AN EMPIRICAL STUDY ON FACTORS THAT INFLUENCES THE MARKETING OF PINEAPPLES IN VAZHAKULAM - KERALA

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Abstract:

Agriculture is the back born of Indian economy, and no planning for economic growth can be fruitful without the development of the agricultural sector. Pineapple is the wonderful tropical fruit having exceptional juiciness, vibrant tropical flavor and immense health benefits. Pineapple exhibits increasing demand worldwide, over the years. In this article the researcher wants to find out the various factors that influences the marketing of pine apple in Vazhakulam area, Kerala. Vazhakulam in Ernakulam district is very famous for pineapple cultivation. Primary data was collected by the researcher with the help of structured questionnaire administered to farmers using interview schedule. A sample of 140 farmers was selected from the pineapple farmers' association members in Vazhakulam, Manjalur Panchayath. Using statistical package for social science (SPSS) the following test were administered 1. Factor Analysis and 2. Reliability test. Based on the test results some of the relevant findings were derived that will be significant and relevant to the pineapple growers to market their products.

Key Words: Market, Pineapple & Marketing

Introduction:

India is a country of peasants, and agricultural provides sustenance to more than two-third of Indian population. Agriculture is the back born of Indian economy, and no planning for economic growth can be fruitful without the development of the agricultural sector. This sector in India assumes special importance in the context of the population explosion, and it is required that agricultural planning should be so devised that agricultural productivity should keep pace with the growing population. Pineapple is the wonderful tropical fruit having exceptional juiciness, vibrant tropical flavor and immense health benefits. Pineapple exhibits increasing demand worldwide, over the years. The global trade is around 50% as fresh fruit 30% as canned product and 20% juice concentrate. In this article the researcher wants to find out the various factors that influences the marketing of pine apple in Vazhakulam area, Kerala. Vazhakulam in Ernakulam district is very famous for pineapple cultivation. Pineapple has been commercially grown in Vazhakulam area for more than 50 years for its excellent fruit for fresh consumption.

Review of Literature:

Dr. P. Anandaraj and Dr. V. Chinniah in their study on the marketing problems of mango growers in Madurai District, Tamil Nadu" (2011) found that, the highly volatile price pattern, lack of storage facilities, non availability of agricultural labours at times the primitive methods of mango cultivation and the stranglehold of the middle man are some of the crippling road blocks faced by the mango entrepreneurs desirous of a steady progress. There is an urgent need to set up efficient market information network, so that farmers can get timely and adequate market related information, which will help them to get better price for the mango.Dr. D. Seetha and Dr. B. Shivaraj had studied "Production and marketing of fruits and vegetables in Karnataka" (2006) states that, there is a need to develop an efficient transport system for quick procurement and distribution produce. A computerised system can be used for this purpose. Production planning is essential so that there is matching of supply and demand. This calls for dissemination of marketing information to farmers.C.P. Godara and S.R. Bhonde in their study on "Market arrivals and price trend of important fruits at Azadpur Mandi, Delhi" (2006) the study of seasonal fluctuation in arrivals and prices reveals that arrivals of most of the fruits were higher in the peak season and lower in the lean season. The correlation between arrivals and prices were worked out and it was found that all fruits are negatively correlated. When arrival of fruits increases, prices decreased and vice-versa. Prof. (Dr) P.K. Dutta had studied "Agricultural rural marketing in India" (2011). In his study he found that major problems which affect agricultural rural marketing are under developed people and under developed markets, lack of proper physical communication facilities, inadequate media coverage for rural communication, multiple languages and Dialects and market organisation & staff. In his study he suggests that for storage facilities the government should depend on private agencies to store food grains. Rural markets need more number of go downs and anciliary platforms for packing places, market office cum information cell, bank and post office. Dr. Shivsankar K and Dr. Basavaraj Banakar had studied "Agribusiness management in Karnataka: a case analysis of dry chillies and its products" all the selected markets the producers incurred the cost in marketing of the produce only on sorting. Hence, most of the

farmers sold their produce to the local traders in the village level only. An appraisal of components of marketing cost clearly revealed that the cost on packing formed the most significant constituent of total marketing cost incurred by farmers especially in dry chillies in the study area. Dr. N. Kathiravel had studied "Satisfaction level of farmers towards production and marketing of agricultural products" in his study he suggested that the size of the farm holdings has a direct effect on the output of agricultural. Sub divisions and fragmentation of the farms leading to uneconomic holdings result in lower output. Necessary steps should be taken to consolidate the small holdings of the farmers to make the agricultural holding more economic so that it will increase the output. The uneconomic holding may be converted into economic holdings through corporative farming. The National Commission on Agriculture defined Agricultural marketing as the process which starts with a decision to produce saleable farm commodities and it involves all aspects of market structure or system both functional, institutional based on technology and academic consideration including pre and post harvest operation, grading, storage, transportation and distribution.

Research Question:

To find out the various factors that influences the marketing of pine apple in Vazhakulam area, Kerala.

Methodology:

The study is a descriptive one. Primary data was collected by the researcher with the help of structured questionnaire administered to farmers using interview schedule. A sample of 140 farmers was selected from the pineapple farmers' association members in Vazhakulam, .Manjalur panchayath. Fifteen questionnaires were distributed for the purpose of pre-testing the questionnaire's contents a complete questionnaire was developed based on the comments collected during the pre-testing period. Type of sampling method used was convenience sampling. Using statistical package for social science (SPSS) the following test were administered 1. Factor Analysis and 2. Reliability test.

