Title: A Study on Production and Marketing of Pineapple in Kolli Hills, Namakkal District, Tamil Nadu-India.

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Abstract

India is the second largest producer of fruits (44mt) and vegetables (87.5mt) with a unique position in fruits like mango, banana, pineapple, sapota and grapes. India's share in the world production is about 10.1 per cent in fruits and 14.4 per cent in vegetables. The future of the Indian farmers depends on the success of the agriculture sector as India's prosperity is predominantly linked to the growth in income in the agrarian sector. Pineapple is the most important American fruit and the third most important tropical fruit, after banana and mango. It is cultivated in all tropical and subtropical countries. The common name for one member of and for the Bromeliaceae. The fruit, whose spiny skin is yellowish brown when ripe, is sweet and juicy it is topped by a distinctive rosette of green leaves. It is grown throughout warmer regions. Pineapple is gradually expanding in the study area district.

Key Words: Pineapple Production, Agricultural Marketing, Marketing Management Concepts, Regulated Markets, Product Concept, Selling Cost.

Introduction

The common name for one member and for the Bromeliaceae, a family of chiefly epiphytic herbs and small shrubs. The spiny leaves of various species of the genus Ananas yield a hard fiber called gravata in South America and pina, or pineapple cloth, in the Philippines. The fruit, whose spiny skin is yellowish brown when ripe, is sweet and juicy, it is topped by a distinctive rosette of green leaves. It is grown throughout warmer regions. Thailand, the Philippines, and Brazil are the largest producers of canned pineapple. It is known botanically as Ananas comosus Merr. The fruit has acquired few vernacular names. The pineapple is mostly grown in West Bengal, Assam, Karnataka, Meghalaya, Manipur, Bihar, Goa, Tamil Nadu and Kerala. It is one of the most common fruits in India.

Objectives

- To analyze the socio-economic status of farmers in the selected block.
- > To study the trends in cost of pineapple cultivation.
- To analyze estimate the economics of pineapple production on the basis of benefit cost analysis.
- To find out the problems faced by the sample farmers in study area.
- ➤ Imply the some policy measure to enhance the sustainability of pineapple cultivation in the selected place.

Statement of the Problem

In the process of marketing the producer has to incur various marketing costs. These costs are determined by the producer's performance and efficiency of different marketing functionaries which in turn influence the returns to the growers. Other problems like finance, often changes of price and poor technology.

Hypotheses

- > There is significant difference in socio-economic status of farmers in the study area.
- There is a significant inter village variation and farm size variation in cost of pineapple cultivation from the stage of growing period to the stage of production of pineapple among the selected farm households in Kollimalai, Namakkal District.
- ➤ There is significant farm wise variation with respect to economics of pineapple production on the basis of benefit cost analysis in the study area.
- The respondents differ significantly in their mode of marketing pineapple.

Methodology

This study aims at analyzing the pattern of pineapple cultivation in Kolli hills, Namakkal District. It analyses various components of cost of cultivation of pineapple on the basis of results obtained through field survey. It also examines the economics of pineapple cultivation in terms of gross or net profit of pineapple cultivation. The design of the study is analytical method.

Sampling

Kolli hills has about 35 revenue villages. Out of them 6 villages are selected as sample according to the performance of pineapple cultivation. Arasampatty village has 78 pineapple growing farmers and among the farmers 50 are selected as constituting 64.10 per cent of the universe. Keeraikadu village has 82 pineapple growing farmer and among them 50 are selected as sample constituting 60.97 per cent of the universe. Sellipatty village has 95 pineapple growing farmer and among them 50 are selected as sample constituting 52.63 per cent of the universe. Bellakadu village has 76 pineapple growing farmer and among them 50 are selected as sample constituting 65.78 per cent of the universe. Thottikadu village has 98 pineapple growing farmer and among them 50 are selected as sample constituting 51.02 per cent of the universe. Vadugarpatty village has 89 pineapple growing farmer and among them 50 are selected as sample constituting 56.17 per cent of the universe. Thus in total 300 pineapple growing farmers are selected as sample on the basis of purposive random sampling method.

