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A Study on Financial Management of the Agricultural Implements Manufacturing Units*

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Abstract: The study conducted in Hubli-Dharwad revealed that the agriculture implements manufacturing units have good financial structure. On an average, the solvency ratio of these units lies between 1.00 to 1.6. The liquidity ratio ranges from 0.14 to 2.19 and the profitability ratio ranges from 0.01 to 0.048. The turnover ratio ranges from 1.14 to 3.40. The major problems faced by them are infrastructure facility, procurement of raw materials, processing and marketing. In marketing, high transportation cost and high taxation are the major problems. Under infrastructure facilities, irregular supply of electricity is the major problem.

Introduction

The Indian farmers are traditionally hard workers, but their hard work seldom brings them a rich harvest due to marginal use of modern farming practices. Among these, the use of improved implements and tools, which save labour and also create better conditions for growth of the crops to increase the yield as well as reduce the waste. The manufacturing of agricultural implements is under both small-scale and cottage industries. The small-scale units manufacture harrows, trailers, ploughs, levelers and cultivators *etc.* In agricultural implements manufacturing units the working capital will be more because of heavy amount required on procurement of raw material. Therefore, the study was under taken to assess the financial management and the problems faced by the agricultural implements manufacturing units in Dharwad district.

Material and Methods

In Northern Karnataka, Dharwad district in which Hubli-Dharwad city is a major industrial center for manufacturing agricultural implements. More than 50 per cent of small-scale industries are concentrated in these twin cities. Hence, Hubli-Dharwad was purposively selected for the study and four units were selected considering the maintain of suitable balance sheets. The primary data relating to financial status and problems faced was obtained from the relevant records maintained by the selected units for the period of 2002-03.In order to analyse the financial status of the units. A combination of financial ratios were used to analyze and compare the business performance of the selected units. Similarly primary data was obtained from the selected units by personal interview with respect to problem faced by them. To analyse the problems faced by the units, ranking technique was used.

Results and Discussion

Financial ratio analysis was used to analyse the financial management of the units. The results are presented in table 1.

To determine the solvency position of the agricultural implements manufacturing units, two ratios namely, total liabilities to owned funds and fixed assets to owned funds were worked out. The ratio of total liabilities to owned funds reflected

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the amount of money the manufacturing units owe to its creditors as against the money invested by the owners of the enterprise, that is the extent of debits per rupee of owned funds. The ratio (Table1) of total liabilities to owned were funds found to be 1.47, 1.52, 1.61 and 1.25 in unit I, II, III and IV, respectively which indicated that for every rupee of owned funds, Rs 1.47,Rs 1.52, Rs 1.61 and Rs 1.25 were external funds used in unit I, II, III, and IV respectively. Large amount of external funds were borrowed and used by unit III and unit II compared to other units. This may be due to low financial base of these units to carryout the various operations in the unit. The values of the ratio here meant that the claims of the creditors on the fixed assets of the unit III were grater than other units. Thus it can also be said that all units have maintained the ratio below 3, indicating that the units external liabilities are almost in accordance with the better business norms of 3:1, of total liabilities to owned funds. Hence, these units have maintained good financial structure.

To know the extent of owned funds tied up in fixed assets, the ratio of fixed assets to owned funds was worked out (Table1). This works out to be 1.0, 1.01, 1.03 and 1.00 in unit I, II, III and IV respectively, which is within the acceptable limits of 1:1. This indicates that out of 1.0 rupee of fixed assets, owned funds accounted to the extent of around one rupee which is tied up across different units because of low net profit and equity participation of the owner. Reddy (1994) has indicated that, a higher value of this ratio was associated with problems of liquidation, because the claims of the creditor have to be met by sale of fixed assets, which are in non-liquid form. Hence the small units make concentrated efforts to increase their owned funds.

Liquidity ratios were worked out to test the ability of the agricultural implements manufacturing units to meet the immediate financial obligations. Two ratios *viz.,* liquid assets to total assets and current assets to current liabilities were estimated.

