

A STUDY ON FACTORS AFFECTING IN SELECTION OF RYTHU BAZAARS IN RAYALASEEMA REGIONS – ANDHRA PRADESH: A CONSUMER PROSPECTIVE

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Abstract: The effectiveness of marketing for fruits and vegetables in India has been of significant concern in the recent years. The rythu bazaars were established in 1999, the concept of rythu bazaars was introduced with the view of provide remunerative price to farmers and offer vegetables to consumers at rational rates. This study investigates the factors affecting on selection of Rythu Bazaars by using factor analysis. To achieve this objective 300 customers are randomly selected from different Rythu Bazaars in Rayalaseema Region (Ananthapur, Kadapa, Kurnool, and Chittoor Districts). From this analysis it is found out that there are three factors are influencing on selection of Rythu Bazaars. Among three factors, factor one is labeled as Freshness, factor two is labeled as price of vegetables and factor three is labeled as Quality. Further the result is concluded most important factors for selection of Rythu Bazaars are variety of vegetables, friendliness of vendors, freshness of vegetables, price of vegetables are major determinants for selection of Rythu Bazaars.

Keywords: Rythu bazaars, freshness of vegetables, vendors.

INTRODUCTION

The Rythu Bazaars were established in the year 1999. The concept of Rythu Bazaar was developed to facilitate direct marketing between consumers and farmers. Rythu Bazaars provide direct interface between farmers and consumers eliminating intermediaries in trade. Direct marketing of agricultural produce helps in complete elimination of middle men and commission agents who charge high level of commission fee from the agriculturists/farmers, coming to the market yards for selling their produce and then artificially inflate the retail prices.

Marketing of fruits and vegetables is more complex in nature in comparison with the other field crops because of special traits like highly perishable nature, seasonality and bulkiness, which needs special care and immediate disposal. Regulated market yards for fruits and vegetables are functioning only at a few centers. The marketing system for fruits and vegetables is now in the hands of middlemen. Middlemen exist at various levels between the farmers and the consumers and exploit through malpractice in weighing, handling and payments (www.farma.org.uk). Large numbers of small farmers are unable to effectively bargain for better prices in the wholesale market. Inefficiencies in the wholesale markets result in a long chain of intermediaries, multiple handling, and loss of quality and increase the gap between

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the producer and consumer prices (http://en.wikipedia.org/wiki/Farmers'_market). Large number of small retailers,

Each handling small quantities creates high overheads leading to high margin on produce. It is, therefore, felt necessary to evolve an alternate marketing strategy where both growers and consumers are benefited through Farmers' markets, sometimes called **green markets**. Hence, the marketing system like farmers' market, if properly organized not only facilitates the proper and smooth disposal of what the farmer products, but also acts as a catalyst to stimulate increased production and satisfy the consumers' needs. These markets are usually held out-of-doors, in public spaces, where farmers can sell their produce to the public (<http://en.wikipedia.org/>). The farmers benefit by selling directly to the consumers and the consumers get good quality produce at best prices. This paper studies the factors affecting for the Consumers to purchase their vegetables from these bazaars. This paper studies the major factors influencing on consumers buying at rythu bazaa.

LITERATURE REVIEW

There has been an increasing concern regarding the margins of small farmers being eaten away by middlemen. To address this issue various state governments in India have undertaken measures to address the agri-marketing channels. Among the various agri-marketing channels, the one adopted by the farmers' markets has a very high chance of addressing this issue. As a result, there has been a lot of interest shown in the functioning of farmers' markets across not only India but also various countries in the world.

Kezis et. al., (1995) on consumers at a small farmers' market in Maine indicates that the number of older, high income, high educated is increasing. Since these consumers are more likely to be attracted to farmers market, the popularity of this format is seen to be increasing.

Govindasamy and Nayga, Jr. (1996) studied the characteristics of farmer-to-consumer direct market customers with the objective of finding various characteristics of farmer-to-consumer direct market consumers. They conclude that the average number of visits per month to a direct marketing facility was between one and two and the average dollar amount spent per visit at direct marketing facilities ranged from \$11 to \$19. The study further Concludes that direct marketing facilities provided better quality of produce as compared to the supermarkets.

