



# *Level Of Awareness Of Green Products Among Consumers In Kerala-An Economic Perspective*

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## INTRODUCTION

In order to understand the consumer behaviour, it is important to evaluate the awareness of consumers regarding the green products and also how long the respondents are aware about the green products. General awareness of the green products is necessary to take purchase decisions. It is because if a consumer knows about the product for so many years it is likely that they purchase the product; otherwise not. If consumers are truly aware of green products, they may tend to utilize the benefits of green products in spite of the sacrifices they have to undertake during the purchase and consumption of green products. The literate population of Kerala are well conscious of the fact that they have to purchase green products alone to keep alive their very existence on this earth. They are sensible to the problem of depletion and destruction of natural resources and are willing to substitute non green products to green ones. This analysis explains the consumer attitude and preferences towards the purchase and use of green products in Kerala..

## ANALYSIS OF LEVEL OF CONSUMER AWARENESS ON GREEN PRODUCTS IN KERALA

The frequency table given below shows that 41.8 percent of the consumers in Kerala are aware of the green products for the last one year, while 25.6 percent of them known about the product between one and five years. Only 21.3 percent of the people know about the product more than five years. It has been very exciting to note that only 11 per cent of the consumers did not know about the product while about double the respondents know about the product more than 5 years. This means that green product is not entirely a new concept. People knows about this very early. But the intensity of awareness is not clear. Hence, there is a need of creating awareness regarding the green product in Kerala to promote its consumption.

Table 1

*Duration on awareness of green products*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	less than 1 year	522	41.8	41.8	41.8
	Between 1 and 5 years	320	25.6	25.6	67.4
	Greater than 5 Year	266	21.3	21.3	88.7
	Not aware	141	11.3	11.3	100.0
	Total	1249	99.9	100.0	

Missing	System	1	.1		
Total		1250	100.0		

Source: Survey Data, 2018

In order to understand the level of awareness of green products, the data collected and tabulated from the consumers of Kerala shows that 17.2% (7 and 10.2percent) of the respondents have less awareness regarding the green products and almost fifty percent have an above average awareness regarding the green products. (Table 2)

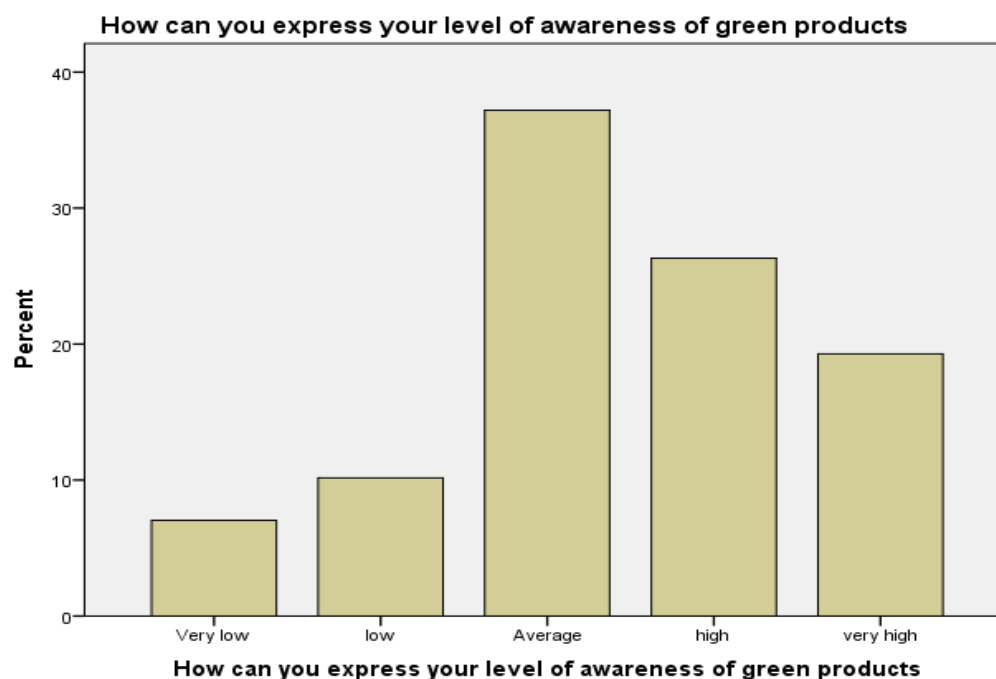
Table 2

Level of awareness of green products

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very low	88	7.0	7.0	7.0
	Low	127	10.2	10.2	17.2
	Average	465	37.2	37.2	54.4
	high	329	26.3	26.3	80.7
	very high	241	19.3	19.3	100.0
	Total	1250	100.0	100.0	

