

# AN ASSESSMENT OF SATISFACTION OF THE BENEFICIARY BUSINESS UNITS IN THE AGRICULTURAL COMMODITY WHOLESALE MARKETS IN KERALA

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#### Abstract

Being an agrarian State, the statistical reports on agricultural activities of the State Kerala indicates a declining trend. Nowadays, the State greatly depends on its neighbouring States for their day to day consumption requirements. This initiated to focus on the reasons for the lagging of farmers in the field of agriculture. Farmers in Kerala found to have witnessed a lot of problems in relation with finance, cropping and in the marketing of agriculture produce. Among the problems, marketing of agriculture produce which are of perishable nature seems to be the major one. In certain situations, farmers are in the status that they could not even cover the cost. As a result the State revealed a declining trend in the agriculture production. Even the traders are forced to depend on the poisoned agriculture produces arriving from the other States and the poor consumers remains the ultimate victims. In order handle these issues, Government of Kerala has introduced several schemes and programmes with the ultimate aim of boosting up agricultural activities in the State. Among the different schemes, the prominent one is the formation of six Agricultural Commodity Wholesale Markets (ACWMs) both in the rural and urban regions of the State. The main aim of these markets is to support the traders and farmers in marketing their agriculture produce through direct platforms without the interference of intermediaries. In this circumstance, it is worthwhile to assess the satisfaction level of those trading units functioning in the rural and urban regions. The present paper is an earnest attempt in this direction. The study concluded that beneficiary business units in the urban commodity markets are more satisfied when compared to that of rural units.

**Keywords:** Agricultural commodity wholesale markets, Business Units, Direct platform, Security Deposit, Exhibtion of Produce.

## INTRODUCTION

Kerala Agricultural Markets Project (KAMP) is a European Union (EU) assisted project implemented for the development of agricultural markets in the State. The six ACWMs were constructed under this project, including the urban and rural markets situated in the southern, northern and in the central parts of the State. Urban markets are of Anayara (TVM), Maradu (EKM) and Vengeri (Kozhikode). Rural markets are of Nedumangadu (TVM), Muvattupuzha (EKM) and Sulthan Bathery (Wayanad). These markets were popularly known as "World Markets" mainly designed to provide facilities to the traders and farmers in marketing their produce.

## STATEMENT OF THE PROBLEM

Kerala was an agrarian State in the past. But recently, the statistical data on area, production and productivity of principal crops in the State reveals that there is a declining trend in agricultural activities. Problems experienced by the farmers seem to be the major reason for such a turn down. Marketing of their agricultural produce is one of the severe issue among the farmers. During certain situations, farmers are forced to dispose their produce at lesser prices which is not sufficient to cover their cost. All these issues induce the farmer to stand away from agricultural activities. As a result, the consumers became the poor victims and they are forced to buy poisoned agricultural produces arriving from other States. Even the traders used to promote the inflow of these poisoned agri products due to the lack of organic produces. In order to tackle with these serious issues Government of Kerala, Agriculture Department implemented six wholesale markets both in the rural and urban regions of the State so as to provide direct platform facility for both traders and farmers in the field of marketing without the interference of intermediaries. These ACWMs are very particular in providing various facilities and services for their immediate beneficiaries specifically the business units functioning with the markets. Hence, now it is worthwhile to assess the existence of significant difference if any, in the satisfactory levels enjoyed by the business units functioning both in the rural and urban wholesale markets. The present paper seeks to accomplish this.

## **OBJECTIVE OF THE PAPER AND HYPOTHESIS**

The specific objective of the present study is to assess the level of satisfaction of the business units functioning in the urban and rural ACWMs in Kerala.



It is hypothesized that, beneficiary business units in the urban commodity markets are more satisfied when compared to the units in rural commodity markets.

## METHODOLOGY AND SOURCES OF DATA

Primary data were collected with the help of pretested structured interview schedule and interviews and discussions with the proprietors of the beneficiary units and their staff. In addition to this, primary data were also collected through observation.

