

## ENVIRONMENTAL KNOWLEDGE AND BEHAVIOR AMONG THE HOUSEHOLDS IN THE NILGIRIS

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### Abstract

*The present study analyses the environmental knowledge and behavior of the rural and urban households in the Nilgiris. The environmental awareness of the people in rural and urban regions significantly varies. Consumer behavior towards the management of natural resources shows that they preserve water, plant saplings, using organic goods, avoiding genetically modified foods, using low decibel sound speaker, involvement in management activities and using public transport to save fuel. Besides, environment friendly approach has to be still widened among the people so that the environmental resources can be preserved for the generations to come. The study suggests that the Government and NGOs must come forward to disseminate knowledge about environmental issues and importance of managing the natural resources.*

**Keywords:** *consumer behavior, environment, pollution, management*

### Introduction

The earth can be thought of as a spaceship with limited resource. The living things including human being are interdependent on one another and their environment. There is a delicate balance of nature a condition of natural ecosystem. There exists a dynamic equilibrium involving various cycles. Interface of people with these cycles over periods of time could lead to catastrophic changes in the environment. The global which has been hospitable to its life supporting system now endangered by the lack of understanding of the consequence of environmental crisis and the total absence of personal and individualized global ethics. The reform in educational system and process is central to the building of this new global ethics. These environmental problems cannot be solved merely through new technologies, legislative regulations and administrative restricting unless there has been appropriate reforms and discipline in the life styles of people. Education is the most effective tool to modify the behavior of the individuals and society in order to make man to understand his responsibility as a part of this biosphere.

Man who is on integral part of the environment that is constantly interfering with the various equilibrium existing in the natural ecosystems there by disturbing the balance of the nature this has been leading to irreparable losses and changes in the environment the mother nature who has been very patient with her sibling is showing her displeasure in

the form of various natural disasters and in many other forms. It is high time that we understand the underlying meaning and start reacting best if it without causing much harm to it indeed. For such a thing to happen it is not enough to tackle it with new technologies or administrative strategies or legislative regulatory and effective reforms must be induced and brought about in the behavior patterns and life styles of the people.

The prime support for the survival of human being is environment. By understanding this, people from ancient period classified the nature as five elements and worshiped nature as god. The worship continues still now but the question here is, whether the resources are managed well. The answer is no because of population growth, industrialization, modernization and so on has deteriorated the quality and quantity of the natural resources. People face the problem of water, air, land and noise pollution. Besides, failure in managing natural resources has led to various environmental disasters. At the time of disasters, the world and people speak about environmental management and move on to other business. People understand the importance of natural resources but depletion continues. Given this, the present study analyses.

### **Methodology**

In order to study the environmental awareness of the people in the Nilgiris, two regions are selected viz., urban and rural regions. From each region, 60 respondents are selected and 120 in total. For urban region Udthagamandalam is chosen and B. Maniyatti village is chosen for rural background. Environmental awareness data is collected with the help of pre tested structured interview schedule. The schedule is administered through personal interviews with most knowledgeable person. Statistical Package for Social Science (SPSS) is used in addition to Ms Excel for data processing, analysis and tabulation. Besides, simple statistical measures such as averages and percentages also will be used extensively for analysis.

### **Education of the Respondents**

Educational status of the respondents is discussed at the preliminary level for understanding about the environment and their behavior towards the environment. It is observed from that table 1 that more than 46.7 percent of the urban respondent's graduates, 31.7 percent of the respondents are illiterate in rural area and 5 percent of the respondents are primary education. 36.7 percent of the respondents graduate, 20.8 percent of the respondents is illiterate, 15.8 percent of the respondents have higher secondary education, 14.2 percent of the respondents have obtained high school and 12.5 percent of the respondents have primary education.

**Table 1**  
**Education of the Respondents**

Details	Area of Respondent		Total
	Rural	Urban	
	(n=60)	(n=60)	(N=120)
Illiterate	19 (31.7)	6 (10.0)	25 (20.8)
Primary	12 (20.0)	3 (5.0)	15 (12.5)
High school	5 (8.3)	12 (20.0)	17 (14.2)
Higher secondary	8 (13.3)	11 (18.3)	19 (15.8)
Graduate	16 (26.7)	28 (46.7)	44 (36.7)
Total	60 (100)	60 (100)	120 (100)

**Source:** Computed

**Note:** Figures in parentheses denotes percentages to the total sample

#### Regional Background and Environmental Awareness

The table 2 has analysed the regional background of the respondents and their environmental awareness. For this, the average response of the respondents was calculated, which will range between 0 to 1.

