**Study on green consumerism towards Sustainable Development**

**ABSTRACT:**

**Aim-** The current study deals with knowledge, awareness and gain in knowledge towards sustainable development by rural households.

**Methodology-**The data was collected for the present study by using self developed interview schedules through snowball techniques and assess pre and post exposure on green consumerism towards sustainable development in Hisar and Bhiwani districts of Haryana state of India. From each districts, 75 respondents were selected for the study making a sample size of 150 respondents from both districts.

**Results-**From both the district highest knowledge was found in Hisar respondents in post exposure stage regarding eco friendly agricultural practices, household practices, eco friendly food and clothing practices after dissemination of multimedia regarding green consumerism.

**Interpretation-**The data showed that age, education, family income, socio economic status of the family and family education status had positive correlation with gain in knowledge.

**Keywords:** Consumer, Green consumption, Sustainable development

1. **Introduction**

Environment has become a conventional issue in the present competitive world. The contemporary rapid growth in the economy and the pattern of consumption and behavior worldwide are the main causes of environmental immorality. Throughout the past few decades in particular, more consumers’ are becoming conscious of and have a raised sense of due care for the environmental harm in which mass production is having upon depleting natural resources. Their response is a shift within their moral focus towards more green or sustainably produced being products, resulting in a reflection of more organizations now, than ever developing more products that claim to reduce the impact upon the environment (Delmas & Burbano, 2011). Therefore consumers’ now have more in-store choices of perceived quality preferences (Theron, 2015) on offer that are not only driven by price, but incorporate their “social and moral values” also (Singh & Singh, 2013). The amount an individual produces or consumes has a direct effect on climate change and can be reflected in terms of environmental issues.

Environmental problems are coupled with human consumption; therefore the problem of conservation is highly related to consumer consumption behavior. Hence consumers need to be responsive to reduce environmental damage through the consumption of environmental friendly products. To augment awareness about the environmental impacts of products, the Ministry of Environment and Forests, Government of India had initiated a scheme in 1991, which fundamentally was a scheme of labeling eco-friendly products, (Challa, 2008). This scheme aims at distinctive through the Eco-Mark, any product that is made, used or disposed of in a way that significantly reduces the undesirable effect to the environment. Environmental consciousness influences decision making behavior (Shen *et al.*, 2015).

Green movement has expanded rapidly in the whole world, but with the time an increased convenience is seen among consumers about going green in developing nations such as India (Raghavan and Vahanvati, 2008). However, a research on environmental issues and green consumerism is at growing stage in the Indian context in comparison to other developing nation (Khare, 2015). Therefore, understanding the consumer intention toward green products is decisive for the marketers. In marketing, academicians and researchers are mainly interested about identifying the previous circumstances or factors of green purchase intention (Chan, 2014, Lin-Hi & Muller,2013) green awareness will help in developing suitable strategies for green products.

The demand of green products is increasing day by day all over the world and as such there is a huge concern for understanding how green is a green product. One of the most significant restrains to the development of green products is the lack of consumer trust and the lack of information about green products. This shows us that consumer’s awareness and knowledge play an important role in promoting the green product. Moreover, consumers seem to have limited capability to verify the liability of green products. Environmental concern and brand knowledge are likely to be the two critical factors that influence consumers’ green products purchasing intention. In the context of increasing global awareness and climate change among the people the green consumerism concept is widely used. As a result there is increasing interest among the environmentalist to quantify the green consumerism around the world, from industrial to individual levels so as to frame their mitigation strategies. A deeper understanding of the influence of different pressures on the environment is required in an attempt to spread awareness regarding green consumerism among the people.

1. **Literature Review**

Divyapriya Dharshini N. et al. (2019) found that the consumers have an awareness of green products and how they would help the environment if they switched to green products. They stated that the consumer awareness of green products is an important indicator of green product purchasing decisions. The study revealed that the data is collected from 30respondents by survey method through a structured questionnaire. They found that promotional activities on eco-friendly products influence consumers green products awareness. It was observed that the majority of respondents know about green products. They also revealed that awareness of green products is the key factor, influencing consumers' purchasing decisions.

Panzone et al., (2016) reported that consumers who are aware of environmental issues usually are aware of life sustainability since they are embracing a good lifestyle in interaction with the environment. It was concluded that customers' environmental knowledge describes the level of customers' knowledge about the environment. Customer environmental knowledge was found to be an important factor in persuading customers to buy environmentally friendly products.

