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A STUDY ON PRODUCTION PROBLEMS FACED BY BANANA CULTIVATORS IN TAMILNADU – WITH SPECIAL REFERENCE TO TIRUCHIRAPPALLI AND THANJAVUR DISTRICTS

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Short Profile

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ABSTRACT:
Banana India is an agricultural based country. It observes half of labour force for employment. In other words half of our population occupies agricultural activity for their livelihoods. It reveals that agricultural sector is an important sector to the economy. Banana is the leading fruit produced in India followed by mango. India is the top country in producing banana. Both in production and area cultivated India stands first in banana production. Banana is one of the profitable crop in India. Tamilnadu is the leading state in producing banana.

KEYWORDS
Production Problems Faced ,Banana Cultivators , producing and marketing banana.

INTRODUCTION

In India, the state of Tamilnadu is the top in producing banana. During 2011-12, banana was cultivated in 1,03,112 hectors with the production of 45,05,435 metric tones . Eventhough Tamilnadu is the top state in producing banana, the farmers of banana are facing many problems in producing and marketing banana. Banana is one of the profitable crop, producers of banana have been facing various problems in all the stages of production. They face production problems, marketing problems and financial problems. Among them marketing problems are somewhat severe. The researcher identified eleven major problems that have been faced by cultivators of banana.

LITERATURE REVIEW

Davara PR and Patel NC (2012) found that that the overall post-harvest loss in banana after harvesting till ripening was 15.43%, which included losses at field level (0.77%), at traders' level comprising of transportation and handling losses (5.86%) as well as ripening losses (8.80%). Gangadhar Banerjee (2012) found that fertilizers cover only 30 per cent of total cultivable areas, where irrigation facilities are available. The remaining 70 per cent of the arable land, which are mainly rain fed do not use fertilizers. The 70 percent cultivable rain fed area supply only 40 per cent of our total food production. Sangolkar UB (2012) evidenced that the trend in the area under production and production of banana had been increasing. It was predicted by the study that the trend value would be 5535.00 thousand metric tonnes during the year 2014-2015 and CAGR with 4.21per cent increase in 11 years for the country. Abu Zafar Ahmed Mukul and Md. Arafat Rahman (2013) found that the farmers could obtain positive net return from cultivation of banana. In the context of income generation and poverty alleviation, production of crop like banana may play a crucial role in meeting the cash needs of the farmers. The findings of the study also revealed that the trading of banana is a profitable venture to different intermediaries. Sumanta Bandyopadhyay (2013) concluded that addition of value by each chain partner reduced unnecessary wastage and kept the product quality as demanded by the customer. Velu Suresh Kumar (2014) noted that there was significant increase in production and productivity of banana in India. This was achieved through development of novel technologies and creation of awareness about

OBJECTIVE

- To study demographical background of the respondents and marketing problems faced by them.

METHODOLOGY

The study is based on primary data, which were collected from 360 cultivators from Tiruchirappalli and Thanjavur districts of Tamilnadu through interview schedule. The study used simple percentage, mean, standard deviation and ANOVA as statistical tools to anlayse the data.

RESULTS AND INTERPRETATION

Table 1 gives the results related to demographical background of the respondents, which included age of the respondents, education of the respondents, experience in cultivating banana and variety of banana cultivated by them.

Table 1
Demographical Background of the Respondents

Particulars	Frequency	Percent
Age		
Upto 30 Years	55	15.3
31 to 40 Years	129	35.8
41 to 50 Years	130	36.1
Above 50 Years	46	12.8
Total	360	100.0
Education		
Illiterates	108	30.0
Below SSLC	110	30.6
SSLC	88	24.4
HSC	30	8.3
Degree and above	24	6.7
Total	360	100.0
Experience in Cultivating Banana		
Upto 5 Years	71	19.7
6 to 10 Years	128	35.5
11 to 15 Years	96	26.7
Above 15 Years	65	18.1
Total	360	100.0
Variety Cultivated		
Poovan	185	51.4
Rasthali	64	17.8
Pachainada	49	13.6
Thenvazhai	22	6.1
Montham	29	8.1
Peyan	11	3.1
Total	360	100.0

Source: Primary Data

Table 1 shows that 35.8 per cent of the respondents belonged to the age group of 31 to 40 years, 36.1 per cent of the respondents belonged to the age group of 41 to 50 years, 15.3 per cent of the respondents were upto 30 years of age and 12.8 per cent of the respondents belonged to the age group of above 50 years. It could be known from the table that educational qualification of 30.6 per cent of the respondents was below SSLC, 30 per cent of the respondents were illiterates, 24.4 per cent of the respondents completed SSLC, 8.3 per cent of the respondents completed HSC and only 6.7 per cent of the respondents completed degree and above qualification. It was also known from table that 35.5 per cent of the respondents had an experience in cultivation of 6 to 10 years in cultivation of other crops, 26.7 per cent of the respondents had more than 11 to 15 years of experience in cultivation, 19.7 per cent of the respondents had upto 5 years of experience of in cultivation of banana and 18.1 per cent of

the respondents had more than 15 years of experience. Table 1 also reports that 51.4 per cent of the respondents cultivated poovan variety of banana in their lands, 17.6 per cent of the respondents cultivated rasthali variety, 13.6 per cent of the respondents cultivated pachainada, 6.1 percent of the respondents cultivated thenvazhai variety, 8.1 per cent of the respondents cultivated montham variety and 3.1 per cent of the respondents cultivated peyan variety of banana.

