

CHAPTER - 1

Introduction

1.1 Introduction

The perpetual pace of industrialization is seriously considered to be an effective wheel for achieving the progress of a country so far its overall economic as well as social development are concerned. The agriculture sector has its own importance and provides the basic necessities of life, but it alone cannot take a country forward. Along with agricultural development, industrialization is also necessary. Being situated in the North Eastern Part of India the State of Assam enjoys ample potentiality of industrial development (Sarma, G. and Devi, M., 2016). In spite of being blessed with a high potential for development of resource-based and demand-based industries in the state, the rate of industrialization in Assam had not been satisfactory. Kokrajhar district of Assam is one of the important district of Bodoland Territorial Area District (BTAD), where the headquarter of BTAD is situated with full of huge natural and human resources, but this district has not industrially developed. Industries are generally classified into four categories such as Agro-based industry, Mineral – based industry, Forest-based industry and other industries. Food processing Industry is under the category of Agro-based industry. The industries which draw the raw material from agriculture are called agro-based industry (Sarma, G. and et al., June 2017).

The industry concerned with processing, preparing, distributing and serving of foods and beverages is called the food processing industry. Food processing involves any type of value addition to agricultural and horticultural produce and also includes processes such as grading, sorting and packaging which enhances the shelf life of food products. Food processing industry is now regarded as the sunrise sector of the Indian economy because of its great potentiality for growth and likely socio-economic impact specifically on income and employment generation (Sarma ,G and et al., 2017). As per the Annual Survey of Industries (ASI) 2014-15, the total number of registered food processing unit in India is 38,603 and it has employed 17,73,355 people (Sarma , G. and Devi , M. , 2016)). The Government of India has given high priority to the Food Processing Industry sector because of their great linkage in the development of many

interrelated variables. Among a lot of significance of food processing industry generating employability , transforming resources from rural area to production field , upliftment of agricultural productivity , value addition to agricultural products, improve marketing network etc. are regarded as the main (Shelly Ms. and Kaur , K , 2015). As per the Ministry of food processing Industry (MOFPI), the industry scheduled in the following groups can be summed up to constitute of food processing industries.

Table No. 1.1
Constituents of the food processing industry

SI No.	Description
1	Production , processing and preservation of meat , fish, fruits ,vegetables , oils and fats
2	Manufacturing of Dairy Products
3	Manufacturing of grain mill products, starches and starch products and prepared animal feeds.
4	Manufacture of other food products.
5	Manufacture of beverages

Source: Ministry of Food Processing Industries, Government of India (www.mofpi.nic.in)

Food processing industry is one of the key sectors which is the stronghold of the Indian economy because of its high share in employment and a major contribution to GDP. That is why, the government has accorded it a high priority, with a number of fiscal reliefs and incentives, to encourage commercialization and value addition to agricultural produce, for minimizing post-harvest wastage, generating employment and export growth (Tiwari S.V. and et al.,2015). India's food grain production has touched 252.56 MT in 2011-12 from a mere 51 MT in 1951-52. In the present scenario, a continuing problem in the country is storing the agricultural surplus produce and the percentage of wastage is very high (Rais M and et al.,2015). The food processing industry provides a solution to this problem. That is why; Central Government has made the efforts to accelerate the pace of development through the food processing industry. A number of incentives and package have been announced for the food processing industry. The separate Ministry for food processing industry has been established. In

India, Assam is the state where large varieties of food grains are produced.(Sarma , G and Devi , M , 2016)). The following table revealed the various categories of food processing units which have established on the basis of locally available agricultural raw material.

Table No. 1.2
Categories of Food Processing Industry and Required Raw Material

SI No	Type of Units	Major Raw Materials Required
1	Pulping and Concentrate	Mango , Pineapple ,Litchi ,Mandarin, Ginger ,Banana , Tomato
2	Juicing	Mango, Pineapple ,Litchi ,Orange ,Banana ,Guava
3	Jam and Jelly	Mango ,Pineapple , Orange , Guava
4	Chips	Banana , Jackfruit , Potato
5	Rice Mill	Paddy
6	Vegetables	Khariff , Rabi Vegetables
7	Confectionary (Hard Boiled Candies)	Pulp , Concentrate , Extracts of Fruits
8	Snacks (Rice based etc.)	Rice
9	Flour mill	Wheat
10	Dairy Unit (e.g. ice cream)	Milk
11	Spice Processing Unite	Cardamon ,Turmeric,Coriander , Black Pepper ,Ginger
12	Extraction Unit	Ginger , Turmeric ,Ayurvedic Inputs
13	Dehydration Unit (Dry/Powder)	Mango , Pineapple , Orange , Tomato
14	Papaya	Papaya Flour
15	Confectionary Unit (Cakes , Biscuits)	Sugar , Additives
16	Vegetable Oil	Khariff , Rabi Vegetables
17	Packaged Drinking Water	Ground Water
18	Oleoresins	Ginger , Turmeric

