

Performance of Regulated Agricultural Markets : Perception of Farmers in Salem District, Tamil Nadu

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Abstract

Although India has achieved self-sufficiency in food grain production (more than 230 million tonnes in 2011-12), but it is still characterized by low levels of productivity due to degradation of natural resources and lack of technological & infrastructural facilities. Unfortunately, unfavorable price regime and low level of value addition activities have also contributed to the out-migration of the farmer class from the rural areas. To secure the agrarian community of the country, India has brought regulations in the agricultural sector, especially in output marketing of agricultural produce. The government has put in serious efforts in bringing all the agricultural markets of the country under the Agricultural Produce Marketing Committee Act, which restricts the sale of agricultural produce anywhere except in the regulated agricultural markets (RAMs). These regulated agricultural markets are direct sale markets monitored by the District Agricultural Marketing Committees of the respective state governments. The present research attempted to bring into light whether these markets were functioning according to the expectations of the sellers/farmers. The study used binary logistic regression, correlation analysis, and other statistical tools to discover the underlying dimensions of various indicators with regard to the overall satisfaction of the sellers/farmers with the performance of the RAMs located in Salem District of Tamil Nadu. Most of the variables/indicators related to market performance were rated on the positive side of the scale by the respondents, thereby concluding that the farmers had a positive perception of the concerned RAMs.

Keywords: regulated agricultural markets (RAMs), performance indicators, perception, market efficiency, social institutions

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Agricultural efficiency can best be measured if the farmers are able to dispose the produce at remunerative prices, otherwise the agricultural community loses interest in the sector as it is the main source of livelihood and means of earning for a majority of the rural people. To strengthen Indian agriculture, the nation must address problems related to not only farm production, but also processing, marketing, trade, and distribution. We must link farmers to markets (Acharaya, 2006 ; Sivanappan, 2000; Sorokhaibam & Devi, 2011). The agricultural sector must be given precedence over the other sectors of the economy as many industries depend upon agricultural production and marketing. Hence, farmers are an important constituent of progress and prosperity of any nation as they are responsible to produce and feed the society, without which the society or nation will not survive. As of now, there are more than 7556 regulated agricultural markets functioning throughout India in various states.

Research Background

The government has taken a lot of initiatives to solve the problems related with the disposal of agricultural produce. One such initiative which the government has taken is the establishment of regulated agricultural

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markets in the country (Godara, 2006; Gandhi, 2006). Mohan (2004) suggested that a changed scenario and strong & viable agricultural financial institutions are needed to cater to the requirements of finance for building the necessary institutional and marketing infrastructure for agriculture.

Sharma and Thakur (2004) examined the existing market infrastructure, its performance, limitations, and made suggestions for improvements needed for smooth, orderly, and efficient marketing of agricultural commodities in Himachal Pradesh. With regard to transportation, the study found a weak correlation between production/marketed supplies of fruits or vegetables and road density. The use of the available markets was limited due to the problem of transport from villages to the market. It was also found that banking and communication facilities available in most of the markets were not used for the benefit of the farmers.

Bhattacharaya and Singh (2005) revealed that marketing of agricultural products exhibited many symptoms, which were not prevalent in commodity selling. Apart from addition of basic uncertainty, production fluctuation and unorganized activities have made it a more uncertain game. So, institutional intervention is, therefore, necessary to meet these problems. Shivannavar (2005), on analysis of production and marketing of papaya in Karnataka state, found that all the respondents opined that markets were far away from the farms. Over 82% of the respondents opined that higher commission charges was a major problem in marketing of papaya. The other problems were lack of availability of market information (79%), storage problem (76%), price fluctuations (37%), and lack of skilled labor for packing (19%).

The research workshop on collective action and market access for small holders aimed at enhancing the conceptual and empirical understanding of the role of collective action institutions (e.g. rules and norms, producer organizations, cooperatives, and so forth) in improving market access for the rural poor. The common theme was that collective action brings certain advantages into commercialization activities (Markelova & Meinzen-Dick, 2006).

