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A STUDY OF EMPLOYMENT PATTERN IN FOOD PROCESSING INDUSTRIES OF ASSAM

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ABSTRACT

Food processing industry plays an important role in economic development. It generates employment opportunities and income for the people and helps to improve their standard of living. It processes the agricultural products and helps to minise wastage of food. It contributes to value addition and contributes to economic progress. Assam produces a large quantity of fruits and vegetables and grains. The study was undertaken to examine the value addition and employment pattern in food processing units in the State. The study was based on secondary and primary sources of data. The primary data were collected from randomly selected sample of 120 units of food processing units from three districts of Assam. The data were analysed using frequency, percentage, bar and pie diagram. The study found that maximum value addition and income was generated by dairy units. But grains and cereal units were found to generate more job opportunities compare to other units. It was found that fruits and vegetables units engaged higher proportion of female than the male workers. The analysis of nature of jobs of the workers showed that three-fourth of the workers in surveyed food processing units were temporary. The main problem faced by the food processing units was unskilled and untrained workers. The study implies that there is an need to promote cereals and grains as well as consumer food units to generate more employment opportunities. Fruits and vegetables units should be given impetus to generate employment for women workers. Dairy should be promoted to generate more value addition and income. Training and skill development programmes should be conducted to develop skilled workers for food processing units.

KEYWORDS: *food processing industry, employment, value addition, nature job*

INTRODUCTION

Food processing industry is one of the promissory industries in the contest of India. With an attractive average annual growth rate of 11.18 per cent during the last five years ending 2019-20, employment generation of 12.38 percent in registered factory sector in 2017-18 and FDI equity inflow of US$ 4.99 billion in the last seven years ending 2021, the food processing industry plays an important role in the rural India. It coordinates among consumers, industry and agriculture. It is the India's fifth large industry in terms of production, consumption, exports and potential growth. The food processing industry of the state has key role in solving and reducing the existing unemployment situation. The state has a total of 1582 registered food processing units, as per the Annual Report of Ministry of Food Processing Industry, Government of India, 2022-23. On the other hand, the number of unincorporated enterprises manufacturing food and beverages as per 73rd round Survey of NSSO, 2015-16 was 65,997 in the state of Assam.

With a population of 31, 205,576, as per population census, 2011, Assam is the most populous state in the north eastern region of India. There were 18, 05, 441 educated unemployed in the state of Assam in 2021(Economic Survey of Assam, 2022-23). The State ranks third among the highest unemployment prone states of the country. However, there is a high potential for income and employment generation in the food processing sector in the State. In this background, the present study was carried with the basic objective of analyzing the income and employment generation in the State's food processing industry.

OBJECTIVES

The study was carried out with the following objectives.

1. To examine the value addition and employment pattern in food processing industries in Assam.
2. To investigate the problems related to employment in food processing industries in the State.

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DATA SOURCE AND METHODOLOGY

The study is based on both primary and secondary data. The secondary data were collected from Economic Survey of Assam, Ministry of Food Processing Industry, Govt. of India and various District Industry Centre (DIC) of Assam. Primary data were collected through field survey of four categories of food processing activities out of six categories identified by the Ministry of Food Processing Industry, Govt. of India. The study applied stratified random sample technique to select the sample of food processing units. The study selected three representative districts of the Assam namely, Tinsukia district from upper Assam, Nagaon district from middle Assam and Dhubri district from lower Assam. The food processing industries were divided into four categories (Dairy, fruits and vegetables, grains and cereals and consumers food processing) and from each category, sample units were selected randomly. The total sample size was 120 food processing units. The sample size of the units from each district is presented in table 1 as follows.

Table 1: Sample of Food Processing Units in Assam.

