Vidyasagar University Journal of Commerce
Vol. 24, 2019/ISSN 0973-5917

A STRATEGIC MOVE FOR VEGETABLE MARKETING AND THE ROLE OF FARMERS-CUM-MARKETERS

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Abstract

A country, whose majority of population depends on agriculture; definitely have the dream of development through farmers' satisfaction. So, when farmers themselves are the merchants, the real meaning of nation's development is proposed to be justified. In this context the research problem can be stated as "can the vegetable product marketing be efficient by a strategic move through farmers-cum-seller's satisfaction"? The objectives of this study are toexplorethefactors of satisfaction of farmer-cum-marketersand the relationshipsof these factors with farmers' intention to continue the profession, consumers' realization of their expected value, and with demographic variables. The study follows causative research design; where a structured questionnaire is used with stratified random sampling method. The sample size is 110. Major findings of this study refers that the vegetable marketing efficiency is justified through the significant impact of farmers' satisfaction on their intention towards their profession and on the customers' value realization. Originality of this research work is that farmer's present knowledge relating to present economy has been successfully related to efficiency of the vegetable marketing.

Keywords:*Vegetable marketing efficiency, farmers-cum-marketers, customers' value realization.*

JEL classification: -Q13, M31, A13

1. Introduction

As vegetable find a special and important placein day-to-day life of Indians, adequate production and proper distribution must be taken care of both by government and non-government decision makers. India commands the world along various dimensions of agriculture, still lagging the developed countries' economy. A statistics here is worthy to mention

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that 169.478 million metric tonnes of vegetables produced in the cultivated land of 9.542 million hectares as per the data base of National Horticulture Board by the year 2014-15, which refers that India is ahead of most of the developed countries so far as vegetable products are concerned. India is the largest producer of Ginger and Okra amongst vegetables and ranks second in production of potatoes, onions, cauliflowers, brinjal, cabbages, etc. Further, India exports vegetables worth Rs.4,866.91 crores in year 2015-16 as per the data base of National Horticulture Board by year 2015-2016 ("Fresh Fruits and Vegetables," n.d.). Another statistics by horticulture-statistical year book of India 2016 shows (table-1) that area of cultivation, production and productivity increases year-by-year but production share of India in world status decreases from 2000-10 to 2012-13, which is putting a question mark on the farmers' intention to continue their profession. In-spite of the above encouraging statistics the needy people are deprived of food, especially vegetables in India, which is reflected in the Global Hunger Index. India's rank is 97 in the index list of 118 (Global hunger index: India ranks grim 97 of 118 countries on hunger index | India News - Times of India, 2016). So a vigorous study regarding above problems is the need of the hour in the current nation's situation.

Table-1: Productivity of Agriculture-products of India in comparison to world

Year	India			World			
	Area (In Hectare)	Production (In Tonnes)	Productivity (In Tonnes/Hectare)	Area(In Hectare)	Production (In Tonnes)	Productivity (In Tonnes/ Hectare)	production percentage of India
2009-10	7984800	133737600	16.7	53709937	931085054	17.3	14.36
2010-11	8495000	146554000	17.3	53977066	1012524165	18.8	14.47
2011-12	8989541	156325481	17.4	58109601	1138121937	19.6	13.74
2012-13	9205186	162186567	17.6	58971121	1159179443	19.7	13.99

Source: Horticulture - statistical year book India, 2016

Above discussion shows that India is efficient in vegetable production but a lot need to be improved so far as storage and maintenance inefficiency is concerned as it leads to wastage of tons of food grains in the country. Another concern is that the ununiformed decisions taken by decision makers or strategists at various stages of cropping and vegetable-marketingcausecontinuous loss of farmers. Moreover, up-to-date information on price and other marketing factors will enables farmers to negotiate with traders, facilitates spatial distribution of products from rural areas to towns & between the markets. It can also facilitate the farmer to produce right product at right time with right quantity so that farmers will not be harassed as the farmers are facing in the present condition of India. Fast transportation with

minimum damage during shipment is very important in successful marketing of perishable products like vegetable. Therefore efficient vegetable marketing embarks upon adequate storage, efficient transportation, reliable information and proper agriculture infrastructural facilities and appropriate planning and strategies for these aspects. Although the above dimensions are proven to be utmost requirements for the vegetable marketing in India, the planners and strategists could not do anything significantly for the country's economy. On this background the research problem is stated below.

