



FARMERS' ATTITUDE TOWARDS THE WORKING OF REGULATED MARKETS IN TAMILNADU - A STUDY

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Abstract

Regulated markets in Theni District, the opinion of the respondents towards the working of Regulated Markets in the study area, of the 21 variables selected, age, gender, type of ownership, literacy level, size of land holdings, farm income, crop loan, mode of sales mode of transport, market experience, distance between the farm field and regulated markets, sources of market information, facilities available in the regulated markets were found to be significant, whereas the remaining variables such as Uses of Regulated Markets, Preference to Sell through Regulated Markets, Facilities available in the Open Market, Problems were found to be insignificant.

Keywords: Performance of Regulated Markets, Level of attitude, Chi-Square.

INTRODUCTION

Agriculture constitutes one of the economies of the developing countries in the world. Constructive progress in their agricultural sector is an indispensable prerequisite for the rapid economic growth and rural development of the countries in general and poverty reduction both within and outside the agricultural sector in particular. It contributes around 25 percent to the GDP and employs 65 percent of the workforce of the country. Furthermore, 80 percent of Indians who live below the poverty line constitute the rural population which depends directly (or) indirectly on agriculture. India is planning to achieve a GDP growth rate of 7 percent to 8 percent during the 10th 5 year plan and has set the target as 4 percent¹ growth in agriculture. The success of any agricultural development rests ultimately on the efficiency of the marketing system. The marketing of agricultural produce is as important as the production itself. Therefore, a mere cell to produce more without providing an efficient marketing machinery which could assure a fair return to the producer- seller carries to conviction with the farmers. The Regulated Market is the major institutional innovation to help the farmers in profitably disposing of their marketable surpluses.

NEED OF THE STUDY

A Market is said to be regulated when the State Government establishes market under a specific enactment and frames rules and regulations to conduct business therein. An efficient marketing system can be an important means of raising the income levels of the farmers and increasing the consumer satisfaction. As the success of any agricultural development programme rests ultimately on the efficiency of the marketing system in-force and a defective marketing system acts as a positive disincentive to any increase in production, the need for an efficient marketing system to match the increasing production was increasingly realized. Moreover, the farmers, the traders, and the consumers who are three different entities, have their objectives which often conflict with one another's. The cultivation in Theni District is carried on in 1,12,053 hectares which is 34.56 per cent of the district's geographical area, and is 2.10 percent of the total area shown in the State. Further agriculture is the livelihood of 56.97 percent of the total workers comprising 50,436 cultivators (9.69%) and 2,45,989 agricultural labourers (47.28%). The district Regulated Market Committee declared twenty crops as notified including all the important food crops and cash crops grown in the district. Moreover the annual average agricultural production of the district was 2.68 lakh M.Ts. and was 2.19 per cent of the average production of the State.

OBJECTIVES

- Factors Influencing the level of attitude of respondents towards the performance of Regulated Markets in Theni District of Tamil Nadu, India

METHODOLOGY

There are 7 Regulated Markets functioning under the Control of the Theni Regulated Market Committee. All these markets have been taken for the study following the census method. The Stratified Random Sampling



Technique is adopted for selecting farmers, taking Theni district as the Universe, the taluk divisions as strata, notified area as the primary unit and farmers as ultimate unit. Theni District comprises 5 Taluk Divisions. A list of the number of farmers of the taluk concerned was obtained from the District statistical office, Theni.

Tools

The attitude of the respondents to the services rendered by the regulated markets in the study area was measured with the help of an attitude scale. The responses of the sample respondents to each statement were elicited with the help of Likert's Scale, classified into five scores for strongly agree, four for agree, three for no opinion, two for disagree and one for strongly disagree. Every sample respondent could score a maximum of 25 scores (5*5) or a minimum of 5 scores (5*1) for the five statements. The level of satisfaction of the respondents of regulated markets has been classified into three categories, namely small level, medium level and high level for the analytical purposes. For this the total score of each respondent is computed for analyzing the attitude of respondents to the services of regulated markets. On the basis of the total score, mean (\bar{x}) and standard deviations (σ) were computed. With the help of these, the level of attitude of respondents were computed and categorised as small level, medium level and high level.

Small Level attitude = $X - \sigma$; Medium Level attitude = $(X + \sigma) - (X - \sigma)$;

High Level attitude = $X + \sigma$

It was found that out of the 500 respondents, 170 respondents were small level attitude, 220 respondents were medium level attitude, and 110 respondents were high level attitude regarding the performance of regulated markets.

RESULTS AND DISCUSSIONS

The survival and growth of regulated markets mainly depend upon the effective participation of farmers in them. The present Governments both at the centre and in the state initiated various measures to strengthen the structure of the regulated markets in the country. Their attempts are mainly towards making the farmers participate in the regulated markets and utilize their services to their advantage. Here, an attempt has been made to ascertain the degree of participation of the farmers in the regulated markets of the study area. The number of sample farmers in the regulated markets of the study area is presented in Table 1.

Table -1 Status of Sample Farmers

Sl.No	Status of Farmers	Number of Farmers	Percentage to Total
1.	Small	170	34
2.	Marginal	220	44
3.	Large	110	22
	Total	500	100

Source: Primary data

Note : Figures in paranthesis indicate percentage to total

It is understood from Table 3.1 that out of the total 500 sample farmers, 170 (34.0%) in small farmers, 220(44.0%) in marginal farmers and 110(22.0%) in large farmers in the regulated markets. The farmers in the regulated markets are generally influenced by several factors. The eleven factors which mostly influence the farmers were identified in the course of the pilot study and these were taken for the analysis in the present section. The selected eleven factors are namelsy Age, Gender, Family Size, Type of Ownership, Literacy Level, Size of Land Holdings, Farm Income, Crop Loan, Mode of Sales, Mode of Transport, Timing of Sales, Market Experience, Uses of Regulated Markets, Distance between the Farm Field and Regulated Markets, Number of Visits to Regulated Markets, Sources of Market Information, Prefer to Sell through Regulated Markets, Sell the produce in the Open Market, Facilities available in the Open Market, Problems, Facilities available in the Regulated Markets.