Data Collection

The relevant primary data are collected from the respondents by employing a well structured interview schedule. The researcher has visited each village and met the respondents. The relevant secondary data are collected from the various government reports, such as reports of District Rural Development Agency, and Director of Statistics.

Data Analysis

The collected data are classified and tabulated with the help of computer programming. Cross tabulation is made for data pertaining to socio-economic background of the respondents.

Limitations

- ➤ The chances of recall bias among the respondents maybe greater, which will not give a true picture about the study area.
- ➤ There are chances for human bias and most of them do not maintain account for their expenditure on the inputs.
- ➤ Kolli Hills is a truly rugged terrain and is not meant for the faint-hearted. It takes courage to even consider and plan a trip to this virgin hill.
- ➤ Located just 100 KMs from Salem town, it is accessible yet outside the reach of unadventurous souls.

Results and Discussion

Table.1
Caste Wise Distribution of Respondents

Area	Backward caste	Most Backward caste	Schedule caste	Schedule tribe	Total
Amagammatti	8	10	9	23	50
Arasampatti	(16.00)	(20.00)	(18.00)	(46.00)	30

P-ISSN: 2204-1990; E-ISSN: 1323-6903 DOI: 10.47750/cibg.2021.27.02.570

77 11 1	7	21	8	14	5 0
Keeraikadu	(14.00)	(42.00)	(16.00)	(28.00)	50
Callington	6	12	21	11	50
Sellipatty	(12.00)	(24.00)	(42.00)	(22.00)	50
Dallakadu	9	8	11	22	50
Bellakadu	(18.00)	(16.00)	(22.00)	(44.00)	50
Thottikadu	5	9	13	23	50
THOUKadu	(10.00)	(18.00)	(26.00)	(46.00)	50
Vadagurpatt	8	11	6	25	50
у	(16.00)	(22.00)	(12.00)	(50.00)	50
Total	43	71	68	118	300
Total	(14.33)	(23.67)	(22.67)	(39.33)	300

Source: Primary Data

Data presented in table.1 indicates out of 300 respondents 14.33 fit in to the backward caste and most backward caste is 23.67 per cent. It was found the schedules caste and scheduled tribes contributed 22.67 per cent and 39.33 per cent respectively in the total respondent. The concentration of scheduled tribes was found in the areas of Arasampatti, Bellakadu and Vadagurpatty.

Table.2
Age Wise Distribution of Respondents

Area	20-30	30-40	40-50	50-60	Total
Arasampatti	19	11	12	8	50
Arasampatti	(38.00)	(22.00)	(24.00)	(16.00)	30
Keeraikadu	15	13	12	10	50
Reciaikadu	(30.00)	(26.00)	(24.00)	(20.00)	30
Collinatty	19	9	10	12	50
Sellipatty	(38.00)	(18.00)	(20.00)	(24.00)	30
Bellakadu	20	15	7	8	50
Denakadu	(40.00)	(30.00)	(14.00)	(16.00)	30
Thottikadu	18	12	11	9	50
Thoursauu	(36.00)	(24.00)	(22.00)	(18.00)	30
Vadagurpatty	8	15	9	18	50
vadagurpatty	(16.00)	(30.00)	(18.00)	(36.00)	30
Total	99	75	61	65	300
Total	(33.00)	(25.00)	(20.33)	(21.67)	300

Source: Primary Data

P-ISSN: 2204-1990; E-ISSN: 1323-6903 DOI: 10.47750/cibg.2021.27.02.570

The table.2 indicates the age wise distribution of respondents. In the 300 samples 33 per cent belong to the age group of 20-30 years, 25 per cent of them come under the age group of 30-40 years and 20.33 per cent of them belong to the age group of 40-50 years. Moreover 21.67 per cent of them belong to the age group of 50-60 years. Majority of the peoples in the areas of Bellakadu village, Thottikadu village, Sellipatty village, Keeraikadu village, and Arasampatti village fall under the age group of below 40 years.