Mahlawat S (2018) reported that the Indian government has already taken the initiative by imposing many rules and regulations to preserve the environment but there is need to play the role of marketing green ideas more intensively to make people more aware and knowledgeable about environmental issues and problems, so that there will be a new generation of green minded consumers who will keep themselves healthy and contribute greatly to conserve our planet healthy for our next generations. She said that the study seeks to critically analyze the factors contributing to the rising green consumerism.

S. Shukla (2015) reported that green marketing is a phenomenon which has developed particular importance in the modern market. In green marketing, advertisers focus on environmental benefits to sell products such as recyclable diapers, energy-efficient light bulbs, and environmentally safe detergents. The study also revealed resources are limited and human wants are unlimited, therefore it is important for marketers to utilize resources efficiently without waste and to achieve the organization's objective.

The literature review emphasized the importance of environmental awareness among people by including studies in national and international literature. In fact, people do not take action about environmental activities unless they are aware of the related environmental problems. After environmental awareness and concerns appear in society generally, environmental problems may be internalized by each person and individuals may take responsibility for environmental action.

1. **Materials and Methods**

The survey work was conducted in Hisar and Bhiwani districts of Haryana state. To draw rural sample from Hisar district, block I and block II were considered. Two villages namely Dabra from block I and Aryanagar from block II were selected. From each village, 75 respondents were selected for the study making a sample size of 150 respondents from Hisar district. Similarly, two villages viz. Jhumpa kalan and Madhopura of Block I and Block II from Bhiwani districts respectively (n=150) were selected thus comprising a total sample size of 300 respondents.

1. **Results**

The data were collected in accordance with the research methodology to achieve the specific objectives of the study. The background profile of the respondents has been presented in table 1 and clearly explained to bring out their characteristic features. Personal, demographic and socio-economic profile of the respondents included information regarding age, gender, family type, family size, education and occupation of respondent and socio-economic profile of the family. **Age -**Personal and demographic attributes of the respondents were studied for proper explanation of the findings. More than half of the respondents i.e. 55.7 percent were in the age group 36-50 years followed by 25.0 per cent in age group of 25-35 years and 19.3 percent in age group of 51-65 years. **Gender**-gender of the respondents revealed that almost equal ratio of respondents i.e 50.7 were female and 49.3 percent were in male category. **Education-**Education status of the respondents revealed that maximum number of respondents had their education till primary (27.7%) followed by matric (15.7%) 10+2 (15.9%), graduate (9.0%), post graduate (6.0%) and 26.7% respondents were illiterate. **Occupation-** The data showed that the majority of respondent (37.3%) were house wife followed by 32.3% of respondents in agricultural work, 18.0% were running their own business and only 10.3% were doing service. **Socio-economic status of the respondent** Socio economic status of the respondents was assessed with the help of Kupuswamy scale (2021). Perusal of the data pertaining to the socio economic status showed that 43.0% of respondents from upper middle class followed by 33.6% from lower middle class and 23.3% from upper class that was least from all the above statements. **Family Education Status** data regarding family education status of the respondents exposed that maximum of respondents (44.7.3%) had medium family education status followed by high family education status (25.0%) and low family education status (41.6%).

**Table 1: Personal and demographic variables**

|  |  |  |
| --- | --- | --- |
| **Sr. No.** | **Variables** | **Frequency (%)**  |
| **1** | **Age** |
| 25-35 | 75(25.0) |
| 36-50 | 167(55.7) |
| 51-65 | 58(19.3) |
| **2** | **Gender** |
| Female | 152(50.7) |
| Male | 148(49.3) |
| **3** | **Education** |
| Illiterate | 80(26.7) |
| Primary | 83(27.7) |
| Matric | 47(15.7) |
| Senior Secondary | 40(13.3) |
| Graduate | 27(9.0) |
| Postgraduate | 18(6.0) |
| Diploma | 5(1.7) |
| **4** | **Occupation** |
| Agriculture | 97(32.3) |
| Business | 54(18.0) |
| Service | 31(10.3) |
| House wife | 112(37.3) |
| Other | 6(2.0) |
| **10** | **Socio economic status** |  |
| Upper(26-29) | 60(20.0) |
| Upper middle(16-25) | 52(17.3) |
| Lower middle (11-15) | 83(27.6) |
| Upper lower (5-10) | 33(11.0) |
| Lower (>5) | 72(28.3) |
| **11.** | **Family Education Status** | **Score** |
| **1** | Low educational profile(4-5) | 125(41.6) |
| **2** | Medium educational profile (6-7) | 134(44.7) |
| **3** | High educational profile (8-9) | 41(13.0) |
|  |  |
|  |  |