The liquid assets to total assets ratios (Table1) worked out to be 0.36, 0.43, 0.14 and 0.50 in unit I, II, III and IV respectively. Generally the ratio of 0.60 to 0.66 is acceptable for a processing industry, in order to meet immediate financial requirement, for purpose of procuring raw material, payment of wages and other expenses. All the units maintained somewhat less of their total assets in the form of liquid assets. Hence, the performance of these units with respect to liquidity is found to be not satisfactory. Hence,

Table 1. Financial ratio value of agricultural implements manufacturing units during 2003-04

Sl. No.	Ratios	Unit			
		I	II	III	IV
	Solvency ratios				
1.	Total liabilities to owned funds	1.47	1.52	1.61	1.25
2.	Fixed assets to owned funds	1.00	1.01	1.03	1.00
	Liquidity ratios				
1.	Liquid assets to total assets	0.36	0.43	0.14	0.50
2.	Current assets to current liabilities	2.19	2.19	1.60	1.02
	Profitability ratios				
1.	Net profit to fixed assets	0.05	0.01	0.04	0.04
2.	Net profit to total assets	0.0.12	0.010	0.051	0.048
	Turnover ratios				
1.	Working capital turnover	1.77	1.14	2.00	2.12
2.	Fixed assets turnover	1.42	2.15	3.40	3.21

Table 2. Problems faced by the processing units

Sl. No.	Description	Scale max (10) – Min (o)		Scores by Unit -I	Scores by Unit -II	Scores by Unit -III	Scores by Unit -IV
A.	Infrastructure facility						
a.	Location	Non appropriate	Appropriate	2	4	3	2
b.	Availability of land	Not available	Available	6	4	5	1
c.	Electricity	Irregular	Regular	9	8	6	7
d.	Water	Scarcely available	Available	1	0	0	1
e.	Approach roads	Not available	Available	0	0	1	1
Total				18	16	15	12
B.	Procurement of raw material						
a)	Availability of iron and steel	Not available	Abundant	2	1	1	2
b)	Price of Iron and steel	Average	Low	1	4	2	5
c)	Quality	Poor	Good	0	0	0	1
d)	Transport facility	Moderate	Good	7	6	7	5
e)	Transport cost	Average	High	4	4	3	3
Total				14	15	13	16
C.	Processing						
a)	Cost of effective technology	Not available	Available	1	3	4	5
b)	Availability of labour	Scarcely available	Available	5	6	4	5
c)	Maintenance of machinery	Difficult	Bit difficult	3	2	4	5
Total				9	11	12	15
D.	Marketing						
a)	Availability of transport vehicles	Scarcely available	Easily available	2	2	1	2
b)	Transportation cost	Average	High	4	4	5	3
c)	Commission/Taxes	High	Average	8	9	8	7
Total				14	15	14	12

these units should increase liquid assets to meet the immediate financial requirement to achieve higher level of production.

The current condition of the business is indicated by the current ratio, that is the ratio between current assets and current liabilities. The ratio (Table-1) was worked out to be 2.19, 1.60 and 1.02 in units I, II, III and IV, respectively, which indicated that for every rupee of current liability, the amount of current assets available was Rs. 2.19, Rs. 2.19, Rs. 1.60 and Rs. 1.02 in unit I, II, III and IV respectively. This shows that the agricultural implements manufacturing units are not much dependent on short term borrowing and hence possessed a good liquidity position. Page *et al.* (1970) considered that a current ratio of 2 was ideal.

The liquidity analysis of the agricultural implements manufacturing unit's reveals the ability to meet their short run financial obligation and as such do not reflect the profitability aspects. Hence, the profitability ratios were used to analyze the overall profitability or efficiency of the business organizations. Two different ratio's namely, net profit to fixed assets and net profits to total assets were worked out and compared for the selected units.

The ratio of net profit to fixed assets were worked out to determine the income yielding capacity of the fixed assets, the ratio of net profit

to fixed assets were worked out and they are in the order of 0.05, 0.01, 0.04 and 0.04 for unit I, II, III and IV, respectively (Table1). This implies that these units were able to generate 5.1, 1.3, 4.1 and 4.2 per cent on fixed assets. This showed that the unit IV and unit III is better off in utilization of fixed assets as compared to unit I and unit II. As a result, the unit IV and unit III is in a better position to meet the long-term obligations compared to other units.