Wolf (1997) in a case study examined responses of consumers with the objective of comparing the profile of farmers' market shoppers to those who do not shop at farmers' markets. Consumers have indicated that quality and value are among the most important attributes when purchasing produce while the major reason for not shopping at farmers'.

Govindasamy et. al., (1998) looked at the resurgence of farmers' markets in New Jersey which had been welcomed by farmers, consumers and municipalities. It allowed farmers to capture a greater share of the consumers' food expenditure thus increasing their profitability, while the consumers' need for fresh, high quality commodities as well as for farm-based recreational experiences is met. The study found that most of the markets were located in suburban areas but close enough to urban areas to enable them to serve both populations. It concluded that when selecting the markets' sites factors affecting choice were visibility, sufficient parking, easy accessibility and traffic flow, available space for farmers' stands, proximity to downtown areas, number of potential customers, safety and use of public land for insurance and financial purposes. The insights provided by this research help to identify the qualities required for a successful farmers' market as well as the constraints affecting these markets so that their efficiency could be improved.

Trobe (2001) studied the potential benefits of marketing food directly from producers to consumers, and hence circumventing the 'middlemen' in the food supply chain. This qualitative study concluded that benefits have been accrued by both farmers and consumers. Consumers get locally grown, fresh, healthy and, in many cases, organic food at affordable prices, while producers get more value of their produce. The study also looked at the environmental benefits. Farmers' markets reduce the distance that food travels between producers and consumers, which in turn would help decrease global environmental pollution. The methodology was survey based.

Brown (2002) reviewed all the research done on farmers' markets in the period from 1940 to 2000 and found the huge increase in the number of farmers' markets in the United States after the passage of the Farmer-to-Consumer Direct Marketing Act of 1976.

Anupindi (2003) undertook a case study Farmers benefitted from more accurate weighing, faster processing time, and prompt payment, and from access to a wide range of information, including accurate market price knowledge, and market trends, which help them decide when, where, and at what price to sell, which were not achievable through the mandi system.

Henneberry and Haerani (2004) examined consumer preferences among various marketing channels (including direct marketing) with the objective of analyzing the impact of various demographic variables on purchasing choice, with a specific focus on the links between demographic factors and shopping preferences. The study identified consumer characteristics that influence produce demand and consequently growers'

Onianwa et. al., (2005) analyzed the determinants of farmer-to-Consumer direct-market shoppers and provided insights into the factors that affect shopping at a farmer-to-consumer direct market.

Otto and Varner (2005) undertook a study with the objective of assessing the market participation and the impact it had on the economic front.

Saibaba and Vadde (2009) studied Consumer Satisfaction and Preferences towards Rythu Bazaar in Warangal District of Andhra Pradesh by looking at the marketing angle which is one of the weakest links in the chain of activities concerned with production and disposal of agricultural products. They analyzed the preferences, needs and wants of the vegetable buyers and make them available to farmers so that they can take correct decisions regarding the marketing strategies to be implemented in Rythu Bazaars of Andhra Pradesh State of India.

OBJECTIVE OF THE STUDY

Rythu Bazaars have been operating in Andhra Pradesh since more than a decade now. In the meantime a few studies have been undertaken to study the satisfaction level of Farmers operating from these bazaars or to look at the preferences, needs and wants of the vegetable buyers and make them available to farmers so that they can take correct decisions regarding the marketing strategies to be implemented. However, this study attempts to look at the factors that drive consumers to these markets.