Source: Advantage Assam, Government of Assam, 2018

There are significant roles to be played by the food processing industry in the socio-economic development of the District. Of course, this development is possible if it is supported by the availability of raw materials, labour, market demand etc. factors which

are urgently required for the food processing industry. It is observed in case of Kokrajhar District is that the availability of raw materials , labour , market demand etc. factor have been leading favourably in the development of food processing industries in the districts. Notwithstanding its favourable support, by the various factors, the position of food processing industries in the districts cannot be justified as satisfactory. Further, it is observed that there are a lot of factors behind this underdevelopment condition of the food processing industry of the Kokrajhar District. The devoid of attention to be given by the Government , lack of awareness among the general public , lack of entrepreneurial skill , financial support to be provided by financial institution etc. are also standing on the way of development of food processing industries in the District. All of this lacks create a gap in between food processing industries and socio-economic development of the Districts. Hence , these prevailing facts and circumstances warrant a careful research work which will certainly provide some policy guideline through observing the present scenario of the food processing industries by virtue of which the District will able to achieve socio-economic development through food processing Industries. It is gratifying to mention that in doing so, this research work has attempted in the formulation of some suitable policies for full utilisation of local unemployed youth, productive use of locally available raw materials and efficient use of indigenous technical Know-how of the Districts. Due to these reasons, this study aims at analysing the growth rate, marketing techniques, comparative economic analysis, problem and prospect so far as food processing industry of the Kokrajhar District is concerned.

1.2 Research Problem

Agriculture is an important sector in the economy of Kokrajhar district of Assam, but the agro-based economy of the district has failed to improve the socio-economic situation of the district because of proper utilization agricultural product, value addition of agricultural product and innovation. The economy of Kokrajhar have observed the high production of fruits, rice, food grains, various horticultural products in the recent past but could not get market prices that are on par with markets in other district of the States. The Kokrajhar District in 2013-14 financial year number one in the production of Rape & Mustard(18170 tonnes) and Potato production (71431 tonnes), seven positions in the production of wheat(1969 tonne) and no eight positions in the

production of total rice (1969 tonne) among all the district of Assam (Sarma G and et al., 2015). The surplus produces often spoils and is wasted due to lack of transportation, insufficient well-equipped cold storage facilities and processing of farm produce, the absence of agro-processing industries, poor post-harvest technology. As per the economic survey of Assam ,2014-15 the marketable surplus of various agricultural products of the State in 2013-14 are 6 lakh MT of rice , 4.70 lakh MT of fruits , 0.75 lakh MT of spices and 8.60 lakh MT of vegetable respectively. The study revealed that simple value addition like cleaning, sorting and packaging could increase the income of farmers by 42.8% per kg.(Rais , M. and et al.,2014). Hence it is necessary to identify the food processing industry which has great scope to develop on the basis of locally available raw material in the region.

The present scenario of food processing Industries of Kokrajhar District reveals the fact that in spite of having ample prospects in terms of raw material, labour and market demand the growth rate of food processing industries are not satisfactory in the district. Consequently , the present underdeveloped condition of Food Processing Industries measurably fails to solve the unemployment problem , provide quality goods to the consumer , proper utilisation of agricultural raw material , utilisation of technical know-how , create modern marketing potentialities etc.(Sarma , G and et al., 2017). All of these problems emerged from the food processing industries make this industry sector failure to act as an effective and efficient tool for socio-economic development of the district.

In a Nutshell, it is observed that the food processing industries of the Districts measurably fail to contribute towards the inclusive development of the Districts. Hence, all of these circumstances make it necessary to have a research work on the Food Processing Industries of the District.

1.3 Significance of the Study

In case of food processing industries, it is a matter to be justified that whether its development is supported by the prevailing environment or not. In this context , environment implies market and industrial condition where consumers demand , availability of raw materials , abundant of labour , infrastructure facility , financial and government support are associated in the market environment or not. On the other hand,

all of these factors of the environment can be classified into two categories. One is natural factors such as the availability of raw material, demography as a consumer demand as well as a source of labour supply (entrepreneur), tourism prospect etc. On the other hand, man made factors include government initiative, financial support, technical know-how, urbanisation, infrastructure etc. After throughout observation both of these categories of factors in relation to food processing industries of Kokrajhar District it is identified that in the development of food processing industries all the natural factors are found to be favourable , where man-made factors are not in a position of satisfactory position. That is why there is a need of careful research work on the topic referred to here so that the deficiency of man-made factor can be solved and reconciliation between both categories of these factors can be established in the greater interest of the overall development of the food processing industries in the Kokrajhar District. Moreover, it is worth mentioning the fact that in the favourable existence of natural factors it is not all difficult to develop food processing industry in Kokrajhar District. In spite of having, support of natural factors, the present development of food processing industries in Kokrajhar Districts is not satisfactory. Hence, the contribution of this industry sector towards the socio-economic development of the District is found not satisfactory. On the ground of this circumstance, the present study will concentrate balancing on both the natural and man-made factors for the betterment of the food processing industries in the Kokrajhar District.