Districts	Categories	Total	Proportionate (30% of each category) Sample Units
Tinsukia District (Upper Assam)	Dairy	5	2
	Fruits & Vegetables	14	5
	Grains and cereals	173	52
	consumer food	54	17
	(A)Total Units	**246**	
Nagaon District (Middle Assam)	Dairy	2	1
	Fruits & Vegetables	5	2
	Grains and cereals	89	27
	Consumer Food	27	9
	(B)Total Units	**123**	
Dhubri District (Lower Assam)	Dairy	-	-
	Fruits & Vegetables	2	1
	Grains and cereals	13	4
	Consumer Food	-	-
	(C)Total Units	**15**	
Total Population(A+B+C)		**384**	**120**

Source: DIC of Tinsukia, Nagaon and Dhubri

The data were analysed using frequency, percentage, bar diagram and descriptive statistical methods.

FINDINGS AND DISCUSSION

The study of income and employment pattern in food processing industries of Assam has been examined on the basis of three parameters namely, value addition, number of workers employed and number of units.

***Value Addition*:** Value addition is the additional value added to the products by an industrial unit in the production process. It is the extra value added over the original value of a product. Annual Survey of Industries, Vol-1, 1976-77, defines 'value addition as that part of value added which is created in the factory. It is calculated as the aggregate market value of aggregate output of a production process minus market value of aggregate inputs and depreciation.' The value addition generated in the surveyed food processing units is given at table 2.

Table 2: Value addition by different categories of surveyed food processing units of Assam.

Category	Yearly value added per units		Yearly value added per worker	
	Rs	Percentage	Rs	Percentage
Dairy	5,74,951.99	85.65	2,87,475.99	87.31
Fruits & Vegetables	65,026.25	9.69	27,379.47	8.32
Grains & Cereals	8,981.72	1.34	3,654.32	1.1
Consumer Food	22,308.31	3.32	10,741.03	3.27
Total	6,71,268.27	100	3,29,250.81	100

Source: Field Survey, 2022

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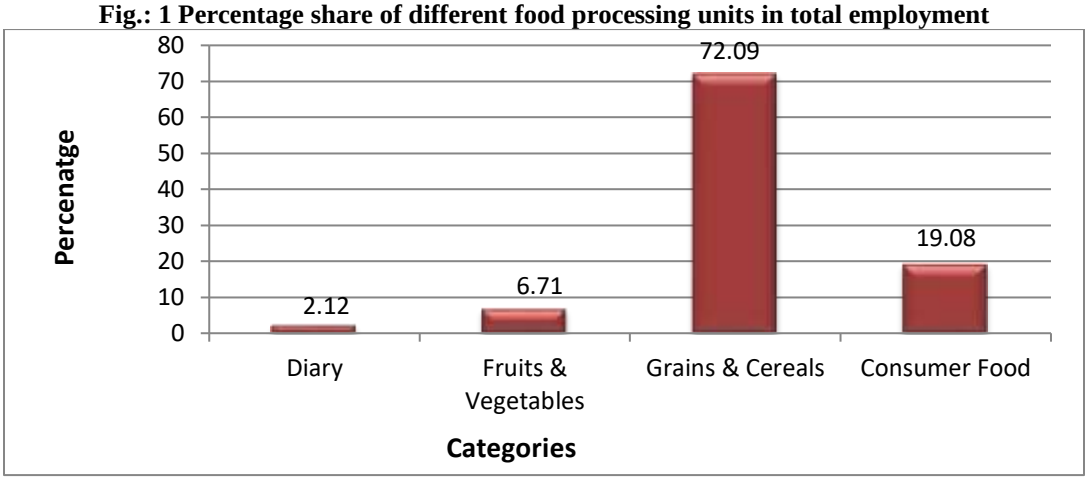
The table 2 shows that the maximum yearly value addition per unit is done by dairy units (85.65 percent) and the minimum is done by grains and cereal units (1.34 percent). Yearly value addition per worker is also the maximum in case of dairy units (87.31 percent) and the minimum in case of grains and cereals (1.1 percent). It signifies the fact that dairy units of Assam are generating higher value addition as compared to other categories of food processing units.

***Number of Workers*:** The number of workers employed of any industrial unit displays its employment status. The employment position of the food processing units of Assam is shown at Figure 1.