**Mass media exposure of respondents**

Mass media exposure of respondents has been presented in table 2. The frequency of usage of mass media related to green consumerism was highest for social media (WMS 2.44) followed by television (WMS 1.43), newspaper (WMS 1.11) and radio (WMS 1.10). The least usage of mass media was magazine (WMS 1.04).

**Table 2: Mass media exposure of respondents about green consumerism**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr. No.** | **Category** | **Daily** | **Sometimes** | **Never** | **WMS** | **Rank** |
| 1 | Television | 19(6.3) | 93(31.0) | 188(62.7) | 1.43 | II |
| 2 | Radio | 3(1.0) | 26(8.7) | 271(90.3) | 1.10 | IV |
| 3 | Newspaper | 17(5.7) | 1(.3) | 282(94.0) | 1.11 | III |
| 4 | Magazine | - | 14(4.7) | 286(95.3) | 1.04 | V |
| 5 | Social Media | 159(53.0) | 116(38.7) | 25(8.3) | 2.44 | I |

**Awareness about Green Consumerismof respondents at Pre exposure and Post-exposure Stage**

Table 3 showed the pre-exposure and post-exposure mean scores and paired‘t’ test were computed for all the messages on green consumerism in the selected districts viz. *Hisar* and *Bhiwani* and presented in the table. It was evident from table that all respondents successes in acquiring knowledge at post-exposure stage. Sufficient gain in knowledge was recorded in all the messages viz. methods of identification, reasons for choosing green products, carry own bags when purchasing, dispose of kitchen waste and treatment the household waste items, environmental Awareness, Health problem due to environmental degradation, awareness about importance of ecofriendly products, aware about ordinary products responsible for environmental degradation, social awareness, health perspective, eco friendly agricultural practice, household practices, resource management practices etc. Gain in knowledge was highly significant for all the messages.

**Table 3: Awareness about Green Consumption at Pre exposure and Post Exposure Stage in Hisar and Bhiwani Districts**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No** | Statements | **Hisar (n=50)** | **Bhiwani (n=50)** |
| **Pre knowledge** | **Post knowledge** | **Gain in knowledge** | **t- value** | **Pre****knowledge** | **Post knowledge** | **Gain in knowledge** | **t-value** |
| 1 | Method of identification of eco friendly products | 9.40 | 13.36 | 3.96 | 19.76\* | 2.53 | 4.07 | 1.54 | 38.44\* |
| 2 | Reasons for choosing green products | 8.08 | 9.38 | 1.30 | 12.76\* | 7.67 | 9.75 | 2.08 | 21.84\* |
| 3 | Carry own bag for purchase | 5.20 | 7.92 | 2.72 | 17.42\* | 6.00 | 8.49 | 2.49 | 29.38\* |
| 4 | Dispose of kitchen waste | 6.74 | 9.64 | 2.90 | 19.94\* | 5.88 | 8.76 | 2.88 | 20.63\* |
| 5 | Aware about Eco friendly Products | 4.60 | 7.40 | 2.80 | 13.61\* | 3.65 | 6.48 | 2.83 | 12.43\* |
| 6 | Aware about Health Problems occurs due to Environmental Degradation | 7.48 | 13.38 | 5.90 | 10.80\* | 8.11 | 13.22 | 5.11 | 21.83\* |
| 7 | Awareness about importance of eco friendly products | 8.38 | 13.06 | 4.68 | 13.18\* | 9.72 | 18.39 | 8.67 | 17.35\* |
| 8 | Awareness about ordinary products responsible for environmental degradation | 8.94 | 14.58 | 5.64 | 18.61\* | 7.83 | 13.05 | 5.22 | 16.24\* |
| 9 | Eco Friendly Social Awareness | 5.08 | 6.68 | 1.60 | 33.60\* | 3.42 | 6.67 | 3.25 | 47.72\* |
| 10 | Eco Friendly Health Perspective | 9.56 | 13.34 | 3.78 | 18.26\* | 8.04 | 12.4 | 4.36 | 12.59\* |
| 11 | Eco friendly Agricultural Practice | 6.36 | 9.28 | 2.92 | 10.45\* | 5.88 | 8.89 | 3.01 | 19.20\* |
| 12 | Eco Friendly Household practices | 6.28 | 8.96 | 2.68 | 22.76\* | 6.30 | 8.42 | 2.12 | 19.85\* |
| 13 | Eco Friendly Resource Management practices | 18.9 | 24.86 | 5.96 | 20.17\* | 17.04 | 23.52 | 6.48 | 20.64\* |

