

A Comparative Analysis of Various economic variables among the selected five food processing industries of Kokrajhar District in Assam

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Abstract

Among various kinds of Industries food processing industries playing a significant role in the socio-economic development of any region. Kokrajhar district is one of the important districts of Assam where a maximum number of people depends upon agriculture. But it is found that the agriculture products in this district are not properly utilized and is wasted due to lack of agro-based industry like the food processing industry. Although there is a great scope to develop such kind of industry, the growth rate is found to be unsatisfactory in this district. That is why there is a need for careful research work to identify those food processing industries which are in a position to show their satisfactory economic performance compared to others. So that , thereby , the proprietors, as well as the Government , Bank and Financial Institution, can give top priority in granting loan and advance , in implementing various relevant schemes. Further, this comparative economic analysis provides some special guidelines for improving the food processing industries which have been showing unsatisfactory performance. Thereby, the study identifies the industries which are able to capture the opportunities of a potential factor of prevailing environment for their development. Through such kind of examining, this study detects the reasons which lead to failure of these industries in spite of having favourable factors. In the light of such analysis, the study will propose some effective policy implementation for the purpose of the revival of these industries and also provide some progressive strategy for the overall development of all food processing industries as a means of socio-economic development of Kokrajhar District.

Key Words: Assam, Food Processing Industry, Comparative Analysis, Kokrajhar

Part: I

Theoretical Approach

1.1 Introduction: Notwithstanding the availability of some common facilities all Food Processing Industries of Kokrajhar District are not equally developed. On the other hand, it is immensely important to develop all the food processing industries in equal balance way so that thereby, they can maximize their contribution towards the socio-economic development of the Districts. Keeping in mind this purpose the present paper attempt to carry out a priority based comparative economic analysis among 90 different industry of 05 different category. In doing so out of many factors four factors such as investment, employment, labour and profit are taken under study considering as an indicator of economic performance.

1.2 Objective of the Study: *As a general objective the study aims at comparing three aspects related to economic activities among 90 industry. To achieve these general objectives following specific objectives are taken under study. These are*

1. To examine the proportionate rate of earning profit as compared to its initial investment (Fixed Capital or Investment).
2. To measure the ratio between the total sales volume and promotional tool.
3. To identify the relationship between employment and education.

1.3 Rationale of the Study: It is observed that 90 industry under 05 sectors are performing their activities at different levels. In spite of working in the same market why different industries are showing a different level of performance is a question of capacity utilization and efficiency of utilizing their opportunities. Taking this fact into consideration there is a need for carrying out a careful research work on a comparative study among these industries. Through this studies, some internal factors are identified which are responsible for their different performance. By knowing such kind of factors an appropriate step can be adopted for the upliftment of those industries which are comparatively showing poor performance. Further, this study is significant because of the fact that it can highlight those factors by virtue of which some industries able to showing their good performance.

1.4 Material and Methodology: The material and methodology of the study are described below.

1.4.1: Types and nature of the Study: By nature, the present study is analytical based on empirical perspective.

1.4.2: Size of population and Design of sample: The size of the population of the study is estimated as 90 number of industries under five categories. With a view to depicting the total scenario of the food processing industry of Kokrajhar district entire 90 industries under five category are taken as a sample for the study.

1.4.3: Location and Limitation of the study: Regarding the location of the study it is to be mention that the study mainly concentrates only on the area of kokrajhar Districts which cover 3169.22 square k.m. On the other hand, the study is limited only on 90 number of industry under 05 sectors, out of which 53 number of rice mill , 12 number of flour mill , 12 number of the bakery , 06 number of oil mill and 07 number of fruits & vegetable processing industry. The studies concentrate only three aspects of the 90 industry. These are finance, human resource and marketing.

1.4.4: Source of the Data and Technique of collection: The study is based on both the primary and secondary data. The primary data are collected by the technique of personal interview, field survey and questionnaire. In this regard, 90 number of the proprietor of the selected industries are taken for personal interview as well as respondent for the questionnaire. On the other hand, secondary data are compiled from books, journals, newspaper magazine etc.

Part: II

Comparative Study among A Few Selected Food Processing Industry

In order to conduct the proposed comparative study among the selected 05 categories of 90 number of industry three main aspects are taken into consideration. These are finance , marketing and Human resource (HR). To make the detail of the comparison two factor from each of the three aspects is selected as prominent in case of the selected industry. These investment and profit under the finance aspect, promotion and sales volume (TR) under marketing aspects and employment and education under the HR aspect. In light of the above factor below an attempt is being taken to make a comparative study among the selected industry.

2.1 Financial Aspect: In spite of having a sizeable number of factors associated with the aspect of finance, here only two factors are especially taken for the purpose of a comparison considering their priorities prevailing in the selected industries. In doing so average profit of 07 years from 2010-11 to 2016-17 is compared with their initial investment which is reflected in the following table. These are investment and profit as depicted in the following table.