FACTOR ANALYSIS

The researcher identified eleven marketing problems in the study area faced by cultivators of banana. Through factor analysis the researcher reduced the number of factors in to four namely transport and storage, price, market knowledge, time and demand and middlemen.

AGE AND MARKETING PROBLEMS

Age is one of the important demographical variables. Hence ANOVA was applied between age of the respondents and marketing problems faced by the respondents in order to know whether there was any significant difference between age of the respondents and marketing problem faced by them. For this purpose a null hypothesis was framed and tested and the results are presented in table 5.19.
Ho: There is no significant difference between age of the respondents and marketing problems faced by them.

Table 2
ANOVA between Age and Marketing Problems

Factor	Age	N	Mean	Std. Deviation	F	P-Value
Transport & Storage	Below 30 Years	55	3.0545	.74332	.468	.705
	31 to 40 Years	129	3.1124	.78621		
	41 to 50 Years	130	3.0192	.85455		
	Above 50 Years	46	3.1630	.95484		
	Total	360	3.0764	.82636		
Price	Below 30 Years	55	3.5091	.71680	.664	.575
	31 to 40 Years	129	3.4496	.76251		
	41 to 50 Years	130	3.4038	.72630		
	Above 50 Years	46	3.3152	.70992		
	Total	360	3.4250	.73506		
Market Knowledge	Below 30 Years	55	3.5909	.79402	2.975	.046
	31 to 40 Years	129	3.3062	.86447		
	41 to 50 Years	130	3.3077	.84078		
	Above 50 Years	46	3.4565	.71357		
	Total	360	3.3694	.83092		
Time and Demand	Below 30 Years	55	3.2727	.79243	2.715	.048
	31 to 40 Years	129	3.1202	.81196		
	41 to 50 Years	130	3.2192	.75996		
	Above 50 Years	46	3.4783	.65791		
	Total	360	3.2250	.77707		
Middlemen	Below 30 Years	55	3.1764	.59627	1.093	.352
	31 to 40 Years	129	3.1566	.65274		
	41 to 50 Years	130	3.1546	.71638		
	Above 50 Years	46	2.9717	.58487		
	Total	360	3.1353	.66080		

Source: Computed from Primary Data

Table 2 shows that the marketing problem of transport and storage was found to be severe for the respondents whose age was more than 50 years (mean value 3.1630), the problem of price was found to be severe for the respondents whose age was less than 30 (mean value 3.5091), the problem of market knowledge was severe for the respondents whose age was below 30 years (mean value 3.5909), the problem of time and demand was found to be severe for the respondents whose age was above 50 years (mean value 3.4783) and the problem of middlemen was found to be severe for the respondents whose age was below 30 years (mean value 3.1764).

The results of the table 5.19 also showed that the calculated value of F-statistics between age of the respondents and the problem of market knowledge was 2.975, its p-value was 0.046, they were 2.715 and 0.048 respectively for the problem of time and demand, they were significant at 5 per cent level, hence the null hypothesis was rejected and therefore there was significant difference between age of the respondents and marketing problems of market knowledge and time & demand. The calculated value of F-statistics between age of the respondents and other marketing problems such as transport & storage, price and middlemen were found to be low and its p-value showed that they were not significant, hence the null hypothesis was accepted for these cases and therefore there was no significant difference between age of the respondents and marketing problems of transport & storage, price and middlemen.

ANOVA between Education and Marketing Problems

Education is one of the important demographical factors in determining marketing problems faced by the respondents. Hence ANOVA was applied between education of the respondents and marketing problems faced by them in order to know whether there was any significant difference between education of the respondents and marketing problem faced by them. For this purpose a null hypothesis was framed and tested and the results are presented in table 3.

H_o: There is no significant difference between education of the respondents and marketing problems faced by them.