1.1 Problem statement

Considering the above said background, a logical argument can be developed that the proven dimensions of agriculture-marketing efficiency have not been successfully related to those stake holders who occupy the centre of all most all decisions of the country's development, the farmers. The above argument is especially true for the vegetable products that need the special care by the strategists. In this context the problem statement of the current research is given as "can the vegetable-product marketing be efficient by a strategic move through farmers-cum-seller's satisfaction"?

1.2 Objective of the study

(i) To explore the factors behind present level of satisfaction of farmer-cum-marketer towards the vegetable cultivation and marketing.

(ii) To analyse the relationship of factors of satisfaction with their intention to continue the profession.

(iii) To analyse the relationship of factors of satisfaction with the consumers' realization of their expected value.

(iv) To examine the interaction of demographic variables with the factors of satisfaction.

2. Methodology:-

The study is based on causative research design, where the farmers-cum-marketers' intention to continue their profession is predicted by their factors of present satisfaction. A structured questionnaire is used with five point Likert scale and adopted to stratified random sampling method. The strata are three geographical regions of Odisha, India, by taking the RMC market yards. The sample size is 110. The respondents are those farmers who cultivate the vegetables and sell in the RMC markets personally. Scale reliability is tested by Cronbach's alpha. Talking about data analysis, explorative factor analysis produced the factors farmers' satisfaction. Multiple liner regression model is adopted to understand the dependency of farmers-cum-marketers' intention to continue their profession on their present satisfaction and through MANOVA, the interactions of demographic variables with factors of satisfaction are judged. Data analysis is done by SPSS 23.0.

3. Literature review

In current era of development the main challenge of a developing nation like India is food-safety and proper distribution of food material to every citizen. Government has taken so many steps to provide basic food to needy poor people. As per the hunger index India rank 100th out of 118 countries (Global hunger index: India ranks grim 97 of 118 countries on hunger index | India News - Times of India, 2016). India is better position in cultivation as per the statistics of table no-1. So there is serious problem in distribution and marketing of vegetable product. In this context Deliya, Thakor, & Parmar (2011) describe that the unorganised distribution channel have more wastage due to number of time load and unload and not having scientific handling and packaging.There is imbalance between the supply and demand due to poor forecasting, which boost the price in some months or seasons and also the vegetables are not plucked from the firm due to the less demand. Another author Mehta & Sonawane (2012) found that there is huge wastage during the post-harvest storage and handling due to improper bagging without crating, lack of temperature controlled vehicles, no cold chain facilities for preserving the produce. Again according to Dey (2012) in RYTHU BAZAR (A place for direct transaction between the farmer and the consumer) farmers are less affected by the middlemen and the wastage of vegetable is less as compare to commonly used marketing channel and Some improvement identified for the income generation of farmers like, facilitating the transportation for farmer, building a storage place and develop proper information system.

To provide vegetable to all needy consumer price matter more in Indian context as per Dastagiri et al (2013) the Marketing efficiency is highest in 'producer to consumer channel' as compare to other. In case most of the commodity, marketing cost, marketing margin, and transport cost, labour charges are adversely affecting marketing efficiency and open market price. Here, Mehta & Sonawane (2012) cited that Marketing cost of produces are mainly affected by the perishability of produces, breakage, spoilage, grading, transportation, storage, unfair and wasteful trade custom Seasonal demand and supply which multiply the cost of produces that makes variation in price paid to farmer for their produce. Again another author Pramanik & Prakash (2010)found that The farmers share on consumer's rupees is low due to unreasonably high price fixed by middlemen which discourage farmers to increasing their marketable surplus.