Table.3
Farm Wise Distribution of Respondents

Area	Marginal	Small	Medium	Large	Total
Arasampatti	27	12	6	5	50
Arasampatu	(54.00)	(24.00)	(12.00)	(10.00)	30
Keeraikadu	11	24	8	7	50
Recraikadu	(22.00)	(48.00)	(16.00)	(14.00)	30
Sellipatty	17	13	11	9	50
Sempatty	(34.00)	(26.00)	(22.00)	(18.00)	30
Bellakadu	7	9	26	8	50
Dellakadu	(14.00)	(18.00	(52.00)	(16.00)	30
Thottikadu	21	14	9	6	50
Thottikadu	(42.00)	(28.00)	(18.00)	(12.00)	30
Vadagurpatty	16	22	7	5	50
v adagurpanty	(32.00)	(44.00)	(14.00)	(10.00)	30
Total	99	94	67	40	300
Total	(33.00)	(31.33)	(22.33)	(13.33)	300

Source: Primary Data

The table.3 indicates the farm wise distribution of respondents. It is observed that out of 300 respondents, 33 per cent marginal farmers and 31.33 per cent the small farmers group. In this study 22.33 per cent of them belong to the medium farm group and the rest 13.33 per cent of them belong to the large farm group. The areas such as Arasampatti village (54.00Per cent), Sellipatty village (34.00Per cent), and Thottikadu village (32.00Per cent), witnessed large number of small farmers.

Table.4
Education Wise Distribution of Respondents

Area	Primary	Pre secondary	Secondary	Higher secondary	Degree	Total
Arasampatti	20 (40.00)	12 (24.00)	7	6 (12.00)	5 (10.00)	50
	7	21	(14.00)	7	(10.00)	
Keeraikadu	(14.00)	(42.00)	(18.00)	(14.00)	(12.00)	50

P-ISSN: 2204-1990; E-ISSN: 1323-6903 DOI: 10.47750/cibg.2021.27.02.570

Callinatty	8	11	16	8	7	50
Sellipatty	(16.00)	(22.00)	(32.00)	(16.00)	(14.00)	50
Bellakadu	17	12	9	7	5	50
Dellakadu	(34.00)	(24.00)	(18.00)	(14.00)	(10.00)	30
Thottikadu	16	13	7	6	8	50
THOUKAGU	(32.00)	(26.00)	(14.00)	(12.00)	(16.00)	30
Vadagurpatty	22	8	9	5	6	50
vadagurpatty	(44.00)	(16.00)	(18.00)	(10.00)	(12.00)	30
Total	90	77	57	39	37	300
1 Otal	(30.00)	(25.67)	(19.00)	(13.00)	(12.33)	300

Source: Primary Data

The table .4 presents the education wise distribution of respondents. Among the total farmers, 30 per cent completed their primary education, 25.67 per cent of peoples completed pre secondary level education and 19 per cent completed secondary level education. It was found that 13 per cent of the respondents are educated up to higher secondary and the rest (12.33 per cent) of them are degree holders. Areas such as Arasampatti village (40.00Per cent), Bellakadu village (34.00Per cent), Thottikadu village (32.00Per cent), and Vadagurpatty village (44.00Per cent) have more numbers of respondents with primary education.

Table.5
Income Wise Distribution of Respondents

A was	Below	5000-	7500-	10000-	Above	Total
Area	5000	7500	10000	12250	12250	Total
Arasampatti	17	10	8	6	9	50
	(34.00)	(20.00)	(16.00)	(12.00)	(18.00)	30
Keeraikadu	8	11	12	7	12	50
Reerarkadu	(16.00)	(22.00)	(24.00)	(14.00)	(24.00)	50
Sellipatty	8	10	14	9	9	50
Semparty	(16.00)	(20.00)	(28.00)	(18.00)	(18.00)	30
Bellakadu	13	10	10	8	9	50
Denakadu	(26.00)	(20.00)	(20.00)	(16.00)	(18.00)	30
Thottikadu	15	12	6	5	12	50
Thoursadu	(30.00)	(24.00)	(12.00)	(10.00)	(24.00)	30
Vadagurpatty	8	13	12	9	8	50
	(16.00)	(26.00)	(24.00)	(18.00)	(16.00)	30
Total	69	66	62	44	59	300
Total	(23.00)	(22.00)	(20.67)	(14.67)	(19.67)	300

