

Entrepreneurial Financial Performance of Fruit Processing Units in Manipur

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Structured Abstract:

Purpose: Manipur is rich in resources and can grow varieties of fruits besides other crops and the need of the hour is strengthening of fruit processing industry along with expansion of marketing network to minimise 40-60 per cent wastage.

Methodology: From among the different sub-categories of ratio analysis, profitability ratios in relation to sales and investments have been selected for the study to measure their financial performance.

Findings: The financial performance of fruit processing units in Manipur, namely, 'Manifru', 'Magfruit', 'Sana' and 'Heirang' were found to be sound in the study period; whereas, financial position of the 'Waifruit' was the weakest among the select sample units.

Practical implications: The need of the hour is strengthening of fruit processing industry by providing easy access to public financing system, because 50 per cent of the respondents have no access to loan facilities from banks and financial institutions as process of obtaining loan were cumbersome and mostly these institutes shy away from giving of loans, along with expansion of marketing network to streamline backward and forward linkages so as to minimise wastage in the state.

Originality / Value: This paper is substantially modified parts of doctoral research work done by the author and is designed to evaluate the financial performance of fruit processing units in Manipur. The findings of this study are much depended on the correctness data furnished by the units.

Keywords: Profitability, Financing, Return on Investments, Market Centres, Sales.

Paper Type: Research Paper.

Introduction

Manipur is a rich state but with poor people, is endowed with fertile soil, high rainfall and a favourable climate for growing varieties of fruits besides other crops. Processing of fruits has a special significance in the state because of high rate of spoilage on account of lack of storage facilities and inaccessibility to a far flung market centres. The major processed items

in the state includes juice and pulp, jam and jelly, pickles, RTS beverages, synthetic syrups, squashes and the like. However, a study (Marketing & Consultancy, 1994) found that 40 – 60 per cent of fruits were wasted from year to year due to transport bottlenecks and lack of adequate storage facilities. The need of the hour is strengthening of fruit processing industry along with expansion of marketing network to minimise wastage.

Literature Review

Fruit processing industry has not received adequate attention of the planners as well as the scholars particularly in Manipur and in the north eastern region. A brief review of past researches relevant to the study have been reviewed and incorporated as follows:

(Iyyampi Ilai, 2006) observed that the WTO regime has created excellent opportunities for developing countries to increase their exports. However, the developing countries have to improve the quality of products to their international standards. The WTO agreement addresses the food quality standards to be followed by the member countries in the international trade for food products.

(Chopra, 2002) suggested that increased utilization of fruits and vegetables to make different types of processed products is an important way to stabilize process, increased product availability during off season, reduce wastage and utilize the fruits and vegetables as an instrument of industrialization. The author also pointed out that there is an acute need for harmonizing the existing food laws and to bring about a development orientation to facilitate faster growth of the industries.

(Tata Consultancy Services (TCS) Kolkata and North Eastern Industrial and Technical Consultancy Organisation Ltd., 1998) observed that the horticulture sector in the north eastern region has not yet received due importance and was largely dependent on subsistence farming. The study also revealed that only a meager 3.6 per cent of cultivable land in the region was under horticulture production.

(Maini, 1996) have observed that because of productivity and value, fruit and vegetable provided much better economic returns per unit area compared to cereal crops and hence it was also a good source of foreign exchange earnings. The authors had suggested that a new orientation is needed to be given to the fruit and vegetable processing industry to upgrade

nutrition, minimize post harvest losses, ensure remunerative returns to the growers, increase employment avenues in the countryside and generate foreign exchange earnings.

(Singh, 1995) has observed that there is a strong need to develop horizontally and vertically integrated farmers' organizations to undertake various post harvest operations of fruits and vegetables with professional approach on economic basis and at a commercial scale in order to reduce the existing high marketing cost, enhance producers' share in consumers' rupee and supply of fresh fruits and vegetables and their processed products to the consumers at comparatively low price. He also stated that now it is more conducive to modernize existing fruit and vegetable processing technology in order to produce more competitive products for export.