Three aspects determine the success of rural-urban linkages: physical infrastructure, including road networks, reliable and affordable transport, post-harvest storage facilities; relations between producers, traders, and consumers; and information on how markets operate, including price fluctuations and consumer preferences (Hogeland, 2006). Mbanasor and Nwankwo (2001) observed that the poor net marketing margin received by the producers showed the need for an efficient marketing system within the enterprise. The producers had the least marketing efficiency of 4.8% as against 15.85% for retailers and 37.35% for wholesalers. The authors revealed that if the producers would have been able to manage resources within the marketing system, they would have been in a better position to net more in the marketing of palm oil.

Ara (2011) analyzed how agricultural marketing continues to be plagued by many market imperfections such as inadequate infrastructure, lack of scientific grading system, defective weights, and so on. The basic objective of regulating the marketing of agricultural products was to bring both producers and buyers/traders closer and to the same level of advantage. Sorokhaibam and Devi (2011) found that the state government has taken several steps to improve the conditions of agricultural marketing. The state government should act as a facilitator in marketing.

Detre, Mark, Mishra, and Adhikari (2011) investigated the adoption of direct marketing strategy and its impact on gross sales. The authors found that production of organic crops and the regional location of the farm were important factors in adoption of direct marketing strategies. Farmers who adopted direct marketing strategies were likely to have higher income. Joshi (2011) found that the share of producers in consumers' rupee was high in a channel where there were fewer number of intermediaries. The marketing costs incurred by wholesalers in different channels were estimated to be 5.01%, 6.39%, and 7.88% of the consumers' price, respectively and their consequent net margins were 9.68%, 9.61%, and 10.23% of the price paid by the consumer.

The logit regression analysis conducted by Zivenge and Karavina (2012) showed that producer price was the major determinant of market choice among farmers. Irengbam (2012) found that the state government had taken several steps to improve the conditions of agricultural marketing. To organize agri-business effectively was to conduct product-specific surveys successfully for ensuring marketability and the type of venture to be set up.

Rehman, Selvaraj, and Ibrahim (2012) suggested that the need to strengthen the regulated agricultural market system arose from changing nature of linkages between agriculture and markets. It was also observed that better

and easy market access and efficient information flow could bring much desired market orientation into the production system. Chalajour and Feizabadi (2012) proposed a model that there is a long-run co-integration relationship between on farm and retail prices. Secondly, the marketing margin resulting from this long-run relationship may cause short-run dynamic adjustments between onfarm and retail prices, which results in asymmetric causality. This implies that the marketing margin is an important factor when analyzing the causality in the onfarm and retail market prices.

Market integration requires creating new links and deepening existing relationships between the household, traders, microfinance institutions, and other farmers willing to supply labor and rent land. Reducing the transaction costs would improve market participation. The transaction cost in smallholder agriculture arises essentially from lack of information, contract enforcement, and coordination; thus, improvement in all these areas will improve market participation (Martey, Al-Hassan, & Kuwornu, 2012).

With so many studies in focus, the present study has made a new effort of analyzing and finding the perception of the farmers towards the performance of the RAMs (regulated agricultural markets).

Objective of the Study

The present research aims to study and analyze the perception of farmers with respect to the performance of RAMs in Salem district of Tamil Nadu.

Methodology

The present research is a survey based study on the farmers' perception towards the performance of regulated agricultural markets in Salem district of Tamil Nadu. The study was conducted in April 2014, measured under different indicators/variables. The study has used a dichotomous structured questionnaire as a research instrument in order to get diverse responses of farmers' opinion on the performance of regulated agricultural markets. The convenience sampling technique was followed, and the respondents were interviewed on a first-come first-serve basis in the respective RAMs. Out of 13 regulated agricultural markets present in Salem district, only six regulated agricultural markets were chosen through stratified random sampling. A total of 5% of the population was selected as the sample for the study, which consisted of 20 farmers from each of the six regulated agricultural markets, summing the total sample size to 120. Data were analyzed by using SPSS and AMOS software.

Analysis and Results

Although the regulated markets were set up in the country to remove the obstacles from agricultural marketing in the country and the same achieved enviable success, still there exists some discrepancy in the success of these markets. Several efforts have been made by academicians and researchers to evaluate the degree of performance of regulated markets throughout the country. Being government-controlled markets, it is necessary to bring awareness to the policy makers and government as well as to the general public towards the extent these markets are successful or unsuccessful in terms of their working performance. So, investigating a communal problem is a better option to come to a desirable and result oriented conclusion for the benefit of the society.