In order to find the association among these select factors and the farmers in the regulated markets relevant null hypotheses were framed and analysed by applying the Chi-Square test.



Factors Influencing the Level of Attitude of Respondents towards the Performance of Regulated Markets

The independent factors such as age, gender, type of ownership, literacy level, size of land holdings, farm income, crop loan, mode of sales, mode of transport, market experience, uses of regulated markets, distance between the farm field and regulated markets, sources of market information, Preference to sell through regulated markets, facilities available in the open market, problems, and facilities available in the regulated markets were considered for analysis. An effort was made to find out whether such independent variables influenced different levels of attitude of the respondents significantly with the help of Chi Square.

Age of Sample Farmers

The classification based on the age group of farmers in the regulated markets is presented in Table 2.

Table-2 Age –wise distribution of Sample Farmers

Sl.No	Age Group	Small	Marginal	Large	Percentage to Total
1.	Below 35 years	46 (27.1)	48 (21.8)	13 (11.8)	107 (21.4)
2.	36-50 years	95 (55.9)	113 (51.4)	36 (32.7)	244 (48.8)
3.	Above 50 years	29 (17.1)	59 (26.8)	61 (55.5)	149 (29.8)
	Total	170 (100.0)	220 (100.0)	110 (100.0)	500 (100.0)

Source: Primary data

Note : Figures in Parenthesis indicate percentage to total

It is seen in Table 2 that out of the 500 sample farmers 107 (21.4%), 244 (48.8%), 149 (21.8%) belong to the age groups of 'below 35 years', '36 and 50 years', and 'above 50 years' of age respectively. Among the 170 small farmers 29 (17.1%) belong to the age group of 'above 50 years' and they are the minimum in this group. 46 (27.1%) and 95 (55.9%) belong to the age group of 'below 35 years', and 'between 36 and 50 years' respectively. The table also shows that among 220 medium farmers 113 (51.4%) belong to the age group of 'between 36 and 50 years' forming the most numerous group. They are followed by 59 (26.8%), 48 (21.8%) who belong to the age group of 'above 50 years' and 'below 35 years' respectively. The table also shows that 110 large farmers 61 (55.5%) belong to the age group of 'above 50 years' forming the most numerous group. They are followed by 36 (32.7%) and 13 (11.8%) who belong to the age group of 'below 36 and 50 years' and 'below 35 years' of age respectively.

Relationship between Age and Level of Attitude of Respondents towards the Performance of Regulated Markets

In order to test the relationship, the data relating to the age level of respondents and their attitude towards the working of regulated markets were collected and classified and the results of Chi. Square are presented in Table 3.

Table -3 Results of Chi Square Test

Variable	Calculated Value of Chi Square	Degrees of Freedom	Table Value of Chi Square
Age	49.35941	4	9.49

Source: Computed data

As revealed by the results, the calculated value of X^2 (49.35941) is higher than its corresponding table value (9.49), the null hypothesis "the age of the respondents does not have any significant relationship with the level of attitude of working of the regulated markets" is rejected. Therefore, it is concluded that the age level of the respondents had not significantly influenced their level of attitude towards the working of regulated markets.



Gender – Wise distribution of Sample Farmers

The gender wise distribution of farmers in the regulated markets is presented in Table 4.

Table-4 Gender – Wise distribution of Sample Farmers

Sl.No	Gender	Small	Marginal	Large	Percentage to total
1.	Male	132 (77.6)	183 (83.2)	95 (86.4)	410 (82.0)
2.	Female	38 (22.4)	37 (16.8)	15 (13.6)	90 (18.0)
	Total	170 (100.0)	220 (100.0)	110 (100.0)	500 (100.0)

Source: Primary data

Note: Figures in parenthesis indicate Percentage to total.

It is seen Table 4 that out of the 500 sample farmers 410 (82.0), 90 (18.0) are ‘male’ and ‘female’. Among the 170 small farmers 132(77.6%) are ‘male’ and 38(22.4%) are ‘female’. Among the 220 marginal farmers 183(83.2%) and 37(16.8%) are ‘male’ and ‘female’ farmers respectively. Among the 110 large farmers the ‘male’ and ‘female’ farmers are 95(86.4%), 15(13.6%) respectively. In both the categories ‘male’ and ‘females’ are exceptionally high.

Relationship between Gender and Level of Attitude of Respondents towards the Performance of Regulated Markets

In order to test the relationship, the data relating to the gender level of respondents and their attitude towards the working of regulated markets were collected and classified and the results of Chi Square are presented in Table 5.

Table-5 Results of Chi Square Test

Variable	Calculated Value of Chi Square	Degrees of Freedom	Table Value of Chi Square
Gender	3.80962	2	5.99

Source: Computed data

As revealed by the results, the calculated value of X^2 (3.80962) is lower than its corresponding table value (5.99), the null hypothesis “the gender of the respondents have significant relationship with the level of attitude towards the working of the regulated markets” is accepted. Therefore, it is concluded that the gender level of the respondents had significantly influenced their level of attitude towards the working of regulated markets.

Type of Ownership

According to the type of ownership of sample farmers in the regulated market is shown in Table 8.

Table-8 Distribution of sample farmers according to Type of Ownership

Sl.No	Type of Ownership	Small	Marginal	Large	Total
1.	Owner Cultivator	102 (60.0)	107 (48.6)	105 (95.5)	314 (62.8)
2.	Tenant Cultivator	45 (26.5)	65 (29.5)	-	110 (22.0)
3.	Both	23 (13.5)	48 (21.8)	5 (4.5)	76 (15.2)
	Total	170 (100.00)	220 (100.00)	110 (100.00)	500 (100.00)

Source : Primary data

Note : Figures in Paranthesis indicate percentage to total.



Table 8 shows that the distribution of sample farmers according to their type of ownership. It shows that out of the total of 500 sample farmers 314 (62.8%) belong to the group of farmers in ‘owner cultivator’, 110 (22.0%) belong to the group of farmers in ‘tenant cultivator’ and 76(15.2%) belong to the group of ‘both owner and tenant cultivator’ respectively.