(Marketing & Consultancy, 1994)) suggested that marketing channel should be widened, intensified and improved in Manipur. The study recommended the formation of Horticulture Development Corporation which is yet to be implemented in the state. The study also has reported that 30-50 per cent of the horticultural produce of the state were wasted due to transport bottleneck and lack of storage facilities.

Though the present review may not be the exhaustive review of literature, but it can be concluded from the above review that there was no in depth study so far conducted in this field particularly in Manipur. Hence, the present study of "Entrepreneurial financial performance of fruit processing units in Manipur" may have a great significant for the development of this sector. This paper is substantially modified parts of doctoral research work done by the author (Yarso, 2002) and is designed to evaluate the financial performance of fruit processing units in Manipur.

Research Methodology

The study is based on both primary and secondary data. The primary data were obtained with the help of personal interviews with the concerned executives of the units and also from the Income statement and the Balance Sheet for 5 years collected furnished by the units.

Tools Used

To analyse the financial performance of fruit processing units, ratio analysis was taken as it is the most important and powerful tool. A ratio is defined as 'the indicated quotient of two

mathematical expressions and as the relationship between two or more things'. Absolute accounting information in the annual reports does not provide much information about the financial matters. A meaningful conclusion can be drawn only when the relationship between the two figures are calculated i.e. ratios. In this part, ratio analysis is used as a yard stick for evaluating the financial performance of the fruit processing units under study.

Further, from among the different sub-categories of ratio analysis, profitability ratios have been selected for the study to measure their financial performance. The profitability of firms can be determined on the basis of sales or investment; the ratios in relation to sales are (i) Gross Profit Ratio (ii) Net Profit Ratio and profitability ratios in relation to investment is measured by (i) Return on Assets and (ii) Return on Capital Employed. Hence, the ratios to be used in this study are Gross Profit Ratio, Net Profit Ratio, Return on Assets and Return on Capital Employed. The individual performance of fruit processing units are ranked, on the basis of this ratios taken individually at the first place and then the overall performance of the units are measured and accordingly rank are assigned.

Selection of the units

The present study confines itself to the list of fruit processing units obtained from the (Office of the Deputy Director, 1999), all the units except units producing sweetened aerated water were taken for the study. Wherefore, out of the 13 units as per the list provided, only 8 units were selected for the study; because two units were dealing with sweetened aerated water and packaging, raw material importing from outside the state, one unit was just the relabeling unit and another unit was found to be sick; whereas one unit could not be contacted during the study period.

Profile of the select Fruit Processing Units

Before evaluating the performance of the units, lets us know the brief background of the fruit processing units selected for the study.

- 1. Ratna Fruit India:** Ratna Fruit India was located at Uripok Polem Leikai, Imphal West District and was commissioned for processing in the year, March, 1992 under the brand name 'Ratna' with FPO Licence No. 7779. It was set up with the main objectives of self-employment and socio-economic upliftment of the state. There were

6 full time workers employed by the unit. The chief items produced by the unit were juice and squash of orange and pineapple.

- 2. Manipur Hill Fruits Processor:** The brand name 'Chandani' with the FPO Licence No. 8320 was marketed by M/S Manipur Hill Fruits Processor, located at Pungdongbam, B.P.O. Yourbung, P.O. Lamlong, Imphal East District. The unit has started processing fruits and vegetables from 20th February, 1991 and has 7 full time and 6 part time workers. Employment and income generation were the main objectives of the unit. Pineapple, orange and lemon squash along with lemon pickle and tomato sauce were the main items of products manufactured by this unit.
- 3. Thangjam Agro Industries:** The unit was located at Chingmeirong, Imphal East District and has marketed its products under brand name 'Likla' with FPO Licence No. 8327 since June, 1991. The main objective of the unit was to capture the market outside the state by taking the advantage of cheap and abundant availabilities of fruits and vegetables in the state. The unit has 6 full time and 4 part time employees. Squash of orange, pineapple and lemon were the main products of the unit.
- 4. Manipur Fruit Juice Crushers:** The unit was located at M.G. Avenue, Imphal and has marketed under brand name 'Manifru' with FPO Licence No. 3564 since 1981. The main objective of the unit was to generate employment and economic upliftment of the state. The unit has 8 full time and 10 part time workers. The chief items produced by the unit were juice and squash of orange, pineapple and lemon.
- 5. A Family of Food Products:** The brand name 'Sana' with FPO Licence No. 8321 was marketed since October 10, 1990 by M/S A Family of Food Products, located at Sega Road, Takhellambam Leikai, Imphal West. The unit has 4 full time and 7 part time workers. The main objectives of the unit were to solve the unemployment problems and to improve the economy of the state. Juice and squash of orange and pineapple, guava jelly and pineapple jam were the main products of the unit.
- 6. Govt. Fruit Preservation Factory (MAGFRUIT), Manipur:** The brand name 'Magfruit' with the FPO Licence No.1443 is marketed by the Govt. Fruit Preservation Factory, Manipur and was located in the campus of Agriculture and Horticulture complex at Mantripukhri, Imphal East. The factory was started in the year 1958 for the purpose of demonstration and to impart training to the public for better utilization of

