“ASSESSMENT OF GREEN CONSUMERISM ON ENVIRONMENTAL SUSTAINABILITY”

‘‘पर्यावरणीय स्थिरता पर हरित उपभोक्तावाद का आकलन’’

MISS SHREYA SANGWAN

THESIS

MASTER OF SCIENCE (HOME SCIENCE)

IN

Department of Resource Management and Consumer Science

2020

Department of Resource Management and Consumer Science

College of Community Science, Udaipur

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A

THESIS

SUBMITTED TO THE

MAHARANA PRATAP UNIVERSITY OF

AGRICULTURE & TECHNOLOGY, UDAIPUR

IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR

The degree of

Master of Science in Home Science

(Resource Management and Consumer Science)

By

MISS SHREYA SANGWAN

2020

CERTIFICATE - I

CERTIFICATE OF ORIGINALITY

The research work embodied in this thesis titled **"Assessment of Green Consumerism on Environmental Sustainability"** submitted for the award degree of **Master of Science** to Maharana Pratap University of Agriculture and Technology, Udaipur (Rajasthan), is original and bonafide record of research work carried out by me under the supervision of **Prof. Rekha Vyas**, Department of Resource Management and Consumer Science, CCAS, MPUAT, Udaipur. The contents of the thesis, either partially or fully, have not been submitted or will not be submitted to any other Institute or University for the award of any degree or diploma.

The work embodies in the thesis represents my idea in my own words and where others ideas or words have been included. I have adequately cited and referenced the original sources. I also declared that I have adhered to all principle of academic honestly and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in my submission. I understand that any violation of the above will be cause for disciplinary action by the University and can also evoke penal action from the source which have thus not been properly cited or form proper permission has not been taken when needed.

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This is to certify that this thesis entitled **"Assessment of Green Consumerism on Environmental Sustainability"**submitted for the degree of **Master of Science** in the subject of **Resource Management and Consumer Science** embodies bonafide research work carried out by **Ms. Shreya Sangwan** under my guidance and supervision and that no part of this thesis has been submitted to any other degree. The assistance and help received during the course of investigation have been fully acknowledged. The draft of the thesis was also approved by the advisory committee on ……...

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This is to certify that the thesis entitled **"Assessment of Green Consumerism on Environmental Sustainability"** submitted by **Ms. Shreya Sangwan** to Maharana Pratap University of Agriculture and Technology, Udaipur partial fulfillment of the requirement for the degree of Master of Science in **Community Science** in the subject of **Resource Management and Consumer Science** after recommendation by the external examiner was defended by the candidate before the following members of the examination committee. The performance of the candidate in the oral examination held on / /2020 was found satisfactory. We therefore, recommended that the thesis be approved.

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This is to certify that **Ms. Shreya Sangwan** student of the **Department of Resource Management and Consumer Science,** College of Community and Applied Sciences has made all corrections/modifications in the thesis entitled**"Assessment of Green Consumerism on Environmental Sustainability"**which were suggested by the external examiner and the advisory committee in the oral examination held on / /2020. The final copies of the thesis duly bound and corrected were submitted on _____are enclosed herewith for approval.

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CERTIFICATE – V

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This is to certify that **Ms. Shreya Sangwan** (M.Sc. Scholar) has worked under me on **"Assessment of Green Consumerism on Environmental Sustainability"**

1. I have monitored her research work.
2. My self and the scholar were in contact with the committee members and the research work was reviewed regularly.
3. The advisory committee members have gone through M.Sc. thesis critically and made the corrections as per requirement.

Dr. Rekha Vyas

Major Advisor

ACKNOWLEDGEMENT

Writing this thesis has been fascinating and extremely rewarding. I would like to thank a number of people who have contributed to the final result in many different ways:

To commence with, I pay my obeisance to the universe, who have bestowed upon me good health, courage, inspiration, zeal and the light.