All the relevant variables examined (like demographics) were age (0 = upto 35 years and 1= above 35 years), gender (0= male and 1= female), marital status (0= married and 1= unmarried), educational qualification (0= upto intermediate and 1= UG and PG), and annual income (0= upto ₹ 2 lakhs and 1= above ₹ 2 lakhs) and these were rated on a dichotomous scale. All other market related factors were rated on a similar common dichotomous scale (0= *disagree* and 1= *agree*). The descriptive statistics are given in the Table 1.

The descriptive statistics, ANOVA results, and regression weights show significant results and most of the indicators related to market performance were rated on the positive side of the dichotomous scale. Hence, we can infer that there is an overall positive perception of farmers with respect to the RAMs.

Table 1. Descriptives

Code	Variable	Frequency	<i>M</i>	<i>SD</i>	<i>F</i>	<i>R</i>
Var1	Age		0.65	0.479		0.059
	Upto 35 years	42				
	Above 35 years	78				
Var2	Gender		0.00	0.00		0.00
	Male	120				
	Female	0				
Var3	Education		0.25	0.435		0.025
	Upto intermediate	90				
	Degree and Above	30				
Var4	Marital Status		0.08	0.278		0.013
	Married	110				
	Unmarried	10				
Var5	Main Occupation		0.53	0.501		0.055
	Farmer	56				
	Employee/Business/Others	64				
Var6	Annual Income		0.26	0.440		0.065
	Upto ₹ 2 Lakh	89				
	Above ₹ 2 Lakh	31				
Var7	Information availability		0.99	0.091		0.043
	Disagree	1				
	Agree	119				
Var8	Market accessibility		0.93	0.250		0.127**
	Disagree	8				
	Agree	112				
Var9	Proper handling/management of the produce		0.98	0.129		0.107
	Disagree	2				
	Agree	118				
Var10	Proper weighing of the produce		0.97	0.180		0.392*
	Disagree	4				
	Agree	116				
Var11	Proper Grading of the produce		0.83	0.374		0.135**
	Disagree	20				
	Agree	100				
Var12	Reasonable market charges		0.98	0.157		0.076
	Disagree	3				
	Agree	117				
Var13	Proper Lotting of the produce		0.95	0.219		0.109
	Disagree	6				
	Agree	114				
Var14	Proper processing time of transaction		0.93	0.25	71.289*	0.219*
	Disagree	8				
	Agree	112				

Var15	Reasonable methods of sale		0.69	0.464	0.270*
	Disagree	37			
	Agree	83			
Var16	Price awareness		0.53	0.501	0.149**
	Disagree	57			
	Agree	63			
Var17	Reasonable rates of produce		0.58	0.496	0.146**
	Disagree	51			
	Agree	69			
Var18	Price stability		0.65	0.479	0.239*
	Disagree	42			
	Agree	78			
Var19	Proper payment procedures		0.98	0.129	0.062
	Disagree	2			
	Agree	118			
Var20	Avoidance of wastage at warehouse		0.93	0.250	0.040
	Disagree	8			
	Agree	112			
Var21	Avoidance of procedural delay by the officials		0.95	0.219	0.109
	Disagree	6			
	Agree	114			
Var22	Good interpersonal relationship		0.89	0.312	0.027
	Disagree	13			
	Agree	107			
Var23	Pledge loan facility		0.95	0.219	0.109
	Disagree	6			
	Agree	114			
Var24	Accidental compensation		0.94	0.235	0.066
	Disagree	7			
	Agree	113			
Var25	Conduction of Training programs		0.86	0.350	0.240*
	Disagree	17			
	Agree	103			
Var26	Integrity/honesty in the regulated market		0.98	0.129	0.062
	Disagree	2			
	Agree	118			
Var27	Grievance redressal mechanism in the market		0.74	0.440	0.230*
	Disagree	31			
	Agree	89			
Var28	Overall satisfaction with RAMs		0.82	0.389	0.630 ^(a) **
	Disagree	22			
	Agree	98			
Valid N (listwise)				120	

*- $p < 0.01$, **- $p < 0.05$, Grand Mean = 0.78, (a) - entered as dependent variable.