the Horticulture crops. It was being run departmentally under the Directorate of Horticulture and Soil Conservation, Government of Manipur and employed altogether 36 employees, 23 of them were full time employees and 13 of them were part time employees. The main items of products produced were squashes of pineapple, orange and lemon.

7. Manipur Fruit Processing and Cold Storage Cooperative Society Ltd: The brand name 'Heirang' with FPO Licence No. 4011 was marketed by the Manipur Fruit Processing and Cold Storage Cooperative Society Ltd, located at Kombirei Road, Lamphelpat, Imphal West, since 24th February, 1975. The main objectives of the unit were to help growers with better prices by eliminating multi-middlemen practices and to enable people to get fresh and processed fruits and vegetables at favourable price throughout the year. The unit has 12 full time and 9 part time employees. Squash of orange, pineapple and lemon were the main products manufactured by the unit.

8. WAIFRUIT (Agrotech and Aqua Products): The unit was located at YVU Bhawan, Indo-Burma Road, Thoubal Wangmataba, Thoubal and has marketed under brand name 'Waifruit' with FPO Licence No. 9724 since 1st August, 1995. The main objectives of the unit were to generate employment opportunities and to generate income mainly from outside the state by selling the product and also to produce good quality diet. The unit employed 11 full time and 42 part time workers. Squash of orange, pineapple and lemon were the main products of the unit.

Data Analysis and Interpretation

In order to evaluate the financial performance of the select fruit processing units, responses on annual sales and investments were collected with the help of a structured questionnaire along with balance sheets of the units for five years. The analysis and interpretation of the furnished data of the select fruit processing units are as follows:

Sources of Financing

Finance is the life and blood to business. So to run the industry, finance is required. In order to know about the sources of financing fruit processing industry in the state, a question was asked to the select sample units. Based on their responses, sources of financing can be classified into three groups. The first group was the government and agencies, namely,

Ministry of Food Processing Industries, Govt. of India, National Co-operative Development Corporation (NCDC), EZE Germany (Foreign Agency) and other state agencies. Banking and financial institutions like State Bank of India (SBI), Central Bank of India, Small Industrial Development Bank of India (SIDBI), Manipur State Co-operative Bank were the second group. Third and last group were family and own source.

From the graph – 1, it was found out that 37.5 per cent of the respondents responded that sources of financing their businesses were from their family and from their own source and 25 per cent of the respondents were funded by financial institutions as well as government agencies. Whereas, 12.5 per cent each of the respondents responded that they were funded by bank and financial institutions, by the Government and Agencies and jointly financed by financial institutions, government agencies and from their own sources respectively.

Availability of Loan Facilities from the Banks and Financial Institutions

To know whether loans from banks and financial institutions were available to the fruit processing units in their own locality / state, a question was asked to the select sample units; in regard to this issue, information were gather and display in the below graph.

From the graph – 2, it is revealed that for 50 per cent of the respondents, loan facilities from banks and financial institutions for their businesses were not available. Subsequently, 37.5 per cent of respondents said that loans facilities were made available to them by banks and financial institutions.

Profitability Ratios Related to Sales: These ratios are based on the principle that a firm should earn an adequate profit on each rupee of sales. If the fruit processing unit is unable to earn sufficient profit on sales, there will be difficulty in meeting the operating expenses, interest charges and as a result no return will be available to owners. As already mentioned in the above, this ratio consists of: (i) Gross profit ratio and (ii) Net profit ratio.