At present, 448 beneficiary business units are functioning in all the six ACWMs in Kerala. Out of this 208 units were selected for detailed study by employing proportional random sampling method. The sample size is fixed with margin error of 5 per cent, confidence interval at 95 per cent and response distribution at 50 per cent. The sample selected consists of 145 units from the urban commodity markets (39 units from Anayara, 63 from Maradu and 43 units from Vengeri market) and 63 units from rural commodity markets (17 units from Nedumangadu, 37 units from Muvattupuzha and 9 units from Sulthan Bathery market). The assessment of the beneficiary satisfaction has been done with the help of selected variables. Suitable mathematical and statistical tools like mean, standard deviation, t-test and F test were used for analyzing the data.

## ASSESSMENT OF BENEFICIARY BUSINESS UNITS' SATISFACTION

In this section an assessment has been made with respect to the level of satisfaction of the beneficiary business units from the various services and facilities offered by ACWMs. Following are the variables analyzed for the purpose.

- 1. Facility of exhibition of produce
- 2. Parking facilities
- 3. Area occupied by the Beneficiary Unit
- 4. Sales earned
- 5. Security Deposit Paid
- 6. Canteen facilities
- 7. Toilet facilities

These variables are analyzed in detail and explained below.

## 1. Facility of Exhibition of Produce

Business units functioning in ACWMs are provided with facilities for exhibiting their produce. Proper exhibition of produce is one of the means of sales promotion. Satisfaction level from the facility of exhibition of produce is shown in Table 1.

Table – 1, Satisfaction Level from Facility of Exhibition of Produce

	Particulars		Very Low	Low	Average	High	Very High	Total	Mean	SD	Statistics
	Anayara	N	0	1	8	7	23	39	4.33	0.90	F= 7.178
		%	0.00	2.56	20.51	17.95	58.98	100.00	-		(sig.=0.000)
	Maradu	N	0	0	0	5	58	63	4.92	0.27	
		%	0.00	0.00	0.00	7.94	92.06	100.00			
<b>t</b>	Vengeri	N	0	0	0	8	35	43	4.81	0.39	
Market	8	%	0.00	0.00	0.00	18.60	81.40	100.00			
_	Neduman	N	0	0	0	7	10	17	4.59	0.51	
	gadu	%	0.00	0.00	0.00	41.18	58.82	100.00			
	Muvattup	N	0	0	0	9	28	37	4.76	0.43	
	uzha	%	0.00	0.00	0.00	24.32	75.68	100.00			
	Sulthan	N	0	0	0	5	4	9	4.44	0.53	

	Bathery	%	0.00	0.00	0.00	55.56	44.44	100.00			
	Urban	N	0	1	8	20	116	145	4.73	0.59	t=0.762
ion		%	0.00	0.69	5.52	13.79	80.00	100.00			(sig.=0.447)
Region	Rural	N	0	0	0	21	42	63	4.67	0.48	
1		%	0.00	0.00	0.00	33.33	66.67	100.00			
	Total	N	0	1	8	41	158	208			
		%	0.00	0.48	3.85	19.71	75.96	100.00			

Source: Survey Data.

It is observed from the Table that out of 208 sample business units surveyed, 95.67 % of the units have rated the facility of exhibition of produce provided by the ACWMs as either "high" or "very high". The percentage share of units in Anayara market in this respect is only 76.93. Whereas the percentage share of all the other markets indicates 100.00 each respectively. Among the outlets, units in Maradu market indicates the maximum score, 4.92 followed by units of Vengeri market (score being 4.81). F test indicates that there is significant difference in the satisfaction level of the business units in different markets. From the region-wise analysis, more per cent of units in urban region expresses their satisfactory level as "very high" (80) when compared to the rural region (66.67 per cent). From the application of t-test it is clear that there exists no significant difference between the business units in urban and rural regions in respect of the same.

## 2. Parking Facilities

Parking facilities in front of the units let out is one among the major facilities provided by ACWMs. Satisfaction level of business units on this variable is analyzed and given in the following table.

