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The socioeconomic status of pineapple growers in Manipur

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Abstract

In India, agriculture and other allied activities contribute significantly to the Gross Domestic Product (GDP), accounting for nearly 16% of the total GDP. Pineapple is one of the important fruit produced by farmers in the hilly area. The present study is an attempt to find out the socio-economic conditions of the pineapple farmers in the Imphal east district of Manipur. The data for the study was collected from a sample of 120 pineapple growers. It was found that the size of the farm groups in numbers for marginal, small and medium was 54, 43 and 23 respectively whereas the sample average percentage of males and females for different sizes of farm groups was 56.87% and 43.14%. The average size of the cultivated holdings per hectare for marginal-size farms was 0.84 ha followed by 1.78 ha for small-size farms and 2.57 ha for medium size farm groups respectively which constituted a sample average of 1.50 ha. Pineapple occupied a major area of 0.45 ha by marginal farms followed by 1.25 ha for small-size farms and 1.78 ha for medium size farm groups respectively. It was found that the maximum number of farmers is a backward and scheduled group, and their socio and economic status are still worse. On account of small land holdings and the inability to apply modern technology and inputs in pineapple cultivation, the marginal farmers of pineapple cultivation cannot earn much amount of profit when compared to the medium farmers.

Keywords: Socio-economic status, farmers, pineapple, Manipur

Introduction

India has made a lot of progress in agriculture since independence in terms of growth in output, yields and area under many crops. According to Pandey and Kumar (1999), there has been growing importance of fruit and vegetables in the agricultural economy of India, their production and marketing deserve the focused attention of all the stakeholders. India is the world's second-largest producer of fruits (57.73 million tonnes) with its projected value touching 98 mt by the year 2020-2021 (Banerjee 2009) [2], whereas for vegetables, it is 129mt, each contributing 10.0% and 13.3%, respectively to the total world production (Anonymous 2006) [1].

Pineapple (*Ananas comosus*) (Linn.) Merr.), is one of the commercially important fruit crops of the world and especially in India. It is the third most important tropical fruit in the world after the banana. Pineapple is found in most parts of the country and is also one of the largely grown fruits in the North Eastern States of India. Its share in the country's total pineapple production is substantial and Manipur is one of the major contributors in this regard. The pineapple grown and cultivated in Manipur is higher in demand as compared to the other states due to its distinctive taste and flavour. In North-East India, Manipur is one of the leading pineapples producing States (Meitei, 1997) [10] owing to its salubrious climate and soil type. It has an average temperature of 20-36 °C and receives excellent sunshine during the summer and winter seasons. Among the fruits produced in Manipur, pineapple records the largest production. The prevailing wide agro-climatic conditions of Manipur make it possible to cultivate pineapple throughout the year. Its share in the country's total pineapple production is substantial and Manipur is one of the major contributors. Pineapple is among the major fruit abundantly available in Manipur for almost 8 months a year. Economically, the fruit has become the backbone of a sizeable section of farmers who have been cultivating it as their major source of income. Pineapple is the largest of fruits that are produced in Manipur and rightfully could be honoured as the State fruit. The average weight of a single pineapple is said to be 1.5 kg, whereas, the weight of a pineapple ranges from 1 to 3 kg. The present study aims at examining the growth rate in area, production and productivity of pineapple in the state.

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Materials and Methods

The present study is based on the primary survey data which a sample of 120 farmers has been taken randomly for the analysis of the socio-economic status of the pineapple farmers from the village. The relevant data were collected from demographic and social aspects. All the collected data were analyzed to meet the objectives of the study. The data collected through the schedule were coded, tabulated, analyzed and presented in tables to make the findings meaningful and easily understandable. The findings emerging from the analysis of the data were suitably interpreted and inferences were drawn. To evaluate the specific objectives of the study, frequency, percentage distribution and mean yield and income were used as statistical tools for the study.

Results and Discussion

An understanding of the general characteristics of sample

farmers is expected to provide a bird's eye view of the general features prevailing in the study area. Therefore, an attempt has been made in the study to analyze some of the important characteristics of the sample farmers.

The structure of a sample family has an important role in the farm economy, as the income-earning capacity of the family in farm management is based on the structure of the families. Agriculture is found to be inherent in almost all the farmers in the study area. It is evident from Table 1 below that size of the farm group for marginal, small and medium-sized farms was 54, 43 and 23 respondents respectively. Altogether 120 respondents were selected for the study. The average size of the cultivated holdings per hectare for marginal-size farms was 0.84 ha followed by 1.78 ha for small-size farms and 2.57 ha for medium size farm groups respectively which constituted a sample average of 1.50 ha.