Fig.: 1 Percentage share of different food processing units in total employment

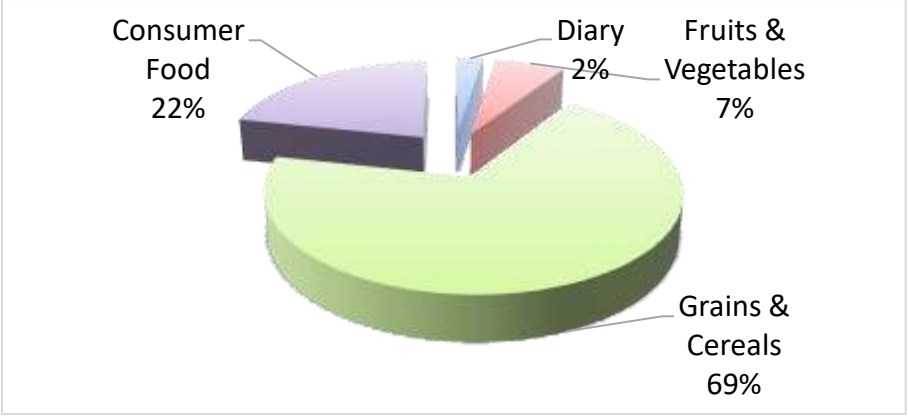


Source: Field Survey, 2022

The figure 1 shows that grains and cereal units accounted for maximum share in employment. It accounted for 72.09 per cent of the total workers employed in different categories of surveyed food processing units of Assam. It is followed by consumer food units with 19.08 per cent share of total workforce of food processing units is employed. Thus, in terms of employment, grains and cereals and consumer food units have the highest potential to generate employment opportunities. Therefore, the policy aimed at solving unemployment problem should focus on promoting grains and cereals as well as consumer food units in the State.

***Number of Units*:** Number of industrial units under different categories is an important aspect of an industry that can give information about the employment position of the workers. The result of in relation to the number of units under four categories of food processing units of the State is depicted in Figure 2.

Fig. 2 Percentage share of different categories of food processing units in total number of units



Source: Field Survey, 2022

The figure 2 shows that grains and cereal units has the largest share (69.2 per cent) in the number of food processing units of Assam. It is followed by consumer food processing units that have a share of 21.6 per cent of the food processing industries.

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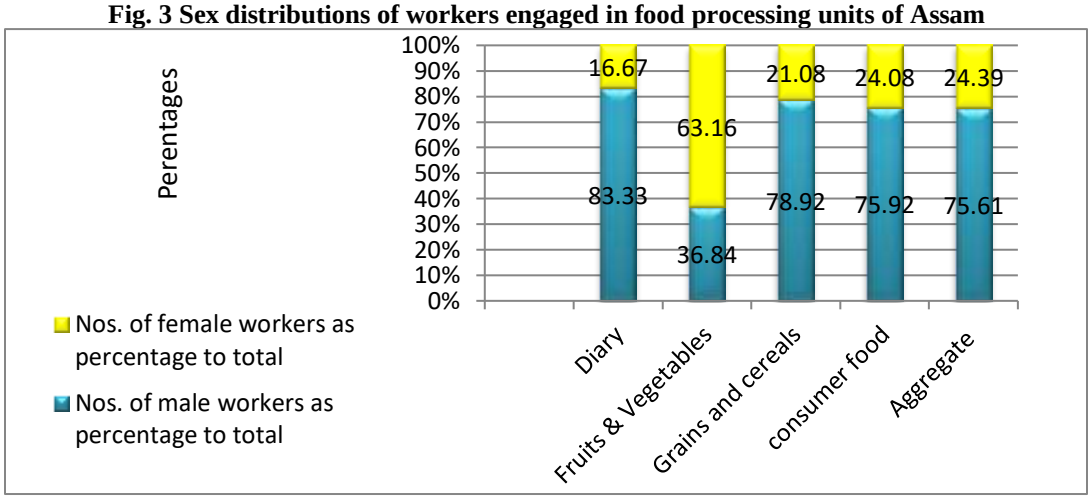
Distribution of Workers

Sex distribution of workers: Sex distribution of workers gives the information about the share of male workers and that of female workers employed in food processing units. In other words, it provides knowledge about the gender distributions workforce in food processing activities. Figure 3 displays the sex distribution of workers in surveyed food processing units of Assam.