Among the 170 small farmers 102 (60.0%) are ‘owner cultivator’s and they are the maximum one. 45(26.5%) and 23(13.5%) belong to the ‘tenant cultivator’ and ‘both of owner and tenant cultivator’ respectively. The table also shows that among 220 marginal farmers 107 (48.6%) belong to the ‘owner cultivator’ forming the most numerous one. They are followed by 65 (29.5%) and 48(21.8%) who belongs to ‘tenant cultivator’ and ‘both owner and tenant cultivator’ respectively. Among the 110 large farmers 105 (95.5%) belong to the ‘owner cultivator’ and 5 (4.5%) belong to ‘both owner and tenant cultivator’ respectively.

Relationship between Type of Ownership and Level of Attitude of Respondents towards the Performance of Regulated Markets

In order to test the relationship, the data relating to the type of ownership of respondents and their attitude towards the working of regulated markets were collected and classified and the results of Chi Square are presented in Table 9.

Table-9 Results of Chi Square Test

Variable	Calculated Value of Chi Square	Degrees of Freedom	Table Value of Chi Square
Type of Ownership	72.22213	4	9.49

Source: Computed data

As revealed by the results, the calculated value of X^2 (72.22213) is higher than its corresponding table value (9.49), the null hypothesis “the type of ownership of the respondents does not have any significant relationship with the level of attitude of working of the regulated markets” is rejected. Therefore, it is concluded that the type of ownership of the respondents had significantly influenced their level of attitude towards the working of regulated markets.

Level of Literacy and Sample Farmers

The distribution of sample farmers on the basis of their level of literacy is presented in Table 10.

Table-10 Distribution of Sample Farmers according to Level of Literacy

Sl.No	Education Level of Farmers	Small	Marginal	Large	Percentage of Total
1.	No Formal Education	49 (28.8)	30 (13.6)	35 (31.8)	114 (22.8)
2.	Upto 10 th standard	53 (31.2)	59 (26.8)	28 (25.5)	140 (28)
3.	Upto Higher Secondary	32 (18.8)	60 (27.3)	24 (21.8)	116 (23.2)
4.	Upto College	36 (21.2)	71 (32.3)	23 (20.9)	130 (26.0)
	Total	170 (100.0)	220 (100.0)	110 (100.0)	500 (100.0)

Source: Primary data

Table 10 shows that the distribution of sample farmers according to their level of literacy. It shows that out of the total of 500 sample farmers 114(22.8%) have ‘no formal education’, 140(28%) have education ‘upto the 10th standard’, 116(23.2%) have studied ‘upto the higher secondary’ and 130 (26.0%) have ‘college level’ education. Among the 170 small farmers 53(31.2%) farmers have ‘upto 10th standard’ education and they are the maximum one. 49(28.8%) and 36(21.2%) farmers are having ‘no formal education’ and ‘upto college’ level of education and



32(18.8%) farmers are having ‘upto higher secondary’ level of education. The table also shows that 220 marginal farmers 71(32.3%) are having ‘upto college’ level of education and they are the maximum one. They are followed by 60(27.3%), 59(26.8%) and 30(13.6%) farmers are having ‘upto higher secondary’ level and ‘upto10th standard’ level, and ‘no formal education’ respectively. Among 110 large farmers 35(31.8%) farmers are having ‘no formal education’ and they followed by 28(25.5%), 24(21.8%) and 23(20.9%) who have ‘upto 10th standard’, ‘upto higher secondary’ level and ‘upto college’ level of education respectively.

Relationship between Level of Literacy and Level of Attitude of Respondents towards the Performance of Regulated Markets

In order to test the relationship, the data relating to the level of literacy of respondents and their attitude towards the working of regulated markets were collected and classified and the results of Chi Square are presented in Table 11.

Table-11 Results of Chi Square Test

Variable	Calculated Value of Chi Square	Degrees of Freedom	Table Value of Chi Square
Level of Literacy	24.72256	6	12.592

Source: Computed data

As revealed by the results, the calculated value of X^2 (24.72256) is higher than its corresponding table value (12.592), the null hypothesis “the level of literacy of the respondents does not have any significant relationship with the level of attitude of respondents towards the working of the regulated markets” is rejected. Therefore, it is concluded that the level of literacy of the respondents had significantly influenced their level of attitude towards the working of regulated markets.

Farm – Income of Sample Farmers

The farm income of sample farmers in the regulated markets is shown in Table 12.

Table-12 Farm – Income Wise Distribution of Sample Farmers

Sl.No	Farm Income	Small	Marginal	Large	Percentage to Total
1.	Between Rs.20,000	83 (48.8)	31 (14.1)	-	114 (22.8)
2.	Between Rs.20,000 and Rs.30,000	63 (37.1)	158 (71.8)	45 (40.9)	266 (53.2)
3.	Above Rs.30,000	24 (14.1)	31 (14.1)	65 (59.1)	120 (24.0)
	Total	170 (100.0)	220 (100.0)	110 (100.0)	500 (100.0)

Source: Primary data

Note: Figures in paranthesis indicate percentage to total.

Table 12 shows the distribution of sample farmers according to their farm income. It shows that out of the total 500 sample farmers 114 (22.8%) belong to the group of farmers whose income is ‘below Rs.20, 000’, 266(53.2%) belong to the group of farmers with their farm income ‘between Rs.20, 000 and Rs.30, 000’ and 120(24.0%) belong to the group of farmers who have farm income ‘above Rs.30, 000’. Among the 170 small farmers 83(48.8%) ‘Below Rs.20, 000’ and they are the maximum farm income of sample farmers, 63(37.1%) and 24 (14.1%) who belong to the level of ‘between Rs.20, 000 and Rs.30, 000’ and ‘above Rs.30, 000’ of farm income respectively. The table also shows that among 220 marginal farmers 158(71.8%) belong to the income group of ‘between Rs. 20,000 and Rs.30, 000’ forming the most numerous one. They are followed by 31(14.1%) and 31(14.1%) who belongs to the level of ‘below Rs. 20,000’ and ‘above Rs. 30,000’ respectively. Among the 110 large farmers 65(59.1%) belong to the level of ‘above Rs.30, 000’ forming the most numerous group of sample



farmers. They are followed by 45(40.99%) and no farmers belong to the level ‘between Rs.20, 000 and Rs.30, 000’, of farm income respectively.