To overcome all the above problem there most requires proper regulation and infrastructure facility so that the farmer will show curiosity in cultivation. According to Negi & Anand (2015) technology and technique, farmers' knowledge and awareness, quality and safety standards, processing value addition and market information etc. are the factors also affect the overall growth of agricultural development in India. Another study by Gunwant et al (2012) refers that the main problem of farmers are lack of information regarding the market price; there is no farmer association for advocacy and lack of policy regarding price fixation and crop

insurance. Problems of farmers aggravated with the poor infrastructure for storage, transportation and marketing facilities for fruits and vegetables, which drag them to significant loss (Njaya, 2014). Further, presence of informal middlemen is main cause of reduction of profit margin of farmers. Near about same thing said by another author, Pokhrel (2010) that due to perish-ability nature of firms' product and lack of proper storage, firms have weaker price negotiation as compare to trader & High profit margin taken by the trader due to the poor information of price margin as compare to the trader. So in this situation there is needed to regulate the role of middle men in the market. According to Man, Nawi, & Ismail (2009) more than half of the fresh fruits and vegetables produced flows through the wholesalers. Movement and distribution of fresh fruits and vegetables from the farm to the retailers is dominated by wholesalers. Consumer preferences as well as the consumption patterns and styles are also changing due to easy access to information. For all of these information and communication technology important role for marketing efficiency , as per Parwez (2014) to reduce post-harvest losses and deliver fresh vegetable to the end user there should needed the collaboration between the supply chain partners and ICT(information and communication technology) which plays an important role for farmers to decide what to produce , what are the value should added after harvest, and which channel should be choose for the flow of produces and Most of the issue are faced by farmers are lack of infrastructure like , insufficient cold chain, not good transportation facility to the firm, proper market choice and lack of information.

For any of the organizational success there must require some proper strategies and policies. This is very much true for proper functioning of vegetable market as it needed the proper strategies and policies, without which the farmers are exploited by middlemen and customers are not realizing their expected value.In this context Gunwant et al (2012) said that in India there is a lack farmers' association for advocacy, lack of policy regarding price fixation and crop insurance. So farmers are not getting their rights which they deserve. Srimanee & Routray (2012) conducted a study on "The fruit and vegetable Marketing chains in Thailand: Policy impacts and implications" by the study they found that for efficient vegetable marketing there needed to make policy of vegetable marketing in keeping view of both the consumer and farmer-cum-businessmen.

Not only the policy making but also the policy implementation realized as the main issues in the Indian context by so many researchers. Proper implementation of the policy can make the vegetable marketing more efficient. Wongprawmas, Canavari, & Waisarayutt (2015) conducted a study on "A multi stakeholder perspective on the adoption of good agricultural practices in the Thai fresh produce industry". Here, the above researchersfound that stakeholders perceived the credibility of national GAP (Q-GAP) standards implemented in the Thai-domestic market as low, due to a lack of reliable verification and traceability and because the system is managed

by governmental bodies. Consumer demand could drive the market of safe produce, but retail stores are the main influencers of producers' adoption of GAPs in domestic markets. So, there is a bare necessity of concrete rules and regulations on the policy adopted in the vegetable marketing, which can be fruitful for both the consumer and the farmer-cum-marketers.

4. Result and discussion

To identify major factors of satisfaction of farmers-cum-marketers inthe production and marketing of vegetable products in the RMC market, the explorative factor analysis is adopted by taking 35 variables. These factors also show the role of farmers-cum-marketer in RMC market.The above said factors are put into multiple linear regression to judge their influence on the intention to continue the farming profession, which is main goal of Indian economy. The interaction of these factors with demographic variables are judged to enable the decision makers to find the wider scope of formulating the policies with farmers' satisfaction in the context of regulated market committee. (RMCs). All the above analyses followed by scale

Table-2: Scale Statistics and Reliability statistics

Mean	Variance	Std. Deviation	N of Items	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
123.35	107.838	10.384	37	.633	.640	37

Source : Calculated by researchers

reliability through Cronbach's Alpha.