Table 1: Detail description of the cultivated holdings in different sizes of the farm group

Sl. No.	Particulars	Size of the Farm group			Sample Average
		Marginal	Small	Medium	
1	Size of the Farm group (in number)	54	43	23	120
2	The average size of cultivated holdings in hectares	0.84	1.78	2.57	1.50
3	Land utilization in different crops (sown in an area in ha)				
I	Kharif				
	1. Pineapple	0.45	1.25	1.78	0.99
	2. Paddy	0.18	0.13	0.28	0.18
	3. Maize	0.12	0.25	0.21	0.18
	4. Others	0.09	0.15	0.30	0.15
Ii	Rabi				
	1. Pineapple	0.45	1.25	1.78	0.99
	2. Paddy	0.09	0.18	0.27	0.20
	3. Gram	0.05	0.13	0.17	0.15
	4. Others	0.06	0.22	0.35	0.17
Iii	Zaid (summer)				
	1. Pineapple	0.45	1.25	1.78	0.99
	2. Banana	0.13	0.19	0.21	0.17
	3. Others	0.13	0.15	0.19	0.15
4	Total sown area	2.20	5.15	7.32	4.32

No. of respondent= 120

M S M= 54+ 43+23=120

(Area in hectares)

It can also see the land utilization pattern in different crops. The crops sown in the Rabi season in this area were Pineapple, Paddy, Maize and others. Among these Pineapple occupied a major area of 0.45 ha by marginal farms followed by 1.25 ha for small-size farms and 1.78 ha for medium size farm groups respectively.

The total sown area for marginal, small and medium size farm groups was 2.20 ha, 5.15 ha and 7.32 ha respectively.

The composition of the average size of the farm families

according to age and gender composition is indicated in Table 2. The average size of the farm families in marginal, small and medium size of farm groups were 7.23, 6.8 and 5.6 respectively. The sample average percentage of males and females of different sizes of farm groups was 3.85 and 2.93 respectively. The highest sample average of different sizes of farm groups belongs to the age composition of 15-60 years (4.60) followed by below 15 years (1.40) and above 60 years (0.76) respectively.

Table 2: Detail description of the sample size households in different sizes of the farm group

Sl. No.	Particulars	Size of the Farm group			Sample Average
		Marginal	Small	Medium	
1	Size of the farm group (in numbers)	54	43	23	120
2	The average size of farm families	7.23 (100)	6.8 (100)	5.6 (100)	6.76 (100)
3	Male (in percentage)	4.13 (57.12)	3.85 (56.62)	3.17 (56.61)	3.85 (56.86)
	Female	3.10 (42.88)	2.95 (43.38)	2.43 (43.39)	2.92 (43.14)
4	Age composition				

	Below 15 years	1.45 (20.06)	1.43 (21.03)	1.25 (22.32)	1.40 (20.77)
	15-60 years	5.23 (72.34)	4.53 (66.62)	3.25 (58.04)	4.60 (68.01)
	60 years and above	0.55 (7.61)	0.84 (12.35)	1.10 (19.64)	0.76 (11.23)

No. of respondent= 120

M S M= 54+ 43+23=120

Note: Figures in parenthesis indicate the percentage to the total size of families

Table 3: Detail description of Literacy in different sizes of the farm group

Sl. No.	Particulars	Size of the Farm group			Sample Average
		Marginal	Small	Medium	
1	Size of the farm group (in numbers)	54	43	23	120
2	The average size of farm families	7.23 (100)	6.8 (100)	5.6 (100)	6.7 (100)
3	Educational status (%)				
I	Primary	1.25 (20.97)	0.81 (14.34)	0.83 (18.44)	1.01 (18.17)
II	Middle	1.20 (20.13)	1.35 (23.89)	0.88 (19.56)	1.19 (21.41)
III	Intermediate	2.71 (45.47)	2.78 (49.20)	2.25 (50.00)	2.65 (47.53)
IV	Graduation and above	0.80 (13.42)	0.71 (12.57)	0.54 (12.00)	0.72 (12.89)
4	Total Literacy	5.96 (82.43)	5.65 (83.09)	4.50 (80.36)	5.57 (82.34)

No. of respondent= 120

M S M= 54+ 43+23=120

Note: Figures in parenthesis indicate the percentage to the total size of the families

The educational status of different sizes of farm groups is indicated in Table 3. The literacy percentage was highest (83.09%) in small-size farms followed by marginal-size farms (82.43%) and medium-size farms (80.36%) respectively.

Among the marginal size farm group, 13.42% of literates had studied graduation and above while 12.57% for small size farm group and 12% for medium size farm group.

