



Knowledge of the Pineapple Growers toward Improved Pineapple Production Practices in Imphal East District of Manipur

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ABSTRACT

This study has been conducted to find out the knowledge of the respondents towards recommended pineapple production practices. The study was conducted in Keirao Block in Imphal East district which were selected purposively. A descriptive research designed was applied for this study. The primary data was collected from 120 respondents which were selected randomly by personal interview method using pre-structure interview schedule. It was observed that, maximum number of the respondents were having medium level of extension contact, a medium level (65.83) was found in regards to the knowledge of the respondents. The Study indicates that a sum number of the population had incorporated the new technologies while others have still yet to adopt and use the new recommended pineapple cultivation practices. The socio-economic variables associated with the respondents, such as age, land holding, education, annual income and mass media exposure, extension contact and personal contact were positively and significantly associated with the overall knowledge of the respondents. The above results compel that the research and extension system to work on the gaps which will improve knowledge of the pineapple growers of the area.

Keywords: Knowledge, pineapple production practices, Imphal East, Keirao, Pineapple growers

Introduction

Pineapple is an Important fruit of India. Pineapple is cultivated in an area of 89 thousand hectares and total Production is 1,415.00 thousand tons. About 67% of the geographical area of Manipur is hill tract cover forests, Pineapple are among the major fruits abundantly available in Manipur for almost 8 month a year. The present pineapple cultivated area is about 10,000 ha with an annual yield of 70,000 MT. Among all the district of Manipur, Imphal East district is the largest producer of Pineapples in and around the Ngarian hills. The fruits weighing nearly 1.2-1.7 kg with the TSS of 14-180 brix and acidity 0.9 to 1.2% and total sugar 0.7 to 1.75 % depending on the stage of maturity and season. In the district Pineapples are grown in hillocks with a slope of 30-40% as beyond that soil erosion is very high during rainy season and experienced moisture scarcity during winter. Imphal East and Thoubal district mainly produce Queen variety fruits which mainly suits with hilly soils. (T.Chanu 2014)

Farmers in hilly areas of Imphal East areas have shifted from paddy cultivation, an age-old practice, to pineapple production. In the present situation, pineapple has become one of the most important commercial crops in the State mainly in and around Ngarian hills areas of Imphal East district.

The present study was an effort to bring out a clear picture of the existing situation with respective improved knowledge of the farmers of pineapple production practices. Therefore, the results of the present study was of



utmost importance to planners, policy makers and extension workers to take stock of the situation and to design and popularize such a balanced policy that was to be in line with the existing needs of the pineapple growers. The main objective of this study was

1. To assess the profile characteristics of the respondents
2. To find out the Knowledge of recommended pineapple production practices by the respondents.

Research Methodology

Descriptive research design was followed for the present study both primary and secondary data were collected through pre-structure interview schedule.

Imphal East district of Manipur was selected purposively since maximum pineapple cultivation area in Manipur fall under Imphal East district and also the researcher belong to the area is well conversant with language, geography, agriculture and other aspect of the area. Keirao block, a sub-division district (block no.01886) of Imphal East district was selected purposively as Keirao is known for its pineapples. There are several villages around this town that cultivate pineapples at a large scale. There are 36 villages in Keirao block out of which 10 villages were selected purposively based on maximum area under pineapple cultivation were selected for the present study. Twelve respondents were selected randomly from each selected village, thus total sample constituted 120 respondents.

Data Analysis

Collected data were analyzed and appropriate statistical tools have been used for analysis of data

Table 1: Profile characteristics of the respondents.

Sl.no	Variables	Intervals	Frequency	Percentage
1	Age	20-35(young) 36-55(middle) Above 55 (old)	34 54 32	28.33 45.00 26.67
2.	Education	Illiterate Upto primary school High school Intermediate Graduation	51 28 12 18 11	42.51 23.33 10.00 15.00 9.16



3.	Occupation	Farming	79	65.83
		Farming +Business	41	34.17
4.	Annual income	Upto Rs 48000	41	34.17
		Rs48000 to 96000	54	45.00
		Above than Rs 96000	25	20.53
5	Size of landholding	Less than 1ha	112	93.33
		1-2 ha	5	4.17
		More than 3 ha	3	2.50
6	Type of house	Hut	70	58.34
		Semi-cemented	42	35.00
		Cemented	8	6.66
7	Family size	Less than 5 members	72	60.00
		Above 5 members	48	40.00

8	Extension contact	Low	32	26.67
		Medium	45	37.50
		High	43	35.83
9	Source of Information	Low	20	16.66
		Medium	81	67.50
		High	19	15.87
10	Social Contact	No membership in any organization	29	24.16
		Membership in one organization	54	45.00
		Membership in more than one organization	37	30.87



From the above table 1, it was found that 45.00% of respondents belonged to the age group of middle ages, 42.50 per cent of the respondents were illiterate ,majority (65.83%) of the respondents main occupation was farming , 45.00% of the respondents have an annual income between Rs 48000 - 96000, 93.33 per cent of the farmers have land holding of less than 1 ha , 58.33 per cent of the respondents have mud/hut type of houses, 60.00 per cent have less than 5 members in a family, 37.50 per cent of the respondents have medium level of extension contact, 67.50 per cent of the respondents have medium level of source of information and 45.00 per cent of the respondents have medium level of social contact.