Table No: 2.1 Comparative Analysis of Financial Aspect

| Category of Industry | Investment (Rs. in Lakh) | | Profit (Rs. in Lakh) | |
|----------------------|--------------------------|---------------------|----------------------|---------------------|
| | Total Investment | Percentage to total | Total Profit | Percentage to total |
| Rice Mill | 129.45 | 37.26 | 83.28 | 40.00 |
| Oil Mill | 25.15 | 7.24 | 13.80 | 6.63 |
| Bakery | 82.60 | 23.77 | 55.20 | 26.51 |
| Flour Mill | 78.70 | 22.65 | 32.88 | 15.79 |
| Fruits & Vegetable | 31.55 | 9.08 | 23.04 | 11.07 |
| Total | 347.45 | 100 | 208.20 | 100 |

Source: Compiled from field survey

Under finance, two factors such as investment and profits are taken. In case of investment the highest percentage of investment in case of rice mill which is 37.26 %, whereas the lowest percentage of investment is in case of oil mill, i.e., 25.15 %. In between these two, the percentage of investment the second, third and fourth position is occupied by the bakery (23.77%), flour mill (22.65 %) and fruits & vegetable (9.08%). On the other hand, in case of profit, the highest percentage is scored by rice mill, i.e., 40.00%, where the lowest percentage is found in the case of oil, i.e., 6.63 %. In between these two positions the second position is occupied by the bakery (26.51%), the third position is Flour mill (15.79%) and fourth is occupied by fruits & vegetable (11.07%). There is a positive correlation in between investment and profit because the increase in investment leads to enhancement of profit which accordingly happens in case of selected 05 industry which is reflected from the table no 2.1.

2.2 Marketing Aspect: Marketing aspect includes two factors out of many considering the position of the selected industry. These are promotional tools and sales volumes. In this regard, it is to be mentioned that the promotional tools consider 08 factors. These are advertising, publicity, special offer, direct mailing, free gift, endorsement, joint ventures and leaflet & poster. Thereafter, through examining, industries are divided into two categories. One is implemented and another is not implemented which is expressed in percentage wise. On the other hand, sales volume (TR) indicates a total number of units sold by these industries. But, to make a uniformity number of sales are converted into monetary terms. For the purpose of comparing sales volume the average sales of 07 years from 2010-11 to 2016-17 is taken into study.

Considering the above criteria pertaining to promotion and sales volume as factors of marketing aspect below a comparative statement is drawn in the table no 2.2

Table No: 2.2 Comparative Analysis of Marketing Aspect

| Category of Industry | Sales Volume (TR) (RS in Lakh) | | Promotional Tool | |
|----------------------|------------------------------------|---------------------|------------------|---------------------|
| | Total Sales Volume | Percentage in Total | Implemented | Percentage in Total |
| Rice Mill | 171.24 | 36.79 | 18 | 26.87 |
| Oil Mill | 30.36 | 6.52 | 06 | 8.96 |
| Bakery | 145.32 | 31.22 | 25 | 37.31 |
| Flour Mill | 76.44 | 16.42 | 10 | 14.92 |
| Fruits & Vegetable | 42.12 | 9.05 | 08 | 11.94 |
| Total | 465.48 | 100 | 67 | 100 |

Source:Compiled from field survey

After going throughout the above table an explanation and observation are made on promotion and sales volume as described below.

In the case of implementing the promotional tool, the bakery industry is occupying the highest position which scores 37.31 % and lowest implementation is found in case of oil mill which is 8.96%.In between these two industry rice mill occupies the second position by securing 26.87 % , where flour mill occupies the third position, i.e. , 14.92 % and fruits & vegetable processing industry occupy the fourth position , i.e. , 11.94 %.

From the observation of sales volume (TR), it is detected that the percentage of highest revenue earn by the rice mill , i.e. , 36.79 % , the second position is occupied by bakery industry by securing 31.22%.The third , fourth and fifth position are occupied flour mill , fruits & vegetable processing industry and oil mill securing 19.32 % , 11.49 % and 6.26 % respectively.

Further, it is observed that the effort of promotional activities performed by the bakery directly and positively leads to its increasing sales volume. It is proved from the data analysis of the above table that bakery industry occupied the highest percentage in implementing the promotional tool, i.e., 37.31 % against which they are able to again occupy the highest position in earning of sales volume as well as profit respectively.

2.3 Human Resource Aspect: Among lots of factors relating to marketing aspects two factors are selected considering their prominent impact on the selected industries. These are employment and education of the proprietor. Here it is to be mention that employment factor is taken from the employer's point of view and education is taken employer point of view. In the case of education, matric examination is taken as a basis of identifying educated and uneducated employee. Those who have passed HSLC and above are categorized as educated and an employer below HSLC standard are categorized

as uneducated. Taking these two factors into consideration an explanation is made among the selected industries which are reflected in the following table.