Relationship between Farm Income and Level of Attitude of Respondents towards the Performance of Regulated Markets

In order to test the relationship, the data relating to the farm income of respondents and their attitude towards the working of regulated markets were collected and classified and the results of Chi Square are presented in Table 13.

Table-13 Results of Chi Square Test

Variable	Calculated Value of Chi Square	Degrees of Freedom	Table Value of Chi Square
Farm Income	181.03336	4	9.49

Source: Computed data

As revealed by the results, the calculated value of X^2 (181.03336) is higher than its corresponding table value (9.49), the null hypothesis “the farm income of the respondents does not have any significant relationship with the level of attitude of working of the regulated markets” is rejected. Therefore, it is concluded that the farm income of the respondents had significantly influenced their level of attitude towards the working of the regulated markets.

Crop Loan and Sample Farmers

The distribution of the sample farmers on the basis of their crop loan in the regulated markets is presented in Table 14.

Table-14 Distribution of sample farmers according to their crop loan

Sl.No	Amount of Crop Loan	Small	Medium	Large	Percentage to Total
1.	Rs.10,000	-	1 (.5%)	-	1 (.2%)
2.	Rs.50,000	52 (30.6)	60 (27.3)	12 (10.9)	124 (24.8%)
3.	Rs.75,000	10 (5.9)	20 (9.1)	34 (30.9)	64 (12.8)
4.	Rs.80,000	7 (4.1)	15 (6.8)	-	22 (4.4)
5.	Rs.1,00,000	101(57.4)	124 (56.4)	64 (58.2)	289 (57.8)
	Total	170 (100.00)	220 (100.00)	110 (100.00)	500 (100.00)

Source: Primary data

Note : Figures in paranthesis indicate percentage to total

Table 14 shows the distribution of sample farmers according to their crop loan. It shows that out of the total of 500 sample farmers only 1 (.2%) who get a loan amount of below Rs.10,000, 124 (24.8%) belong to the persons who get a loan amount of below Rs.50,000, 64 (12.8%) to the persons who get a loan amount of below Rs.75,000, 22 (4.4%) belongs to the persons who get a loan amount of Rs.80,000 and 289 (57.8%) belongs to a persons who get a loan amount of Rs.1,00,000. Among the 170 small farmers 101 (57.4%) having Rs.1,00,000 and they are followed by 52(30.6%), 10(5.9%) and 7(4.1%) who belong to the level of Rs.50,000, Rs.75,000 and Rs.80,000 of crop loan respectively.

The table also shows that among 220 marginal farmers 124 (56.4%), 60(27.3%) belong to the crop loan of Rs.1, 00,000 and Rs.60, 000. They are followed by 20(9.1%), 15(6.8%) and 1(.5%) who belong to the level of Rs.75,



000, Rs.80, 000 and Rs. 10,000 respectively. Among the 110 large farmers 64(58.2%) who belong to the crop loan of Rs.1, 00,000 forming the most numerous one. They are followed by 34(30.9%) and 12(10.9%) who belong to the crop loan amount of Rs.75, 000 and Rs.50, 000 respectively.

Relationship between Their Crop Loan and Level of Attitude of Respondents towards the Performance of Regulated Markets

In order to test the relationship, the data relating to the crop loan of respondents and their attitude towards the working of regulated markets were collected and classified and the results of Chi Square are presented in Table 15.

Table-15 Results of Chi Square Test

Variable	Calculated Value of Chi Square	Degrees of Freedom	Table Value of Chi Square
Crop Loan	18.033	4	9.49

Source: Computed data

As revealed by the results, the calculated value of X^2 (18.033) is higher than its corresponding table value (9.49), the null hypothesis “the crop loan of the respondents does not have any significant relationship with the level of attitude towards the working of the regulated markets” is rejected. Therefore, it is concluded that the crop loan of the respondents had significantly influenced their level of attitude towards the working of regulated markets.

Mode of Sales and Sample Farmers

The distribution of sample farmers on the basis of their mode of sales in the regulated markets is presented in Table 16.

Table-16 Distribution of sample farmers on the basis of mode of sales

Sl.No	Mode of Sales	Small	Medium	Large	Total
1.	Through Commission Agent	21 (12.4)	38 (17.3)	14 (12.7)	73 (14.6)
2.	To Village Merchant	140 (82.4)	173 (78.6)	77 (70.0)	390 (78.0)
3.	To Mills	5 (2.9)	8 (3.6)	12 (10.4)	25 (5.0)
4.	To Others	4 (2.4)	1 (.5)	7 (6.4)	12 (2.4)
	Total	170 (100.00)	220 (100.00)	110 (100.00)	500 (100.0)

Source: Primary data

Note : Figures in paranthesis iindicate percentage to total

Table 16 shows the distribution of sample farmers according to their mode of sales. It shows that out of the total of 500 sample farmers 73(14.6%) made sales through commission agent, 370(78.0%) made sales to village merchant, 25(5.0%) made sales to mills and 12(2.4%) who made sales to others respectively. Among the 170 small farmers 140(82.4% belong to the group who made a sales to village merchant and they are the maximum one. And they are followed by 21(12.4%) belong to the group who made a sales through commission agent, 5(2.9%) belong to the group who made a sales to mills and 4(2.4%) belong to the group who made a sales to others respectively.