**Table – 2, Satisfaction Level from Parking Facilities** 

	Particulars		Very Low	Low	Average	High	Very High	Total	Mean	SD	Statistics
	Anayara		0	1	3	10	25	39	4.51	0.76	
	7 mayara	%	0.00	2.57	7.69	25.64	64.10	100.00	4.51	0.70	
	Maradu	N	0	0	0	0	63	63	5.00	0.00	
	Waradu	%	0.00	0.00	0.00	0.00	100	100.00	J.00	0.00	
	Vengeri	N	0	0	0	10	33	43	4.77	0.43	F= 9.413
Market	v engeri	%	0.00	0.00	0.00	23.26	76.74	100.00	4.77	0.43	
Ма	Nedumangadu	N	0	1	1	10	5	17	4.12	0.78	(sig.=0.000)
		%	0.00	5.88	5.89	58.82	29.41	100.00	4.12	0.76	
	Muvattupuzha	N	2	2	3	4	26	37	4.35	1.18	
	Wiuvattupuzna	%	5.41	5.41	8.11	10.80	70.27	100.00	4.55	1.10	
	Coddhan Dadhana		0	0	0	9	0	9	4.00	0.00	
	Sulthan Bathery		0.00	0.00	0.00	100.00	0.00	100.00	4.00	0.00	
ű	Urban	N	0	1	3	20	121	145	4.80	0.49	
Region	Ciban	%	0.00	0.69	2.07	13.79	83.45	100.00	4.00	0.49	t=5.437 (sig.=0.000)
<b>8</b>	Rural	N	2	3	4	23	31	63	4.24	1.00	



		%	3.17	4.76	6.35	36.51	49.21	100.00	
	Total		2	4	7	43	152	208	
			0.96	1.92	3.37	20.67	73.08	100.00	

Source: Survey Data.

From the above table, 2 it is clear that out of 208 total sample units, 152 ,(73.08 per cent) units opined that they are very highly satisfied with the parking facilities offered by the ACWMs. Market-wise analysis showed that 64.10 per cent of units in Anayara market, 100 per cent of units in Maradu market, 76.74 per cent of units in Vengeri market, 29.41 per cent units in Nedumangadu market and 70.27 per cent units in Muvattupuzha market stated that they are very highly satisfied with the parking facilities provided by the wholesale markets. The maximum satisfaction in parking facility is found to be among the units in Maradu market (score = 5) followed by Vengeri market, the score being 4.77. The lowest satisfaction is found among the units of Bathery market (score is 4.00). In order to test the degree of market wise difference among the units in different markets, applying 'F' test, it is seen that there is significant difference in the opinion of units on this variable. Region-wise analysis showed that satisfaction percentage share (97.24) of urban units is more when compared to the percentage share (85.72) of rural units. From the results of t-test it can be seen that significant difference is there between the units in urban and the rural regions.

## **3.**Area Occupied by the Beneficiary Units

Beneficiary business units prevailing in ACWMs are provided with sufficient areas for their trading purpose. This also facilitates the loading and unloading of products which are transported to and from the business units with the help of large container vehicles. Market-wise and region-wise comparison of the sample business units showing their response level on the area occupied is mentioned in the following table.

Table -3, Satisfaction Level from Area Occupied

	Particulars		Very Low	Low	Average	High	Very High	Total	Mean	SD	Statistics
	Amorromo	N	0	1	6	5	27	39	4.40	0.05	
	Anayara		0.00	2.56	15.39	12.82	69.23	100.00	4.49	0.85	
	Manady	N	0	0	0	0	63	63	5.00	0.00	
	Maradu %		0.00	0.00	0.00	0.00	100.00	100.00	5.00	0.00	
	Managai	N	0	0	0	10	33	43	4 77	0.42	F=47.089 (sig.=0.000)
Market	Vengeri	%	0.00	0.00	0.00	23.26	76.74	100.00	4.77	0.43	
Maı	Nedumangadu	N	0	3	6	7	1	17	2.25	0.86	
		%	0.00	17.65	35.29	41.18	5.88	100.00	3.35	0.80	
	M	N	0	0	22	6	9	37	2.65	0.00	
	Muvattupuzha	%	0.00	0.00	59.46	16.22	24.32	100.00	3.65	0.86	
İ	C14h D	N	0	0	9	0	0	9	2.00	0.00	
	Sulthan Bathery	%	0.00	0.00	100.00	0.00	0.00	100.00	3.00	0.00	
	Urban	N	0	1	6	15	123	145	4.79	0.54	
ion	Urban		0.00	0.69	4.14	10.34	84.83	100.00	4.79	0.54	t=13.707
Reg	Urban  Rural		0	3	37	13	10	63	3.48	0.82	(sig.=0.000)
	Kuiai	%	0.00	4.76	58.73	20.63	15.88	100.00	3.40	0.62	
	Total	N	0	4	43	28	133	208			
	Total %		0.00	1.92	20.68	13.46	63.94	100.00			

Source: Survey Data.



