

Willingness of Rural Consumers to Pay for Green FMCG Products: A Study on Bhiwani District

Srishti

Research Scholar

IMSAR, MaharshiDayanand University, Rohtak

Dr. Sunita Bhartwal

Associate Professor

Department of Management, CBLU, Bhiwani

Abstract: In the recent years, change in climate, excessive utilization of natural resources, air pollution and ozone depletion are found to be the main environment problems which causes an adverse effect on health of human being. Urbanization, industrialization and unplanned economic development are also associated with deterioration of environment. The deterioration of environment has very negative effect on the health. The problem requires the solution on urgent basis. Going green or marketing of green products is one of the solutions for dealing with the problem of deterioration of environment. Consumers' positive attitude towards green products has made them to pay higher prices for the purchase of green products. Although many consumers are still unwilling to pay higher price for the purchase of green products. So this study is carried out with an objective to find out the willingness of rural consumers to pay for green FMCG products. For this purpose responses were collected from 100 rural consumers and these responses were analyzed by applying frequency distribution technique of SPSS. It was found in this study that 53% respondents are still unwilling or less willing regarding spending extra amount on purchase of green FMCG products, regarding paying extra amount for eco-friendly packaging of products, regarding paying higher prices and higher taxes on green FMCG products for protecting the environment and contributing towards sustainability of environment and regarding buying green FMCG products with the fact that green products are more costly than non-green products. While 47% respondents are willing regarding spending extra amount on purchase of green FMCG products, regarding paying extra amount for eco-friendly packaging of products, regarding paying higher prices and higher taxes on green FMCG products for protecting the environment and contributing towards sustainability of environment and regarding buying green FMCG products with the fact that green products are more costly than non-green products.

Keywords: Environment deterioration; rural consumers; green FMCG products; non-green products

Introduction

In the recent years, change in climate, excessive utilization of natural resources, air pollution and ozone depletion are found to be the main environment problems which causes an adverse effect on health of human being. Urbanization, industrialization and unplanned economic development are also associated with deterioration of environment. The problem of environment deterioration is foremost in India. In India, Pollution being the 5th major cause for death and every year 1.2 million people are died because of pollution. By WHO, 2016 India was found to be in the list of most polluted countries across the world and 30 cities of India were also included in the list of 100 most polluted cities of the world.

The deterioration of environment has very negative effect on the health. The problem requires the solution on urgent basis. Seeking the solution for this problem is the responsibility of all the stakeholders namely government, society and business. Going green or marketing of green products is one of the solutions for dealing with the problem of deterioration of environment. Many players such as companies, government, consumers, media and various institutions are playing their roles in stimulating the use of green products and protecting the environment.

Many companies such as Nike, Johnson & Johnson, Hewlett-Packard (hp), Honda, Dell, Coca-Cola etc. are applying various practices which are environment friendly. These companies are making green products to gain competitive advantage.

Consumers are also adopting green products. They are getting aware regarding the negative effect of non-green products on their health and environment. Apart from this the pandemic like covid-19 has also made the consumers more conscious towards environmental problems. It has compelled everyone to think for better immunity options. So they are getting aware regarding the availability of green products and their positive effect on environment and on their health. According to a survey conducted on the effect of COVID pandemic in 2020 approximately 50% respondents were found to be concerned regarding the hygienic packaging and sustainability of the products they are purchasing.

Not only urban consumers but rural consumers are also getting aware regarding the benefits of eco-friendly products. They are ready to buy green products and also willing to pay higher for purchasing green products. A survey by CGS on Retail and Sustainability in 2019 also found that approximately 67% respondents were considering the sustainability aspect for making a decision regarding purchase of the products and they were also having willingness to pay a little higher for purchasing green products.

Literature Review

Yau (2012) analyzed the willingness of consumers to pay for eco-labeled residential building. For this purpose data were collected from 231 respondents. It was found that less than 50% (only 44.2%) consumers were willing for paying extra amount for purchase of eco-labeled residential building. By applying logistic regression it was also found that attitude regarding environment and household income had significant effect on the willingness of consumers to pay for eco-labeled residential building. However other demographic variables namely age, gender and education were found to have no significant effect on the willingness of consumers to pay for eco-labeled residential building.

Biswas (2016) analyzed the effect of perceptual factors (i.e. consumers' concern and attitude towards environment), contextual factors (i.e. quality, physical infrastructure and price of product) and Environmental Performance of companies on the willingness of consumers to pay for green products. For this purpose data were collected from 150 respondents. By applying multiple regression analysis it was found that perceptual factors and contextual factors were having significant and positive effect on the willingness of consumers to pay for green products while Environmental Performance of companies was not having any significant effect on the willingness of consumers to pay for green products.