The scale (used in the questionnaire) is optimally reliable, i,e. 64% as the standardised value of Cronbach'salpha is 0.640 with 37 items excluding 5 demographic variables, referred in the table -2.

Table- 3: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.518
Bartlett's Test of Sphericity	Approx. Chi-Square	1492.795
	Df	561
	Sig.	.000

Source : Calculated by researchers

4.1 Exploration of major factors that influence the satisfaction farmer-cum-marketer and their intention to continue the profession.

The KMO statistics (.518) is found to be significant. So the sample is adequate nearly by 52% suggesting that items can yield distinctive and reliable factors. The Bartlett's test of

sphericity reveals a chi-square statistic of 1492.795 with 561 degrees of freedom, which is significant at 0.000 levels. Further, the significance value is less than .005 that permit the study

Table -4: Rotated Component Matrix[a]

Sl. No	Factor name	Variable	Eigen value
1	**Farmer satisfaction**	Getting reasonable profit from vegetable	.797
		Happy with the profession	.782
		Distance of firm location and market is manageable	.715
2	**Consumer relationship**	Enable maintain good relationship with consumer	.877
		Feel customer are satisfied with the behaviour	.836
		Chose RMC to sale as first preferences	.409
3	**Marketing future**	Visualizing the customer demand for product in this market	.769
		Can see price increase or decrease in near future	.716
		Getting adequate infrastructure in RMC market	.576
		Perishability of vegetable detracting farmers to produce vegetable for selling propose	.456
4	**Market detraction**	Commission agents are affect negatively in the business	.757
		Less profit margin due to more marketing cost	.698
		Getting proper place of selling of vegetable in RMC market	-.436
5	**Storage facility**	Proper storing facility of pick season of the vegetable production	.754
		Vegetable are good for health	-.641
		Govt./ local authority providing adequate storage facility	.638
		Suffer marketing surplus in this market	.459
6	**Entrepreneurship**	Vegetable are main source of income	.752
		Facing problem of loading and unloading	.652
		Feel entrepreneur in profession	.602
7	**Various infrastructure facility**	prefer to sale unsold product to commission agents	.746
		Getting help from Govt. for cultivation and marketing	.599
		Easily avail private transportation	.465
8	**Marketability**	Think little-bit risk of selling vegetable in the vegetable	.771
		Grading of product	.617
9	**Demand and supply matching**	Timely able sale vegetable	.849
		Getting expected price at the high production seasons	.608
		Present production meet the customer demand	.439
10	**Value addition**	Adding value before selling to attract consumer	.701
		Getting material handling facility in RMC market	.669
11	**Ease of Marketing**	Getting information about market	.768
		Prefer sale product at a time	-.685
12	**Planned selling**	Having proper planning for selling product in RMC market	.725
		Wastage of product reduces the profit margin	-.566

Source : Calculated by researchers

Extraction Method: Principal Component Analysis. a. Rotation converged in 19 iterations.

be preceded with factor analysis (table-3). The variables and responses after being found suitable and the next step involved extraction of factors.

By using Principal component analysis and by Varimax rotation with Kaiser Normalization, 12 factors are extracted as depicted in the Table-4.These factors are named as farmer satisfaction, consumer relationship, marketing future, market detraction, storage facility, entrepreneurship, various infrastructure facility, marketability, demand and supply matching, value addition, ease of marketing and planned selling. These 12 factors explain near about 72% variance as cumulative percentage of rotated square loading is 72.239.