I take this opportunity to express my profound sense of gratitude and indebtedness to my major advisor, ***Dr. Rekha Vyas,*** *Professor, Department of Resource management and Consumer Science, Directorate of Extension Education, Udaipur, Zonal Directorate of Research, Rajasthan for her sustaining guidance, constant encouragement, sublime suggestions, motherly support, affectionate behaviour, intellectual stimulation and efforts which helped me during entire period of my research work. It was indeed an unforgettable and pleasant experience to work under her guidance.*

Words are a poor substitute for expressing my gratitude to the members of my advisory committee ***Dr. Gaytri Tiwari,*** *Head and Associate Professor, Department of Human Development and Family Studies,* ***Ms Seema Dwivedi,*** *Head and Associate Professor, Department of Resource Management and Consumer Science, and DRI nominee* ***Dr. Sarla Lakhawat,*** *Head and Associate Professor, Department of Foods and Nutrition for their valuable suggestions and precious guidance in planning and execution of the study.*

I am much obliged to thank ***Dr. Meenu Srivastava****, Dean, College of Community and Applied Sciences, for providing the necessary facilities to carry out the study.*

I feel short of words to express my heartfelt feelings and thank my seniors ***Aligina Anvitha Sudheshna, Sakshi Mishra*** *and my friends* ***Tanya Verma, Yogita Arya, Amdy and Abhishek Tamta*** *who were there for patiently listening to my day to day problems and providing a light out of every problem that confronted me.*

I need to pay my sincere reverence and gratitude to my grandparents ***Mr. Guru Charan Lal and Mrs. Kamlesh,*** *my parents* ***Mr. Sanjay Sangwan and Mrs. Neelam Sangwan*** *and my family members* ***Mr. Ajay Sangwan, Mrs. Jyoti Sangwan, Bhavya***

Sangwan and Vartika Sangwan *for their love, blessings and encouragement in the course of my studies.*

I hence with the deepest feeling of my heart convey thanks and gratitude to all of them, including those people unmentioned, who directly or indirectly helped me to reach up to this level.

Place: Udaipur *Shreya Sangwan*

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INTRODUCTION

Global environmental sustainability has led people to focus on their consumption behavior.We are faced with an array of environmental problems, which together indicate a change in the ecosystem caused by human activities and challenge our present lifestyles **(Bamberg & Moser, 2007)** environmental sustainability has received immense academic and industrial attention in last few years.

Problems, such as climate change, ozone layer depletion, large-scale exploitation of natural resources, and increasing contamination of air, water, and soil, increasing carbon emissions, are a continually growing concern worldwide. Degradation of environment and natural resources is happening at a rapid pace. All these issues are raising numerous questions regarding protecting the environment and devising sustainable strategies.

The fact that the earth's resources are limited and are supposed to deplete soon is of utmost value. The threat to our mother nature, our ecosystem and human health is catastrophic. The ill impacts of human pursuit over the environment are a real matter of concern at present. Sustainability has not only become important but a necessity in the present time. It is considered as the ability of something to remain constant for years. Thus, environmental sustainability is to keep balance between humankind and nature and to protect natural resources for present and future.

According to econometric model, the current population of the world is over 7.6 billion. It is estimated to reach around 9 billion by the year 2040. Out of 7.6 billion, some 13 million belongs to India and the population of India is expected to cross 1326.20 million by the end of 2020 and around 1352.7 million by the year 2022 **(World Bank, United States Census Bureau, 2020).**The increase in population is troublesome for the environment and natural resources. More the population count more will be the requirements of resources. As a result, depletion of earth's resources will occur early. Some of the major impacts of growing population would be more consumption of more naturally available resources like water, land, fuels, etc. which in turn will lead to more waste generation. Apart from these, deforestation, excessive farming, increase in water, air, soil and noise pollution, global warming, weather changes, etc. are some of the negative impacts of more human beings on earth. Around 80% of the forests have been cut down for farming and agricultural practices

as more food is required to feed more number of humans. As a result of cutting of forests the amount of carbon dioxide released into the atmosphere accounts for around 25% of the global warming.