Binary Logistic Regression Analysis

Farmers' perception regarding performance of RAMs was studied using the binary logistic regression model. The study used a model to empirically quantify the relative influence of various variables on the overall satisfaction towards performance of RAMs. Binary logistic regression expresses the dependent variable as a logit variable through log-linear transformation, which represents a natural of odds of the dependent variable occurring or not occurring. The model predicts the probability of occurrence of an event by calculating the changes in the odds of log of the dependent variable. The equation can be represented as : Performance of RAMs (P_i) depends on the attributes (age, gender, education, marital status, income, information availability, market accessibility, proper handling/management of the produce, proper weighing of the produce, proper grading of the produce, reasonable market charges, proper lotting of the produce, proper processing time of transaction, reasonable methods of sale, price awareness, reasonable rates of produce, price stability, proper payment procedures, avoidance of wastage at warehouse, avoidance of procedural delays by the officials, good interpersonal relationships, pledge loan facility, accidental compensation, conduction of training programs, integrity/honesty in the regulated market, and grievance redressal mechanism in the market) and can be specified as :

$$P_i = (p/1-p) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_n X_n + U_i$$

where,

β_0 = constant,

$\beta_1, \beta_2, \dots, \beta_n$ = parameters to be estimated (regression coefficients),

X_1, X_2, \dots, X_n = items as independent variables (predictors),

U_i = Error term.

Logistic regression does not assume that the relationship between independent variables and dependent variable is linear, nor does it assume that the dependent variable or error term is distributed normally. The maximum likelihood estimate of the coefficients of the logit model for the respondents is depicted in the Table 2.

↳ **Overall Satisfaction of the Respondents with RAMs :** The Table 2 reveals the impact of independent variables on the dependent variable - overall satisfaction towards the performance of RAMs. A significant model has emerged explaining 58.9% of the variance in the satisfaction towards the performance of RAMs, with model chi-square = 53.909, $df=26$, and $p < 0.01$. The regression model emerges as significant for estimating the perception of the respondents. The diagnosis of multicollinearity for the model was run and tested using linear regression analysis in order to inspect the tolerance and variance inflation factor (VIF) and none of the variables showed any multi-collinearity problem, and all the variables were considered fit for test statistics in binary logistic regression.

The β -coefficients and standard error are expressed in the same way as in ordinary linear regression; however, the log odds are predicted. The Wald chi-square tests the significance of the individual variables, Nagelkerke's R-square is used to estimate the proportion of variance attributable to the predictor variables which are combined in the equation, and $\exp(B)$ estimates the odds of the particular outcome occurring; the odds ratio, if greater than means that probability of occurring an event increases as the coefficient of the predictor increases. An odds ratio of 2 would indicate that $P_i = 1$ is twice as likely with an increase of X per unit. The model chi-square test statistics represent the overall significance of the model.

Only one demographic variable - annual income ($\beta = 1.37, p < 0.10$) is able to perceive the significant satisfaction of the farmers with the performance of RAMs. Similarly, the other factors like market accessibility ($\beta = 5.51, p < 0.01$), proper handling/management of the produce ($\beta = -1.51, p < 0.05$), proper weighing of the produce ($\beta = -2.58, p < 0.01$), reasonable market charges ($\beta = 1.42, p < 0.05$), proper lotting of the produce ($\beta = 2.91, p < 0.05$), proper processing time of transaction ($\beta = -1.70, p < 0.01$), price awareness ($\beta = 0.88, p < 0.10$), proper payment procedures ($\beta = 1.68, p < 0.01$), avoidance of wastage at warehouse ($\beta = 1.14, p < 0.05$), avoidance