Table -5: ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
R1	Regression	55.176	12	4.598	6.200	.000[b]
	Residual	70.454	95	.742		
	Total	125.630	107			

Source : Calculated by researchers

a. Dependent Variable: continue to sale in RMC market

b. Predictors: (Constant), planned Selling, Ease of Marketing, value addition, Demand and supply matching, Marketability, Various Infrastructure Facility, Entrepreneurship, Facility for storage, Market Detraction, Marketing Future, Relationship with Consumer, Satisfaction level of farmer

4.2 Influence of farmer-cum-marketers' satisfaction on intention to continuity in their profession.

Table-6: Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.663[a]	.439	.368	.861	.439	6.200	12	95	.000	1.976

Source : Calculated by researchers

a. Predictors: (Constant), planned Selling, Ease of Marketing, value addition, Demand and supply matching, Marketability, Various Infrastructure Facility, Entrepreneurship, Facility for storage, Market Detraction, Marketing Future, Relationship with Consumer, Satisfaction level of farmer

b. Dependent Variable: continue to sale in RMC market

The model, multiple linear regression, is significantly suitable in this analysis as the F statistics (6.200) is significant (p=0.000), referred from the above table (table-5).

Multiplelinear regression analysis was conducted to test the joint relationship of all the independent variable and dependent variable. The model summary shown in table-6 provides the value of R 0.663 which represents positive correlation between farmer-cum-marketers' satisfaction and farmers' intention to continue the profession. The results further revealed that

R square as 0.439, which implies that the parameters of farmers' satisfaction explain nearly 44%of the observed variability in the intention to continue the profession. The adjusted R square is a modified measure and has a value of .368 which is significant (p=0.000).So, the factors of satisfaction of farmers-cum-marketer influence the intention of continuing farming

Table-7: Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	3.852	.083		46.483	.000					
	Satisfaction level of farmer	.556	.083	**.513**	6.678	**.000**	.513	.565	.513	1.000	1.000
	Relationship with Consumer	.036	.083	.034	.438	.662	.034	.045	.034	1.000	1.000
	Marketing Future	.245	.083	**.226**	2.943	**.004**	.226	.289	.226	1.000	1.000
	Market Detraction	-.125	.083	-.115	-1.496	.138	-.115	-.152	-.115	1.000	1.000
	Facility for storage	.063	.083	.058	.753	.453	.058	.077	.058	1.000	1.000
	Entrepreneurship	.311	.083	**.287**	3.737	**.000**	.287	.358	.287	1.000	1.000
	Various Infrastructure Facility	-.068	.083	-.062	-.812	.419	-.062	-.083	-.062	1.000	1.000
	Marketability	.084	.083	.078	1.014	.313	.078	.103	.078	1.000	1.000
	Demand and supply matching	-.079	.083	-.073	-.946	.346	-.073	-.097	-.073	1.000	1.000
	Value addition	.028	.083	.026	.340	.735	.026	.035	.026	1.000	1.000
	Ease of Marketing	.092	.083	.085	1.110	.270	.085	.113	.085	1.000	1.000
	Planned Selling	-.041	.083	-.038	-.495	.622	-.038	-.051	-.038	1.000	1.000

Source : Calculated by researchers

a. Dependent Variable: Continue to sale in RMC market

and selling in RMC market by 37%, referred from the table-6. No autocorrelation symptoms are available in the regression model because Durbin Watson value is 1.976, which should vary from 1.5 to 2.5.

Farmers' satisfaction in marketing the vegetables in the RMC markets is an importantfactor as this factor contribute 51% to (Beta=0.513 with p=0.000) to the overall farmers' intention to continue the farming & selling in the RMC markets in future. Another two factor marketing future in RMC market and farmers' felling as entrepreneur in their profession are also contributing 23% and 29% (Beta-0.226 with p=0.004 and Beta-0.287 with p=0.000) respectively to

overall intention to continue the farming and selling in the RMC in future. In collinearity statistics shows that no multi-collinearity symptoms at all. Of course the factors are extracted from the

Table- 8: ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	21.204	12	1.767	1.958	.037[b]
	Residual	85.712	95	.902		
	Total	106.917	107			

Source : Calculated by researchers

a. Dependent Variable: Consumer are getting expected value of their money

b. Predictors: (Constant), Planned Selling, Ease of Marketing, Value addition, Demand and supply matching, Marketability, Various Infrastructure Facility, Entrepreneurship, Facility for storage, Market Detraction, Marketing Future, Relationship with Consumer, Satisfaction level of farmer

explorative factor analysis.