Table 3
ANOVA between Education and Marketing Problems

Factor	Education	N	Mean	Std. Deviation	F	P-Value
Transport & Storage	Illiterates	108	3.1250	.91234	.179	.949
	Below SSLC	110	3.0500	.77799		
	SSLC	88	3.0795	.82311		
	HSC	30	3.0500	.66111		
	Degree and above	24	3.0000	.88465		
	Total	360	3.0764	.82636		
Price	Illiterates	108	3.3796	.72302	3.682	.031
	Below SSLC	110	3.4545	.74361		
	SSLC	88	3.4943	.73693		
	HSC	30	3.4167	.77774		
	Degree and above	24	3.2500	.70711		
	Total	360	3.4250	.73506		

Market Knowledge	Illiterates	108	3.4213	.78586	3.787	.030
	Below SSLC	110	3.4136	.93813		
	SSLC	88	3.3580	.81983		
	HSC	30	3.1833	.73676		
	Degree and above	24	3.2083	.64127		
	Total	360	3.3694	.83092		
Time and Demand	Illiterates	108	3.1759	.82969	.600	.663
	Below SSLC	110	3.2000	.79908		
	SSLC	88	3.3352	.67262		
	HSC	30	3.1833	.71297		
	Degree and above	24	3.2083	.88363		
	Total	360	3.2250	.77707		
Middlemen	Illiterates	108	3.1269	.67652	3.379	.041
	Below SSLC	110	3.1527	.64676		
	SSLC	88	3.0841	.63786		
	HSC	30	3.2500	.71523		
	Degree and above	24	3.1375	.70081		
	Total	360	3.1353	.66080		

Source: Computed from Primary Data

It could be noted from table 3 that the problem of transport & storage, price and time and demand were found to be severe for the respondents whose educational qualification was SSLC as shown by mean value at 3.0795, 3.4943 and 3.3352 respectively. The problem of marketing knowledge was found to be severe for the respondents who were illiterates (mean value 3.4213) and the problem of middlemen was found to be severe for the respondents who completed HSC (mean value 3.2500).

The table 3 also shows that the calculated value of F-statistics between education of the respondents and the problem of price stood at 3.682, its p-value was 0.031, they were 3.787 and 0.030 for the problem market knowledge and F-statistics and p-value between education and the problem of middlemen stood at 3.379 and 0.041 respectively, all these results were significant at 5 per cent level, hence the null hypothesis was rejected and therefore It was also observed from the table that the calculated value of F-statistics was found low between education of the respondents and the problems of transport and storage and time and demand and they were not significant, hence the null hypothesis was accepted and therefore there was no significant difference between education of the respondents and the problems of transport and storage and time and demand.

ANOVA between Experience and Marketing Problems

In order to know whether there was any significant difference between experience of the respondents in cultivating banana and marketing problems faced by the respondents ANOVA was applied and the results are discussed subsequently. For this purpose a null hypothesis was framed and tested and the results are presented in table 4.

H_o: There is no significant difference between experience of the respondents in cultivating banana and marketing problems faced by them.

Table 4
ANOVA between Education and Marketing Problems

Factor	Experience	N	Mean	Std. Deviation	F	P-Value
Transport & Storage	Below 5 Years	71	3.0423	.71087	3.843	.029
	5 to 10 Years	128	3.0977	.79382		
	11 to 15 Years	96	3.1563	.83449		
	Above 15 Years	65	2.9538	.98315		
	Total	360	3.0764	.82636		
Price	Below 5 Years	71	3.5141	.73665	.828	.479
	5 to 10 Years	128	3.4531	.75670		
	11 to 15 Years	96	3.3802	.72091		
	Above 15 Years	65	3.3385	.71320		
	Total	360	3.4250	.73506		
Market Knowledge	Below 5 Years	71	3.3803	.91988	3.086	.037
	5 to 10 Years	128	3.3516	.78960		
	11 to 15 Years	96	3.4010	.83231		
	Above 15 Years	65	3.3462	.82407		
	Total	360	3.3694	.83092		
Time and Demand	Below 5 Years	71	3.2113	.84795	2.911	.041
	5 to 10 Years	128	3.1758	.77254		
	11 to 15 Years	96	3.2500	.78472		
	Above 15 Years	65	3.3000	.70045		
	Total	360	3.2250	.77707		
Middlemen	Below 5 Years	71	3.1394	.59845	.374	.772
	5 to 10 Years	128	3.1789	.67154		
	11 to 15 Years	96	3.1104	.74586		
	Above 15 Years	65	3.0815	.57388		
	Total	360	3.1353	.66080		

Source: Computed from Primary Data

It could be found from table 4 that the problems of transport & storage and market knowledge were found to be severe for the respondents whose experience was between 11 and 15 years in cultivating banana as shown by the mean values at 3.1563 and 3.4010 respectively. The problem of price was found to be severe for the respondents whose experience was less than 5 years (mean value 3.5141). The problem of time and demand was found severe for the respondents whose experience in cultivating banana was above 15 years (mean value 3.3) and the problem of middlemen was found severe for the respondents whose experience was between 5 and 10 years (mean value 3.1789).