The table also shows that among 220 marginal farmers 173(78.6%) belong to the group who made a sales to village merchant and they are the most numerous one, and they are followed by 38(17.3%) who belong to the group who made a sales through commission agent, 8(3.6%) and 1 (.5%) belong to the groups made a sales to mills and to others respectively. Among the 110 large farmers 77(70.0%) made a sales to village merchant and



they are the most numerous one. They are followed by 14(12.7%) and 12(10.9%) and 7(6.4%) who belong to the groups who made a sales through commission agent, mills and others respectively.

Relationship between Mode of Sales and Level of Attitude of Respondents towards the Performance of Regulated Markets

In order to test the relationship, the data relating to the mode of sales of respondents and their attitude towards the working of regulated markets were collected and classified and the results of Chi Square are presented in Table 17.

Table-17 Results of Chi Square Test

Variable	Calculated Value of Chi Square	Degrees of Freedom	Table Value of Chi Square
Mode of Sales	23.86828	6	12.592

Source: Computed data

As revealed by the results, the calculated value of X^2 (23.86828) is higher than its corresponding table value (12.592), the null hypothesis “the mode of sales of the respondents does not have any significant relationship with the level of attitude of the respondents towards the working of the regulated markets” is rejected. Therefore, it is concluded that the mode of sales of the respondents had significantly influenced their level of attitude of the respondents.

Mode of Transport and Sample Farmers

According to the mode of transport owned and /or hired by the sample farmers in the regulated markets is presented in table 18.

Table-18 Distribution of sample farmers on the basis of Mode of Transport

Sl.No	Mode of Transport	Small	Medium	Large	Total
1.	Cart	11 (6.47)	15 (6.82)	-	26 (0.52)
2.	Tractor	135 (79.41)	158 (71.82)	43 (39.09)	336 (67.2)
3.	Lorry	20 (11.76)	39 (17.73)	67 (60.91)	126 (25.2)
4.	Minibus	1 (0.59)	8 (3.64)	-	9 (1.8)
5.	Others	3 (1.76)	-	-	3 (0.6)
	Total	170 (100.00)	220 (100.00)	110 (100.00)	500 (100.00)

Source :Primary data

Note :Figures in paranthesis indicate in percentage to total

Table 18, shows the distribution of the sample farmer according to their mode of transport used for selling their produce. It shows that out of the 500 sample farmers, 26(0.52%), 336(67.2%), 126(25.2%), 9(1.8%) and 3(0.6%) transported their produce by cart, tractor, lorry, minibusa and others respectively. Among the 170 small farmers, 135(79.41%) transported their produce by tractor and they are the maximum one. And they are followed by 20(11.7%), 11(6.47%), 3(1.76%) and 1(0.59%) used lorry, cart, others and minibus respectively.

The table also shows that among 220 small farmers 158(71.82%) used tractor to transport their produce and they are the most numerous one. 39(17.73%) used lorry , 15(6.82%) used cart and 8(3.64%) used minibus. Among the 110 large farmers 67(60.91%) used lorry and 43(39.09%) used tractor for transporting their produce. No farmer used cart or minibus.



Relationship between Mode of Transport and Level of Attitude of Respondents towards the Performance of Regulated Markets

In order to test the relationship, the data relating to the mode of transport of respondents and their attitude of towards the working of regulated markets were collected and classified and the results of Chi Square are presented in Table 19.

Table-19 Results of Chi Square Test

Variable	Calculated Value of Chi Square	Degrees of Freedom	Table Value of Chi Square
Mode of Transport	110.78484	8	15.507

Source: Computed data

As revealed by the results, the calculated value of X^2 (110.78484) is higher than its corresponding table value (15.507), the null hypothesis “the mode of transport of the respondents does not have any significant relationship with the level of attitude towards the working of the regulated markets” is rejected. Therefore, it is concluded that the mode of transport of the respondents had significantly influenced their level of attitude towards the working of regulated markets.

Market Experience and Sample Farmers

The distribution of the sample farmers based on their market experience is presented in Table 22.

Table -22 Distribution of Sample Farmers according to Market Experience

Sl.No	Market Experience	Small	Marginal	Large	Percentage to Total
1.	Less than 5 years	34 (20.00%)	18 (8.18%)	13 (11.82%)	65 (13%)
2.	Between 5 and 10 years	124 (72.94%)	153 (69.55%)	72 (65.45%)	349 (69.8%)
3.	Above 10 years	12 (7.06%)	49 (22.27%)	25 (22.73%)	86 (17.2%)
	Total	170 (100.00%)	220 (100.00%)	110 (100.00%)	500 (100.00%)

Source: Primary data

Note: Figures in Paranthesis indicate percentage to total.

Table 22 shows the distribution of sample farmers according to their market experience. It shows that out of the total of 500 sample farmers 65(13%) belong to the group of farmers who have market experience of less than 5 years, 349(69.8%) belong to the group of farmers who have market experience between 5 and 10 years, and 86(17.2%) belong to the group of farmers who have market experience more than 10 years. Among the 170 small farmers 124(72.94%) sample farmers have the market experience between 5 and 10 years and they are the maximum one. 34(20%) and 12(7.06%) belong to the market experience of less than 5 years and above 10 years respectively.

The table also shows that among 220 marginal farmers 153(69.55%) belong to the market experience between 5 years and 10 years, forming the most numerous one. They are followed by 49(22.27%), 18(8.18%) who belong to the level of experience above 10 years and less than 5 years. Among 110 large farmers 72(65.45%) belong to the years of experience between 5 years and 10 years forming the most numerous one. They are followed by 25(22.73%) and 13(11.82%) who belong to the level above 10 years and less than 5 years of experience respectively.



Relationship between Market Experience and Level of Attitude of Respondents towards the Performance of Regulated Markets

In order to test the relationship, the data relating to the market experience of respondents and their attitude towards the working of regulated markets were collected and classified and the results of Chi Square are presented in Table 23.

Table--23 Results of Chi Square Test

Variable	Calculated Value of Chi Square	Degrees of Freedom	Table Value of Chi Square
Market Experience	156.32589	24	36.415

Source: Computed data

As revealed by the results, the calculated value of X^2 (156.32589) is higher than its corresponding table value (36.415), the null hypothesis “the market experience of the respondents does not have any significant relationship with the level of attitude of the respondents towards the working of the regulated markets” is rejected. Therefore, it is concluded that the market experience of the respondents had significantly influenced their level of attitude towards the working of regulated markets.