The significant of the study on food processing industry in Kokrajhar district emerges from various points of view such as the study is important for supplying adequate as well as a quality food product for good physical and mental health of the people, providing a satisfactory opportunity for employment and for improving well organized agro-based industrialization system. The most important point in the Food Processing Industry is that it is agro-based and it has high employment potentiality with significantly lower investment than the large-scale industry. The multiplier effect of investment in the food processing industry is 2.5 times than in other industrial sector.(Bhattacharyya B, 2013) In spite of having a lot of significant stills, no satisfactory development of the food processing industry can take place in Kokrajhar. Considering all of the above fact and circumstances makes the study significant.

1.4 Objective of the Study

The general objective of the study is to examine the role of Food Processing Industries in the overall socio-economic development of Kokrajhar district in Assam. In doing so, the researcher tries to identify the prospect of this sector as well as try to identify the various types of processing industry which have great scope to develop in the district. In order to achieve these general objectives the following five specific objectives have been taken under the study.

[1] To analyse the various trends of economic activities of food processing industries under study.

[2] To examine the marketing activities performed by the food processing industries under study.

[3] To analyse the comparative performance among the selected food processing industries.

[4] To examine the multifarious problems faced by the food processing industries under study.

[5] To analyse the future prospects of Food Processing Industries in Kokrajhar District.

1.5 Hypothesis of the Study

In order to examine the above specific objectives, the following hypothesis has been formulated and this hypothesis will be tested in the appropriate chapters.

[1] It is assumed that the rates of growth of food processing industries in Kokrajhar District are not satisfactory.

[2] It is presumed that the selected food processing industries are measurably failed to adopt the modern and effective marketing strategies in the changing environment.

[3] It is assumed that the Food Processing Industries of Kokrajhar District have been suffering multifarious problems.

[4] It is presumed that there is an ample future prospect of developing food processing industries in Kokrajhar District.

1.6 Research Methodology

The research methodology is described under the following points.

1.6.1 Types of Research

The proposed study is analytical in nature as well as the exploratory. The study is based on both primary and secondary data.

1.6.2 Sources and Techniques of Collection of Primary Data

The primary data has been collected by the techniques of field survey, personal interview and questionnaire. In order to perform the field survey, it is found that there is 90 number of selected food processing industries which are classified into 5 number of the category. Moreover office of Gram Panchayat, DICC office, NGOs, Self-help group, KVIB, Bank, District agricultural office, Block offices, Food and Civil supply department etc. are the primary sources of field survey.

1.6.3 Size of Population

The food processing industry in Kokrajhar district consists of basically two categories, namely registered and unregistered. Further, it is to be mentioned that in case of fruits and vegetable processing industry a few self-help groups are involved in production and selling. Hence with a view to depicting a total scenario of food processing in Kokrajhar District all these three sectors are taken covering the Kokrajhar districts as shown in the following table.

Table No. 1.3

Total Population of Selected Food Processing Units in Kokrajhar District

Sr. No	Category	Number of Industry
1	Rice Mills	53
2	Oil Mills	6
3	Flour Mills	12
4	Bakery	12
5	Fruits and Vegetable Processing Industry	7
		Total = 90

Source: Compiled from DICC Office, Kokrajhar and Field survey

1.6.4 Size and design of sampling

The above table reveals that the population of food processing industry of five categories is differently distributed among the Kokrajhar district. In order to depict a complete picture through the present study, the entire 90 number of five categories of the food processing industry are taken under the study. Hence, the size of the sample is also fixed as 90, which is equal to the population. So, the census method is used for this study.

1.6.5 List of Selected Respondents

With a view to compiling the opinion of consumers, regarding their buying behaviour of selected food items, respondents are selected from the consumer community using convenient method taking three categories of educational background as a basis as shown in the following table.

Table No. 1.4
Lists of Respondents

Sl. No	Category of Respondents	Number of Respondents
1	Highly Educated Consumer Respondents	100
2	Moderately Educated Consumer Respondents	150
3	Less Educated Consumer Respondents	200
Total		450

Source: Field survey

1.6.5 Sources of Secondary Data

The necessary secondary information is collected from various research paper, journal, books, newspaper; annual report and publication of various government department, economic survey, various ministries of government and relevant website.