From the above table, it is seen that majority of the total sample units (133) expressed that they are very highly satisfied with the area occupied. There percentage share is 63.94. Market-wise analysis of Maradu, Vengeri, Anayara, Muvattupuzha and Nedumangadu markets showed their percentage share in the order of very high satisfaction level as 100.00, 76.74, 69.23, 24.32 and 5.88 respectively. Among the markets, Maradu market denotes the highest mean score (5.00) followed by units in Vengeri market (score=4.77). Significant market wise difference exists in the satisfactory levels of business units in different markets when 'F' test is applied. Between the regional business units, urban units showed more per cent (84.83) when compared to that of rural units (15.88). Region-wise analysis also revealed the same effect on the results by using statistical tool as t-test.

#### 4. Sales Earned

From the survey it is found that the sales earned by the sample business units in different markets vary in between. The analysis results of the satisfaction of business units from sales earned are presented in the following table.

Table -4, Satisfaction Level from Sales Earned

			Table	-,			I Sales La			ı	
	Particulars		Very Low	Low	Average	High	Very High	Total	Mean	SD	Statistics
	Anayara	N	0	1	2	11	25	39	4.54	0.72	F= 32.746
		%	0.00	2.56	5.13	28.21	64.10	100.00			(sig.=0.000)
	Maradu	N	0	0	0	2	61	63	4.97	0.18	
		%	0.00	0.00	0.00	3.17	96.83	100.00			
	Vengeri	N	0	2	3	9	29	43	4.51	0.83	
ket		%	0.00	4.65	6.98	20.93	67.44	100.00			-
Market	Nedumangadu	N	1	1	7	7	1	17	3.35	0.93	
		%	5.88	5.88	41.18	41.18	5.88	100.00			
	Muvattupuzha	N	0	0	10	21	6	37	3.89	0.66	
		%	0.00	0.00	27.03	56.75	16.22	100.00			
	Sulthan Bathery	N	0	4	2	3	0	9	2.89	0.93	
		%	0.00	44.45	22.22	33.33	0.00	100.00			
	Urban	N	0	3	5	22	115	145	4.72	0.63	t=10.467
ion		%	0.00	2.07	3.45	15.17	79.31	100.00			(sig.=0.000)
Region	Rural	N	1	5	19	31	7	63	3.60	0.85	
		%	1.59	7.94	30.15	49.21	11.11	100.00			
	Total	N	1	8	24	53	122	208			
		%	0.48	3.85	11.54	25.48	58.65	100.00			

Source: Survey Data.

The results (Table 4) observed that 84.13 per cent of total sample business units remarked that they are either highly or very highly satisfied in this respect. Whereas only a meager percentage of the sample units remarked their opinion as either "low" or "very low" in respect of the sales earned (4.33). Market-wise comparison indicates that Maradu market scores the highest satisfactory level (4.97) followed by Anayara market, the score being 4.54. The lowest satisfaction level is indicated by the units in Bathery market (Score = 2.89). The 'F' test shows significant difference in the opinion among the units in different wholesale markets. From the region-wise comparison it is clear that, percentage share of satisfaction level in urban units is more (94.48) than that of the same in rural units (60.32). Statistical test ('t') shows that the difference of opinion of the units in regional markets in this respect is significant.

## 5. Security Deposit Paid

Business units functioning with the market authority needs to pay an amount as security deposit against the units allotted. From the survey it is understood that the amount of security deposits collected by the different wholesale markets for the same sized outlets, varies in between. As a result it is important to seek the opinion of satisfaction from the units in different markets in this respect. The data collected were analyzed and shown in Table 5.