Table-9: Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.445[a]	.198	.097	.950	.198	1.958	12	95	.037	1.673

Source : Calculated by researchers

a. Predictors: (Constant), Planned Selling, Ease of Marketing, Value addition, Demand and supply matching, Marketability, Various Infrastructure Facility, Entrepreneurship, Facility for storage, Market Detraction, Marketing Future, Relationship with Consumer, Satisfaction level of farmer

b. Dependent Variable: Consumer are getting expected value of their money

4.3 Predictability of consumers'value realization by factors of satisfaction of farmer-marketers

The model, multiple linear regression, is significantly suitable for this analysis as the F statistics (1.958) is significant (p=0.037), referred from the above ANOVA table (table-8).

Multiplelinear regression analysis was conducted to test the predictability of customers' value realization by factors of satisfaction of farmers-cum-marketers. The model summery shown in table-9 provides the value of R as 0.445 which represents positive correlation between farmer-cum-marketers' satisfaction and customers' value realization. The results further revealed that R^2 as 0.198, which implies that the parameters of farmers' satisfaction explain nearly 20%of the observed variability in the customers' value realization. The adjusted R^2 is a modified measure and has a value of .097which is significant (p=0.037).So, the customers' value realization can be predicted by the factors of satisfaction of farmers-cum-marketer withnearly 10%, referred from the table-9. No autocorrelation symptoms are available in the regression

Table-10: Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	4.028	.091		44.067	.000					
	Satisfaction level of farmer	-.080	.092	-.080	-.869	.387	-.080	-.089	-.080	1.000	1.000
	Relationship with Consumer	-.119	.092	-.119	-1.294	.199	-.119	-.132	-.119	1.000	1.000
	Marketing Future	.090	.092	.090	.981	.329	.090	.100	.090	1.000	1.000
	Market Detraction	-.180	.092	-.180	-1.959	.053	-.180	-.197	-.180	1.000	1.000
	Facility for storage	-.189	.092	**-.189**	-2.056	**.042**	-.189	-.206	-.189	1.000	1.000
	Entrepreneurship	-.236	.092	**-.237**	-2.575	**.012**	-.237	-.255	-.237	1.000	1.000
	Various Infrastructure Facility	.091	.092	.091	.993	.323	.091	.101	.091	1.000	1.000
	Marketability	.080	.092	.080	.871	.386	.080	.089	.080	1.000	1.000
	Demand and supply matching	-.141	.092	-.141	-1.537	.128	-.141	-.156	-.141	1.000	1.000
	Value addition	-.042	.092	-.042	-.455	.650	-.042	-.047	-.042	1.000	1.000
	Ease of Marketing	-.015	.092	-.015	-.166	.868	-.015	-.017	-.015	1.000	1.000
	Planned Selling	-.095	.092	-.095	-1.036	.303	-.095	-.106	-.095	1.000	1.000

Dependent Variable: Consumer are getting expected value of their money

model because Durbin Watson value is 1.673, which should vary from 1.5 to 2.5.

Facility for storage of vegetable is an important factor that is having a negative contribution of 19 % (Beta-0.189 with p=0.042) to the customers' value realization with respect to their expectation in RMC market. Another factor,farmers' felling as entrepreneur in their profession are also contributing 24%negatively (beta= -0.237 with p=0.012) to the consumers realization getting expected value in RMC market.