Rodigeret al. (2016) highlighted the knowledge regarding price, WTP (willingness to pay) and the real purchase decision of consumers for organic products. Data were collected from 642 respondents by interview method. It was found that a large no. of respondents were unable to estimate the actual price. They were failed in estimating the correct price by an average of 19.9%. Regarding WTP, respondents were having a WTP 52.7% more than the store prices. It was also found that the respondents who were willing to pay lower price than the actual store price, bought the product in 67% cases even though the actual price was more than the price consumers were willing to pay.

Kirmani and Khan (2018) identified the predictors of consumers' willingness for paying a higher price for green products. For this purpose data from 515 respondents were collected and by applying SEM (Structural equation modeling) it was found that ATGP (attitude towards green products) significantly influence WTP (willingness to pay) a higher price for green products. While ATGP in turn significantly influenced by environmental concern and collectivism.

Dahal (2020) analyzed the effect of two factors namely attitude regarding eco-friendly products and willingness to pay higher price for purchase of eco-friendly products on the behaviour of consumers regarding purchase of eco-friendly products. For this purpose data were collected from 100 respondents. By applying correlation analysis it was found that both attitude regarding eco-friendly products and willingness to pay higher price for purchase of eco-friendly products were significantly and positively related with the behaviour of consumers regarding purchase of eco-friendly products.

Objectives

- The main objective of this study is to find out the willingness of rural consumers to pay for green FMCG products.

Research Methodology

Both types of data i.e. primary and secondary are used for this study. Although for achieving the main objective of the study primary data is mainly used. Secondary data is also used in this study. This secondary data was taken from various sources such as books, journals and websites etc. For collecting the primary data structured questionnaires were distributed to 100 consumers. Data was collected from rural areas of Bhiwani district. For collecting the data Convenience sampling method was used and for analyzing the data frequency distribution technique of SPSS was used.

Demographic Analysis

For this study demographic profile includes Gender, Age, Marital status, Education and Income. For analyzing the demographic profile of respondents frequency distribution technique of SPSS was used.

Chart 1: Gender

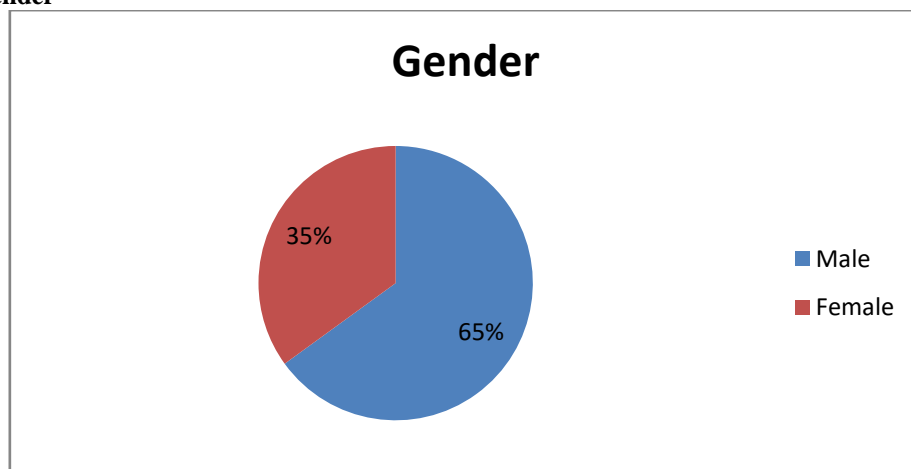


Chart 1 shows that out of 100 respondents 65(i.e. 65%) respondents were male while 35(i.e. 35%) respondents were female.