Source: Primary Data

P-ISSN: 2204-1990; E-ISSN: 1323-6903 DOI: 10.47750/cibg.2021.27.02.570

The table .5 reveals the income wise distribution of respondents. Out of 300 respondents, 23 per cent of the peoples earn monthly income below Rs.5000, 22 per cent earn monthly income in the range of Rs. 5000 to Rs.7500 and 20.67 per cent of the peoples which covers the range of Rs.7500-10000. It was found that 14.67 per cent of the peoples belong to the income bracket of Rs.10000-12250 and the rest of the peoples (19.67 per cent) belong to the above Rs.12250. It is obvious that majority of the sample farmers fall under the lower income categories.

Table.6
Family Size Wise Distribution of Respondents

Area	Small	Medium	Large	Total
Arasampatti	12	16	22	50
Arasampatu	(4.00)	(32.00)	(44.00)	30
Keeraikadu	11	21	18	50
Recraikadu	(22.00)	(42.00)	(36.00)	30
Callinatty	26	12	12	50
Sellipatty	(52.00)	(24.00)	(24.00)	30
Bellakadu	15	27	8	50
Dellakadu	(30.00)	(54.00)	(16.00)	30
Thottikadu	28	13	9	50
Thouradu	(56.00)	(26.00)	(18.00)	30
Vadagurpatty	23	16	11	50
vadaguipatty	(46.00)	(32.00)	(22.00)	30
Total	115	105	80	300
1 Utai	(38.33)	(35.00)	(26.67)	300

Source: Primary Data

Data presented in table .6 indicates the family size wise distribution of respondents. A considerable number of respondents of Arasampatti village (44.00Per cent), belong to the large family size. From this analysis it is concluded that a vast majority of the respondents fall under the categories of small and medium sized families.

Table.7
Housing Type Wise Distribution of Respondents

Area	Thatched	Tiled	Terrace d	Partly Tiled and Terraced	Partly thatched and tiled	Total
Arosompotti	20	7	8	9	6	50
Arasampatti	(40.00)	(14.00)	(16.00)	(18.00)	(12.00)	30
Keeraikadu	12	20	6	5	7	50
Reciaikadu	(24.00)	(40.00)	(12.00)	(10.00)	(14.00)	30

P-ISSN: 2204-1990; E-ISSN: 1323-6903 **DOI: 10.47750/cibg.2021.27.02.570**

Callinatty	8	9	21	7	5	50
Sellipatty	(16.00)	(18.00)	(42.00)	(14.00)	(10.00)	50
Bellakadu	20	9	7	8	6	50
Dellakadu	(40.00)	(18.00)	(14.00)	(16.00)	(12.00)	30
Thottikadu	9	13	11	9	8	50
THOUKAGU	(18.00)	(26.00)	(22.00)	(18.00)	(16.00)	30
Vadagurpatty	14	7	8	11	10	50
vadagurpatty	(28.00)	(14.00)	(16.00)	(22.00)	(20.00)	30
Total	83	65	61	49	42	300
1 Otal	(27.67)	(21.67)	(20.33)	(16.33)	(14.00)	300

Source : Primary Data

Table .7 presents the housing type wise distribution of the peoples. In this was observation that out of 300 of the peoples, 12.67 per cent live in the thatched houses, 21.67 per cent dwell in the tiled houses and 20.33 per cent of the peoples live in terraced houses. The sizeable number of the peoples of Keeraikadu village (40.00Per cent) and Thottikadu village (26.00Per cent) reside in the tiled houses.