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**Figure: 5 A conceptual framework on process of change in attitude of respondents**

**Level of gain in knowledge at pre and post exposure stage regarding green consumerism**

Effect of media package exposure on the level of knowledge of respondents has been shows in table 4. It was observed that Hisar respondents having high level (0.76-1.13%) of knowledge about green consumerism increased by 64% and respondents having poor (0.02-0.39) and average (0.39-0.76) was decreased by 48% and 16%, respectively, upon media exposure. In the same way, Bhiwani respondents in high level of gain in knowledge about green consumerism were increased by 56% (0.76-1.13) followed by average knowledge decreased by 4% and poor knowledge decreased by 52% about green consumerism.

**Table: 4 Level of gain in knowledge at pre and post exposure stage regarding green consumerism**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Sr.no.**  | **Hisar** | **Pre Knowledge****(n=25)** | **Post Knowledge****(n=25)** | **Gain in Knowledge(%)** | **Bhiwani** | **Pre Knowledge(n=25)** | **Post Knowledge****(n=25)** | **Gain in Knowledge****(%)** |
| **1** | Poor (0.02-0.39) | 16 (64%)  | 4 (16%)  | -12 (-48%)  | Poor  | 19 (76%  | 6 (24%)  | -13(-52%)  |
| **2** | Average (0.39-0.76) | 7 (28%)  | 3 (12%)  | -4 (-16% )  | Average  | 4 (16%)  | 3 (12%)  | -1 (-4%)  |
| **3** | Good(0.76-1.13)  | 2 (8%)  | 18 (72%) | 16 (+64%) | Good  | 2 (8%)  | 16 (64%) | 14 (+56%) |

1. **Discussion**

Based on the interpretation of score more than half of the respondents i.e. 55.7 percent were in the age group 36-50 years followed by 25.0 per cent in age group of 25-35 years and 19.3 percent in age group of 51-65 years. Almost equal ratio of respondent’s i.e 50.7 was female and 49.3 percent were in male category. Maximum number of respondents had their education till primary (27.7%) and majority of respondent were house wife followed by in agricultural work and majority of respondents had small family size. Majority of respondents regarding socio economic status showed that 43.0% of respondents belong from upper middle class.

Maximum of respondents (44.7.3%) had medium family education status. Mass media exposure of respondents regarding green consumerism was highest found in social media (WMS 2.44). Exposure of mass media led a significant gain in knowledge regarding green consumerism. The pre-exposure and post-exposure mean scores and paired‘t’ test were computed for all the messages on green consumerism in the selected districts viz. Hisar and Bhiwani. It was evident from data that all respondents succeed in acquiring knowledge at post-exposure stage. Sufficient gain in knowledge was recorded in all the messages viz. eco friendly food items, eco friendly packaging material, eco friendly clothing, eco friendly home cleaner and washing detergents. Gain in knowledge was highly significant for all the messages. Hayran*et al.* (2018)also supported the present study by reporting that the majority of the respondents (67.36%) had a positive attitude towards sustainable agriculture, while 26.78 percent had a negative attitude. Khurana *et al.* (2007), Rizwana and Paris (2009) and Sindhu and Thakur (2011) also support the study. Significant change in attitude regarding organic farming was also observed. So the results indicated that exposure to booklet and leaflet had increased the knowledge level of respondents and changes the attitude. Kumari and Sethi (2012), Thakur and Verma (2012) reported the similar results that majority of the respondents were ready to adopt the organic farming, eco friendly practices in post exposure stage. It was evident that all respondents successes in acquiring knowledge at post-exposure stage. Sufficient gain in knowledge was recorded in all the messages viz.eco friendly food items, eco friendly clothing and eco friendly home appliances.