**Table 2 Regional Background and Environmental Awareness: Mean Scores**

Details	Area of the Respondents		Total
	Rural	Urban	
	(n=60)	(n=60)	(N=120)
Aware of Environmental Components	0.45	0.77	0.61
Aware of Environmental Services	0.45	0.77	0.61
Awareness on Air Pollution	0.24	0.54	0.39
Awareness on Water Pollution	0.40	0.76	0.58
Awareness on Land Pollution	0.31	0.63	0.47
Awareness on Noise Pollution	0.35	0.78	0.56
Awareness on Other Environmental Issues	0.28	0.64	0.46
Environmental Protection Behavior	0.33	0.64	0.49
Environmental Friendly Behavior	0.33	0.65	0.49

**Source:** Computed

On an average, the respondents are more aware about environmental components (0.61) and environmental services (0.61). Next to this, awareness of water (0.58) and noise pollution (0.56) is high among the respondents. Among the rural and urban regions, the awareness is tremendously high regard to environmental components, services, water

pollution and noise pollution. This shows more level of understanding of the urban people since they face various environmental issues as compared to rural populace. Thus, from the results it is understood that the people are aware about the environmental components, services and pollution. But, there is variation among the rural and urban people in understanding the environmental issues.

#### Education and Environmental Awareness

The surveyed respondents have attained education up to school level and collegiate where few respondents are illiterate (see table 1 for more details). The table 3 has analysed the level of education and environmental awareness among the surveyed respondents. The awareness is high among the graduates, which is hiked more than 0.8 in all the environmental awareness listed wherein it is 0.75 and 0.72 regarding environment friendly and protection behavior respectively. The awareness level is better for high secondary educated respondents and comparatively less for the other school level educated. That too for the illiterate the level of understanding is too less. Thus, the awareness is high among the graduates as compared to the respondent's attained education up to school level and illiterate. Thus, education parts a major role in understanding the environmental issues.

**Table 3 Education and Environmental Awareness: Mean Scores**

Details	Educational Status of the Respondents					
	Illiterate	Primary	High school	Higher secondary	Graduate	Total
Aware of Environmental Components	0.24	0.33	0.64	0.68	0.87	0.61
Aware of Environmental Services	0.31	0.46	0.64	0.65	0.80	0.61
Awareness on Air Pollution	0.06	0.17	0.33	0.36	0.69	0.39
Awareness on Water Pollution	0.21	0.42	0.59	0.63	0.82	0.58
Awareness on Land Pollution	0.13	0.19	0.39	0.48	0.78	0.47
Awareness on Noise Pollution	0.21	0.28	0.56	0.64	0.83	0.56
Awareness on Other Env't. Issues	0.12	0.16	0.32	0.49	0.80	0.46
Environmental Protection Behavior	0.19	0.24	0.44	0.57	0.72	0.49
Environmental Friendly Behavior	0.17	0.22	0.43	0.55	0.75	0.49

Source: Computed

### Environmental Protection Behaviour

The table 4 shows the extent of environmental protection they adopt in their day-to-day-life. The environmental protection measures of the respondents are preserving water, plantation, using organic goods, avoiding genetically modified foods, using low decibel sound speaker, involvement in management activities and using public transport to save fuel. Of this, majority of the respondents adopt to safeguard the environment while there is wide variation among the urban and rural regions. Environmental protection activities followed by the urban people ranges from 35 per cent to 91.7 per cent while the same is 13.3 per cent to 58.3 per cent for the rural people. Thus, rural people lack in understanding the environmental issues and protecting the environment.

**Table 4 Behavior of Respondents on Environment Protection**

Details	Area of Respondent		Total
	Rural	Urban	
	(n=60)	(n=60)	(N=120)
Preserving Water	30 (50.0)	52 (86.7)	82 (68.3)
Habit of Planting Saplings	16 (26.7)	34 (56.7)	50 (41.7)
Consuming Organic Foods	9 (15.0)	21 (35.0)	30 (25.0)
Use of Organic Pesticides is the Best Method	15 (25.0)	36 (60.0)	51 (42.5)
Avoiding GM Foods	11 (18.3)	30 (50.0)	41 (34.2)
Using Low Decibel Sound Speaker	20 (33.3)	42 (70.0)	62 (51.7)
Avoiding Inorganic Vegetables	8 (13.3)	21 (35.0)	29 (24.2)
Need for Environmental Studies for Solving Environmental Problem	35 (58.3)	52 (86.7)	87 (72.5)
Individual Involvement is need for Protecting the Environment	31 (51.7)	55 (91.7)	86 (71.7)
Participating in Environmental Protection Activity	18 (30.0)	36 (60.0)	54 (45.0)
Using Public Transports and Avoiding Vehicle	25 (41.7)	45 (75.0)	70 (58.3)