4.4 Interaction of demographic variables with the factors of farmers' satisfaction.

The individual effects of the demographic variables like age, gender, qualification and number

Table- 11: Multivariate Tests[a]

Effect		Value	F	Hypothesis df	Error df	Sig.
Intercept	Pillai's Trace	.382	2.525[b]	12.000	49.000	.011
	Wilks' Lambda	.618	2.525[b]	12.000	49.000	.011
	Hotelling's Trace	.618	2.525[b]	12.000	49.000	.011
	Roy's Largest Root	.618	2.525[b]	12.000	49.000	.011
Age	Pillai's Trace	2.185	1.753	96.000	448.000	.000
	Wilks' Lambda	.052	1.957	96.000	340.344	.000
	Hotelling's Trace	4.374	2.153	96.000	378.000	.000
	Roy's Largest Root	2.100	9.799[c]	12.000	56.000	.000
Gender	Pillai's Trace	.390	2.607[b]	12.000	49.000	.009
	Wilks' Lambda	.610	2.607[b]	12.000	49.000	.009
	Hotelling's Trace	.638	2.607[b]	12.000	49.000	.009
	Roy's Largest Root	.638	2.607[b]	12.000	49.000	.009
qualification	Pillai's Trace	.603	1.798	24.000	100.000	.023
	Wilks' Lambda	.487	1.768[b]	24.000	98.000	.027
	Hotelling's Trace	.868	1.737	24.000	96.000	.032
	Roy's Largest Root	.495	2.061[c]	12.000	50.000	.038
Number of familymemberinvolvei nvegetableproduction	Pillai's Trace	1.295	3.227	36.000	153.000	.000
	Wilks' Lambda	.168	3.357	36.000	145.504	.000
	Hotelling's Trace	2.600	3.443	36.000	143.000	.000
	Roy's Largest Root	1.359	5.775[c]	12.000	51.000	.000
Age * qualification	Pillai's Trace	1.040	2.255	36.000	153.000	.000
	Wilks' Lambda	.263	2.309	36.000	145.504	.000
	Hotelling's Trace	1.781	2.359	36.000	143.000	.000
	Roy's Largest Root	1.073	4.560[c]	12.000	51.000	.000
Age * Number of family member involve in vegetable production	Pillai's Trace	1.862	1.416	96.000	448.000	.011
	Wilks' Lambda	.083	1.588	96.000	340.344	.001
	Hotelling's Trace	3.568	1.756	96.000	378.000	.000
	Roy's Largest Root	1.518	7.083[c]	12.000	56.000	.000
Marital status * qualification	Pillai's Trace	1.085	4.941	24.000	100.000	.000
	Wilks' Lambda	.179	5.572[b]	24.000	98.000	.000
	Hotelling's Trace	3.116	6.232	24.000	96.000	.000
	Roy's Largest Root	2.533	10.556[c]	12.000	50.000	.000
qualification * Number of family member involve in vegetable production	Pillai's Trace	.917	1.871	36.000	153.000	.005
	Wilks' Lambda	.318	1.915	36.000	145.504	.004
	Hotelling's Trace	1.468	1.944	36.000	143.000	.003
	Roy's Largest Root	.773	3.285[c]	12.000	51.000	.001

N.B: The individual demographic variable, marital status and rest of the 21 combined effects of demographic variablesfound to have insignificant interaction with satisfying factors.

of family members involved in farming with marketing profession, are showing significant interaction with the factors of satisfaction of farmers-cum-marketers as values of Pillai's

Trace (2.185,0.390, 0.603, 1.295 respectively) are significant as 'p' values are less than 0.05. Then, by considering the values of Wilks' Lambda, Hotelling's Trace and Roy's Largest Root values are also significant as P vale of all of these statics are less than 0.05. Combined effect of demographic variables such as age * qualification, age * number of family member involve in vegetable production& marketing, marital status * qualification and qualification * number of family members involve in vegetable production are have significant Pillai's Trace, Wilks' Lambda, Hotelling's Trace and Roy's Largest Root values are significant as all these values are less than 0.05(Table-11).

5. Findings

The major factors that are affecting the farmers' intention to continue the cultivation and marketing of vegetable products in the RMC market are 'planned selling', ease of marketing, value addition, demand and supply matching, marketability, various infrastructure facility, entrepreneurship, facility for storage, market detraction, marketing future, relationship with consumer and satisfaction level of farmer.