Table.8

Cost – benefit profile of pineapple cultivation (Village wise)

	Total		Income per	Income	
Village	cost of	Yield	acre	from inter	Total
Village	product	per acre	pineapple	crop	income
	ion		cultivation	cultivation	
Arasampatty	104614	6557	131140	18025	149165
			(87.92)	(12.08)	147103
Keeraikadu	105031	6819	136380	19046	155426
			(87.74)	(12.26)	133420
Sellipatty	112900	6915	138300	21035	159335
			(86.79)	(13.21)	139333
Bellakadu	119597	6795	135900	22450	158350
			(85.02)	(14.18)	136330
Thottikadu	126641	7028	140560	30035	170595
			(82.39)	(17.61)	170393
Vadagurpatty	131805	8115	162300	32165	194465
			(83.45)	(16.55)	1 24403
Total	118837	7038	140760	23792	164552
			(85.54)	(14.46)	104332

Source: Primary Data

P-ISSN: 2204-1990; E-ISSN: 1323-6903 DOI: 10.47750/cibg.2021.27.02.570

The table .8 shows the village wise cost-benefit of pineapple cultivation. The yield of pineapple per acre was found to be 7038 Kg. This analysis exhibited that an average of pineapple production per acre was calculated to be 7038kg. It is observed that inter village variation is observed in income generation from pineapple cultivation. Vadagurpatty village ranks the first position in income generation.

Table .9 Farm - wise cost benefit analysis

Farm	Total cost of production	Yield per acre	Income per acre pineapple cultivation	Income from inter crop cultivation	Total income
Marginal	105959	8015	160300	26165	186365
			(86.01)	(13.99)	
Small	115125	7632	152640	25655	178295
			(85.61)	(14.39)	
Medium	125700	6890	137800	19450	157250
			(81.63)	(12.37)	
Large	132550	6985	139700	18500	158200
			(88.30)	(11.70)	
Total	118837	7038	140760	23792	164552
			(85.54)	(14.46)	

Source: Primary Data

The table.9 portrays the farms wise cost benefit analysis of pineapple cultivation in the study area. The marginal farmers were ranked the first position with respect to yield of pineapple as it was worked out to be 8015 Kg per acre. The small farmers take the second position with respect to yield of pineapple as it was worked out to be 7632 Kg per acre. The large farmers occupy the third position with respect to yield of pineapple as it was worked out to be 6985 Kg per acre. It is clear that they worked out to be 6890 Kg per acre and the fourth rank of the medium farmers with respect to yield of pineapple.

Table .10 Farm wise cost of pineapple cultivation

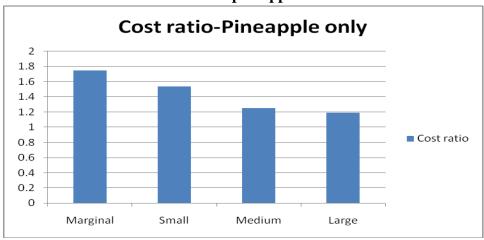
Farm	Total cost of production	Income from pineapple cultivation	Cost ratio	Total cost of production	Total income including inter crop	Cost ratio
Marginal	105959	160300	1.51	105959	186365	1.75
Small	115125	152640	1.32	115125	178295	1.54

Medium	125700	137800	1.09	125700	157250	1.25
Large	132550	139700	1.05	132550	158200	1.19
Total	118837	140760	1.18	118837	164552	1.38

Source: Primary Data

It is seen clearly from the above analysis that overall cost ratio of pineapple cultivation is worked out to be 1.38 including inter-crop cultivation and 1.18 for pineapple cultivation alone. Among the sample farmers, the performance of marginal farmers is best with respect to economics of pineapple cultivation and it is last in the case of large farmers.