Chart 2: Age

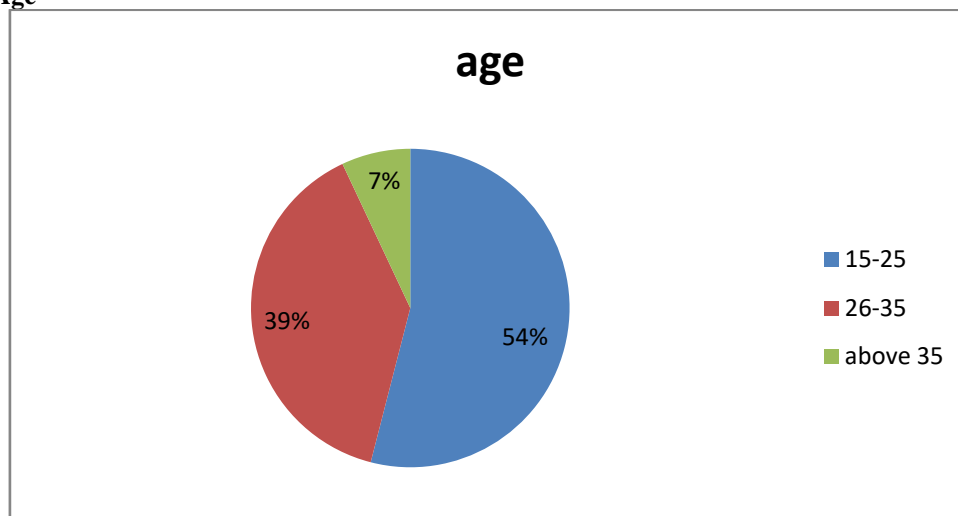


Chart 2 shows that out of 100 respondents 54 (i.e. 54%) respondents were having the age between 15 – 25, 39 (i.e. 39%) respondents were having the age between 26 – 35 while only 7 (i.e. 7%) respondents were having the age above 35.

Chart 3: Marital Status

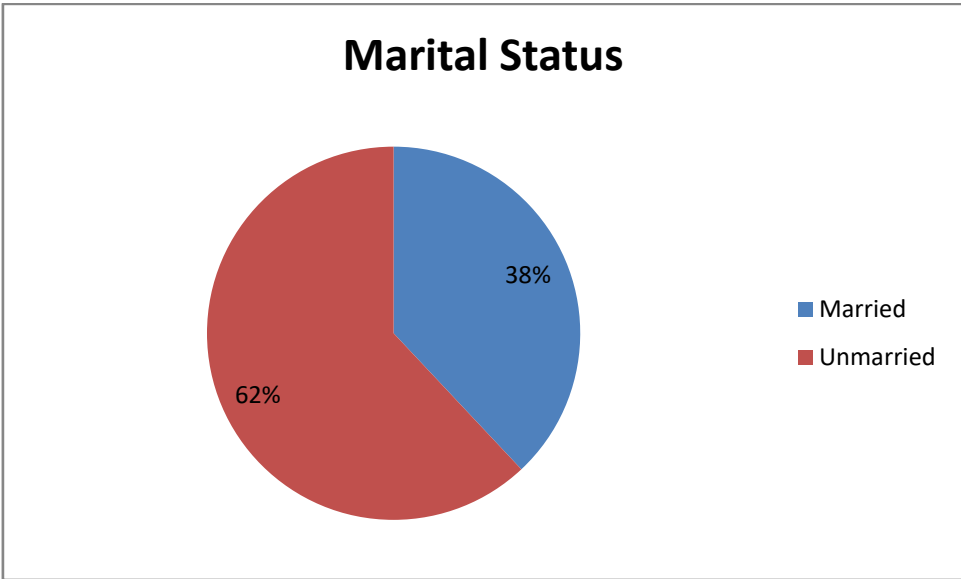


Chart 3 shows that out of 100 respondents 38(i.e. 38%) respondents were married while 62(i.e. 62%) respondents were unmarried.