Industries are one of the major contributors in deterioration of the environment. Sometimes the raw material that is used in the production of goods and the final product that is consumed, both are harmful to environment as well as to mankind. There are many environmental issues that are severely impacted by the production and rendering of conventional goods and services. Some of these can be seen as drastic changes in climate, eutrophication, shortage of fresh water, degraded indoor and outdoor air quality, acid rain, plastic rain, greenhouse gas emissions, traces of toxic pollutants, global warming and many more. Certain gases like carbon dioxide, methane, nitrous oxide, water vapors and Chlorofluorocarbons block heat from escaping out of the atmosphere and they respond physically or chemically to changes in the surface temperature. These are called greenhouse gases.It has been concluded that these greenhouse gaseshave caused more than 95% of the observed increase in Earth's temperature over the past 40-50 years **(United States Global Change Research Program).** The Earth's climate has changed drastically all along. In the last 650,000 years there have been seven cycles of glaciers growth and shrink, with the hasty end of the last ice age about 11,700 years ago marking the pioneer of modern climate era and human advancement. The industrial activities on which the modern world depends upon have raised atmospheric carbon dioxide levels from 280 parts per million to 412 parts per million in the last 150 years.

According to the Intergovernmental Panel on Climate Change (IPCC), the extent of climate change effects on individual regions will vary over time and with the ability of different societal and environmental systems to mitigate or adapt to change.The IPCChave also predicted that the increase in global mean temperature of less than 1 to 3 degrees Celsius will produce beneficial impacts in some regions of the world but it will severely impact the other regions. As the global temperature will increase the annual costs will also increase with time.

But there are some industries and brands that have lent a big hand in adopting the procedures that are friendly to the environment and they much deserve the accolade. Companies like IKEA, Unilever, Panasonic, Allergan, Seventh Generation, Patagonia, IBM, Adobe, Nike, H&M, etc. have worked a lot in reducing their harmful effects

caused to the environment. Alike these companies, all have to come forward with the thought of saving the environment and adopting eco-friendly marketing techniques.

Saving the natural resources and behaving in an earth-friendly way is a desideratum so thatthe environment and people's health could be hedged from detrimental effects caused by industrial pollutants and by continuous economic growth. This scenario has fostered a new idea of consumption of goods and services which is known as the**"Green Consumerism".**

Green Consumerism can be elucidated as a form of consumerism or a consumption pattern that is well suited with the protection of the environment for the present and for the next ages. It is a concept which is accredited with the consumer's responsibility for thinking about the environmental issues and help combating them through adoption of environmentally friendly behavior. If put simply, **Green Consumerism** refers to a state in which consumers demand products and services that have undergone an eco-friendly production process or the one that involves recycling and safeguarding the planet's resources. **(www.conserve-energy-future.com, 2020).**

1.1 Importance of green consumerism

Green consumerism is an aggregate that identifies the environmental issues as well as the need of the consumers and maintains both of them. The importance of green consumerism includes:

- Reduces the amount of waste generated in the production, packaging and consumption of goods by encouraging reuse-reduce –recycle process.
- Decreases release of pollutants from the industries as well as the emissions that are caused during the transportation of the products.
- It adds up to the energy efficiency which ultimately increases the savings part as it reduces the utility bills.
- Increases the need of consumption of more healthy and eco-friendly food materials which in turn helps promoting the consumption and use of locally and organic grown products.
- It helps sustaining the natural resources for future ages.

Fortunately, the perception of people towards goods and services has changed up to an extent today. They have become much perturbed about the goods they are

consuming concerning about the environment and their own health. The budding consumer awareness about environmental issues has changed the patterns of consumption towards sustainable goods and services **(Yang, 2017).** Lately, consumers have been moving towards the use of **"green products"** that are not much hazardous to environment and their health. Green products are those products that have low impacts on the environment. These are made in such a way that they cause less harm to the environment during their whole life cycle. Green products are durable, have minimal packaging, are mostly made of recycled materials and are non-toxic in nature.The inclination towards going green and being "*Green Consumers"*by*"using green products"*is noticeable. There are many different types of green consumers, varying from the deep-dyedconsumersto some cynical consumers. A 2009 study by the Hartman Group found that there are three main groups of green consumers. They include:

1. **Periphery consumers**:

These are the type of consumers who have started go green and adopt green consumerism. But they don't make any significant changes in the green consumerism pattern as they still do not purchase eco-friendly products and make up only 14% of the green consumers.