Knowledge of the respondents improved towards pineapple cultivation practice were presented in table.2.

Table 2: Knowledge of respondents about recommended pineapple production practices of Pineapple.

Sl. No.	Statements	Knowledge					
		Fully known		Partially known		Not known	
		F	%	F	%	F	%
1.	Field preparation: i)Traditional method- 2-3 times ploughing	102	85.00	18	15.00	0	0
	ii)Loosing soil	105	87.50	15	12.50	0	0
	iii)Levelling	113	94.16	7	5.83	0	0
2.	Improved variety: i) Queen	84	70.00	36	(30)	0	0
3.	Planting Materials: Ratoons	48	40.00	70	58.33	2	1.66
	Suckers	81	67.50	39	32.50	0	0
	Slips	0	0	27	22.5	94	78.33
	Gills	0	0	19	15.83	101	84.16
4.	Time of Cultivation: August - October	47	39.16	54	45	19	15.83
5.	Spacing : 22.5 ×75 × 60cm	91	75.83	17	14.16	13	10.83



6.	Fertilizers: i)200:50:200 Kg NPK/ha	7	5.83	25	20.83	88	73.33
	ii)40-50t/ha (FYM)	10	8.33	69	57.50	41	34.16
7.	Irrigation: i)Spinkler irrigation	0	0	13	10.83	108	89.17
	ii)Surface and Sub irrigation	13	10.84	35	29.16	72	60.00
8.	Weeding and hoeing operations: i)2times	53	44.16	61	50.83	6	5.00
	ii) 4times	93	77.50	27	22.5	0	0
9.	Weed control: i)Hand weeding	105	87.50	15	12.50	0	0
	ii)Diuron and Bromacil	7	5.83	36	30	77	64.16
10.	Diseases: i)Black rot or soft rot	15	12.50	42	35.00	64	53.33
	ii) Leaf spot	15	12.50	38	31.66	67	55.83
11.	Harvesting: 1. 5 months	28	23.33	79	65.83	13	10.83
	2. 7- 8 month	39	32.50	74	61.66	7	5.83
12.	Yield:50-80 tonnes/ha	53	44.16	58	48.33	9	7.50
13.	Storage (7 to 12°C)	11	9.16	46	38.33	63	52.50
14.	Processing (syrup, juice, jam)	73	60.83	33	27.5	14	11.66
15.	Transportation (Packaging)	73	60.83	19	15.83	28	23.33



Table 3: Knowledge level wise distribution of the respondents

Sl. no	Category	Frequency	Percentage
1	Low (15-24)	16	13.33
2	Medium (25-34)	79	65.83
3	High (35-44)	25	20.83

The data in table 3, inferred that 65.83 percent of pineapple growers were belonged to medium level of knowledge. Whereas 13.33 percent and 20.837 percent of the respondents belonged to low and high adoption category respectively. Similar findings is also reported by

Table 4: Association between socio-economic characteristics and knowledge level of respondents

S. No.	Characteristics	r-value	Regression co-efficient
X ₁	Age	0.571	0.761 ^{NS}
X ₂	Occupation	0.470	0.091 ^{**}
X ₃	Marital status	0.145	0.085
X ₄	Educational status	0.484	0.433 ^{**}
X ₅	Income	0.426	0.587 ^{**}
X ₆	Family type	-0.469	0.79 ^{NS}
X ₇	Family size	0.399	0.061 ^{**}
X ₈	Type of house	0.392	0.025 ^{NS}
X ₉	Land holding size	0.165	0.281 [*]
X ₁₀	Farm power	0.266	0.326 [*]
X ₁₁	Material possession	0.480	0.061 ^{**}
X ₁₂	Mass media exposure	0.368	0.261 [*]
X ₁₃	Extension contact	0.518	0.254 [*]
X ₁₄	Sources of information	0.349	0.263 [*]
X ₁₅	Membership	0.125	0.361 [*]

$$R^2 = 0.44 \quad F = 5.364 \quad a = -4.246$$

** - Significant at 1%

* - Significant at 5%

NS - Non significant

From table.3, it could be understood that the knowledge level of pineapple growers had significant and positive association with age, occupation, marital status, education, family size, type of house, land holding, material



possession and membership. Meanwhile, annual income, family type, farm power, mass media exposure extension contacts and source of information had non-significant association with the knowledge level of pineapple growers. Thus, it implies that increase in age, increased educational status, increased farm power, increased participation of pineapple growers in organization, mass media exposure, extension contact and source of information increases the knowledge level of the pineapple growers. Simultaneously, increase in annual income, marital status, land holding and family size does not affect the knowledge level of the pineapple growers.

Conclusion

It was concluded that that majority of the respondents were middle age group, illiterate of education having less than 1 hectares of land holding, belonged to small family with low social participation. The respondents have maximum participation. Majority of the respondents have medium level of participation. Landholding, income, education, mass media exposure, extension contact and sources of information have positively and significantly associated with the knowledge level of the respondents. Training, demonstration and proper extension strategy to be followed for improving knowledge level of the respondents about improved pineapple production practices which will lead all round development of the area

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