- i) **Gross Profit Ratio (GPR):** The first profitability ratio in relation to sales is the gross profit ratio. It is calculated by dividing the gross profit by sales i.e.

$$\text{Gross Profit Ratio} = \text{Gross Profit} / \text{Sales}$$

The Gross Profit Ratios of 8 fruit processing units has been shown in Table - 1. The brand 'Magfruit' of the Govt. Fruit Preservation Factory, Government of Manipur stood the first

rank in GPR with 25.93 per cent. The brand 'Sana' of A Family of Food Products, Imphal, Manipur securing second position with GPR of 22.86 per cent and The brand "Manifru" of the Manipur Fruit Juice Crusher, Imphal has 20 per cent of GPR securing third position. The Gross Profit Ratio of the brand name 'Heirang' of the Manipur Fruit Processing & Cold Storage Co-operative Society Ltd., Imphal Manipur has the least GPR with 6.9 per cent.

ii) **Net Profit Ratio (NPR):** The Net Profit Ratio is calculated by dividing net profit by sales:

$$\text{Net Profit Ratio} = \text{Net Profit} / \text{Sales}$$

The Table-1 indicates that the Net Profit Ratio of the brand "Manifru" of the Manipur Fruit Juice Crusher, Imphal West stood in the first rank with 3.36 per cent; it was followed by the brand 'Magfruit' of the Govt. Fruit Preservation Factory, Government of Manipur and the brand 'Likla' of the Thangjam Agro Industries, Chingmeirong, Imphal East District with percentages of 1.37 per cent and 1.04 per cent respectively. The Brand 'Ratna' of the Ratna Fruit India, Imphal West, Manipur has the least NPR with just 0.19 per cent.

By comparing the two ratios, the profitability ratios of the brand 'Magfruit' of the Govt. Fruit Preservation Factory, Government of Manipur can be ranked on the top; followed by the brand 'Manifru' of the Manipur Fruit Juice Crusher, Imphal West. However, it is interesting to note that financial performance of the fruit processing units based on GPR and the NPR fluctuates. For instance, the brand 'Heirang' of Manipur Fruit Processing and Cold Storage Co-operative Society Ltd. Manipur has the least in GPR but stood 4th position in the NPR; whereas, the brand 'Sana' of A Family of Food Products, Imphal West had secured 2nd position in GPR but ranked 6th in NPR.

Profitability Ratios related to Investment

Profitability of the fruit processing units can also be calculated based on the profits of the units to its investments. Such ratios are known as return on investments. Profitability in relation to investment is measure by (i) Return on Assets and (ii) Return on Capital Employed.

i) **Return on Assets (ROA):** The relationship between profit and assets can be shown by the return on assets ratio. This ratio can be calculated by dividing net profit by total

assets. Here net profit is the profit after tax and total assets include net fixed and current assets.

$$\text{ROA} = \text{Net Profit} / \text{Total Assets}$$

In the Table - 1, the ratio ROA of the brand 'Manifru' of the Manipur Fruit Juice Crusher, Imphal West stood the first rank with 7.83 per cent; followed the brand 'Magfruit' of the Govt. Fruit Preservation Factory, Government of Manipur and, the brand 'Heirang' of Manipur Fruit Processing and Cold Storage Co-operative Society Ltd. Manipur in the second and the third rank with 2.56 per cent and 1.08 per cent respectively. The brand 'Likla' of the Thangjam Agro Industries, Chingmeirong, Imphal East has the least ROA with 0.10 per cent.

ii) Return on Capital Employed (ROCE): The second type of ROI is the ROCE.

This ratio has similarities with ROA except in one respect i.e., here the profits are related to the total capital employed. The term capital Employed refers to long term fund supplied by the creditors and owners of the firm. In other words, it is equivalent to net working capital plus fixed assets.