Chart 4: Education

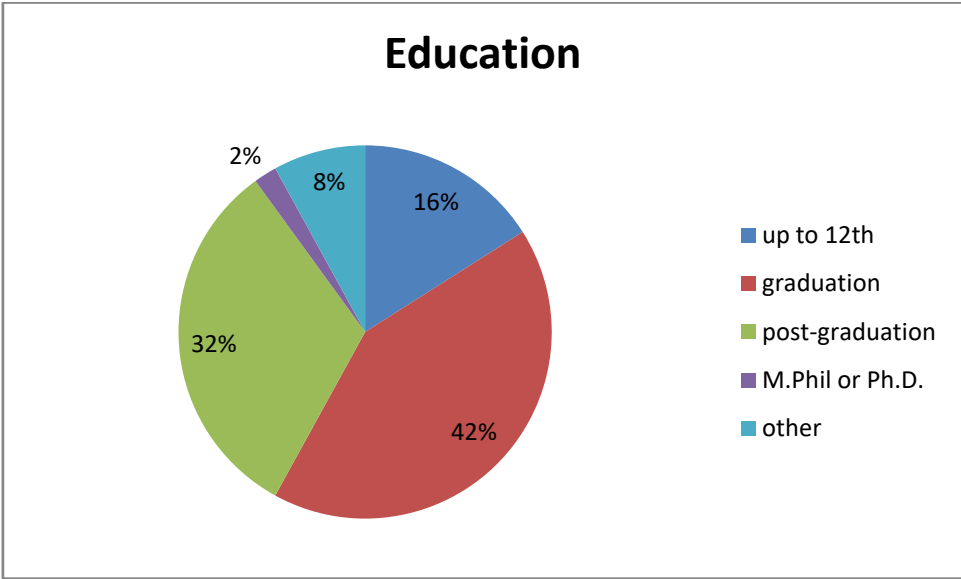


Chart 4 shows that out of 100 respondents 16(i.e. 16%) respondents were up to 12th, 42 (i.e. 42%) respondents were graduate, 32 (i.e. 32%) respondents were post-graduate, 2 (i.e. 2%) respondents have done M.Phil. or Ph.D. while 8 (i.e. 8%) respondents were related to other category of education.

Chart 5: Family Income (per month)

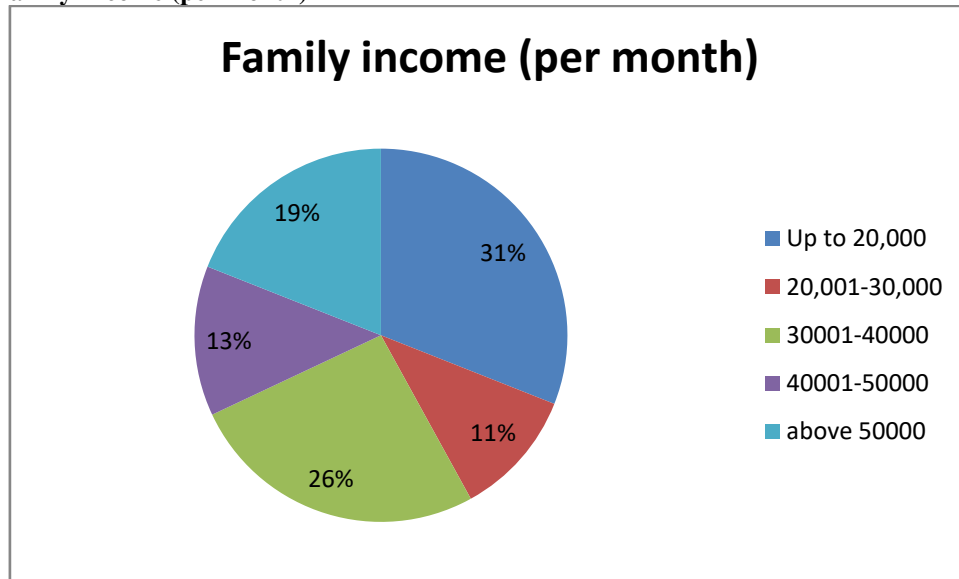


Chart 5 shows that out of 100 respondents 31 (i.e. 31%) respondents were having the income up to 20000, 11 (i.e. 11%) respondents were having the income between 20001 – 30000, 26 (i.e. 26%) respondents were having the income between 30001 – 40000, 13 (i.e. 13%) respondents were having the income between 40001 – 50000 while 19 (i.e. 19%) respondents were having the income above 50000.

Analysis regarding willingness of rural consumers to pay for green FMCG products

The main objective of this study was to find out the willingness of rural consumers to pay for green FMCG products. 4 statements regarding willingness to pay for green FMCG products were used for collecting the data and achieving the objective of this study. Frequency distribution was applied for analyzing the data.

Table 1: For buying a healthier alternative, I am willing to spend extra amount on purchase of green FMCG products

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	34	34.0	34.0
	Disagree	11	11.0	45.0
	Neutral	20	20.0	65.0
	Agree	30	30.0	95.0
	Strongly Agree	5	5.0	100.0
Total	100	100.0	100.0	

Table 1 shows that for buying a healthier alternative 45% (n=45) respondents were not willing to spend extra amount on purchase of green FMCG products. 20% (n=20) respondents were neutral i.e. they were neither willing nor unwilling for spending extra amount on purchase of green FMCG products While only 35% (n=35) respondents were willing for spending extra amount on purchase of green FMCG products.