Table- 5, Satisfaction Level from Security Deposit Paid

	Particulars		Very Low	Low	Average	High	Very High	Total	Mean	SD	Statistics
		N	9	3	5	9	13	39	3.36	1.58	
	Anayara	%	23.08	7.69	12.82	23.08	33.33	100.00	3.30	1.30	
		N	0	18	35	0	10	63	3.03	0.97	F= 7.280
	Maradu	%	0.00	28.57	55.56	0.00	15.87	100.00	3.03	0.97	
		N	0	3	31	4	5	43	3.26	0.76	
Market	Vengeri	%	0.00	6.98	72.09	9.30	11.63	100.00	3.20	0.76	
Σ	Nedumangadu	N	0	0	9	6	2	17	3.59	0.71	(sig.=0.000)
		%	0.00	0.00	52.94	35.29	11.77	100.00	3.39	0.71	
		N	0	0	0	29	8	37	4.22	0.42	
	Muvattupuzha	%	0.00	0.00	0.00	78.38	21.62	100.00	4.22	0.42	
	Sulthan Rathary	N %	0.00	0	4	5	0	9	3.56	0.53	
	Sulthan Bathery		9	0.00	44.44 71	55.56 13	0.00	100.00 145			
ion	Urban	N %	6.21	16.55	48.97	8.97	19.30	100.00	3.19	1.12	t=-5.117
Region		N	0	0	13	40	10	63	3.95	0.61	(sig.=0.000)
	Rural	%	0.00	0.00	20.63	63.49	15.88	100.00	3.93	0.01	
		N	9	24	84	53	38	208			
	Total		4.33	11.54	40.38	25.48	18.27	100.00			

Source: Survey Data.



It is observed from the table that out of the total sample units, 43.75 percentage of beneficiary units opined that the security deposit paid to the wholesale markets is satisfactory as against their dissatisfaction percentage is 15.87. Market-wise analysis indicates that the maximum satisfaction is found to be among the units in Muvattupuzha market (score is 4.22) followed by the units in Nedumangadu market (score = 3.59) in respect of the same. The lowest satisfaction is found among the units in Maradu market, the score being 3.03. Analytical results of F test indicate that the difference in opinion is significant. From the comparison of opinion between the regional units, rural units scored more (3.95) than that of the urban units (the score is 3.19). Difference of opinion between the regional markets in respect of the same also indicates as significant from the application of t-test.

#### **6.** Canteen Facilities

Traders as well as workers in the business units can avail of food stuffs at subsidized rate from the canteen facilities offered in ACWMs. It is found from the survey that canteen facilities are provided only in Anayara and Vengeri markets. Business unit's response level in this respect is collected and presented in the following Table 6.

Table - 6, Satisfaction Level from Canteen Facilities

			Tubic	0,0000	action Beve						
	Particulars		Very Low	Low	Average	High	Very High	Total	Mean	SD	Statistics
	Anayara	N	1	3	11	3	21	39	4.03	1.18	
	1 11111 / 11111	%	2.56	7.69	28.21	7.69	53.85	100.00		1110	
	Maradu	N	0	0	0	0	0	0	_	_	
	Waradu	%	0.00	0.00	0.00	0.00	0.00	0.00	_		
	Vengeri	N	0	1	1	15	26	43	4.53	0.67	
Market	Vengeri	%	0.00	2.33	2.33	34.88	60.46	100.00	4.33	0.07	F= 5.920
Ma	Nedumangadu	N	0	0	0	0	0	0	_	_	(sig.=0.017)
		%	0.00	0.00	0.00	0.00	0.00	0.00	_		
	Muvattupuzha	N	0	0	0	0	0	0	_		
	Widvattupuzna	%	0.00	0.00	0.00	0.00	0.00	0.00	_		
	Sulthan Bathery	N	0	0	0	0	0	0			
	Sultrian Bathery	%	0.00	0.00	0.00	0.00	0.00	0.00	_		
	Urban	N	1	4	12	18	47	82	4.29	0.97	
Region	Urban G		1.22	4.88	14.63	21.95	57.32	100.00	4.23	0.97	
Reg	Rural	N	0	0	0	0	0	0	_	_	-
	Kurar	%	0.00	0.00	0.00	0.00	0.00	0.00	_		
	Total	1	4	12	18	47	82				
	Total %		1.22	4.88	14.63	21.95	57.32	100.00			

Source: Survey Data.