Table 2. Binary Logistic Regression

Variables	β	SE	Wald	Exp (B)
Overall satisfaction with RAMs ³				
Age	-0.48	0.80	0.36	0.61
Education	-0.19	0.89	0.46	0.82
Marital Status	-0.66	1.62	0.16	0.51
Main Occupation	0.39	0.74	0.27	1.47
Annual Income	1.37	0.83	2.70***	3.94
Information availability	0.01	0.20	0.00	1.01
Market accessibility	5.51	1.47	14.01*	247.72
Proper handling/management of the produce	-1.51	0.56	6.47**	0.24
Proper weighing of the produce	-2.58	0.69	14.05*	0.08
Proper grading of the produce	0.67	1.21	0.30	1.95
Reasonable market charges	1.42	0.94	2.32**	4.15
Proper lotting of the produce	2.91	0.99	8.65**	18.35
Proper processing time of transaction	-1.70	0.68	6.09*	0.18
Reasonable methods of sale	0.79	1.30	0.37	2.21
Price awareness	0.88	0.86	1.06***	2.42
Reasonable rates of produce	-0.71	0.89	0.57	0.50
Price stability	-0.66	0.71	0.87	0.51
Proper payment procedures	1.68	0.82	4.23*	0.19
Avoidance of wastage at warehouse	1.14	0.92	2.57**	3.14
Avoidance of procedural delay by the officials	3.75	0.87	9.52*	14.59
Good interpersonal relationship	1.05	1.48	0.50	2.87
Pledge loan facility	1.49	2.41	2.42**	4.38
Accidental compensation	-2.91	0.99	8.59*	18.33
Conduction of training programs	-1.67	1.13	2.19**	0.18
Integrity/honesty in the regulated market	17.91	28021.37	0.00	60575299.83
Grievance redressal mechanism in the market	1.51	1.43	1.11**	4.56
Constant ^a	1.49	0.23	40.096*	4.45
Model X^2 Statistic			53.909*	
df			26	
Nagelkerke's R^2			0.589	

*- $p < 0.01$, **- $p < 0.05$, ***- $p < 0.10$.

Notes: Dependent and Independent variables are dichotomous; like Age (0= upto 35 years and, 1= over 35 years), Gender (0= male, 1=female), Educational Qualification (0=Upto intermediate, 1= Degree and above), Marital Status (0= Married, 1= Unmarried), and Annual Income (0= Upto ₹ 2 Lakhs and 1= Above ₹ 2 Lakhs) and all the other factors were weighted on scale as 0 = *Disagree* and 1= *Agree*, entered as dichotomous independents. The dichotomous variable which was considered dependent is the overall satisfaction of farmers with the performance of the RAMs.

of procedural delay by officials ($\beta = 3.75, p < 0.01$), pledge loan facility ($\beta = 1.49, p < 0.05$), accidental compensation ($\beta = -2.91, p < 0.01$), conduction of training programs ($\beta = -1.67, p < 0.05$), and grievance redressal mechanism in the RAMs ($\beta = 1.518, p < 0.05$) are also found to be significant in perceiving the overall satisfaction with the performance of RAMs.

The demographic factors which did not seem to contribute significantly to the predictors are age ($\beta = -0.48, p > 0.10$), educational qualification ($\beta = -0.19, p > 0.10$), marital status ($\beta = -0.66, p > 0.10$), and main occupation ($\beta = 0.039, p > 0.10$). Similarly, the other factors which did not contribute significantly are : proper grading of the produce ($\beta = 0.67, p > 0.10$), reasonable methods of sale ($\beta = 0.79, p > 0.10$), reasonable rates of produce ($\beta = -0.71, p > 0.10$), price stability ($\beta = -0.66, p > 0.10$), good interpersonal relationships ($\beta = 1.05, p > 0.10$), and integrity and honesty in the RAMs ($\beta = 17.91, p > 0.10$). Individually, some of the variables may not have contributed to the overall satisfaction with the RAMs, but in the model, each factor is considered equally important in estimating the overall perception of the farmers towards the performance of RAMs.

The bivariate correlation matrix indicates that most of the variables are correlated at significant levels. The highest significant (at the 5% level) correlation is shown by reasonable rates of produce and grievance redressal mechanism in the market ($r = 0.609$), followed by information availability and reasonable market charges ($r = 0.572$), reasonable methods of sale and price awareness ($r = 0.485$), reasonable methods of sale and reasonable rates of produce ($r = 0.485$), price awareness and reasonable rates of produce ($r = 0.465$), proper weighing of produce and conduction of training programs ($r = 0.457$), proper grading and proper weighing of the produce ($r = 0.415$), price awareness and grievance redressal mechanism in the market ($r = 0.392$), market accessibility and accidental compensation ($r = 0.361$), reasonable methods of sale and pledge loan facility ($r = 0.344$), education and marital status ($r = 0.313$), and education and main occupation ($r = 0.309$); while the lowest significant (at the 5% level) correlation is shown by market accessibility and reasonable methods of sale ($r = 0.183$), followed by price stability and good interpersonal relationships ($r = 0.194$), reasonable methods of sale and integrity/honesty in the market ($r = 0.195$), proper weighing of the produce and price awareness ($r = 0.195$), proper grading of the produce and conduction of training programs ($r = 0.203$), reasonable market charges and avoidance of procedural delay by the officials ($r = 0.208$), main occupation and annual income ($r = 0.209$), pledge loan facility and grievance redressal mechanism ($r = 0.214$), proper payment procedures and grievance redressal mechanism in the market ($r = 0.221$), and so forth.