Net profit to total assets ratio was used to examine the extent of net profit gained for each rupee of investment. The ratio's were found to be 0.012, 0.010, 0.051 and 0.048 in unit I, II, III and IV respectively (Table1). It means that the unit I, II III and IV were able to generate 1.2, 1.0,5.1 and 4.8 per cent profit on total assets respectively. Which is very low in all the units, particularly in unit II. This is because of lower production during the study period. This calls for efficient use of total assets as well as to increase profit by decreasing expenditure.

In order to study the operational efficiency of the selected units. Turn over ratios, namely working capital turnover and fixed assets turnover ratios were worked out. These ratio helps to evaluate the effectiveness of the agricultural implements manufacturing units in their working capital and sales.

Working capital turnover ratio was worked out, to study the relationship between sales and working capital. This ratio measures the efficiency with which the working capital was employed in the selected units. Generally higher the turnover greater will be efficiency and rate of profit. The ratio were found to be 1.77, 1.14, 2.00 and 2.12 in unit I, II, III and IV respectively (Table1). The rate of turn over to working capital was high in unit IV as compared to other units. This might be because of high rate of turn over due to more proportion of working capital, in the total assets held by it. Hence, the unit II and I should try to increase the proportion of working capital in the total assets.

Fixed assets turnover ratio was estimated to know the utilization of fixed (Table1) assets to generate sales. The ratio were found out to be 1.42, 2.15, 3.40 and 3.21 in unit I, II, III and IV, respectively, indicating that higher efficiency in utilization of fixed assets to generate sales in unit III. This may be due to huge investment on plant and machinery and other fixed assets. Hence, the unit I, III and IV should utilize the fixed assets efficiently to generate more sales.

The prevalence of problems in the processing units is quite common and these are no exception. The opinions of sample processors on different problems are presented in table 2. The major constraints of agricultural implements manufacturing units is short supply of power leading to under utilization of plant which affected their production capacities, similar problems were also reported by Venkatasheshaih (1992) while studying the processing unit.

The second major problem faced by the agricultural implements manufacturing units was procurement of raw material in terms of transport cost and quality of raw material.

The processor/manufacturers of agricultural implements expressed satisfaction in getting raw material in local area throughout the year. The agricultural implements manufacturing units procured the iron and steel from the local iron and steel distributors/dealers.

The problem of marketing was the third major problem faced by agricultural implements manufacturing units. All the selected units complained about the problem of high taxation of the commodity, which constituted major share in marketing of product. Other problem in agricultural implements manufacturing units were the lack of

modernization of machineries. This was probably one of the reasons for lower production capacity. The manufactures also complained of high freight charges.

In general, the major constraints observed in agricultural implements manufacturing units are irregular power supply, high transportation cost, higher taxes and lack of modernization of machines. These problems could be overcome by proper planning of production technologies. Macro policy support from the state government may come in the form of uninterrupted power supply and reduction in taxes to encourage small-scale industries.

It may concluded from the study that the business performance of the agricultural implements manufacturing units indicated by various financial ratios reflected that unit IV was more efficient than the other units. This is mainly due to economies of scale in operation and management. The major constraints of agricultural implements manufacturing units is short supply of power leading to under utilization of plants which affected their production capacities, followed by procurement of raw material in terms of transport cost and quality of raw material and others like marketing, problem of high taxation, lack of modernization of machineries.

References

PAGE, R. E., SCHREMERHORN, R. W. AND ROMINE, B. D., 1970, *Financial analysis of grain and supply cooperative in Oklahama co-operative extension service.* Oklahoma State University, Oklahoma, USA.

REDDY INDRASENA, 1994, Financial performance of co-operative banks- A case study, *Agricultural Banker.,* **18**(2): 17-26.

VENKATASHESHAIAH, K., 1992, Evaluation of groundnut processing units and marketing of products in Cuddaph district Andhra Pradesh. *M.Sc.* (*Agri.) thesis,* University of Agricultural Sciences, Dharwad.