Table 5 depicts the opinion level of sample business units in Anayara and Vengeri markets on this variable. Out of 82 sample units surveyed 47 (57.32 per cent) units are of opinion that they are highly satisfied with the canteen facilities offered. Market-wise comparison of the units shows that the percentage share of units in Vengeri market (60.46) is more in this



respect than that of percentage share of units in Anayara market (53.85). However, units in urban markets denotes the mean score 4.29 (SD 0.97). The application of statistical test shows that this difference is significant at 5 per cent level.

## 7. Toilet Facilities

Toilet facilities within the market premises seem to be a necessity that has to be properly provided. From the survey it is found that, though infrastructural lay out for toilet facilities are provided within the market premises, most of them are not in proper usage condition. The response of sample business units about the satisfaction level from toilet facilities is shown in Table 7.

Table- 7, Satisfaction Level from Toilet Facilities

	Table- 7, Satisfaction Level from Toilet Facilities													
	Particulars		Very Low	Low	Average	High	Very High	Total	Mean	SD	Statistics			
		N	32	6	1	0	0	39	1.21	0.47				
	Anayara	%	82.05	15.38	2.57	0.00	0.00	100.00	1.21	0.47				
		N	46	6	11	0	0	63	1.44	0.78				
	Maradu	%	73.02	9.52	17.46	0.00	0.00	100.00	1.44	0.78				
		N	34	4	5	0	0	43	1.33	0.68				
Market	Vengeri	%	79.07	9.30	11.63	0.00	0.00	100.00	1.33	0.08	F= 1.656			
Мал	Nedumangadu	N	15	2	0	0	0	17	1.12	0.33	(sig.=0.147)			
		%	88.24	11.76	0.00	0.00	0.00	100.00	1.12	0.33				
	Muvattupuzha	N	26	11	0	0	0	37	1.30	0.46				
		%	70.27	29.73	0.00	0.00	0.00	100.00	1.30	0.46				
		N	9	0	0	0	0	9	1.00	0.00				
	Sulthan Bathery	%	100.00	0.00	0.00	0.00	0.00	100.00	1.00	0.00				
		N	112	16	17	0	0	145	1.34	0.68				
Region	Urban	%	77.25	11.03	11.72	0.00	0.00	100.00	1.54	0.08	t=1.500 (sig.=0.135)			
Reg		N	50	13	0	0	0	63	1.21	0.41	(Sig.=0.155)			
	Rural	%	79.37	20.63	0.00	0.00	0.00	100.00	1.21	0.41				
	Total N		162	29	17	0	0	208						
			77.88	13.94	8.18	0.00	0.00	100.00						

Source: Survey Data.

It is observed from the table that out of total sample units, 91.82 percentage of units opined that they are not satisfied with the toilet facilities offered by ACWMs. Market-wise analysis showed that units in Bathery market express the lowest satisfactory level (score is 1.00) followed by units in Nedumangadu market, the score being 1.12. 'F' test indicates that there is no significant difference of opinion among the units in different wholesale markets on this variable. Region-wise analysis showed that the opinion score of units in of urban markets is more (1.34) compared to that of rural markets, the score is 1.21. Region-wise difference between the units in respect of this variable seems to be not significant when t-test is applied.

For the purpose of assessing the beneficiary satisfaction of the business units in the regional markets from the facilities and services offered to them, 6 variables are identified and analyzed. The region-wise analysis reveals that in case of 5 variables



the satisfaction level of urban beneficiary business units is found better compared to that of rural units. Of these 5 variables, statistically significant difference is seen in case of 3 variables i.e., parking facilities, area occupied and sales earned. It may be concluded that, the satisfaction level of beneficiary units in urban market is better in case of 3 variables. Thus it is clear that the level of satisfaction of the urban units is significantly better compared to that of the rural units in ACWMs. Therefore, the hypothesis that the beneficiary business units in the urban commodity markets are more satisfied when compared to the units in rural commodity markets may be accepted.