Source: Computed

Note: Figures in parentheses denotes percentages to the total sample

### Environment Friendly Behaviour

From the table 5, the respondents avoid plastic materials (32.5%) and use wire/cloth bags (65%), use electricity (66.7%) and gas (56.7%) economically, protect birds and animals (49.2%), adopt rain water harvesting (37.5%) and celebrate functions without crackers (40.8%) and create awareness among the people (40%). It is to appreciate the people that they are environment friendly and particularly adoption is high among the urban as compared to rural people. Environment friendly approach has to be still enlarged among the people so that the environmental resources can be preserved for the generations to come.

**Table 5 Environment Friendly Behaviour of the Respondents**

Details	Area of Respondent		Total (N=120)
	Rural	Urban	
	(n=60)	(n=60)	
Avoiding Plastic Material	11 (18.3)	28 (46.7)	39 (32.5)
Using Wire or Cloth Bags	29 (48.3)	49 (81.7)	78 (65.0)
Utilize the Electricity with Economy	30 (50.0)	50 (83.3)	80 (66.7)
Save and Utilize Economically LPG	24 (40.0)	44 (73.3)	68 (56.7)
Protecting Birds and Animals	21 (35.0)	38 (63.3)	59 (49.2)
Adaptation of Rain Water Harvesting	12 (20.0)	33 (55.0)	45 (37.5)
Celebrate Functions without Crackers	14 (23.3)	35 (58.3)	49 (40.8)
Creating Environmental Awareness among the People	14 (23.3)	34 (56.7)	48 (40.0)

Source: Computed

Note: Figures in parentheses denotes percentages to the total sample

### Conclusion and Policy Suggestions

The consumer behavior towards the management of natural resources shows that they preserve water, plant saplings, using organic goods, avoiding genetically modified foods, using low decibel sound speaker, involvement in management activities and using public transport to save fuel. At the same time, there is wide variation between the people in rural and urban regions in understanding environmental awareness. Besides, environment friendly approach has to be still widened among the people so that the environmental

resources can be preserved for the generations to come. The issue is people are aware about the environmental issue but it is not followed by the people in day-today-life. At the time of environmental disasters, the whole world must not stop by speaking the environmental issues rather it has to find some solutions for managing effectively. The Government has to create environment management clubs in both urban and rural areas to disseminate knowledge about environment and must encourage the clubs by giving awards according to their performance. Environmental education must be given from the primary school level and we must make the young students to understand the environmental issues and importance of managing the natural resources.

### References

1. Abraham. M. and Arjunan. N. K. 2005. "Environmental Interest of Secondary School Students in Relation to their Environmental Attitude." *Perspectives in Education*, 21 (2): 100-105.
2. Astaline, 2008. "A Comparative Study of Environmental Awareness between SC, OBC and General Caste Students among Higher Secondary Schools." *Modern Educational Research in India*, 3(3): 21-29
3. Autti Harju P. 2013. "Measuring Environmental Awareness in Nineteen States in India." *Universal Journal of Environmental Research and Technology*, 3, (5): 544-554
4. European Commission. 2012. "Environmental Awareness Does Not Lead To Smaller Carbon Footprints." *Science for Environment Policy*. 12 July
5. Hansla, A, Gamble, A, Juliusson, A and Garling, T. 2008. "The Relationships between Awareness of Consequences, Environmental Concern and Value Orientation." *Journal of Environmental Psychology*, 28: 1-9
6. Olander, F., and Thøgerson, J. 1995. "Understanding Consumer Behavior as A Prerequisite For Environmental Protection." *Journal of Consumer Policy*, 18, 345-385.
7. UNESCO. 1980. "Environment Education In The Light of Tbilisi Conference". Final Report. Tbilisi, Paris: UNESCO.
8. Villacorta, M., Koestner, R., and Lekes, N. 2003. "Further Validation of The Motivation Toward The Environment Scale." *Environment and Behavior*, 35, 486-505.
9. Vining, J., and Ebreo, A. 2002. "Emerging Theoretical and Methodological Perspectives on Conservation Behavior." *Handbook of environmental psychology* (551-558). New York: Wiley. 3(3): 21-29
10. Ziadat AH. 2010. "Major Factors Contributing To Environmental Awareness Among People In A Third World Country/ Jordan." *Environ Dev Sustain* 12:135-45
11. Zsoka, A. 2005. "Consistency and Awareness Gaps in Pro-Environmental Organisational Behaviour." PhD dissertation. Corvinus University of Budapest.