Table 2: I am ready for paying extra amount for eco-friendly packaging of products

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	8	8.0	8.0	8.0
Disagree	26	26.0	26.0	34.0
Neutral	26	26.0	26.0	60.0
Agree	34	34.0	34.0	94.0
Strongly Agree	6	6.0	6.0	100.0
Total	100	100.0	100.0	

Table 2 shows that 34% (n=34) respondents were not ready for paying extra amount for eco-friendly packaging of products. 26% (n=26) respondents were neutral regarding paying extra amount for eco-friendly packaging of products while 40% (n=40) respondents were ready for paying extra amount for eco-friendly packaging of products.

Table 3: I am ready for paying higher prices and higher taxes on green FMCG products for protecting the environment and contributing towards sustainability of environment

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	9	9.0	9.0	9.0
Disagree	26	26.0	26.0	35.0
Neutral	25	25.0	25.0	60.0
Agree	31	31.0	31.0	91.0
Strongly Agree	9	9.0	9.0	100.0
Total	100	100.0	100.0	

Table 3 shows that 35% (n=35) respondents were not ready for paying higher prices and higher taxes on green FMCG products for protecting the environment and contributing towards sustainability of environment. 25% (n=25) respondents were neutral regarding paying higher prices and higher taxes on green FMCG products for protecting the environment and contributing towards sustainability of environment while 40% (n=40) respondents were ready for paying higher prices and higher taxes on green FMCG products for protecting the environment and contributing towards sustainability of environment.

Table 4: I am willing to buy green FMCG products regardless of the fact that green products are more costly than non-green products

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	11	11.0	11.0	11.0
Disagree	22	22.0	22.0	33.0
Neutral	22	22.0	22.0	55.0
Agree	38	38.0	38.0	93.0
Strongly Agree	7	7.0	7.0	100.0
Total	100	100.0	100.0	

Table 4 shows that 33% (n=33) respondents were not willing to buy green FMCG products with the fact that green products are more costly than non-green products. 22% (n=22) respondents were neutral i.e. they were neither willing nor unwilling for buying green FMCG products with the fact that green products are more costly than non-green products. While 45% (n=55) respondents were willing for buying green FMCG products with the fact that green products are more costly than non-green products.

Table 5: overall willingness of rural consumers to pay for green FMCG products

	Frequency	Percent	Valid Percent	Cumulative Percent
4.00	1	1.0	1.0	1.0
6.00	4	4.0	4.0	5.0
7.00	6	6.0	6.0	11.0
8.00	11	11.0	11.0	22.0
9.00	13	13.0	13.0	35.0
10.00	10	10.0	10.0	45.0
11.00	2	2.0	2.0	47.0
Valid 12.00	6	6.0	6.0	53.0
13.00	9	9.0	9.0	62.0
14.00	12	12.0	12.0	74.0
15.00	5	5.0	5.0	79.0
16.00	14	14.0	14.0	93.0
17.00	3	3.0	3.0	96.0
18.00	3	3.0	3.0	99.0
20.00	1	1.0	1.0	100.0
Total	100	100.0	100.0	

Table 5 shows that overall 53% (i.e.53) respondents were unwilling or less willing regarding spending extra amount on purchase of green FMCG products, regarding paying extra amount for eco-friendly packaging of products, regarding paying higher prices and higher taxes on green FMCG products for protecting the environment and contributing towards sustainability of environment and regarding buying green FMCG products with the fact that green products are more costly than non-green products. While 47% (i.e. 47) respondents were willing regarding spending extra amount on purchase of green FMCG products, regarding paying extra amount for eco-friendly packaging of products, regarding paying higher prices and higher taxes on green FMCG products for protecting the environment and contributing towards sustainability of environment and regarding buying green FMCG products with the fact that green products are more costly than non-green products.

Conclusion

The scope of green products is increasing day by day. More and more companies are adopting green practices and are producing green products. Consumers are also responding positively towards green products. They are also willing to pay higher for purchasing green products. Many rural consumers are also ready to pay more for purchasing green products. Although many consumers are still not ready for paying a higher price for the purchase of green products. As this study show; 53% respondents are still unwilling or less willing regarding spending extra amount on purchase of green FMCG products, regarding paying extra amount for eco-friendly packaging of products, regarding paying higher prices and higher taxes on green FMCG products for protecting the environment and contributing towards sustainability of environment and regarding buying green FMCG products with the fact that green products are more costly than non-green products. While 47% respondents are willing regarding spending extra amount on purchase of green FMCG products, regarding paying extra amount for eco-friendly packaging of products, regarding paying higher prices and higher taxes on green FMCG products for protecting the environment and contributing towards sustainability of environment and regarding buying green FMCG products with the fact that green products are more costly than non-green products.