2. **Mid-level green consumers:**

They are the type of consumers who not only believe in the concept of green consumerism but theyalso buy eco-friendly products sometimes. These make up the mass of green consumers i.e., 65%.

3. **Core consumers:**

This is a small group of consumers consisting only 21% of the total consumers whoactually are green consumers. They invest in eco-friendly products purchasing them frequently.

1.2 Factors affecting Green Consumer Behavior

Commercial, social and traditional forces have structured green consumerism. It has been chiefly focused at buoying up the consumers to be more aware of the benefits of use of green products and services that do no harm the environment. There are a various factors that influence the consumers buying behavior and towards being green consumer. Some of them are:

- Knowledge and information about green consumerism.
- Economic resources.
- Societal influence.
- Personal values.
- Environmental values and concern about the environmental safety.
- Availability of eco-friendly products.
- Trust on the utility of eco-friendly products.
- An image of the self.
- Need of the products.

These are some the factors that affects the buying intention of the consumers and also their preference towards the type of green products.

According to the**Organic Trade Association,**81% of the consumers purchase green products at least sometimes. The reasons they gave were to maintain good health and to conserve the natural resources. Amongst those 81%, approximately 54% of the consumers preferred green/organic food products and the consumers belonged to the age group of 30 and above and around 25% of them preferred green/organic cosmetic products and these belonged to the age group of 18-30 years. It can be said that most of the consumers buy either organic food or organic cosmetic products but only a few give preference to other categories of eco-friendly products like clothing, home decoration, electronic appliances and many more.

After, the **Environmental Performance Ranking Index (EPI)** came into light, many countries upgraded themselves and contributed in combating severe environmental issues. EPI basically highlights the world's leading countries in progressive environmental performance and policies.

According to **2018 EPI data**, Switzerland currently leads the world in terms of environmental sustainability, with the overall score of 87.42%. The country received almost perfect scores for water quality (99.99), has been ranked second for overall quality of the air as well as climate and energy. It has been called the most improved country over the past decade followed by France (83.95), Denmark (81.60), Malta (80.9), and Sweden (80.51).Unfortunately, EPI considered India in the bottom five performers in a list of 180 countries showing the rate of use of green goods and

services and adoption of green consumerism. A study was done that included around 2000 respondents between the age group of 25-65 from different cities of the country. It was noted that about 88% of the consumers were unable to buy green products because of the absence of affordability and around 89% of the consumers believed that they would be able to address climate change more actively if companies offered alternative solutions to adopt green consumerism.

Emergence of environmental responsiveness and green consumerism shifts has set to a need for consumer research for the market. There has been never seen a better time to bring sustainable offering into light. Consumers, particularly millennial, increasingly say they want brands that embrace purpose and sustainability. Here, comes the role of green market and governmental policies of the country to work more towards green consumerism.

1.3 Green marketing

Green marketing came into light in early 1990's. It is the marketing of goods and services that are considered as to be environmentally safe.As marketing has 4Ps i.e. product, price, place and promotion so does the green marketing i.e., green product, green price, green place and green promotion.

Green product:

According to **Albino *et al* (2009),** green product is a product designed to minimize the environmental impact during its whole life-cycle, ranging from the acquisition of raw materials for production, distribution until purchase and post purchase activities. These products not only save energy, water and money but also help combating the environmental hazards. Some of the brands, for example, Nike,a shoe brand, is first to mark itself as a green brand. Its Air Jordan footwear is eco-friendly. It has made this shoe type to show that it has reduced the use of non-eco-friendly material. **(Silicon India Blogs).**

Green Price:

Green pricing takes into account the people, planet and profit in a way that takes care of the health of employees and communities and ensures efficient productivity. Value can be added to the price by modifying its look, functionality and by customizing **(Silicon India Blogs).**In many of the cases marketers try and charge additional prices

for green products which are clearly unjustified. This may demotivate and discourage customers to be involved in green purchasing behavior.