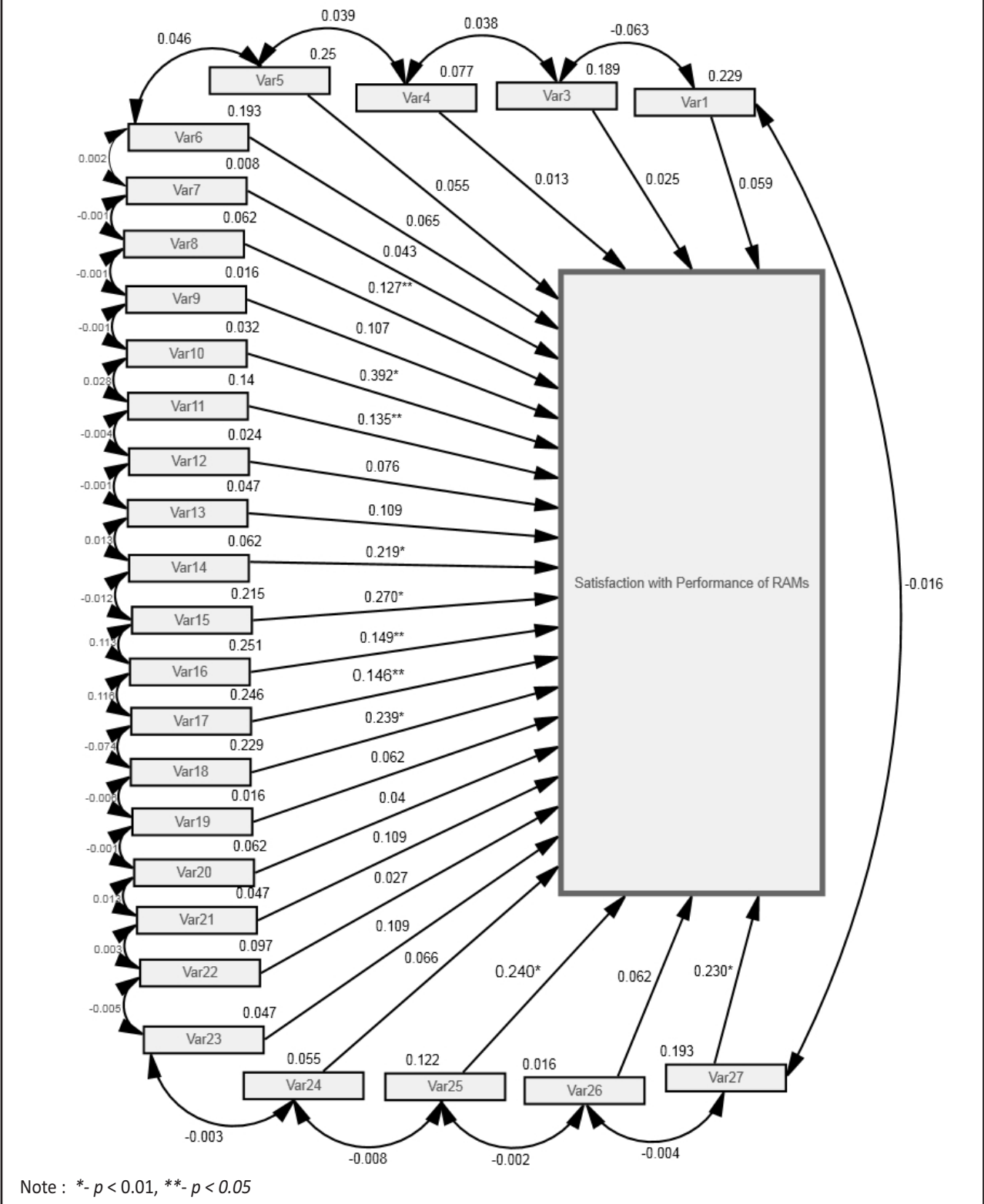
The bivariate correlation matrix also shows negative but significant (at the 5% level) correlation coefficients. The highest being shown by age and marital status ($r = -0.411$), followed by price stability and grievance redressal mechanism in the market ($r = -0.313$), reasonable rates of produce and price stability ($r = -0.313$), age and education ($r = -0.303$), annual income and accidental compensation ($r = -0.259$), proper lotting of the produce and price awareness ($r = -0.218$), proper grading of the produce and reasonable rates of produce ($r = -0.218$), and so forth. The final results are compiled and a SEM developed by AMOS software is depicted in the Figure 1.