Figure .1 Farm wise cost of pineapple cultivation



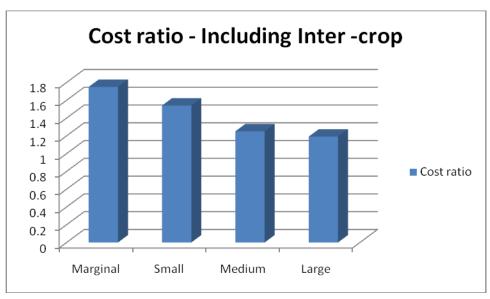


Table .11
The Results Multiple in the Regression of Large Farms of Pineapple production

Variable	Co-efficient	Standard	t Value
		Error	
Constant	627315.92	241632.75	2.59
Caste	87812.55	21615.59	4.04
Age	59312.23	19623.44	-3.02
Education	86415.27	78918.37	1.09
Family Size	59815.65	19781.27	-3.02
Farm Income	57318.38	18723.72	3.06
Non-farm Income	67332.49	18742.77	3.59
Land Holding	52436.5	39672.0	1.32
Fertilizer use level	87432.5	20415.	4.28
Pesticide use level	67813.3	21765.6	3.11
Mechanization	97416.7	12192.5	7.98
\mathbb{R}^2	0.9269		
F ratio	29.65		

Source: Computed

The table .11 presents the results of multiple regression results on pineapple production in the case of large farmers. There are ten independent variables were chosen. Among these independent variables, mechanization, caste, fertilizer used, education and pesticide level are the important independent variables which positively affect the pineapple production.

Problems Faced by the Sample Farmers

This section deals with farmers' problems in production of pineapple. These include High cost of planting material delay in payments, fluctuation in market price, high cost of borrowing, non-availability of adequate labour, weighment problems, lack of grading facilities, heart rot disease of pineapple, non-availability of credit in time, inadequate electricity for irrigation, absence of regulated markets, and lack of technical knowhow.

Table .12
Problems Faced by the Sample Farmers

Variables	Arasampatti	Keeraikadu	Sellipatty	Bellakadu	Thottikadu	Vadagurpatty	Total
Non-availability of planting materials in							2.64
time	2.16	2.42	3.12	3.01	2.45	2.66	2.04
Non-availability of fertilizers in time	2.2	2.32	3.26	3.29	2.45	2.61	2.69
Inadequate electricity for irrigation	2.31	2.52	3.56	3.74	2.63	2.57	2.89
Non-availability of adequate labour	3.31	3.52	3.11	3.63	3.63	2.54	3.29

Lack of technical know how	2.19	2.52	2.26	2.59	2.63	2.81	2.50
The high cost incur planting material	3.85	3.54	3.31	3.7	3.57	3.64	3.60
Credit- Non-availability in time	3.06	3.11	2.84	2.58	3.28	3.35	3.04
High cost of borrowing	3.37	3.28	3.09	2.97	3.51	3.85	3.35
Heart rot disease of pineapple	3.18	3.07	3.16	2.81	3.09	3.36	3.11
Absence of regulated markets	2.34	3.27	2.16	2.71	2.45	2.61	2.59
Fluctuation in market price	3.21	3.09	3.4	3.49	3.58	3.8	3.43
Lack of grading facilities	2.59	2.87	3.25	3.11	3.43	3.74	3.17
Lack of cold storage facilities	2.17	2.6	3.02	3.11	2.46	3.12	2.75
Delay in payments	3.37	3.62	3.22	3.81	3.7	3.49	3.54
Weighment problems	3.09	3.13	3.27	3.18	3.59	3.06	3.22
Non-availability of market information	3.02	3.29	2.89	2.69	2.59	2.46	2.82
Average	2.81	2.89	3.01	3.21	3.05	3.16	3.05

As far as the sample villages are concerned, the Bellakadu Vadagurpatty village was ranked at first in facing the problems on the basis of mean scores and this followed by Thottikadu village, Sellipatty village, Keeraikadu village and Arasampatti village respectively.