Green Place:

Green place is all about managing the logistics to lessen the transportation emissions in order to reduce the carbon footprints. For example, instead of marketing some imported fruit in India it can be licensed for the local production **(Silicon India Blogs).**

Green Promotion:

Green promotion means to design the aids used for promoting like advertising, paper, presentations, etc. by keeping people, planet and profits in mind.

In today's era, the society is much worried about the nature and its resources. Keeping in mind the society's budding concerns, business and industries have started to mold their patterns and have begun to integrate issues related with the environment into activities of the organizations. Governments all over have become much worried and concerned about green marketing. Undoubtedly, the demand and awareness of green products and willingness towards being green consumer is increasing tremendously but mostly in developed cities. **Lucy Atkinson, 2015** said that although consumers increasingly claim to be concerned about the environment, they rarely follow through with these concerns in the market. Efforts to identify the details of this attitude-behavior gap or "green gap", have focused on a variety of attitudinal, cognitive and behavioral causes.

In most parts of the world the increase in demand is seen but still in many places there is still lack of knowledge about the concept of green consumerism and behavioral issues are noticed regarding green consumption.Hence, it is pivotal for the consumers to know each and everything about green products. Educating consumers and making them aware about the perks of these products is essential so that consumers use them to the maximum and its usage increase overtime. It must be guaranteed that the negative perception about green products in any facet is pulled down and consumers should be encouraged to make their maximum use.

1.4 Justification of the Study

Seeing the current scenario of the deterioration of the environment, it has become a necessity to make environment sustainableand therefore, there is an urgent need to take up a study in this reference. The current work is undertaken on the notion of making consumers deterrent towards the hazards of using non eco-friendly products. At present, it is essential to get to the depth of knowledge today's consumers have about green consumerism and their willingness towards being green consumers. This study intends to make them aware about importance of using green products so that they contribute in preventing environmental degradationand making it more sustainable.

1.5 Objectives of the study

1. To find the awareness of the consumers regarding consumption of goods that cause harm to the environment and human health.
2. To assess the knowledge, attitude and practices of consumers towards green products.
3. To elicit the factors that affects the decision making of consumers towards buying intention and consumption of green products.
4. To impart knowledge to the consumers regarding benefits of green products consumption those are important for environmental protection.

1.6 Implications of the study

- This study will make consumers aware about the relation of green products consumption with environmental sustainability.
- The study will bring awareness and enhance the knowledge of green product among consumers and will draw their attention towards practice of these products.

1.7 Delimitations of the study

The study will be delimited to:

- Urban consumers who are eighteen years of age and above.
- Locale of the study will be Nainital, Uttarakhand.

REVIEW OF LITERATURE

Review of literature is a systematic investigation to reach new conclusions and establish facts.It provides researcher with the understanding of the coherence of work. Review of literature is an all-embracing pre-requisite to aspire research's endeavor and a scrupulous study of previous literature enables to the consciousness of the researches that have been taken up in the specified area and helps in keeping in touch with recent development.

The array of environmental problems, indicate a change in the ecosystem caused by human activities and challenge our present lifestyles **(Bamberg &M'oser, 2007).** There has been a calamitous impact on environment due to incautious behavior seen in industrialization and urbanization. Some of the worrisome things include dire shifts in the climate, declining of ozone layer, profiteering of both renewable and non-renewable resources, disappearance of flora and fauna, water paucities, and rising measures of air, water, soil and even noise pollution at an alarming pace. For instance, fuel and energy consumption contribute to climate change, and agricultural production of food can lead to eutrophication i.e. there will be excessive nutrients from sewage or fertilizers resulting in increased growth of the plants in water bodies, which in turn cause the extinction of flora and fauna **(Tobler, 2011).** Thus, in totality the province of housing, transportation, and eatables are responsible for approximately 70% of the environmental impacts **(Jungbluth, Nathani, Stucki, & Leuenberger, 2011).**

Much of the issues like climate change, declining of ozone layer, disappearance of flora and fauna, air, water, soil, noise pollution etc. are entrenched in human activities **(Vlek & Steg, 2007),** and thus can be managed by changing the relevant behavior so as to reduce its environmental impacts.