Source: Survey Data, 2018

This can be diagrammatically explained as below. A good number of consumers in Kerala are aware of green products. It can be seen from the perspective of a literate state



Source: Survey Data, 2018

Figure .1 Level of awareness of green products

## ECONOMIC CLASS AND LEVEL OF AWARENESS ON GREEN PRODUCTS

Awareness of the product can change according to the economic class the respondents belongs to. Hence, awareness is classified on the basis of economic class is given in the Table 3 below. It is observed that 39.7 percent of the lower class are aware about the product for less than a year while it is 46.5 percent for middle classes and 38.8 percent for upper middle and 36.7 percent for upper class. But, when considering the length of period of awareness of the product, it can be seen that when 22.2 percent of the lower class and 18.7 percent of the middle class knows about the product between one and five years, more percentage of the upper middle class and upper class, 37.7 percent and 38.8 percent, respectively knows about the product. Which means the awareness regarding the green products is much more higher among the upper class than the lower class. Besides 15.8 percent among lower class and 14.1 percent among the middle class does not know about the green product while it is relatively less, that is only 2.9 and 2 percent for upper middle class and upper class. Hence, from this analysis it is very clear that upper class people had comparatively better awareness on green products.

Table 3 Crosstab On Duration Of Awareness And Economic Class

			How long you have been aware of green products				Total
			less than 1 year	Between 1 and 5 years	Greater than 5 Year	Not aware	
Economic Class	Lower class	Count	166	93	93	66	418
		% within Economic Class	39.7%	22.2%	22.2%	15.8%	100.0%
	Middle Class	Count	214	86	95	65	460
		% within Economic Class	46.5%	18.7%	20.7%	14.1%	100.0%
	Upper Middle class	Count	106	103	56	8	273
		% within Economic Class	38.8%	37.7%	20.5%	2.9%	100.0%
	Upper class	Count	36	38	22	2	98
		% within Economic Class	36.7%	38.8%	22.4%	2.0%	100.0%
	Total	Count	522	320	266	141	1249
		% within Economic Class	41.8%	25.6%	21.3%	11.3%	100.0%

Source: Survey Data, 2018

In order to test this association, the chi-square is applied with the following hypothesis is formulated.

**H<sub>0</sub>:** There is no significant relationship between the different economic classes and the duration of awareness of people regarding green products.

The cross tabulation result from table 3 regarding the difference in the awareness of green products among different economic class are subjected to Chi square test in table 4 below. The test result [ $\chi^2$  (9) =72.292, P<0.05] shows that the awareness regarding green products are dependent on economic class. A p-value of less than .05 indicates that the null hypothesis of no significant association between the economic class and duration of awareness is to be rejected. That is, there exists a significant relationship between economic classes and the awareness of green products.

Table 4

Chi-Square Tests- economic classes and the duration of awareness of green products

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	72.292 <sup>a</sup>	9	.000
Likelihood Ratio	80.265	9	.000
Linear-by-Linear Association	11.115	1	.001
N of Valid Cases	1249		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 11.06.

Source: Survey Data, 2018

It is also possible that the self-perceived awareness of green products can vary according to the economic class they belong to. It is seen from the table 5.that an average awareness regarding the green products is more perceived by lower and middle class and high and very high awareness is perceived by the respondents in the higher income group.