1. **Conclusion**

Sustainable development is invented to provide a solution for meeting indispensable human needs, integrating environmental development and protection, achieving equality, ensuring social self-determination and cultural diversity, and maintaining ecological integrity.

* + More than half of the respondents had overall low knowledge and awareness at pre- exposure stage.
	+ Majority of respondents did not follow the eco friendly practices while purchase products at pre exposure stage.
	+ Effectiveness of media for Leaflet, Poster, YouTube videos and booklet for all messages was high as perceived in post exposure stage

**Implications and Future Research Works**

Develop green practices at household level for sustainable development

Disclaimer (Artificial intelligence)

Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc.) and text-to-image generators have been used during the writing or editing of this manuscript.

**Reference**

Bhatia, M., and Jain, A. 2012. Green marketing: A study of consumer perception and preferences in India. *Electronic Green Journal,* **1**(36), 1-19.

Birgelen, M., Semeijn, J., Keicher, M. 2008. Packaging and Proenvironmental Consumption Behavior J. consumer behavior, **4**(3), 185-20.

Charles, Gu, 2012. Influence of mass media on public. A specially designed training module for adolescents. University of Barcelona.

Divyapriyadharshini, S. Devayani, V. Agalya, J. Gokulapriya, 2019. Consumer Awareness towards Green Products and Its Impact*, J. International Journal of Research and Innovation in Social Science,* **III**(X).

Garakani., Seyed Amirhossein Lak., Azadeh Niyasati and Masoomeh. 2020. Toward sustainable development in post-flood relocation of rural settlements in Iran, *International Journal of Disaster Resilience in the Built Environment; Bingley*, **11**(3): 359-377.

Golkonda, S. B. 2013. Bioproducts: Consumers' perception and buying behavior, *J. Business Management,* **3***(6), 12-19.*

Khalid Sadia ., 2018. Impact of Consumers Green Attitude on Green Product Purchase Behavior; Mediating role of Green Product Purchase Intention Moderating Role of Consumer Degree of Involvement, Master of Science, Faculty of Management & Social Sciences Department of Management Sciences.

Kuppuswamy‘s (2017) Revised socio-economic status scale: *Indian Journal of Community Health*. **27**, (4): 415-417.

Mahapatra Sabita 2013. A study on consumer’s perception for green products: An empirical study from India, *International Journal of Management & Information Technology*, **7**(1), 925-933.

Maheshwari Shruti P, 2014. Awareness Of Green Marketing And Its Influence On Buying Behavior Of Consumers: Special Reference To Madhya Pradesh*, India AIMA, J. of Management & Research,* **8**( 1/), ISSN 0974 – 497.

Pareek and Lodha 2017. Knowledge of homemakers regarding water footprint. *Inter. J. Home Sci.***3**(2):430-436.

Panzone, L., Hilton, D., Sale, L., & Cohen, D. 2016. Socio-demographics, implicit attitudes, explicit attitudes, and sustainable consumption in supermarket shopping.*Journal of Economic Psychology,* **55**:77–95*.*

Mahlawat S., 2018. Emerging Green Consumerism in India: A Study of Green Awareness, Perception & Green Brand Preferences, *J. of Advances & Scholarly Researches in Allied Education,***15**(7), 45-49.

Marsh,L., Zoumenou, V., Cotton, C., and Hashem, F. 2017. Organic farming: knowledge, practices, and views of limited resource farmers and non-farmers on the Delmarva *J.Peninsula. Org.Agr.*, **7**: 125-132.

Shukla S. and Shubhendu 2015. Green Marketing: Promoting Green Consumerism for Sustainable Development *Journal of Management and Research,* **2** (1).

Saxena and Khandelwal, 2010. Can green marketing used as tool for sustainable growth? A study performed in India and an economy emerging, *J. International journal of environmental cultural Economic and social sustainability,* **6**(2), ISSN 1832-2077

Yadav, B. (2004). Study on participatory messages designed for effective communication in home science, Ph.D. Thesis, CCS Haryana Agriculture University, Hisar, Haryana.

Zagreb International Review of Economics & Business, Vol. 21, No. 1, pp. 67-94, 2018.