Table .13
Mode of transportation of pineapple - Village wise

Villages	Bullock cart	Tempo	Tractor	Lorry	Total
Arosompotty	12	8	9	21	
Arasampatty	(24.00)	(16.00)	(18.00)	(42.00)	50
Keeraikadu	6	8	29	7	
Reciaikadu	(12.00)	(16.00)	(58.00)	(14.00)	50
Callinatty	9	30	6	5	
Sellipatty	(18.00)	(60.00)	(12.00)	(10.00)	50
Bellakadu	7	8	5	30	
Бепакаци	(14.00)	(16.00)	(10.00)	(60.00)	50
Thottikadu	9	5	30	6	
Thoukadu	(18.00)	(10.00)	(60.00)	(12.00)	50
Vadaquematty	29	8	6	7	50
Vadagurpatty	(58.00)	(16.00)	(12.00)	(14.00)	50
Total	72	67	85	76	300
1 otai	(24.00)	(22.33)	(28.33)	(25.33)	300

Source computed

Figures in parentheses denote percentage

P-ISSN: 2204-1990; E-ISSN: 1323-6903 DOI: 10.47750/cibg.2021.27.02.570

The village wise analysis reveals the following facts. Majority of the farmers of Bellakadu (60Per cent) and Arasampatti village make use of lorry to transport their pineapples. A vast majority of the farmers of Keeraikadu village (58 Per cent) and Thottikadu village (60 Per cent) make use of tractor to transport their pineapples. The bullock cart usage is quite common among the farmers of Vadagurpatty village.

It is obvious that tractor usage is quite common in marketing pineapples and it occupies the first position followed by lorry, bullock cart and tempo usages.

Table. 14
Opinion of respondents on grading of pineapples – Farm wise

Farm	classific	y wise eation of eables	Factors	Total	Grand		
size	Yes	No	Freshness	Moisture content	Fleshy nature		Total
Marginal	63	46	14	13	36	63	109
Marginar	(57.80)	(42.20)	(22.22)	(20.63)	(57.14)		
Small	76	9	29	13	34	76	85
Siliali	(89.41)	(10.59)	(38.16)	(17.11)	(44.74)		
Medium	45	7	14	22	9	45	52
Medium	(86.54)	(13.46)	(31.11)	(48.89)	(20.00)		
Lamaa	46	8	27	10	9		
Large	(85.19)	(14.81)	(58.70)	(21.74)	(19.57)	46	54
Total	230	70	84	58	88		
10tai	(76.67)	(23.33)	(36.52)	(25.22)	(38.26)	230	300

Source computed

Figures in parentheses denote percentage

A study of data in table.14 indicates the farm wise respondents' views on grading pineapple for marketing purpose. Majority of the marginal farmers (57.14Per cent) and small farmers (44.74Per cent) stated that fleshy nature of pineapple determines the quality of pineapple. The medium farmers (48.89Per cent) stated that moisture content of pineapple determines the quality of pineapple. A more than half of the large farmers stated that freshness determines the quality of pineapple.

Table .15
Village Wise Respondents' Views on Pineapple Pricing System

Villages Satisfac present j syste	Pricing Reasons for dissatisfaction of pricing	Total	Grand Total
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	Yes	No	Low price	No dis cussion among framers	No price control among farmers		
Arasampatty	18	32	18	8	6	32	50
Thusamputty	(36.00)	(64.00)	(56.25)	(25.00)	(18.75)	32	30
Keeraikadu	6	44	12	10	22	44	50
Recraikadu	(12.00)	(88.00)	(27.27)	(22.73)	(50.00)	7-7	30
Sellipatty	11	39	9	8	22	39	50
Sempatty	(22.00)	(78.00)	(23.08)	(20.51)	(56.41)		
Bellakadu	14	36	8	12	16	36	50
Dellakadu	(28.00)	(72.00)	(22.22)	(33.33)	(44.44)	30	30
Thottikadu	15	35	24	6	5	35	50
Houkadu	(30.00)	(70.00)	(68.57)	(17.14)	(14.29)	33	50
Vadagurnatty	10	40	25	8	7	40	50
Vadagurpatty	(20.00)	(80.00)	(62.50)	(20.00)	(17.50)	40	30
Total	74	226	96	52	78	226	300
าบเลา	(24.67)	(75.33)	(42.48)	(23.01)	(34.51)	220	300

Source computed

Figures in parentheses denote percentage

It is seen clearly from the above analysis that majority of the farmers are satisfied with the present pricing system. In general, farmers are dissatisfied with preset pricing system owing to lack of coordination among the farmers while fixing the price, lack of price control mechanism among the farmers and low selling price of pineapples.