India has sown the seeds of "green revolution" long back to mark the perils of environmental deteriorations and its effects like the changes in climatic conditions, global warming and loss of eco-diversity, health care issues and many more. But the need for more policies and revolutions like this is crucial so that they can address the deleterious impacts of the environmental hazards with potency. Some of the kinds are as under:

One-straw Revolution: it is a system that does natural farming without the use of plough, weeding, any chemical fertilizers or pesticides and herbicides.

Bearing in mind the fresh developments and awareness of the environmental hazards, it was thought that the patterns of consumption needs to be diversified in a more apposite manner so as to take the edge off deleterious impacts on environment. The associated research studies concerning to the current exploration on "Assessment of Green Consumerism on Environmental Sustainability" are reviewed and offered in this chapter as under:

2.1 Impacts of environmental degradation

2.2 Green consumerism and green consumers

2.2 Benefits of green consumerism

2.4 Consumer behavior in consumption of green products

2.5 Components affecting consumer behavior

2.6 Green marketing

2.1 IMPACTS OF ENVIRONMENTAL DEGRADATION

Environmental degradation is happening at an alarming rate and its ill impacts quite visible. The climate is changing drastically, global warming is moving gradually towards its peak, ecological diversity is becoming endangered rapidly, fresh water is scarce, soil is polluted, and air quality is worsening more.

According to **Intergovernmental Panel on Climate Change (IPCC), 2007** increasing global average air and ocean temperature can change the type of precipitation during the winter season. The awareness of the extent to which change of climate can affect the environment, society, and economy is increasing. Long-term climate change has been observed at continental, regional, and ocean basin scales, due to increasing concentration of greenhouse gases particularly carbon dioxide. These include changes in precipitation amounts and timings, arctic temperatures, wind patterns, and aspects of extreme weather like heavy precipitation, drought, and heat waves **(IPCC, 2007).**

The pattern of precipitation has been noticed changing from snow to rainfall in many regions including China, North India, North America and some parts of Europe. Increments in heavy precipitation have been noted even in areas where total rain amounts have decreased **(Barnett, T.P., *et al*., 2008).**

Rao *et al.* (2010) analyzed the annual mean of the temperatures ranging from maximum to the minimum. The study was carried out across varied regions in India.

The study concluded that the increasing maximum temperature was lowest in 20% areas in north and was highest in 75% of the areas in south zone and the increments in the minimum temperature was observed in above 60% over all India.

Jacob *et al.* (2010) conducted a study on the degradation of quality of air due to greenhouse gases. They noticed the degradation of 1^{-10} ppm in the quality of air and also stated that the degradation of air quality to remain constant if greenhouse gas emissions does not reduce.

Schlenkar and Lobell (2010) combined crop production from the past years and data of weather conditions of Africa into an analysis. The crops taken into consideration were sorghum, maize, groundnut, millet and cassava. It was noticed that countries in Africa with the highest yields had the largest yield losses and were more susceptible to heat related losses. They revealed there was 95% probability that the loss may exceed up to 27% more if the conditions remain same.

According to IPCC (2014) extreme weather changes and climate events have been seen since 1950. Some of these have influenced humans along with decrement in the cold temperature extremes, an increment in hot temperature extremes, and increase in sea levels and also increase in the heavy precipitation the regions all through. Carbon which is stored in the biosphere is most susceptible to harm the atmosphere as a result of eco-system degradation, deforestation and climatic changes.

Sima*et al.*(2015) reported that in Romania climatic changes are observed andits ill effects are felt either through thermal discomforts (higher temperatures and heat waves), stronger white-outs in winter, or the major losses in crop production due rain scarcity. They reported that people perceive change in climate and drought, dryness and summers are becoming much more severe. It was also predicted that the temperature in the next 100 years will rise by 2-7 degrees Celsius.