Thus, ROCE can be computed in the following manner.

$$\text{ROCE} = \text{Net Profit after tax} / \text{total capital employed}$$

From the Table - 1, the ROCE of the brand 'Manifru' of the Manipur Fruit Juice Crusher, Imphal West continued to top in the ranking with 10.53 per cent; it was followed the brand 'Magfruit' of the Govt. Fruit Preservation Factory, Government of Manipur and the brand 'Heirang' of Manipur Fruit Processing and Cold Storage Co-operative Society Ltd ranked 2nd and 3rd with 3.29 per cent and 1.23 per cent respectively. The brand 'Likla' of the Thangjam Agro Industries, Chingmeirong, Imphal East has the least ROCE with 0.11 per cent.

By comparing the four parameters namely, GPR, NPR, ROA, ROCE, we can conclude that the brand 'Manifru' of the Manipur Fruit Juice Crusher, Imphal West can be ranked first; followed the brand 'Magfruit' of the Govt. Fruit Preservation Factory, Government of Manipur and the brand 'Sana' of A Family of Food Products, Imphal West having secured the second and third rank respectively. The brand 'WAIFRUIT' of Agrotech and Aqua Products, Thoubal district of Manipur was adjusted with the least in the overall ranking of the profitability ratios of the fruit processing units in the state.

Conclusion

The financial performance of fruit processing units of Manipur were found to be varying from unit to unit, and even the sources of financing their capitals requirement also differs. The study found that fruit processing units of the state procured funds from their own family member and supported themselves by their retained earnings. At times, some of the units were also supported and funded by financial institutions, government and agencies. Loans facilities provided by the financial institutions could not be enjoyed by majorities of the units due to multiple criteria fulfillment required for the eligibility of loans eventually discouraged the borrowers.

Subsequently, the profitability ratios related to sales indicate that the brand 'Magfruit' shows better in comparison with the performance of 'Manifru'. However, in the profitability ratios related to investment 'Manifru' performed better than that of the 'Magfruit'. Eventually, the study can be concluded that the financial performance of 'Manifru', 'Magfruit', 'Sana' and 'Heirang' were found be sound in the study period; whereas, financial position of the 'Waifruit' was the weakest among the select sample units.

The need of the hour is strengthening of fruit processing industry by providing easy access to public financing system, because 50 per cent of the respondents have no access to loan facilities from banks and financial institutions as process of obtaining loan were cumbersome and mostly these institutes shy away from giving of loans, along with expansion of marketing network to streamline backward and forward linkages so as to minimise wastage in the state.