The table 4 also shows that the calculated value of F-statistics between experience in cultivating banana and the problem of transport & storage stood at 3.843, its p-value was 0.029, F-statistics and p-value between experience and the problem of market knowledge stood at 3.086 and 0.037 and they were 2.911 and 0.041 between experience and the problem of time & demand, all these results were significant at 5 per cent level, hence the null hypothesis was rejected and therefore there was significant difference between experience of the respondents in cultivating banana and the problems of transport & storage, market knowledge and time & demand. It was also found that the calculated value of F-statistics between experience of the respondents and the problems of price and middlemen was found to be low and they were not significant, hence the null hypothesis was accepted for these cases and therefore there was no significant difference between experience of the respondents in

cultivating banana and the problems of price and middlemen.

ANOVA between Variety of Banana Cultivated and Marketing Problems

It was observed by the researcher that in the study area six major varieties of banana were cultivated. In order to know whether there was any significant difference between variety of banana cultivated by the respondents and marketing problems faced by them ANOVA was applied and the results are presented and discussed subsequently. For this purpose a null hypothesis was framed and tested and the results are presented in table 5.

H_o: There is no significant difference between variety of banana cultivated and marketing problems faced by them.

Table 5
ANOVA between Variety of Banana Cultivated and Marketing Problems

Factor	Variety	N	Mean	Std. Deviation	F	P-Value
Transport & Storage	Poovan	185	3.0568	.76668	.711	.615
	Rasthali	64	3.1719	.79791		
	Pachainada	49	3.0918	.96649		
	Thenvazhai	22	3.0682	.99158		
	Montham	29	2.8793	.87275		
	Peyan	11	3.3182	.87386		
	Total	360	3.0764	.82636		
Price	Poovan	185	3.3784	.71859	3.008	.038
	Rasthali	64	3.4766	.73695		
	Pachainada	49	3.3673	.78246		
	Thenvazhai	22	3.5000	.80178		
	Montham	29	3.5000	.70711		
	Peyan	11	3.8182	.71668		
	Total	360	3.4250	.73506		
Market Knowledge	Poovan	185	3.2838	.88112	1.152	.333
	Rasthali	64	3.4531	.85782		
	Pachainada	49	3.3776	.68868		
	Thenvazhai	22	3.4773	.66328		
	Montham	29	3.5000	.62678		
	Peyan	11	3.7273	1.08082		
	Total	360	3.3694	.83092		
Time and Demand	Poovan	185	3.2108	.77942	2.836	.044
	Rasthali	64	3.2188	.79620		
	Pachainada	49	3.1939	.77605		
	Thenvazhai	22	3.3636	.72673		
	Montham	29	3.2241	.84077		
	Peyan	11	3.3636	.67420		
	Total	360	3.2250	.77707		
Middlemen	Poovan	185	3.1016	.64315	.428	.829
	Rasthali	64	3.2156	.72358		
	Pachainada	49	3.1898	.75062		
	Thenvazhai	22	3.0727	.50349		
	Montham	29	3.1586	.64004		
	Peyan	11	3.0545	.53733		
	Total	360	3.1353	.66080		

Source: Computed from Primary Data

Table 5 shows that the problem of transport & storage was found to be severe for the respondents who cultivated 'Rasthali' variety of banana (mean value 3.1719), the problems of price and market knowledge were severe for the respondents who cultivated 'peyan' variety of banana (mean value 3.8182 and 3.7273 respectively), the problem of time & demand was severe for the respondents who cultivated 'thenvazhai' variety of banana (mean value 3.3636) and the problem of middlemen was found to be severe for the respondents who cultivated 'rasthali' variety of banana (mean value 3.2156).

It was also observed from table 5 that the calculated value of F-statistics between variety of banana cultivated and the problem of price stood at 3.008, its p-value was 0.038, they were 2.836 and 0.044 for the problem of time & demand, they were significant at 5 per cent level, hence the null hypothesis was rejected and therefore there was significant difference between variety of banana cultivated and the problems of price and time & demand. It was also observed that the calculated values of F-statistics between variety of banana cultivated and the problems of transport & storage, market knowledge and middlemen were found to be low and they were not significant, hence the null hypothesis was accepted for these cases and therefore there was no significant difference between variety of banana cultivated and the problems of transport & storage, market knowledge and middlemen.

CONCLUSION

The study has been made with demographical background of the cultivators respondents in Tiruchirappalli and Thanjavur districts of Tamilnadu. It also studied marketing problems faced by the cultivators of banana in the study area. The study found that there was significant difference between age of the respondents and marketing problems of market knowledge and time & demand, education of the respondents and the problems of price, market knowledge and middlemen, significant difference between experience of the respondents in cultivating banana and the problems of transport & storage, market knowledge and time & demand and significant difference between variety of banana cultivated and the problems of price and time & demand as shown by the results of ANOVA.

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