Using the Regulated Markets and Sample Farmers

According to the distribution of the sample farmers based on their uses of regulated markets is presented in Table 24.

Table-24 Distribution of Sample Farmers according to Uses of Regulated Markets

Sl.No	Uses of Regulated Markets	Small	Medium	Large	Total
1.	Below 5 years	66 (38.8)	58 (26.4)	33 (30.1)	157 (31.4)
2.	Between 5 years and 10 years	99 (58.2)	152 (69.0)	55 (49.9)	306 (61.2)
3.	Above 10 years	5 (3.0)	10 (4.6)	22 (20.0)	37 (7.4)
	Total	170 (100.00)	220 (100.00)	110 (100.00)	500 (100.00)

Source : Primary data

Note : Figures in paranthesis indicate percentage to total

Table 24 shows the distribution of sample farmers according to their use of regulated markets. It shows that out of the total of 500 sample farmers 157(31.4%), 306(61.2%), 37(7.4%) people to use the regulated markets for below 5 years, between 5 and 10 years and above 10 years respectively. Among the 170 small farmers 99(58.2%) used the regulated markets between 5 years and 10 years and they are the maximum one. They followed by 66(38.8%) and 5(3.0%) people who used the regulated markets below 5 years and above 10 years respectively. The table also shows that among 220 marginal farmers 152(69.0%) used the regulated markets between 5 years and 10 years and they are the most numerous one. 58(26.4%) and 10(4.6%) people used the regulated markets below 5 years and above 10 years respectively. Among 110 large farmers 55(49.9%) used the regulated markets between 5 years and 10 years. They are followed by 33(30.1%) and 22(20.0%) who used the regulated markets below 5 years and above 10 years respectively.

Relationship between Using the Regulated Markets and Level of Attitude of Respondents towards the Performance of Regulated Markets

In order to test the relationship, the data relating to the uses of regulated market of respondents and their attitude towards the working of regulated markets were collected and classified and the results of Chi Square are presented in Table 25.



Table.25 Results of Chi Square Test

Variable	Calculated Value of Chi Square	Degrees of Freedom	Table Value of Chi Square
Using the Regulated Markets	230.84863	26	38.885

Source: Computed data

As revealed by the results, the calculated value of X^2 (230.84863) is higher than its corresponding table value (38.885), the null hypothesis “using the regulated markets by the respondents does not have any significant relationship with the level of attitude of the respondents towards working of the regulated markets” is rejected. Therefore, it is concluded that the using of regulated market of the respondents had significantly influenced their level of attitude towards the working of regulated market.

Sample Farmers and Distance between their Farm Field and Regulated Markets

The distribution of the sample farmers based on the distance between their farm field and the nearest regulated markets is presented in Table 26.

Table.26 Distribution of Sample Farmers according to Distance between Farm Field and Regulated Markets

Sl.No	Distance from Regulated Markets	Small	Marginal	Large	Percentage of Total
1.	Less than 5 kms	15 (8.82)	8 (3.64)	22 (20.00)	45 (9.00)
2.	Between 5 and 10 kms	74 (43.53)	98 (44.55)	17 (14.45)	189 (38.00)
3.	Above 10 kms	81 (47.65)	114 (51.82)	71 (64.55)	266 (53.00)
	Total	170 (100.00)	220 (100.00)	110 (100.00)	500 (100.00)

Source :Primary data

Note :Figures in parantheis indicate percentage to total

Table 26 shows that out of the total of 500 respondents 45(9.00%), 189(38.00%), 266(53.00%) having their farm fields with in less than 5kms, between 5 and 10 kms, and above 10 kms from the nearest regulated markets respectively. Among the 170 small farmers 81(47.65%) farmers are having their fields above 10 kms from the nearest regulated markets and they are the maximum one. 74(43.53%) and 15(8.82%) are having their farm fields between 5 and 10 kms and less than 5 kms from the nearest regulated markets respectively.

The table also shows that out of 220 marginal farmers 114(51.82%) are having their farm field above 10 kms and they are the maximum one, and followed by 98(44.55%),8(3.64%) are having their farm field between 5 and 10 kms and less than 5 kms from the nearest regulated markets respectively. Among the 110 large farmers 71(64.55%) are having their farm fields above 10 kms from the nearest regulated markets.22(20.00%) and 17(14.45%) are having their farm fields less than 5kms and between 5kms and 10 kms nearest regulated markets respectively.

Relationship between Distance between their farm field and regulated markets and Level of Attitude of Respondents towards the Performance of Regulated Markets

In order to test the relationship, the data relating to the distance between their farm field and regulated market of respondents and their attitude towards the working of regulated markets were collected and classified and the results of Chi Square are presented in Table 27.



Table-27 Results of Chi Square Test

Variable	Calculated Value of Chi Square	Degrees of Freedom	Table Value of Chi Square
Distance between their farm field and Regulated Markets	217.400122	22	33.924

Source: Computed data

As revealed by the results, the calculated value of X^2 (217.400122) is higher than its corresponding table value (33.924), the null hypothesis “the distance between their farm field and the regulated market of the respondents does not have any significant relationship with the level of attitude of the respondents towards the working of the regulated markets” is rejected. Therefore, it is concluded that the distance between their farm field and regulated market of the respondents had significantly influenced their level of attitude of the respondents towards the working of regulated market.

Sources of Market Information

The distribution of sample farmers on the basis of to collect the source of market information is presented in Table 30.