1. To assess the demographic profile of visiting consumers at rythu bazaars
2. To identify the major factors influencing consumers in buying at rythu bazaars
3. To find satisfaction factors among consumers who buy at rythu bazaars

METHODOLOGY

Data Collection

The present study is based on the survey method. The data has been collected from both primary and secondary sources. By using convenience sampling method the data is collected from four districts in Rayalaseema region i.e. Kadapa, Anthapuram, Kurnool and Chittoor. The state of Andhra Pradesh operates totally 119 rythu bazaars. Ten rythu bazaars were selected primarily based on the convenience of the researcher. There exist 6 rythu bazaars at Kurnool, one at Kadapa, 2 at Chittoor and one rythu bazaar in anthapuram. The rythu bazaars are at A.A Nagar, adoni, c.camp, kothapet, nandyal (srinivasa nagar), nandyal (tekkey), dwarakanagar, Chittoor (M.G.H), tirupati (tuda) and one more at P. ramachandrayelu Park.

A structured schedule questionnaire is adopted for collecting data from consumers. Likert's five point scale (1 = strongly disagree; 5 = strongly agree) is used for availing the responses. For this study a sample of 300 regular purchasing of vegetables at rythu bazaars at different days is gathered from the selected districts. The secondary data has been gathered from journals, business magazines, the informal discussions with the officials of departmental concerned and various websites pertaining to previous research studies and investigations.

Tools of Analysis

Various factors that drive consumers into these markets is studied and factor analytic techniques have been used to describe variability among observed variables in terms of fewer unobserved variables called factors. The observed variables are modeled as linear combinations of the factors. For this study principal component analysis where the factors produced are conceptualized as being linear combinations of the variables has been used.

FACTORS DRIVING CUSTOMERS INTO RYTHU BAZAARS

KMO and Bartlett's Test

As in the case of the consumer's survey, to find the suitability of the data for factor analysis the KMO and Bartlett's test was done on the consumers' data. From Table 1 it is seen that the KMO test value is 0.576 and thus we can go for factor analysis. From the Bartlett's Test of Sphericity also it is observed that the chi-square value is very high i.e. 5654.174 and the significance level is less than 0.05, therefore factor analysis can be applied.

TABLE 1: KMO AND BARTLETT'S TEST

<i>Kaiser-Meyer-Olkin Measure of Sampling Adequacy.</i>		.576
Bartlett's Test of Sphericity	Approx. Chi-Square	5654.174
	df	105
	Sig.	.000

Communalities

Having established that factor analysis can be applied, it cannot be expected that the factors will extract all variance from the items; rather, only that proportion that is due to the common factors and shared by several items. The proportion of variance of a particular item that is due to common factors (shared with other items) is called communality. The other task in applying this model is to estimate the communalities for each variable, that is, the proportion of variance that each item has in common with other items.

TABLE 2: COMMUNALITIES

	<i>Initial</i>	<i>Extraction</i>
Quality of the products at rythu bazaars	1.000	.844
Freshness and nutritious	1.000	.876
Friendly atmosphere	1.000	.863
Price at rythu bazaars	1.000	.758
Variety of vegetables	1.000	.839
Consistence of availability	1.000	.713
Good service	1.000	.853
Supporting the cause of local farmers	1.000	.969
Convince purchase	1.000	.809
Parking facility	1.000	.752
Transportation facility	1.000	.819
Assortment of purchase	1.000	.669
Accessibility of rythubazaars	1.000	.821
Overall cost advantage	1.000	.974
Amenities	1.000	.782

Extraction Method: Principal Component Analysis.

The proportion of variance that is unique to each item is then the respective item's total variance minus the communality. Initial communalities are estimates of the variance in each variable accounted for by all components or factors. Extraction communalities are estimates of the variance in each variable accounted for by the factors in the factor solution. Small values indicate variables that do not fit well with the factor solution, and should possibly be dropped from the analysis

Total Variance Explained

From Table 8, the estimates of the variance in each variable accounted for by the factors (or components) in the factor solution are found. Small values (given in bold) indicate variables that do not fit well with the factor solution, and should possibly be dropped from the analysis. Table 9 shows all the factors extractable from the analysis along with their eigen values, the percent of variance.

Attributable to each factor, and the cumulative variance of the factor and the previous factors. The first factor accounts for 16.250% of the variance, the second 15.234%, the third factor 13.926% of variance and the fourth factor 10.131% of variance. 55.540% of the variance is explained by all four factors. To get better factor scores, factor rotations were needed and for that purpose varimax has been used.