Findings

- Among different farmers, the marginal farmers are more in number and they contributed 33 per cent in the total farmers.
- > Farmers who fall under the higher income categories are low in number when compared to first two income categories.
- ➤ Only a few farmers live in the thatched and tailed houses.
- ➤ The total cost of pineapple production is worked out to be Rs. 118837 per acre during first years of cultivation.
- ➤ In general small farmers have less cost of pineapple cultivation when compared to large farmers.
- ➤ The overall benefit cost ratio of pineapple cultivation is worked out to be 1.38 including inter crop cultivation and 1.18 with pineapple cultivation alone.

P-ISSN: 2204-1990; E-ISSN: 1323-6903 DOI: 10.47750/cibg.2021.27.02.570

- Among the sample villages, the performance of Keeraikadu village is best with respect to economics of pineapple cultivation and it is last in the case of Thottikadu village.
- The moderate problems are identified as weighing problems, lack of grading facilities, heart rot disease of pineapple, and non-availability of credit in time.
- ➤ It is concluded that large farmers have high distance of accessing to market place for their pineapples in contrast to marginal farmers.
- ➤ It was concluded that large farmers make use of mainly lorry and tractor service to market their pineapples.
- As far as the marketing function is concerned the greatly depends upon the grading.
- ➤ In general, it is concluded that medium farmers occupy the first position in rating moisture content quality of pineapple.
- These advantages are realized mainly among the respondents of Sellipatty, Bellakadu and Arasampatti villages.
- ➤ It is observed that that majority of the farmers are not satisfied with the present pricing system.
- ➤ In general, majority of the large farmers are dissatisfied with preset pricing system due to lack of price control mechanism among the farmers and low selling price of pineapples.
- ➤ The findings of respondents' views on marketing problems indicate the following facts.

Results of Hypotheses testing

- 1. There is no significant difference in the prospects of pineapple cultivation among the farmers of different villages in the study area
- 2. There is no significant difference in the problems faced by the farmers of different villages in the study area
- 3. There is no significant difference in the problems faced by the farmers of different farm sizes in the study area
- 4. There is no significant difference in the opinion of the farmers of different villages on the problems of marketing of pineapples.

Suggestions

- The pineapple production depends upon the quality of inputs given by the farmers. The inputs such as fertilizers, pesticides, seeds are not continuously available to the farmers. Government should come forward to ensure the availability of these inputs in time.
- ➤ It is inferred that there is lack technical knowhow to promote the pineapple production in the study area. The department of horticulture and agriculture has to carry out many researches to promote the pineapple production.
- A special board can be set up for pineapple just like tea board, coffee board to promote the pineapple cultivation.
- ➤ Periodical training should be given to the farmers on pineapple cultivation. This would help them to improve their cultivation.

Conclusion

The role of agricultural commodities produced in the hilly area play a crucial role in Indian economy. The present study deeply analysed the economics of pineapple cultivation in the Kollihills of Namakkal district, India. Since the maximum number of farmers are backward and scheduled group, their socio and economic status are still worse. Regarding the cost benefit of the pineapple cultivation, the large farmers benefited much when compared to small farmers. This is because of the fact that the large farmers enjoy from the economies of large scale production. The farmers of pineapple cultivation in this study face some sorts of problems which should be overcome. If the above said suggestions are fulfilled, the farmers of pineapple cultivation in this study area get new life in their cultivation.

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