Table No: 2.3 Comparative Analysis of Human Resource Aspect

| Category of Industry | Employment | | Education | |
|----------------------|------------|---------------------|-----------|---------------------|
| | Number | Percentage in Total | Number | Percentage in Total |
| Rice Mill | 162 | 42.55 | 14 | 33.34 |
| Oil Mill | 24 | 6.26 | 05 | 11.90 |
| Bakery | 79 | 20.62 | 12 | 28.57 |
| Flour Mill | 74 | 19.32 | 07 | 16.67 |
| Fruits & Vegetable | 44 | 11.49 | 04 | 9.52 |
| | | | | |
| Total | 383 | 100 | 42 | 100 |

Source: Compiled From field Survey

It is revealed in the above table that there are all total 383 employees engaged in the 90 number of different 05 categories of industries. Out of these total highest percentage of employees are engaged in rice mill , i.e. , 20.625% , whereas , second highest is found in the bakery , i.e.,20.63%.The flour mill , fruits & vegetable and oil mill provide the employment at a percentage of 19.32 % , 11.49% and 6.26% respectively. In case of education out of total 90 number of employers 42 employers is found to be educated ,i.e. ,HSLC passed. The above table reflects the percentage at which these 42numbers of educated employers are distributed differently in 05 industry. In this distribution highest educated employer is involved in rice mill , i.e. , 35.89 % , the second highest educated employer is seen in the bakery industry ,i.e. , 28.57 % whereas , the third highest percentage of the educated employer is in flour mill , i.e. , 16.67%.The remaining two industries , i.e., oil mill and fruits & vegetable processing industry has occupied fourth and fifth position securing 11.90 and 9.52 % respectively in case of education.

Besides the observation made through the above tables, some additional facts are identified by reconciallating a few items from the said tables, which is depicted in the tables given below. As from the above table, it is seen that the Rice Mills are in the highest position, in case of earning profit over investment. Hence, talking rice mill as a base, a comparison is made to reflect what should be the percentage of earning profit over their investment at the proportion of rice mill against their prevailing positions.

In this regards two tables are prepared taking two factors for comparing four industries with rice mill. One is the percentage of profit earn over investment and another percentage of employment over investment.

Table N0: 2.4 Comparison of percentage of profit over the investment of four industries with rice mill.

| Name of Industry | Actual Percentage of profit of earned by the industry over investment. | What should be profit percentage at the proportion on investment of rice mill |
|--------------------|--|---|
| Rice Mill | 40.00 % | ----- |
| Flour Mill | 15.79 % | 24.31% |
| Bakery | 26.51 % | 25.51 % |
| Fruits & Vegetable | 11.07 % | 9.75 % |
| Oil | 6.63 % | 7.77 % |

Source: Compiled from field survey

But at the proportion of 37.26 % of investment rice mill earn the profit 40.00%.At the proportion of this profit earning of rice mill the percentage of profit that flour mill should earn a profit 24.31 % where it actually earns 15.79%.So as compared to rice mill the percentage of earning profit on the basis of investment of flour mill found to be less. Whereas, at the proportion of profit earning by rice mill, the earning percentage of bakery should be 25.51%, whereas, actually it can able to earn 26.51% which is proportionately more than rice mill. Likewise at the proportion of rice mill earning fruits & vegetable should be 9.75 % , whereas its actual percentage is found to be more , i.e. ,11.07%.On the other hand ,as compared to rice mill percentage of earning oil mill should be 7.77% , but it can earn only 6.63 % .So out of the above comparison it is revealed that if rice mill is taken as a basis then two industry these bakery and fruits & vegetable are able to earn its profit at proportion of investment more than rice mill whereas remaining two industries such as flour and oil mill earn less profit at proportion of their investment than that of the rice mill. Further, it is detected from the overall comparison, that the fruits & vegetable processing industry earn the highest percentage of profit in the proportion of its investment than the remaining four industries.

Below again a comparison is made taking the percentage of employment over investment between rice mill and remaining industries.

Table No: 2.5 Comparison of percentage of employment over the investment of four industries with rice mill.

| Name of Industry | Actual Employment Percentage over investment | What should be Employment Percentage at the proportion of Rice Mill |
|--------------------|--|---|
| Rice Mill | 42.55% | ----- |
| Flour Mill | 19.32 % | 25.86 |
| Bakery | 20.62% | 27.14 |
| Fruits & Vegetable | 11.49% | 10.36 |
| Oil | 6.26 % | 8.27 |

Source: Compiled from Field Survey

It is revealed from the above table that out of four mills only the percentage of employment over the investment of fruits & vegetable processing industries is more by 1.13 % at the proportion of the rice mill. On the other hand, in case of remaining three industries, it is found that at the proportion of rice mill their percentage of employment over-investment is lower by 6.54 % in case of flour mill, 6.52% in case of the bakery, 2.01 % in case of the oil mill.