Table 4: Detail of Occupational description in different sizes of the farm group

Sl. No.	Particulars	Size of the Farm group			Total number of respondents
		Marginal	Small	Medium	
1	Size of the farm group (in numbers)	54	43	23	120
2	One occupation (Primary occupation)	18 (33.33)	14 (32.55)	9 (39.13)	41 (34.16)
3	Two occupation (Secondary occupation)	20 (37.03)	16 (37.20)	6 (26.08)	42 (35.00)
4	Three occupation (Tertiary occupation)	16 (29.62)	13 (30.23)	8 (34.78)	37 (30.83)

No. of respondent= 120

M S M= 54+ 43+23=120

Note: Figures in parenthesis indicate the percentage to the total size of the families

Table 4 revealed that the size of the farm group in numbers for marginal, small and medium sizes of the farm was 54, 43 and 23 respondents respectively. The primary occupation was highest in medium size farms (39.13%) followed by marginal-size farms (33.33%) and lowest in the case of small-size farms (32.55%) respectively, which therefore makes a sample average of 34.16% for the primary occupation of different size of the farm group. Secondary occupation for marginal,

small and medium size farm groups was 37.03%, 37.20% and 26.08% respectively. The sample average for secondary occupation among the different sizes of farm groups was 35.00%. Tertiary occupation for marginal, small and medium size farm groups was 29.62%, 30.23% and 34.78% respectively. This makes the sample average for tertiary occupation in different sizes of farm groups 30.83%.

Table 5: Labor utilization of pineapple crop in different sizes of farm group, per-hectare in Man days

Sl. No.	Different farm operations	Size of the Farm group			Sample Average
		Marginal	Small	Medium	
1	Land preparation	2 (40.00)	1 (33.33)	1 (50.00)	1.45 (50.00)
2	Transportation of fertilizers and manure	0	0	0	0
3	Nursery preparation, sowing /transplanting	0	0	0	0
4	Weeding and Inter-culture operation	-	-	-	-
5	Irrigation operation	-	-	-	-

6	Plant protection	-	-	-	-
7	Harvesting	-	-	-	-
8	Loading/unloading material, transportation	3 (60.00)	2 (66.66)	1 (50.00)	2.26 (50.00)
9	Total	5 (100)	3 (100)	2 (100)	3.71 (100)

No. of respondent= 120

M S M= 54+ 43+23=120

Note: Figures in parenthesis indicate the percentage of the total

Table 5 reveals the different operational wise labour utilization of pineapple crops in different sizes of the farm group. The total land preparation for marginal, small and medium size of farm groups was 40.00%, 33.33% and

50.00% respectively. The loading/unloading material and transportation were highest (66.66%) for the small-size farm group, followed by the marginal-size farm group (60.00%) and medium-size farm group (50.00%) respectively.

Table 6: Tractor and Machinery utilization of pineapple crop in different sizes of farm groups, per hectare in hours.

Sl. No.	Different farm operations	Size of the Farm group			Sample Average
		Marginal	Small	Medium	
1	Land preparation	4 (40.00)	4 (33.33)	5 (33.33)	4.19 (50.00)
2	Transportation of fertilizers and manure	2 (20.00)	3 (25.00)	4 (26.66)	2.74 (23.48)
3	Nursery preparation, sowing /transplanting	-	-	-	-
4	Weeding and Inter-culture operation	-	-	-	-
5	Irrigation operation	-	-	-	-
6	Plant protection	-	-	-	-
7	Harvesting	-	-	-	-
8	Loading, unloading, material, transportation	4 (40.00)	5 (41.66)	6 (40.00)	4.74 (40.61)
9	Total	10 (100)	12 (100)	15 (100)	11.67 (100)

No. of respondent= 120

M S M= 54+ 43+23=120

Note: Figures in parenthesis indicate the percentage of the total

Table 6 reveals the different operation-wise tractor and machinery utilization in pineapple cultivation for land preparation in different sizes of farm group was 50.00% followed by transportation of fertilizers and manures which was 23.48% and for loading, unloading and transportation was 40.61% respectively.

Conclusion

The above analysis indicates the overall socio-economic status of the pineapple growers in the Imphal east district of Manipur. It was found that the size of the farm groups in numbers for marginal, small and medium was 54, 43 and 23 respectively whereas the sample average percentage of males and females for different sizes of farm groups was 56.87% and 43.14%. The educational status resulted in marginal, small and medium size of farm groups where 82.34% were literate. The sample average percentage for one occupation was 34.17% for secondary occupations was 35.00% and for tertiary occupations was 30.83% respectively in different sizes of farm groups. The results revealed the socio-economic status of the respondents found to be moderate with primary education, and well economic background.

The socioeconomic status of the pineapple farmers is important for the improvement of pineapple cultivation and to provide better policy options since the demand for pineapples has been expanding both locally and globally. As mentioned at the start, the pineapples in Manipur are considered the best in terms of their taste by the industry experts interviewed by the authors. Most pineapples are grown by small landholders. The size of the smallholders is detrimental to their negotiating

power and has led to inert distrust in collectors. The study of the socio-economic profile of the pineapple growers aims to better understand the pineapple growers in the area which can future improve the productivity of pineapple as a whole.

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