### **MAJOR FINDINGS**

- Majority of the units (95.67 per cent) are of the opinion that they are satisfied with the facilities of exhibition of produce offered by ACWMs. Market-wise analysis shows that the mean score of units in Maradu market is more (4.92) compared to that of units in other markets. F-test proves that the difference shown among the units based on the satisfaction level from facility of exhibition of produce seems to be significant. Region-wise comparison points out that, urban units are more satisfied (score being 4.73) than that of rural units (score=4.67). However, no significant difference is found in this respect.
- Regarding the parking facilities, most of the units (93.75 per cent) in ACWMs are of the view that they are satisfied. Among the markets, units in Maradu market shows the maximum satisfaction (score=5.00). However, market-wise analysis shows that the difference among the units in respect of satisfaction from parking facilities is significant. Comparison between the regional units indicates that, satisfaction percentage of urban units are found more (score is 4.80) than that of rural units (the score being 4.24). Significant difference is found among the responses of urban and rural units.
- Most of the units (77.40 per cent) in ACWMs are of the response that they are satisfied with the area occupied. Among the markets, units in Maradu show the maximum mean value (5.00). Significant difference was also inferred in the opinion scores among the units in different markets. Region-wise analysis revealed that urban units are more satisfied when compared to rural units. T-test indicates that there exists significant difference in the responses between the urban and rural units.
- Considering the satisfaction from sales earned by the beneficiary units, 84.13 per cent are of the opinion that they are satisfied. Results of market-wise analysis indicate that, among the markets, mean score of units in Maradu market is found more (4.97). Significant difference is also observed in the mean opinion scores among the units in different markets. Mean score of the two regional units, urban regional units (mean=4.72) and rural regional units (mean=3.60) also shows statistically significant difference.
- In case of satisfaction level from security deposit paid, units in Muvattupuzha remarked as more satisfied (mean=4.22). Significant difference is inferred in the opinion of units in different markets. Based on region-wise analysis, rural units are found more satisfied (the score is 3.95) compared to urban units (score=3.19). Significant difference is noted in the response of units in both regions.
- It was observed that, canteen facilities are only provided in Anayara and Vengeri markets. Market-wise comparison shows that, units in Vengeri market scores more (4.53) in this respect when compared to that of units in Anayara market (score is 4.03). There exists significant difference in the opinion of the units prevailing in the two markets in respect of this variable.
- An important finding was with respect to the toilet facilities offered by ACWMs, majority of the units (91.82 per cent) are of the opinion that they are not satisfied with the available toilet facilities offered. However, no significant market-wise and region-wise difference is noticed in the opinion scores of business units.

## **CONCLUSION**

Even though ACWMs offer various facilities and services to the beneficiary units, there are certain weak spots, security deposits paid are not highly commendable, canteen facilities are not provided in the markets like Maradu, Nedumangadu, Muvattupuzha and Bathery and the toilet facilities provided within the market premises are not proper for usage. In spite of such conditions, mean opinion scores of units in Maradu market seems to be more when compared to other markets in



respect of facility of exhibition of produce, parking facilities, sales earned, and in respect of toilet facilities offered. Moreover, urban units are found more satisfied in respect of various aspects when compared to rural units.

### SUGGESTIONS

A disparity is found in the security deposit collected by the market authority of Vengeri and Muvattupuzha markets between the medium sized and double sized rooms. Though the amount charged is more, here, the double sized rooms are found cheaper compared to medium sized rooms. Whereas, in all the other markets the advance amount (security deposit) collected for double sized rooms is found to be double the rate of medium. This disparity may create unnecessary issues while letting out of units. To avoid such problems the market authority can fix up revised rates, so that they could maintain a similarity between the units of same size within ACWMs.

ACWMs are situated in the places which are somewhat away from the rush cities. This creates the importance of canteen facilities within the market premises. The study reveals that though infrastructure for canteen is there in all the markets, such facilities are not provided by Maradu, Nedumangadu, Muvattupuzha and Bathery markets to their beneficiaries. As a result the traders, staff, petty workers etc. have to travel long distance even to have their snacks. This seriously affects their Quality of Work Life (QWL) and even causes wastage of time. Therefore, such market authorities can invite tenders from the public for running the canteen within the market premises on contract basis, so that the wholesale markets could provide food at subsidized rates for their beneficiaries.

Since more number of men and women staff is working in the business units of ACWMs, it is necessary to provide adequate toilet facilities separately for both men and women. Market authority have to utilize the fund (Market Development Fund) provided by the Government for the timely maintenance of toilet facilities. Moreover, the authority can take up initiatives to appoint part time labours for cleaning purpose so that proper hygiene can be ensured.

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