In support of the above explanation, it is clearly observed that from the straight comparative analysis the rice mill score the highest percentage of employment over investment. But from the explanation of table no: 2.5, it is seen that fruits & vegetable stands the first position, four industries are compared at the proportion of rice mill. So it can be concluded that among 05 industries the fruits & vegetable industries are in the highest position so far as the percentage of employment over-investment is concern, where rice mills are in the second position. On the other hand, oil mill, bakery and flour mill position in this context are third, fourth and fifth respectively.

Part – III

Conclusion

This part aims at identifying some major findings as identified throughout the study. Accordingly, some suitable policy implication is put forward for the purpose of removing the prevailing problems. Thereafter, an overall conclusion is given at last.

3.1 Findings:

1. From the overall comparison, rice mill is found to be the highest profit earning sector as compared to investment than that of the remaining four sectors under study as reflected in the table NO 01. , at the proportion of the percentage of earning of profit against the investment of the rice mill if remaining four industries are compared than bakery and fruits & vegetable processing industries stand in the top highest position as referred to the table no no 2.1 and table no 2.4.
2. The observation of employment in relation with investment reveals that the fruits & vegetable processing industry occupy the highest position as clear in table No 2.5.
3. There should have a positive relationship between promotional tool and sales volume as well as profit. In the present study which is reflected in the case of the bakery industry. In support of table No 2.2, it is to be mention that against enhancement of promotional tool enhance the sales volume.
4. As how a good educational background of the employers of the industries under study can lead the increase in profit is reflected in case bakery , where by virtue of applying their education many attractive promotional tools is applied and consequent of which the bakery industries able to enhance their sales volume for earning higher profit (as referred to table no 2.2 & 2.3)
5. In case of fruits & vegetable processing industries, it is identified that with a minimum amount of investment can provide the highest employability and earn the highest profitability wherefrom it is reflected that there is an ample prospect of development of this industry in Kokrajhar District.
6. In the modern competitive world, it is seen that every successful business gives much more emphasis on the implementation of the modern marketing tool. But the lack of such kind of initiative in case of the selected industries stand on the way of enhancing sales, increasing profit as well as expanding the business activity.

3.2 Policy Implication:

1. Notwithstanding the immense importance of training , no one employer of the industries under study neither can acquire knowledge through training for themselves nor can provide for their employees owing to lack of finance. That is why it is suggested to the government of Assam to provide adequate training facilities to this industries through the DICCC. In doing so, the management of functioning of DICCC, Kokrajhar should be immediately reformed so that DICCC can efficiently and effectively implement the programme of training offered to them.

2. In support of performance of trainee, the government can provide the financial support to them so that they can by virtue of knowledge acquired in training can apply the new promotional technique of marketing.

3. With a view to materialize the prospect of fruits & vegetable processing industries in Kokrajhar District a strong step should be taken by the government for enhancing awareness among the potential youth for which government is suggested to follow the following guidelines

- (i) Awareness campaign
- (ii) Publicity
- (iii) Conduct exhibition expo etc.

4. There should have a direct and positive linkage between the growth of food processing industries and employability. In this regard, the government should frame the linkage industrial policy separately for food processing industries for this District considering the purpose of link with the employability.

5. The present study reveals that the fruits & Vegetable processing industry is found to be the most prosperous industries in sense of highest employability and profitability. Hence, Government should pay serious attention for the future development of fruits & vegetable processing industries emphasizing its prospect in the following aspect.

(a) Granting special financial assistance along with the higher percentage of subsidy to the entrepreneurs who are interested in set up fruits & vegetable processing industry.

(b) Impart special training programme among the youth to set up such kind of industry.

(c) The government should impart sophisticate machinery & tools to be distributed among the youth who have successfully completed the training.

6. With a view to utilizing the various agricultural product available in the District for the purpose of production the Government should establish different fruits & vegetable processing industry in this District. So that thereby , a district linkage can be established in a permanent mode in between the source of raw material (Farmer) and production Centre (Fruits & Vegetable Processing Industry).

3.3 Conclusion: Out of the present study two dimensions come into understanding. One is that there is ample prospect of food processing industries in Kokrajhar District in terms of raw material, labour , demand etc. Another is that accordingly to the prospect no positive effort is given from some essential angles such as lack of awareness among educated youth, no special government initiative, no bank & financial institutions come forward, no food processing industry based technology. Hence in the greater interest of establishing food processing industries for socio-economic development of the concerned district, there should have an action plan to be implemented for reconciliation this two aspect.

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