Fig. 3 Sex distributions of workers engaged in food processing units of Assam

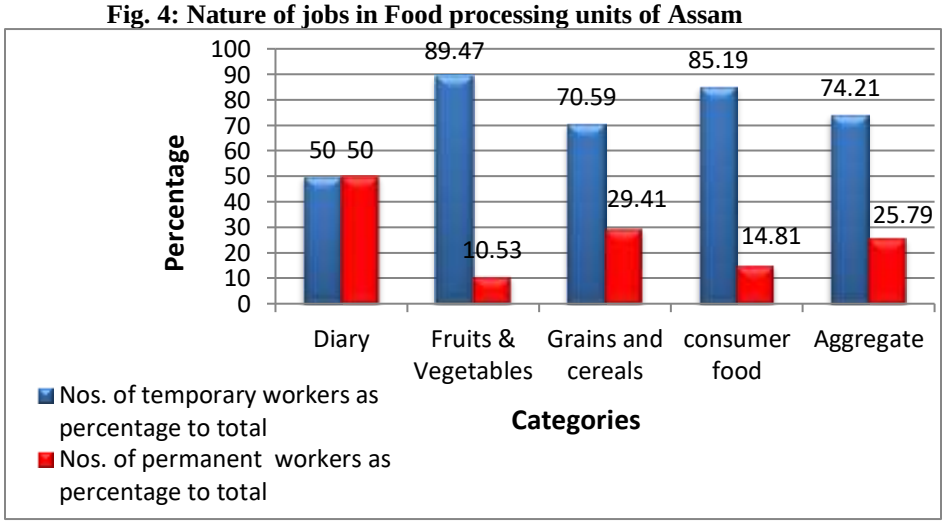


Source: Field Survey, 2022

It is found that, except fruits and vegetables units, in all the other categories of food processing units, percentage of male workers is more the female workers. It implies that food processing units require more of male workers than the female workers. In dairy units, 83 per cent of the workers were male followed by 78.92 per cent in grains and cereals and 75.92 per cent in consumer food units. In aggregate, 75.61 per cent (three-fourth) of the total workers in surveyed food processing units were male. Thus, it can be inferred that food processing units are biased towards male workforce. However, the female workers accounted for 63.16 per cent of the total workers employed in fruits and vegetables processing units. It indicates that the policy aimed at generating employment for women need to focus on giving incentives to promote fruits and vegetables processing units. Further, the women workers need to be provided training and skills to take up the job requirement in other food processing units. This will help to address the gender disparity in employment in food processing units in the State.

***Nature of job*:** Employment of the workers can be either temporary or permanent nature. Temporary workers get jobs only for few days or months in a year. The nature of jobs is an important indicator of well-being of the workers. The nature of job of workers engaged in the surveyed food processing units of the State is shown in Figure 4.

Fig. 4: Nature of jobs in Food processing units of Assam



Source: Field survey, 2022

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The figure 4 shows that except dairy category, in all the units of food processing activities, the share of temporary workers is more than permanent ones. As the food processing units collect raw materials mainly from the agriculture sector, which is seasonal in nature, majority of processing activities operate during the harvesting season and so the jobs in food processing units are observed to be temporary. The share of permanent job was the highest in dairy units (50 per cent) followed by grains and cereals (29.41 per cent). On the other hand, in fruits and vegetables units 89.47 per cent of the workers were temporary. In aggregate, the shares of the temporary and permanent jobs in processing units were 74.21 and 25.79 respectively. This implies that around three-fourth of the workers in food processing units were having temporary jobs.

***Age Distribution of Workers*:** The workers were categorised into three age groups namely, tender age group (15 to 18 years) mature age group (18 to 60 years) and old age group (above 60 years). The table 3 highlights the age group wise distribution of workers.