TABLE 3: TOTAL VARIANCE EXPLAINED

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.921	32.805	32.805	4.921	32.805	32.805	4.519	30.124	30.124
2	3.771	25.138	57.943	3.771	25.138	57.943	4.137	27.581	57.705
3	1.980	13.198	71.140	1.980	13.198	71.140	1.956	13.043	70.748
4	1.670	11.136	82.276	1.670	11.136	82.276	1.729	11.528	82.276
5	.884	5.893	88.170						
6	.603	4.021	92.191						
7	.314	2.092	94.283						
8	.268	1.788	96.071						
9	.234	1.558	97.629						
10	.163	1.090	98.719						
11	.066	.438	99.157						
12	.045	.302	99.458						
13	.037	.250	99.708						
14	.033	.219	99.927						
15	.011	.073	100.000						

Extraction Method: Principal Component Analysis.

Finding the Number of Factors

In order to choose the number of factors, Cattell's screen test has been used. This test has been used as opposed to Kaiser's eigenvalue rule as has been mentioned earlier. From the scree plot it is seen that the curve begins to flatten between factors 4 and 5. So, for this study only four factors can be retained.

ROTATED COMPONENT MATRIX^A

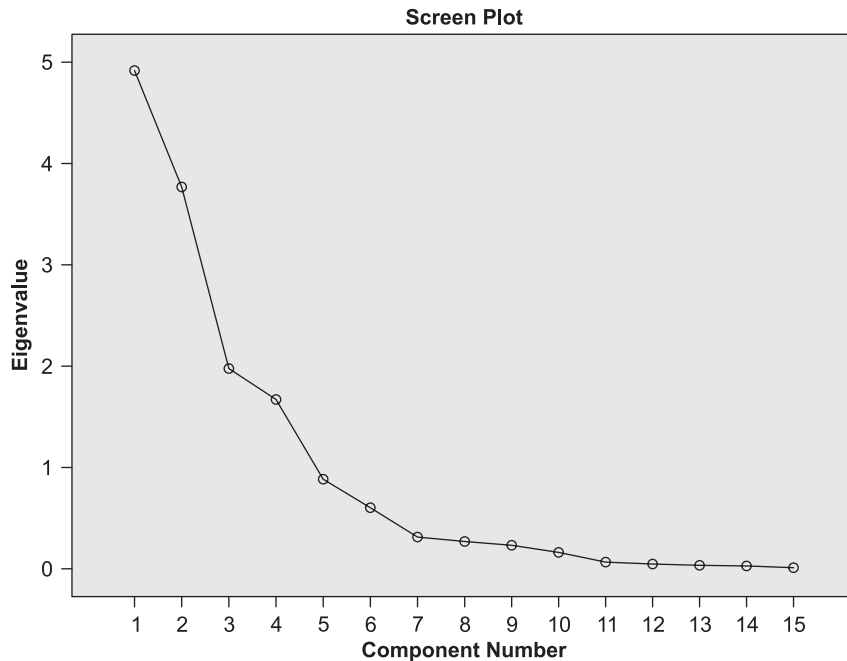
	Component			
	1	2	3	4
Quality of the vegetables	.922			
Freshness and nutritious	.901			
Friendly atmosphere	.865			
Availability of Variety	.922	.913		

	<i>Component</i>			
	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
Consistence				
Good service			.929	
Supporting the cause of local farmers			.981	
Convince purchase		.897		
Parking facility				.928
Transportation facility		.904		
Assortment of purchase	.806			
Accessibility				
Cost advantage		.933	.983	
Amenities				.915

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

^aRotation converged in 4 iterations.



Using Rotation

In an attempt to identify common themes, the contents of questions that load onto the same factor are looked at. The questions that load highly on factor 1 seem to all

relate to quality and variety of vegetables. This factor has therefore been labeled as quality vegetables. Similarly the questions that load highly on factor seem to all related to the price of vegetables and consistency of rates, and hence it is labeled as price. On similar lines factor 3 and factor 4 have been labeled as product availability and amenities respectively.