The intention of farmers-cum-marketers to continue the farming & sellingof vegetable product in the RMC market depends upon the above 12 factors by37%. On the other handthe predictability of consumers' realized valuewith respect to theirexpectation is 20% on those same 12 factors. These results logically refers that something is lacking in between the production of vegetables and customers' realized value, which means the value addition factors needs a lot of improvements that are the distribution, selling, marketing infrastructures, storage and logistics.

Farmers' satisfaction in marketing the vegetables in the RMC markets is an important factor as this factor contributes 51% to the overall farmers' intention to continue the farming & selling in the RMC markets in future. This fact reflect that the Govt. & non-government strategists need to protect the present level satisfaction of farmer-cum-marketer with respect to the safe future of their profession, so that the vegetable production will not become a crisis of the country.

Two important factors like'marketing future in RMC' and 'feel as entrepreneur in their profession' are contributing 23% and 29% respectively to overall intention to continue the farming and selling in the RMC in future. It shows that if farmer-cum-marketers can have a realization that they have bright future in RMC market and can have a feelingof entrepreneurshipwith their profession then their intension to continue farming and selling in RMC market will be positive.

Facility for storage of vegetable is an important factor that contribute (19 %) negatively to the consumers realized value in RMC market with respect to their expectation, which reflects that if there is more storage facility of vegetable consumer will not get expected value for their

money, as marketer have more bargaining power in this case and general consumer are sufferer. So there must require a policy that can protect both consumer and marketer. Another factor, farmers' felling as entrepreneur in their profession is contributing (24%) negatively to the consumers' realized value in RMC market. This result shows that farmers' feeling as an entrepreneur in their profession will give rise to strict profit making sense of those farmers, which may deteriorate the interest of general consumer. So, the policies of government and non-government decision makers should orient the entrepreneurship feeling of farmers in such a manner that farmers will get justice through their profit and general consumers will not be exploited negatively, which can happen mostly by regulated market system. Hence, the RMCs should be more emphasized rather than ignorance.

The demographic variables like age, gender, qualification and 'number of family members involved in the agriculture profession' are significantly interacting with the satisfying factors of farmers. Further, most of the possible combinations of age, qualification and number of family members involved in the profession are interacting with the farmers' satisfying factors. On the other hand factors of farmers' satisfaction are significantly influencing farmers' intention to continue their profession of farming and marketing the vegetable products. Thus, both the government and non-government decision makers should formulate their policies based upon these demographic variables in order to encourage them to continue their farming profession.

6. Conclusion

Something is lacking between current production of vegetable products and consumer realised value in India, which deprive the farmers from getting justice. The above said 'something' can be addressed by the issues of improvement in distribution, storage, logistics and other marketing infrastructures. These issues are justified as the criteria of farmers' satisfaction, which is the back-bone of country's economy. This study refers that if most of the farmers are satisfied in their profession, feel as an entrepreneur in their profession and feel thattheir future in production & marketing of agriculture products is safe, then the farmers' intension to remain in their current profession will be strengthened.It must require some long-term and none-negotiable policy in marketing of vegetables and other agriculture products to protect the farmers from the exploitation, so that economy of India can be insulated from various economic disasters.

7. Originality contribution:

The farmers' knowledge relating to present economy has been successfully related to future growth and efficiency of the vegetable marketing and hence some strategies can be suggested not only for vegetable products but also for the marketing of entire agriculture products.

8. Limitations and their overcome

Time limitation made the researchers to go for small sample size (110), but by largersample size, more approximated results can be obtained. Only basic software Use more advanced

technique for data analysis and data collection can give improved results of this type of studies. Respondents of the study are only the farmers and most of them are not literate enough to express their realization and also reluctant to give all accurate information regarding their selling activities. So, better technique and trained survey people can produce more precision.

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