Narain and Sambyal (2016) said that the Central Pollution Control Board's report on Assessment and Quantification of Waste Generation in Cities, estimated that approximately 70 percent of the packaging products are converted into waste in a very short span and its recycling and disposal is a huge problem.

2.2 GREEN CONSUMERISM AND GREEN CONSUMERS

Green Consumerism refers to a state in which consumers demand products and services that have undergone an eco-friendly production process or the one that involves recycling and safeguarding the planet's resources **(www.conserve-energy-future.com, 2020).**

It is defined as a concept that imputes to the responsibility of the consumers for taking into consideration the environmental issues and then adopting environmental friendly behaviors, such as using organic products, clean and renewable energy sources and doing the research of goods produced by companies with zero, or almost zero, impact. **(en.m.wikipedia.org, 2015).**

Sharma *et al.* (2014) defined green consumerism as a concept that individual consumer would adopt if their wants and needs are satisfied in their everyday routine and very little or no harm is caused to the environment.In the last few years, it has been observed that consumers are showing much interest and are more inclined towards purchasing green products and hence are called Green Consumers.

According to **Cambridge Business English Dictionary (2014)** green consumer is one who wants to buy things that have been produced in a way that protects the natural environment.

A green consumer is one who is very concerned about the environment and, therefore, only purchases products that are environmental friendly **(Sinha, 2018)**

Boztepe (2012)defines a green consumer as one who avoids products that are likely to risk the health of the consumers, causes major harm to the nature during their produce, usage or disposal, consumes gigantic energy amounts, causes waste, use materials derived from threatened flora and fauna, involves cruelty to wildlife or adversely affects the universe.

Consumers who take into account the environmental impact on their consumption pattern and willing to change their purchasing behavior can be regarded as green consumers **(Ritter et al., 2015).**

2.3 BENEFITS OF GREEN CONSUMERISM

After bearing in mind the effects of production of conventional goods on the environment, it has become crucial to adopt and practice green consumerism to the maximum. According to **Conserve Energy Future(2020)** green consumerism allows for the efficient use of energy, which ultimately helps in saving money, reducing utility bills, lowering greenhouse gas emissions and enables the economy to meet peaking energy demands.

By combining earth-conscious outlook with the safety practices, businesses can flourish with a wealth of benefits and also cut down the expenses which are linked with unnecessary waste **(Prinzing, 2013).**

Shukla (2015) said that green consumerism is a way to use the environmental benefits of a product or service to promote sales. With green Consumerism, advertisers can emphasize on environmental benefits to sell products such as recyclable diapers, energy-efficient bulbs, eco-friendly detergents, etc.

According to **Construction World (2016)** green consumerism is worthwhile to adopt for consumers and companies both if they want to contribute in environmental protection and improve the company's performance and operations. It may be more costly to implement and adopt initially but the long term benefits of green consumerism should not be overlooked.

Lamoureux(2017) said that green consumerism comprises of varied elements like recycling and management of waste, use of renewable energy sources, considers energy efficiency, water conservation, organic production and more. These elements collectively contribute much in environmental protection and sustainability.

Atlas and Florida (2018)stated that green consumerism can lead to lower raw material costs, recycling wastes, rather than purchasing virgin materials, production of efficiency gains, reduced environmental and occupational safety expenses and improved corporate image.

According to **United Nations Sustainable Development(2018)** green consumerism would also include analysis of efficiency, infrastructure, and waste, as well as access to basic services, green and decent jobs and a better quality of life for all.

2.4 CONSUMER BEHAVIOR IN CONSUMPTION OF GREEN PRODUCTS

2.4.1 Knowledge:

Thakar*et al*. (2009) sought to measure knowledge levels of the market, apropos of green marketing of automobiles. A few things were singled out that are probable to help the marketers design and reformulate green strategies and approaches: social responsibility, contender's activities and discerned cost profitability perks and government directives.

