurred by these two mills was the heavy interest burden on funds borrowed from the government and other public sector undertakings. These borrowed funds were utilized as working capital ie. to make payment for sugar cane procurement.

Public sector sugar mills could reduce the working expenditure, the sugar mills should also be allowed to diversify their operations to increase the revenues. By products of the sugar mill viz., baggage, molasses and press mud, should be gainfully utilized for increasing the rename of the mills. At present many sugar mills

have set up baggage based co-generation unit for generating electricity. After meeting their needs, the mills supply the excess power to the TNEB grid. There is scope for increasing the power production thereby adding revenue to the mills.

In the era of globalization, sugar industry needs more competitive edge which can be given by way of modernization, enhancing productivity and manufacturing excellent quality sugar at competitive price. It needs quality management at every level of activity to enhance its performance. The need of the hour is to liberalize industry from clutches of unprofessional people. Most of the sugar mills do not have by-products utilization plants. Projects based on baggage and molasses should be initiated. Ethanol, alcohol and paper projects have tremendous scope for development in India. In future 10-15% ethanol may be allowed to be blended with petrol. Baggage based power NABARD should provide adequate timely re-finance to these projects at concessional interest rates. Sugarcane price should be fixed on the basis of sugar recovery. Attention is to be given on manufacturing quality sugar as per international standards of competitive prices. Tamil Nadu public sector sugar mills could be run successfully. i.e they diversify their operation without sticking to sugar production alone.

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