1.6.6 Analysis and Treatment of Data

The data collected from primary and secondary sources are rationalized, proposed and tabulated and thereafter data are analyzed to describe the objectives of the study. Regarding the statistical tools used in the study, it is to be mentioned that considering the different nature of the chapter different tools and methods are used in different chapters. In this connection different statistical tools like tabulations, percentage, graph, mean etc have been used for analysing the data of the chapter No: 3 entitled **Analytical Study on Various Trends of Food Processing Industries**. To estimate the CAGR log-linear regression model and linear regression model have been fitted and data have calculated through SPSS which is explained in the relevant chapter. Along with these graphs, maps and tables are drawn to highlight and illustrate the data. Accordingly, considering the nature of chapter No: 4 entitled **Marketing Analysis of Food Processing Industries** also various statistical techniques like tabulation, percentage, graphs are used to analyse the relevant data. In order to find out the implementation

level of marketing mix tool of selected industries (respondents) three levels of implementation techniques are used which is described in the chapter. Further, the data are presented and analysed through tabulation, percentage and graphs. Further, 450 number of respondent consisting three level of education background have been selected from the consumer community as a respondent for compiling their feedbacks regarding the effect of marketing mix tools on their buying behaviours as well as analysed the buying behaviour of local based and outside based products and thereafter, analysed this feedbacks using the percentile methods to identifying the impact of various marketing mix tools on consumer buying behaviours. Different methods and tools used in chapter No: 5 entitled **Comparative Analysis of Food Processing Industries** are percentage methods, graphs, tables and Pearson correlation to analyse the relationship among the various selected variables of the selected industries under study. Further, to find out the annual growth rate the selected industries, the growth formula are used and this growth rate is represented through the growth curve. In the case of Chapter No: 6 entitled **A Study on various Problematic Dimensions of Food Processing Industries** the various problematic dimensions of selected industries are analysed through using three-point scales. Further, collecting the opinion of respondent regarding the various problems using three-point scales, problems are represented through simple tabular analysis and lastly using the combined arithmetic mean and arithmetic mean weight age value of different categories of problems have been calculated to find out the highest weight age among the problems. Moreover, in the chapter No: 7 entitled **Prospective Outline of Food Processing Industries** relates to the fact of future prospect, various prospective dimensions are identified in this chapter and using five-point scale opinion of respondents regarding the significance of respective prospective factors are collected. Lastly using weighted mean formula, the opinion of respondents regarding the prospective factors are analysed to find out the highest weight age of the selected prospective factors. Tabulation and graphical presentations are used for better understanding of the results of all the chapters.

1.7 Profile of the Study Area

Kokrajhar, recognized as the gateway to the North-eastern region of India is a major district of Assam. The district of Kokrajhar nestled on the riverbank of Brahmaputra is

bounded by Bhutan on the north and Dhubri district on the south. The Bongaigaon district lies on the eastern side whereas West Bengal borders the west of the Kokrajhar district. Kokrajhar is well accessible by both roadway and railway. This District falls under the Bodoland Territorial Council (BTC) which is a territorial privilege established according to the Memorandum of Settlement on February 10, 2003. The area under the BTC jurisdiction is called the Bodoland Territorial Area District (BTAD). The Kokrajhar district has comprised with three sub-divisions viz Gossaigaon, Kokrajhar and Parbatjora. Again each sub-division is divided into revenue circle and under revenue circles, there are Mouzas comprising few revenue villages. Kokrajhar with its headquarters at Kokrajhar possesses Nine Revenue circles with eleven Community Development Blocks comprising a total of 1068 villages in all Revenue circles. The district occupies two statutory towns and two census towns viz. Gossaigaon, Kokrajhar, Padmabil and Salakati . Kokrajhar district has an area of 3296.00 Sq. Km out of which 3279.68 k.m. are a rural area and 16.32 s.q. k. m. are an urban area. The total population of the district was 8,87,142 as per 2011 census. The literacy rate was 65.22 % of the total population as per 2011 census report. (District Census Report, Kokrajhar , 2011)

1.8 Location and Limitation of the Study

The study is mainly concentrated in the Kokrajhar district of Assam only. Regarding the limitation of the study, it is to be mentioned that the study is restricted only on three dimensions of the food processing industries of Kokrajhar district. These are problems, marketing aspects and future prospects of five categories of the food processing industry, i.e., rice mills, oil mills, flour mills, bakery and fruits & vegetable processing industry. The study basically covers the 10 years from 2007-08 to 2016-17.

1.9 Scheme of the Study

The scheme of the study covers the following chapters:

Chapter No 1: Introduction:

Chapter 2: Review of Literature:

Chapter 3: Analytical Study on Various Trends of Food Processing Industries.

Chapter 4: Marketing Analysis of Food processing industries.

Chapter 5: Comparative Analysis of Food Processing Industries.

Chapter 6: A Study on Various Problematic Dimensions of Food Processing Industries.

Chapter 7: Prospective Outline of Food Processing Industries.

Chapter 8: Findings, Recommendations and Conclusion.

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