The SEM has modeled the factors according to their contribution in developing the overall satisfaction with the performance of RAMs. The linear item to item covariances, variance, and *R*-weights (coefficient of determination) have been assigned to the respective variables/factors in order to predict the possibility of the model fit. It is obvious that the factors have a significant influence in determining the overall perception of farmers with the performance of RAMs and fit the model significantly.

Comparatively, the performance of agricultural markets, as studied by various researchers from time to time, (Aggrey, 2009 ; Ara, 2011 ; Kaur & Kaur, 2003; Kar, Atteri, & Kumar, 2004 ; Pandey, Krishna, Vickers, Menezes, & Raghavendra, 2010 ; Rehman et al., 2012 ; Shilpi & Umali-Deininger, 2008 ; Senyolo, Chaminuka, Makhura, & Belete, 2009) also revealed similar results. Hence, it can be said that the factors - provision of market infrastructure (depos, godowns, auction platforms, telecommunication, etc.) ; extension (technical and production issues, quality requirements, accessibility etc.) ; financial market knowledge ; research on a wide range of market aspects ; integrity ; reasonable methods of sale ; proper grading and packaging ; and transportation facilities surely aid in enhancing the performance of agricultural markets.

Similar studies (Pant, Burark, & Bajrolia, 2004; Sharma & Thakur, 2004 ; Sharma, 2012) suggested that the

Figure 1. Structural Equation Model (SEM) for the Performance of RAMs



usage of physical facilities like - input shops, auction platforms, bank facilities, communication facilities, good roads, grading & standardization, weighing equipments, and so forth would further attract more number of people in the coming years towards the regulated markets and thereby boost the value chain.

Implications

More number of regulated markets must be constructed very near to the agricultural rich areas, and rural godowns must be constructed in bulk for the storage of agricultural produce in distrust conditions. There must be proper and all weather road facilities to every regulated market. Regulated markets must implement some more welfare schemes for the farmers and traders. Farmers and traders must be supported for pledge loan benefits ; settlement of payment must be immediate after sale, and methods of sale must be improved. Modern equipments like computers must be used for storage of data, and the records must be maintained in English too. Although the farmers feel satisfied with the performance of RAMs, but the policy makers and government must further try to improve the working environment of these markets by attracting more number of farmers and also need to gain interest and satisfy them with the overall service delivery.

Conclusion

The performance of RAMs by the logistic regression model showed significant results, and the odds ratio showed that the variables have influenced the satisfaction with the performance of RAMs by an appropriate number of times per unit increase in the corresponding variables. The indicators as the most significant determinants are : market accessibility, proper handling/management of the produce, proper weighing of the produce, proper processing time of transaction, price awareness, proper payment procedures, avoidance of wastage at warehouse, avoidance of procedural delay by the officials, pledge loan facility, accidental compensation, conduction of training programs, and grievance redressal mechanism in the market. More or less, all the variables in the study have contributed to the model. The study further reveals that the efficiency of the RAMs could be improved if all the indicators are given due credit to serve the farmer community with excellent results.

Limitations of the Study and Scope for Future Research

The study focused upon a few regulated markets of Salem district only and does not reflect the actual working performance of all the regulated markets either in Salem District, or in Tamil Nadu, or in whole of India. The primary data was collected from a sample of 120 respondents only and does not reflect the overall perception of all the farmers or traders of regulated markets in Salem district. Efforts must be made by researchers, academicians, and the government to undertake such kind of studies in other parts of the country as well. There may be some other issues related to the performance of regulated markets which the current research has overlooked or did not come-across, which must be addressed in future studies.

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