CONCLUSION AND IMPLICATIONS OF THE STUDY

From the findings of this research, it is clearly evident that primarily rythu bazaars markets infrastructures should meet the basic expectations of the customers who visit the rythu bazaars. Policy makers must be focus on making the availability of the factors like quality and freshness of vegetables, Variety of items and availability of the produced products. .this acts as a customer pulling forces and cause for success of the rythu bazaars. The infrastructure of the rythu bazaars must be accessible to the customers groups, setting the rythu bazaars at convince place, especially in the centre of public dwellings. Makes it cost advantage on the overall purchase and transportation cost. It is highly difficult to inculcate attitude among the sellers at rythu bazaars .however sellers start realizing serving customers will lead to repeated purchase, the attitude can be built up over the a period of time. It is worthwhile to maintain any infrastructure is not responsive to common needs of the public, will lead to failed in due course. So it is necessary to see that there facilities are make available at rythu bazaars.

References

- Kezis, A., T. Gwebu, S. Peavey, and H. Cheng, (1995), "A Study of Consumers at a Small Farmers' Market in Maine: Results from a 1995 Survey" *Journal of Food Distribution Research*; 93-99.
- Onianwa, O., G. Wheelock, and M. Mojica, (2005), "A Analysis of the Determinants of Farmer-to-Consumer Direct-Market Shoppers", *Journal of Food Distribution Research* 36(1): 130-134.
- Otto., Daniel., and Theresa Varner, (2005), "Consumers, Vendors, and the Economic Importance of Iowa Farmers' Markets: An Economic Impact Survey Analysis", *Iowa Farmers' Market Association*.
- Saibaba, Rudra, and Vadde, Suresh (2009), "Consumer Satisfaction and Preferences towards Rythu Bazaar: A Study in Warangal District Andhra Pradesh" *Indus Journal of Management & Social Sciences*, 3(1):52-63.
- "Energy Efficient Two-Phase Sensing for Cooperative Spectrum Sensing in Cognitive Radio Ad hoc Networks" in Central government NISCAIR, *Journal of Scientific & Industrial Research (JSIR)*, New Delhi, India in September 2016 issue. (Impact Factor 0.500 Central Govt Journal) (SCI indexed).
- Trobe, Helen La. (2001), "Farmers' markets: consuming local rural produce", *International Journal of Consumer Studies*, 25, 3, 2001, 181-192.

- Wolf, Marianne McGarry. (1997), "A Target Consumers Profile and Positioning for Promotion of the Direct Marketing of Fresh Produce: A Case Study." *Journal of Food Distribution Research* 28(3):11-17. <http://www.newworldencyclopedia.org/entry/Bazaar>
- Anupindi, R. (2003), "Going Direct to the Farmer: ITC's e-choupal initiative", http://210.212.115.113:81/AK.Dey/OperationsMgmt/O_M_Cases/ITC_Collection/GoingDirect_Anupindi.pdf
- Brown, A. (2002), "Farmers' market research 1940-2000: an inventory and review", *American Journal of Alternative Agriculture*, 17, 167-176.
- Govindasamy, Ramu., and Rodolfo M. Nayga, Jr. (1996), "Characteristics of Farmer-To-Consumer Direct Market Customers: An Overview"; <http://www.joe.org/joe/1996august/rb1.php>
- Brown, A. (2002), Farmers' market research 1940–2000: an inventory and review, *American Journal of Alternative Agriculture*, 17, pp 167-176.
- Saibaba, Rudra, and Vadde, Suresh (2009), Consumer Satisfaction and Preferences towards Rythu Bazaar: A Study in Warangal District Andhra Pradesh, *Indus Journal of Management & Social Sciences*, 3(1), pp 52-63.
- "Energy Efficient Two-Phase Sensing for Cooperative Spectrum Sensing in Cognitive Radio Ad hoc Networks" in Central government NISCAIR, *Journal of Scientific & Industrial Research (JSIR)*, New Delhi, India in Upcoming issue. (Impact Factor 0.500 Central Govt Journal) (SCI indexed).