Table 3: Age group of the workers in surveyed food processing units of Assam

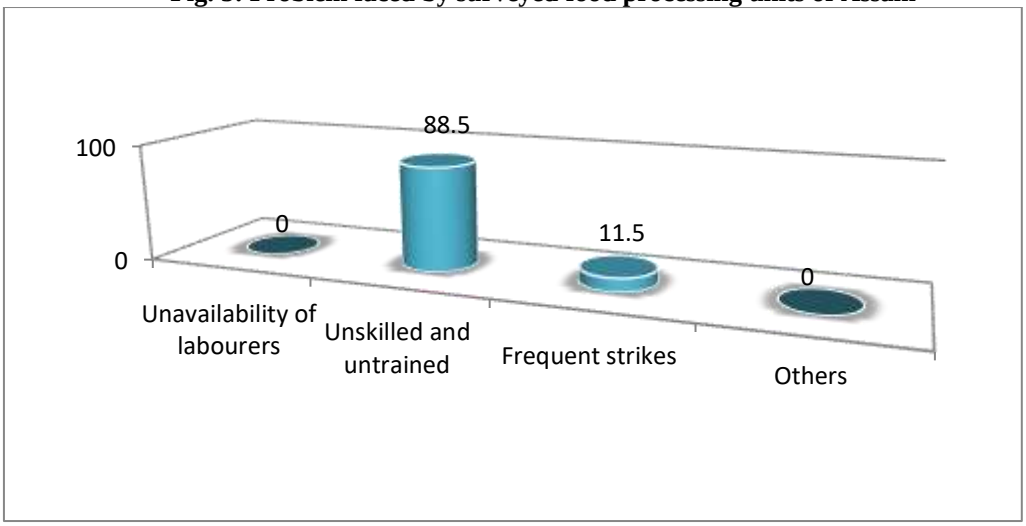
Age groups	Nos of workers	Percentage of total workers
15 to 18 years (tender workers)	9	3.18
18 to 60 years (Mature workers)	266	93.99
More than 60 years (Old workers)	8	2.83
Total	**283**	**100**

Source: Field survey, 2022

The table 3 shows that majority of the workers (94 per cent) belonged to mature age group (18 to 60 years). Only 3.18 per of the total workers were in the age group of 15 to 18 years (tender workers). It is to be noted that 2.83 per cent of the workers were in the age group of above 60 years (old workers). This shows that due to poor economic conditions and lack of care facilities, people at old age are compelled to engage themselves in wage work at food processing units.

Problems faced by food processing units: The study also explored the employment related problems being faced by the surveyed food processing units. It was found that only, 21.7 per cent of the surveyed food processing units faced employment related problem and the rest 78.3 per cent did not face such problem. Regarding the nature of problem, most of the units were facing the problem of unskilled and untrained labour. The details are presented in the figure 5.

Fig. 5: Problem faced by surveyed food processing units of Assam



Source: Field Survey, 2022

It was found that out of the units facing employment related problem, 88.5 per cent of them were facing the problem of unskilled and untrained workers and 11.5 per cent of them faced the problem of frequent strikes.

CONCLUSIONS

The study shows that food processing units have high potential to generate income and employment opportunities in Assam. It was found that out of six categories, four categories of food processing units mainly operate in the State and most of the surveyed food processing units were grains and cereal units and consumer food units. It was found that among the four categories, dairy units generate maximum value addition and income in the State. However, in terms of share in employment, grains and cereals occupy the top most

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position followed by consumer food. Thus, grains and cereals units have the capacity to generate higher employment opportunities. The sex distribution of work force revealed that the fruits and vegetable units employ more female workers than male workers as compared to other units. The analysis of nature of job in food processing units indicated that around three-fourth of the workers were engaged as temporary workers. The distribution of workers by age group showed that most of the workers were in age group of 18 to 60 years. But around 3 per cent of them were old workers (above 60 years). The analysis of employment related problem faced by the food processing units showed that 21 per cent of the surveyed units faced such problems. Most of those units faced the problem of unskilled labour.

The findings of the study lead to the following policy implications; the policy should focus on promoting food processing units to generate income and employment. Dairy units should be promoted as it generates higher value addition. It should give more emphasis on grains and cereals units and consumer units for employment generation; to generate employment for women, policy should promote fruits and vegetables units; the policy should focus on skill development as the food processing united require skilled labour.

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