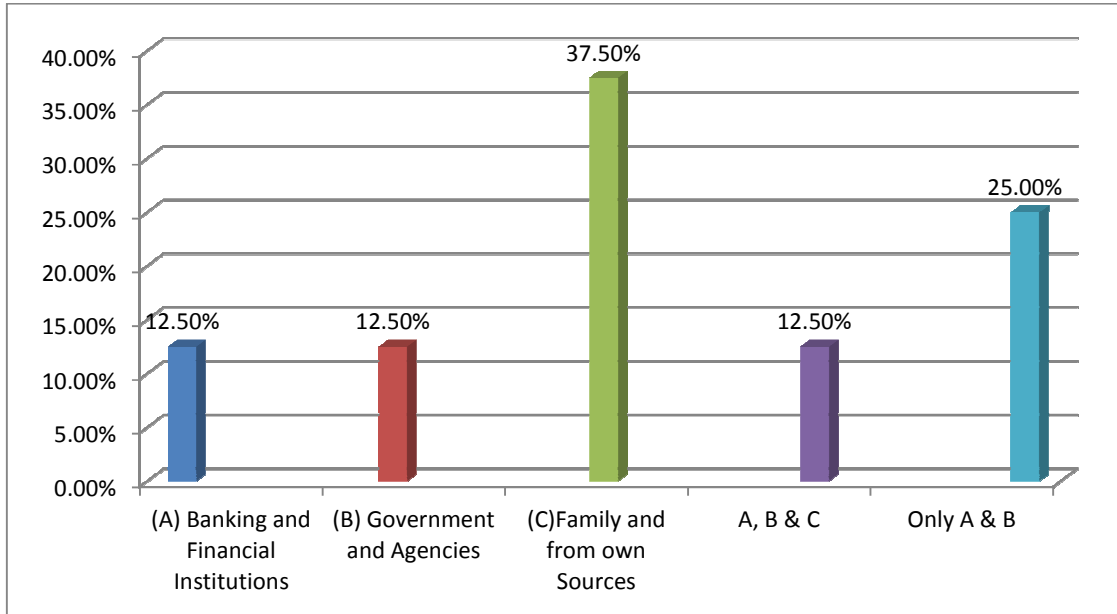
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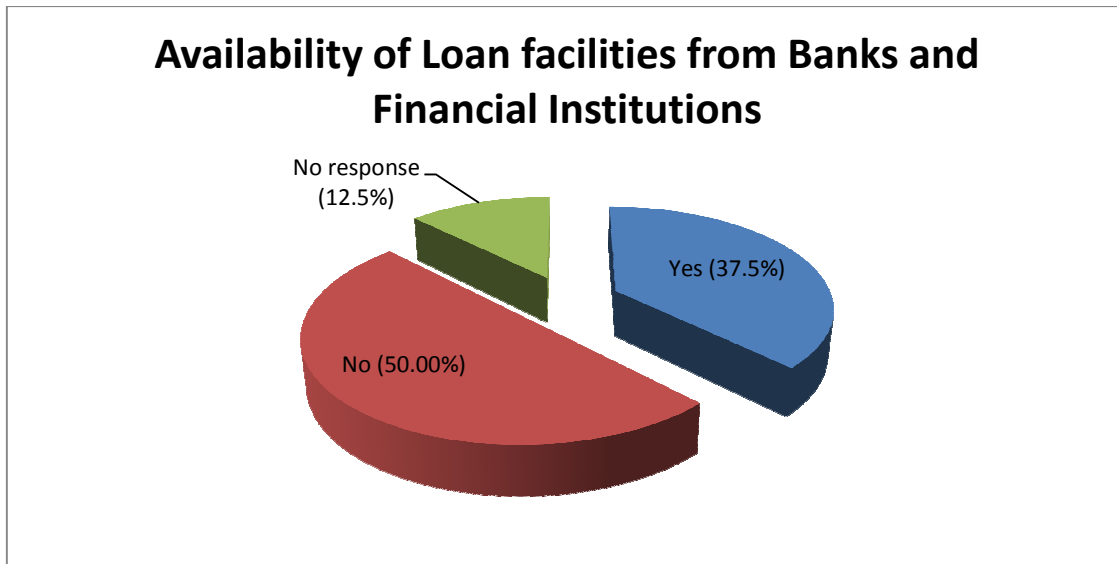
Tables and Graphs:

Graph – 1: Sources of Financing



Source: Compiled on the basis of Questionnaire Administered to Fruit Processing Units.

Graph -2: Availability of loan facilities from banks and financial institutions



Source: Compiled on the basis of Questionnaire Administered to Fruit Processing Units.

Table-1: Rank analysis of profitability ratios of selected fruit processing units of N.E. India

<i>SI. No. of the units</i>	<i>Brand Name of the Units</i>	<i>G.P. Ratio</i>		<i>N.P Ratio</i>		<i>ROA Ratio</i>		<i>ROCE Ratio</i>		<i>Overall Performance (in rank)</i>
		<i>Average</i>	<i>Rank</i>	<i>Average</i>	<i>Rank</i>	<i>Average</i>	<i>Rank</i>	<i>Average</i>	<i>Rank</i>	
1	Chandni	10.00	5	0.30	7	0.52	5	0.75	5	5
2	Ratna	7.45	6	0.19	8	0.16	6	0.18	6	7
3	Heirang	6.90	8	0.62	4	1.08	3	1.23	3	4
4	Sana	22.86	2	0.49	6	0.67	4	0.82	4	3
5	Likla	16.97	4	1.04	3	0.10	8	0.11	8	6
6	Magfruit	25.93	1	1.37	2	2.56	2	3.29	2	2
7	Waifruit	7.41	7	0.59	5	0.11	7	0.13	7	8
8	Manifru	20.00	3	3.36	1	7.83	1	10.53	1	1

Sources: Compiled on the basis of: Financial statements given by the units and pre-tested questionnaire