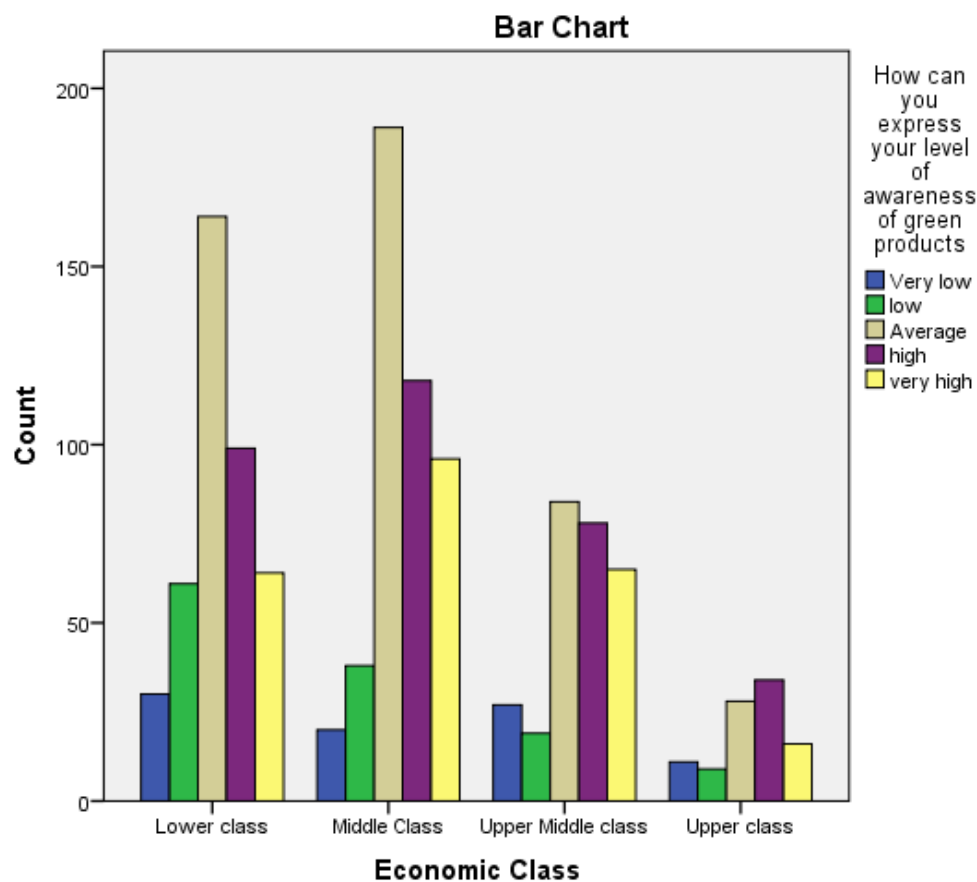
Table 5

Crosstab On Level Of Awareness And Economic Class

		How can you express your level of awareness of green products					Total	
		Very low	low	Average	high	very high		
Economic Class	Lower class	Count	30	61	164	99	64	418
		% within Economic Class	7.2%	14.6%	39.2%	23.7%	15.3%	100.0%
	Middle Class	Count	20	38	189	118	96	461
		% within Economic Class	4.3%	8.2%	41.0%	25.6%	20.8%	100.0%
		Count	27	19	84	78	65	273

	Upper Middle class	% within Economic Class	9.9%	7.0%	30.8%	28.6%	23.8%	100.0%
	Upper class	Count	11	9	28	34	16	98
		% within Economic Class	11.2%	9.2%	28.6%	34.7%	16.3%	100.0%
Total	Count	88	127	465	329	241	1250	
	% within Economic Class	7.0%	10.2%	37.2%	26.3%	19.3%	100.0%	

Source: Survey Data, 2018



Source: Survey Data, 2018

Figure: 2. level of awareness and economic class

In order to test this association, a hypothesis was formulated, with a null hypothesis being no significant difference in the awareness across the economic class and this was tested with Chi-Square. It is found that there is significant variation in the self-perceived awareness regarding green products in different economic class. The chi-square results shows that at 5 percent significance level ,chi square value of 41.890 with p value at .000 and with 12 degree of freedom .Here the null hypothesis is rejected .So it can be argued that self-perceived awareness varies according to different economic class they belong to (Table 6).

Table 6

*Chi-Square Test on level of Awareness and Economic Class*

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	41.890 <sup>a</sup>	12	.000
Likelihood Ratio	41.567	12	.000
Linear-by-Linear Association	4.522	1	.033
N of Valid Cases	1250		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 6.90.