Reliability Statistics:

Table 1

Cronbach's Alpha	N of Items
0.654	22

An examination had been made from the reliability of the data to check whether random error causing inconsistency and in turn lower reliability is at a manageable level or not, by running reliability test. From table 1 it is clear that the values of coefficient Alpha (Cronbach's Alpha) have been obtained, the minimum value of coefficient Alpha obtained was .654. This shows data has satisfactory internal consistency reliability.

Factor Analysis:

The individual statements of a study on the factors that influences the marketing of pine apples was examined using factor analysis based on 20 individual statements and the reliability of the samples collected was tested for internal consistency of the grouping of the items.

Table 2: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.601
Bartlett's Test of Sphericity	Approx. Chi-Square	895.121
	df	190
	Sig.	0.000

KMO measure of sampling adequacy is an index to examine the appropriateness of factor analysis. High values between 0.5 and 1.0 indicate factor analysis is appropriate. Values below 0.5 imply that factor analysis may not be appropriate. From the above table it is seen that Kaiser – Meyer – Olkin measure of sampling adequacy index is 0.601 and hence the factor analysis is appropriate for the given data set. Bartlett's Test of Sphericity is used to examine the hypothesis that the variables are uncorrelated. It is based on chi- Square transformation of the determinant of correlation matrix. A large value of the test statistic will favor the rejection of the null hypothesis. In turn this would indicate that factor analysis is appropriate. Bartlett's test of Sphericity Chi-square statistics is 895.121, that shows the 20 statements are correlated and hence as inferred in KMO, factor analysis is appropriate for the given data set.

Table 3: Total Variance Explained

Component	Initial Eigen Values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.778	23.891	23.891	4.778	23.891	23.891	2.801	14.004	14.004
2	2.396	11.979	35.870	2.396	11.979	35.870	2.406	12.032	26.036
3	1.656	8.278	44.148	1.656	8.278	44.148	2.330	11.651	37.688
4	1.504	7.522	51.670	1.504	7.522	51.670	2.015	10.074	47.762
5	1.343	6.713	58.383	1.343	6.713	58.383	1.792	8.960	56.722
6	1.082	5.409	63.792	1.082	5.409	63.792	1.414	7.070	63.792

7	.946	4.730	68.522						
8	.834	4.168	72.690						
9	.831	4.154	76.844						
10	.779	3.896	80.739						
11	.674	3.372	84.111						
12	.616	3.080	87.191						
13	.503	2.513	89.704						
14	.456	2.279	91.983						
15	.440	2.202	94.185						
16	.325	1.623	95.808						
17	.276	1.379	97.187						
18	.260	1.302	98.489						
19	.174	.872	99.361						
20	.128	.639	100.000						

Extraction Method: Principal Component Analysis

Eigen Value represents the total variance explained by each factor. Percentage of the total variance attributed to each factor. One of the popular methods used in Exploratory Factor Analysis is Principal Component Analysis, Where the total variance in the data is considered to determine the minimum number of factors that will account for maximum variance of data.

Table 4: Rotated Component Matrix

	Component					
	1	2	3	4	5	6
Fluctuation in Price	.030	.062	.786	-.144	.204	.113
Middle man assistance	-.055	-.138	.703	.042	-.082	.107
No standard price system	.220	-.075	.659	.149	-.268	.022
Extra charges	.057	.033	.666	.212	.451	-.248
Government provide subsidies	.383	.328	.344	-.108	.539	-.104
Information about financial assistance	.569	.559	.071	.180	-.050	-.045
Price differences in markets	.546	.439	-.051	.072	-.130	.210
Transportation facility	.281	.355	-.088	-.313	.275	.483
Transportation cost higher than expected	.833	.109	.177	.018	-.045	.027
Interest rate for borrowed fund	.620	.046	-.070	.254	.172	.024
Lack of performance by government	-.050	.779	-.099	.180	.054	-.032
Shortage of labor to market	.138	.831	-.066	.070	.148	-.011
Lack of information about marketing of pine apple	-.003	.126	-.104	.152	.768	.159
Lack of information about variety of Pine apples	.672	-.083	.082	.074	.177	.186
Difficult to get loan	.135	.370	.243	.389	-.050	.353
Seasonal	.413	.056	.018	.479	.364	.257
Storage Facility	.123	-.101	.115	.172	.126	.841
Commission charges	.330	.111	-.131	.763	.141	-.071
Advance money	.002	.292	.176	.721	.076	.120
Interest from unorganized sector	.182	-.236	.128	.366	.478	.241

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
Rotation converged in 11 iterations.

Interpretation of factors is facilitated by identifying the statements that have large loadings in the same factor. The factor can be interpreted in terms of the statement that loads high on it. The factors that influences the marketing of pine apples comprises of 20 individual statements. Out of 20 factors, 6 individual factors influences more, the factors are:

- ✓ Fluctuation in price
- ✓ Transportation cost
- ✓ Shortage of labor to market the product
- ✓ Lack of information about marketing of pine apple
- ✓ Commission charges
- ✓ No proper storage facility

Conclusion:

Pineapple has remained the top most fruit in India ever since ancient days. It is delicious and luscious table fruit for the Indians. To meet ever growing demand of the pineapple, a large area of the Indian soil should be used for pineapple cultivation. The pineapple cultivation provides employment

opportunities to many people, and also helps the pineapple growers of improving their economic status. In this context, the present study is highly unique in nature and the findings of the study would prove to be quite helpful to many people, including the government departments, for further research as well as for formulating the future plans for various policies. It was an attempt to study and make some recommendation to solve current marketing problems pineapple farmers. The lack of storage facilities, inadequate government assistance, high commission charge collected by the intermediaries, non availability of packing materials are some of the crippling roadblocks faced by the pineapple entrepreneurs desirous of a steady progress.

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