Table-30 Distribution of sample farmers according to the Source of Market Information

Sl.No	Sources of Market Information	Small	Medium	Large	Total
1.	All India Radio and Television	9 (5.29)	30 (13.64)	15 (13.64)	54 (10.8)
2.	Local News Papers	19 (11.17)	4 (1.82)	13 (11.82)	36 (7.2)
3.	Traders	3 (1.76)	33 (15.0)	12 (10.91)	48 (9.6)
4.	Fellow Farmers	116 (68.24)	134 (60.91)	53 (48.18)	303 (60.6)
5.	Regulated Markets	-	1 (0.45)	2 (1.82)	3 (0.6)
6.	Commission Agents	23 (13.53)	18 (8.18)	15 (13.64)	56 (11.2)
	Total	170 (100.00)	220 (100.00)	110 (100.00)	500 (100.00)

Source: Primary data

Note : Figures in paranthesis indicate percentage to total

Table 30 shows the distribution of sample farmers according to their sources of market information. It shows that out of the total of 500 sample farmers 54(10.8%) got the market information through all india radio and tv, 36(7.2%) collected the information through local news papers, 48 (9.6%) belong to the persons who received the information from the traders, 303(60.6%) persons collect the information from fellow farmers, 3(0.6%) from the regulated markets and 56(11.2%) collected information from the commission agents respectively. Among the 170 small farmers 116(68.24%) received the information about the regulated markets from the fellow farmers and they form the majority. 23(13.53%), and 19(11.17%) collected their information from the commission agents, and local newspapers 9(5.29%) from the All India Radio and 3(1.76%) from the traders respectively. Among the 220 marginal farmers 134(60.91%) received the information about regulated market from the fellow farmers and they are the numerous one. 33(15.0%) from the traders,30(13.64%)from the All India Radio and T.V,and 18(8.18%) from the commission agents , 4(1.82%)collected their information from the local news papers and , 1(0.45%) from the regulated markets.



The table also shows that among the 110 large farmers 53(48.18%), 15(13.64%), and 15(13.64%) collected their information about the regulated markets from fellow farmers, All India Radio and T.V. and commission agents respectively. 13(11.82%) from the local newspapers and 12(10.91%) from the traders. Only 2(1.82%) received the information from the regulated markets.

Relationship between Sources of Market Information and Level of Attitude of Respondents towards the Performance of Regulated Markets

In order to test the relationship, the data relating to the sources of market information of respondents and their attitude towards the working of regulated markets were collected and classified and the results of Chi Square are presented in Table 31

Table-31 Results of Chi Square Test

Variable	Calculated Value of Chi Square	Degrees of Freedom	Table Value of Chi Square
Sources of Market Information	52.27446	10	18.307

Source: Computed data

As revealed by the results, the calculated value of X^2 (52.27446) is higher than its corresponding table value (18.307), the null hypothesis “the sources of market information of the respondents does not have any significant relationship with the level of attitude of the respondents towards the working of the regulated markets” is rejected. Therefore, it is concluded that the sources of market information of the respondents had significantly influenced their level of attitude of the respondents towards the working of regulated market.

Preference to Sell Through Regulated Markets

The distribution of sample farmers on the basis of their preference to sell their product through regulated markets is presented in Table 32.

Table-32 Distribution of Sample Farmers according to their Preference for Regulated Markets

Sl.No	Preference	Small	Medium	Large	Total
1.	Absence of Middlemen	43 (25.29)	68 (30.91)	20 (18.18)	131 (26.2)
2.	Correct Weighment	5 (2.94)	15 (6.82)	-	20 (4.0)
3.	Immediate Payment	34 (20.0)	43 (19.55)	47 (42.72)	124 (24.8)
4.	Remunerative Prices	-	1 (0.46)	-	1 (0.2)
5.	Government Agency	78 (45.88)	63 (28.64)	27 (24.54)	168 (33.68)
6.	Better Marketing Facilities	10 (5.88)	30 (13.64)	16 (14.55)	56 (11.2)
	Total	170 (100.00)	220 (100.00)	110 (100.00)	500 (100.00)

Source :Primary data

Note :Figures in paranthesis indicate percentage to total

Table 32 shows the distribution of sample farmers according to their preference of regulated markets. It shows that out of the total of 500 sample farmers 131(26.2%) preferred because of the absence of middlemen, 20(4.0%) for correct weighment, 124(24.8%) for immediate payment, 1(0.2%) for remunerative prices, 168(33.68%) for government agencies, 56(11.2%) for better marketing facilities in the regulated markets respectively. Among the 170 small farmers 78(45.88%) preferred for government agency, 43(25.29%) for absence of middlemen,



34(20.0%) for immediate payment, 10(5.88%) for better marketing facilities and 0(0%) remunerative prices respectively.

The table also shows that among the 220 marginal farmers 68(30.91%) preferred the regulated markets for the absence of middlemen, 63(28.64%) for government agency, 43(19.55%) for immediate payment, 30(13.64%) for better marketing facilities, 15(6.82%) for correct weightment and 1(0.46%) for remunerative prices respectively.

Among 110 large farmers 47(42.72%) for immediate payment, 27(24.54%) for government agency, 20(18.18%) for absence of middlemen, 16(14.55%) for better marketing facilities, 0(0%) and 0(0%) for remunerative prices and correct weightment respectively.

Relationship between Preference to Sell Through Regulated Markets and Level of Attitude of Respondents towards the Performance of Regulated Markets

In order to test the relationship, the data relating to prefer to sell through regulated markets of respondents and their attitude towards the working of regulated markets were collected and classified and the results of Chi Square are presented in Table 33.

Table-33 Results of Chi Square Test

Variable	Calculated Value of Chi Square	Degrees of Freedom	Table Value of Chi Square
Preference to Sell Through Regulated Markets	51.90278	10	18.307

Source: Computed data

As revealed by the results, the calculated value of X^2 (51.90278) is higher than its corresponding table value (18.307), the null hypothesis “preference to sell through regulated markets of the respondents does not have any significant relationship with the level of attitude towards working of the regulated markets” is rejected. Therefore, it is concluded that prefer to sell through regulated market of the respondents had significantly influenced their level of attitude of working of regulated market.