*Source: Survey Data, 2018***INCOME CLASS AND LEVEL OF AWARENESS ON GREEN PRODUCTS**

It is very important to understand whether there is any influence of income on the awareness of the products and hence, income analysis across how long each individual are aware of the products are highly relevant. There is a possibility that income of the respondents can influence the awareness of the consumers on green products. It is found that, since the green products are of recent origin, most of them are aware about the product for less than one year irrespective of the income level. About 40 percent of the all income group is aware of the product for less than a year, whereas it is about 11 percent who are unaware about the green products on an average. Across the different salaried group, this green awareness is analysed. About 40 percent of the respondents of all the income category have been aware of the product less than one year. But, as one move further, it can be found that the awareness increases as the income of the respondents increases, which is clearly evident from the declining trend of relatively higher percent of respondents in the category of 'not aware' of the green products. It is good to find out the relationship between income level and awareness of green products. It is necessary to find out how this green awareness influences the consumption behaviour of consumers. The cross-tabulation results of awareness with income level shows a clear picture of difference in awareness as the income level varies. The corresponding result is given on table 7.

Table 7

Cross tab -Income and duration of awareness

			How long you have been aware of green products				Total
			less than 1 year	Between 1 and 5 years	Greater than 5 Year	Not aware	
Salary	Up to Rs 15000	Count	35	28	17	4	84
		% within Salary	41.7%	23.3%	20.2%	14.8%	100.0%
	Rs 15001 to Rs 31000	Count	81	60	35	21	197
		% within Salary	41.1%	30.5%	17.8%	10.7%	100.0%

Rs 31001 to Rs 50000	Count	177	109	75	37	398
	% within Salary	44.5%	27.4%	18.8%	9.3%	100.0%
Above Rs 50000	Count	229	123	139	79	570
	% within Salary	40.2%	31.6%	24.4%	3.9%	100.0%
Total	Count	522	320	266	141	1249
	% within Salary	41.8%	25.6%	21.3%	11.3%	100.0%

Source: Survey Data, 2018

To test the association between the monthly income and awareness of green products, a hypothesis is formulated as follows.

$H_0$ : There is no association between the monthly income and duration of awareness of green products

The chi-square test has been applied and the test result explained in Table 8. below. It shows that since, P value (the exact significance level at which we reject the null hypothesis) is shown less than 0.05 percent, we reject the null hypothesis. It explains that a statistically significant difference between duration of awareness and monthly income is clearly visible in Table 8.. As the income increases, the possibility of duration of awareness increases. Hence, the null hypothesis is rejected that there is no association between salary structure and duration of awareness. The corresponding result ( $\chi^2(9) = 21.781, P < 0.05$ ) is given in table 5.23. below.

Table 8

Chi-Square Test- Monthly Income and Awareness of Green Products

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	21.781 <sup>a</sup>	9	.010
Likelihood Ratio	22.449	9	.008
Linear-by-Linear Association	6.647	1	.010
N of Valid Cases	1249		
a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 9.48.			

Source: Survey Data, 2018

Level of awareness, is yet another important aspect which is to be considered while considering the awareness regarding green product. It is observed that on an average, less than 10 percent of the respondents are having an awareness level less than ten percentage. As income increases, the level of awareness shows an upward trend as observed in the Table 9. below.

Table 9

*Salary and the level of awareness of green products*

			How can you express your level of awareness of green products					Total
			Very low	low	Average	high	very high	
Salary	Up to Rs 15000	Count	10	10	29	18	17	84
		% within Salary	11.9%	11.9%	34.5%	21.4%	20.2%	100.0%
	Rs 15001 to Rs 31000	Count	13	19	66	55	44	197
		% within Salary	6.6%	9.6%	33.5%	27.9%	22.3%	100.0%
	Rs 31001 to Rs 50000	Count	38	41	147	91	82	399
		% within Salary	9.5%	10.3%	36.8%	22.8%	20.6%	100.0%
	Above Rs 50000	Count	27	57	223	165	98	570
		% within Salary	4.7%	10.0%	39.1%	28.9%	17.2%	100.0%
	Total	Count	88	127	465	329	241	1250
		% within Salary	7.0%	10.2%	37.2%	26.3%	19.3%	100.0%

Source: Survey Data, 2018

### CONCLUSION

Since the green products are of comparatively recent origin, people are slowly getting aware of the product. One of the most important inferences is about the source by which consumers are aware of green product which help the producers and sellers to frame their marketing strategy. From the above analysis it can be seen that all most all the consumer behaviour parameters are changing with respect to change in the social and economic conditions. The awareness regarding the green products has been improving as one moves from low income to high income and low economic status to high economic status. The level and duration of awareness of green products among consumers in Kerala are also discussed in detail with the data collected and interpretations developed from it.

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