This study found that in spite consumers' consciousness towards environment degradation; a majority of respondents are not willing to pay a higher price for the purchase of green products. So marketers should make an effort for decreasing the cost of green products and also for persuading the consumers to pay a little higher price for the purchase of green products. Consumers should also understand that the green products are better

for environment and health; so they should also be ready to pay a little higher price for the purchase of green products.

Limitations of the Study

- This study was carried out only on a small geographical part of India.
- In this study sample size is very small i.e. only 100 respondents were approached for collecting the data.

Scope for Future Research

- In future, another study can be carried out by covering a large geographical part of India.
- In future, another study by taking a larger sample size can be carried out.
- In this study willingness of rural consumers to pay for green products was find out while in another study willingness of urban consumers to pay for green products can be find out.

References

- [1]. Biswas, A. (2016), "A Study of Consumers' Willingness to Pay for Green Products", *Journal of Advanced Management Science*, Vol. 4, No. 3, pp. 211-215.
- [2]. Carrete, L., Castaño, R., Felix, R., Centeno, E. and González, E. (2012), "Green consumer behavior in an emerging economy: confusion, credibility, and compatibility", *Journal of Consumer Marketing*, Vol. 29, No. 7, pp. 470-481.
- [3]. Chaudhary, R. (2018), "Green buying behavior in India: an empirical analysis", *Journal of Global Responsibility*, Vol. 9, No. 2, pp. 179-192.
- [4]. Dahal, D. (2020), "A Study on Impact of Attitude And Willingness to pay on Green Purchase Behaviour in Kamrup Metro District of Assam", *Journal of Critical Reviews*, Vol. 7, No. 11, pp. 3229-3234.
- [5]. <https://www.globenewswire.com/news-release/2019/01/10/1686144/0/en/CGS-Survey-Reveals-Sustainability-Is-Driving-Demand-and-Customer-Loyalty.html>
- [6]. <https://www.statista.com/statistics/1203694/india-covid-19-impact-on-consumer-buying-by-company-behavior/>
- [7]. Joshi, Y. and Rahman, Z. (2016), "Predictors of young consumer's green purchase behaviour", *Management of Environmental Quality: An International Journal*, Vol. 27, No. 4, pp. 452-472.
- [8]. Kirmani, M.D. and Khan, M.N. (2018), "Decoding willingness of Indian consumers to pay a premium on green products", *South Asian Journal of Business Studies*, Vol. 7, No. 1, pp. 73-90.
- [9]. Onel, N. and Mukherjee, A. (2014), "Analysis of the predictors of five eco-sensitive behaviours", *World Journal of Science, Technology and Sustainable Development*, Vol. 11, No. 1, pp. 16-27.
- [10]. Rodiger, M., Plabmann, S. and Hamm, U. (2016), "Organic consumers' price knowledge, willingness-to-pay and purchase decision", *British Food Journal*, Vol. 118, No. 11, pp. 2732-2743.
- [11]. Tanner, C., Kaiser, F.G. and Kast, S.W. (2004), "Contextual conditions of ecological consumerism: a Food-Purchasing survey", *Environment and Behavior*, Vol. 36, No. 1, pp. 94-111.
- [12]. Times of India (2017), "Air pollution causes 1.2 million deaths in India annually; Delhi most polluted: Greenpeace report", available at: <https://timesofindia.indiatimes.com/india/air-pollution-causes-12-lakh-deaths-in-india-annually-delhi-most-polluted-greenpeace-report/articleshow/56478622.cms> (accessed August 2017).
- [13]. WHO (2016), "Ambient air pollution: a global assessment of exposure and burden of disease", available at: <http://apps.who.int/iris/bitstream/10665/250141/1/9789241511353-eng.pdf?ua=1> (accessed September 2017).
- [14]. Yau, Y. (2012), "Eco-labels and willingness-to-pay: a Hong Kong study", *Smart and Sustainable Built Environment*, Vol. 1, No. 3, pp. 277-290.

Appendix

Statements regarding willingness to pay for green FMCG products

Sr. No.	Statements
1.	For buying a healthier alternative, I am willing to spend extra amount on purchase of green FMCG products
2.	I am ready for paying extra amount for eco-friendly packaging of products
3.	I am ready for paying higher prices and higher taxes on green FMCG products for protecting the environment and contributing towards sustainability of environment
4.	I am willing to buy green FMCG products regardless of the fact that green products are more costly than non-green products