Facing Any Problems

The distribution of sample farmers on the basis of facing any problems in the regulated markets is presented in Table 38

Table.38 Distribution of Sample Farmers according to Face any Problems

Sl.No	Faced and Problem	Small	Marginal	Large	Total
1.	Yes	90 (52.9)	157 (71.4)	75 (68.2)	322 (64.4)
2.	No	77 (45.3)	63 (28.6)	35 (31.8)	175 (35.0)
3.		3 (1.8)	-	-	3 (0.6)
	Total	170 (100.00)	220 (100.00)	110 (100.00)	500 (100.00)

Source : Primary Data

Note : Figures in Paranthesis indicate percentage to total

Table 38 shows the distribution of sample farmers according to their problems in regulated markets. It shows that out of the total of 500 sample farmers 322(64.4%) faced some problems in the regulated markets. 175(35.0%) did not face any problems respectively. Among the 170 small farmers 90(52.9%) farmers faced some problems in the regulated markets, and they are the most numerous one. And they are followed by 77(45.3%) persons who did not face any problems in the regulated markets.

The table also shows that among 220 marginal farmers 157(71.4%) persons faced some problem in the regulated markets and they are the maximum one. And they are followed by 63(28.6%) persons who did not face any problems in the regulated markets respectively. Among the 110 large farmers 75(68.2%) and 35(31.8%) faced some problems and did not face problems in the regulated markets respectively.



Relationship between Facing any Problems and Level of Attitude of Respondents towards the Performance of Regulated Markets

In order to test the relationship, the data relating to facing any problems of respondents and their attitude towards the working of regulated markets were collected and classified and the results of Chi Square are presented in Table 39.

Table.39 Results of Chi Square Test

Variable	Calculated Value of Chi Square	Degrees of Freedom	Table Value of Chi Square
Face any Problems	19.20120	4	9.49

Source: Computed data

As revealed by the results, the calculated value of X^2 (19.20120) is higher than its corresponding table value (9.49), the null hypothesis “facing any problems of the respondents does not have any significant relationship with the level of attitude towards the working of the regulated markets” is rejected. Therefore, it is concluded that any problems faced by the respondents had significantly influenced their level of attitude towards the working of regulated market.

Facilities Available in the Regulated Markets

The distribution of sample farmers on the basis of awareness of facilities available in the regulated markets is presented in Table 40.

Table.40 Distribution of Sample Farmers According to the Awareness of Facilities Available in the Regulated Markets

Sl.No	Facilities	Small	Marginal	Large	Total
1.	Grading	54 (31.8)	50 (22.7)	8 (7.3)	112 (22.4)
2.	Weighing	32 (18.8)	12 (5.5)	17 (15.5)	61 (12.2)
3.	Storage	58 (34.1)	103 (46.8)	67 (60.9)	228 (45.6)
4.	Market Information	17 (10.0)	18 (8.2)	13 (11.8)	48 (9.6)
5.	Pledge Loan	-	16 (7.3)	-	16 (3.2)
6.	Services	9 (5.3)	18 (8.2)	5 (4.5)	32 (6.4)
7.	Infrastructure	-	3 (1.4)	-	3 (0.6)
	Total	170 (100.00)	220 (100.00)	110 (100.00)	500 (100.00)

Source: Primary data

Note: Figures in paranthesis indicate percentage to total

Table 40 shows the distribution of sample farmers according to their awareness of facilities available in the regulated markets. It shows that out of the total of 500 sample farmers 112(22.4%) knew the grading, 61(12.2%) knows weighing, 228 (45.6%) knew the storage facilities, 48(9.6%) frequently collected the market information, 16(3.2%) knew pledge loan available in the regulated markets and 32(6.4%) persons had information for services, 3(0.6%) knew about infrastructure facilities available in the regulated market respectively.

Among the 170 small farmers 58(34.1%) knew the storage facilities available in the regulated market and they are the maximum one. They are followed by 54(31.8%),32(18.8%) knew about the grading and weighing facilities available in the regulated market respectively. 17(10.0%) and 9(5.3%) knew about the market information and services are frequently available in the regulated market respectively. No one had awareness about pledge loan and infrastructure facilities in the regulated market. Among the 220 marginal farmers 103(46.8%) had an awareness about the storage facilities available in the regulated market and they are the numerous one.



50(22.7%), 18(8.2%), 18(8.2%) knew the grading, market information, and services available in the regulated market. 16(7.3%), 12(5.5%), 3(1.4%) knew the pledge loan, weighing, and infrastructure facilities available in the regulated markets.

The table also shows that among the 110 large farmers 67(60.9%), 17(15.5%), 13(11.8%) knew about the facilities of storage, weighing, and market information available in the regulated market. 8(7.3%), 5(4.5%) had awareness about grading and services. No one had awareness about pledge loan and infrastructure facilities in the regulated markets.

Relationship between Facilities available in the Regulated Markets and Level of Attitude of Respondents towards the Performance of Regulated Markets

In order to test the relationship, the data relating to facilities available in the regulated markets of respondents and their attitude towards the working of regulated markets were collected and classified and the results of Chi Square are presented in Table 41.

Table.41 Results of Chi Square Test

Variable	Calculated Value of Chi Square	Degrees of Freedom	Table Value of Chi Square
Facilities Available in the Regulated Markets	71.05956	12	21.026

Source: Computed data

As revealed by the results, the calculated value of X^2 (71.05956) is higher than its corresponding table value (21.026), the null hypothesis “facilities available in the regulated markets of the respondents does not have any significant relationship with the level of attitude towards the working of the regulated markets” is rejected. Therefore, it is concluded that the facilities available in the regulated markets had significantly influenced their level of attitude of performance of regulated market.

CONCLUSION

In order to test the level of opinion of the respondents towards the working of Regulated Markets in the sample area, of the 21 variables selected, age, gender, type of ownership, literacy level, size of land holdings, farm income, crop loan, mode of sales mode of transport, market experience, distance between the farm field and regulated markets, sources of market information, facilities available in the regulated markets were found to be significant, whereas the remaining variables such as Uses of Regulated Markets, Preference to Sell through Regulated Markets, Facilities available in the Open Market, Problems were found to be insignificant.

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