Robelia and Murphy (2012) ascertained high levels of knowledge about several environmental problems like what are renewable resources, what gives rise to habitat deterioration but dispiriting levels of knowledge about the others like climatic change, production of energy and quality of water. Around 75% of the consumers had knowledge about the above mentioned problems. They said, pro-environmental choices are tough to be made if the consumer has inaccurate or no knowledge.

Levine &Strube (2012) conducted a study on 90 college students on their knowledge about green consumerism and environmental issues and how it affects buying behavior. The results showed that the knowledge significantly affected the buying behavior of 73 per cent the consumers. It was further stated that knowledge about green consumerism should be counted as necessary for relevant decision making.

Maheshwari (2014) affirmed that around the globe, knowledge and awareness about going green has risen but in the country India, consumers are in the budding stage of knowledge about green consumerism. She added that there is no single product in the market which is entirely eco-friendly. There is a vast gap between consumer behavior and their beliefs. She further stated that 60 per cent consumers had knowledge of green consumerism and green products; still they did not consider themselves green consumers.

Moses *et al*. (2016) evaluated knowledge of sources, consequences and commuting measures of global heating among population of industrial zones of Nigeria. By the study it was inferred that the 91 per cent of the respondents had notable knowledge of global heating. In counsel, public's environmental haleness should be promoted through integrated and multidisciplinary research and the expansion of all-in environmental health and safety intervention approach.

2.4.2 Attitude:

Manaktola and Jauhari (2007) explored the aspects regulating consumer attitude with regard to green practices in the lodging industry of India. The study picked 66 consumers of NCR and studied their attitude regarding green practices in Indian lodging industry. The study divulged that 85 per cent consumers favored those hotels which had acquired green practices, but concurrently they were found to be considerably anxious about the quality of service. Besides, it was also found that in spite of the positive attitude about green practices, 79 per cent consumers were not agreeable to spend more amounts for green practices in hotels.

Saxena*et al*. (2010)conducted a study on 1000 companies to examine their attitude towardsgreen consumerism. The results showed positive attitude of the companies towards green consumerism with a score of 4.11 out of 5 on Likert Scale.They also asserted that with the positive view of consumers towards green consumerism, firms can hold out to diverse green sections by designing effectual unified marketing communications going with the associated profiles, by emphasizing on their product's utility proposition and competitive disparities.

Chen and Chai (2010) conducted a study to investigate attitude of the consumers towards green consumerism. The findings propounded that the gender causes not much difference in the attitude towards green products. It was further stated that there exists a significant relationship between the role of government and the attitude of consumers towards green consumerism.

Gadenne*et al*. (2011) by means of survey on consumer environmental behavior averred that consumer's attitudes are the grounds that shift their behavior over the course of time from unmoved to ultimately condescending eco-friendly products. As their attitudes towards eco-friendly products continue to change, green marketing stands to earn profit markedly.

Mittleman (2012) found that in the numerous researches, the attitude towards sustainability by and large seemed to be very positive. All consumers were well acquainted with the sustainability hurdles and thought it is of utmost importance to build a healed world for their descendants. Consumers admire the fact that agencies think about the sustainability hurdles and proffer customers an option to purchase green. The attitude towards purchasing green products was positive. Consumers

indicated the viewpoint that it would be better for them to buy green goods and all ascertained to become green consumers and will not buy regular products.

Paladina and Serena (2012) studied the attitude of consumers towards environmental concern and green consumerism. It was observed that the attitude towards green products corresponds weakly with the purchase intent. Findings refute each other, since there were varied outcomes of the two measures of green purchasing behavior. In the foremost, 40 per cent respondents specified how frequently they bought various green products. The other measure was more notional as respondents told about monetary percentage spent on green products. On this basis, it was stated that the attitude towards green consumerism holds no foreseen value: an attitude-behavior gap lives. There is, however, a methodological trouble which might describe this contradictory finding. When respondents responded the articles on their attitude towards green products, they had just been briefed with examples of green products, which are partly the selfsame products used to measure the actual purchasing behavior. So, this could elucidate why no attitude-behavior gap lives when using these measures.

Bhatia and Jain (2013) explored the partaker's preferences toward green marketing participate practice and products. The study included 160 participants. The results said that 86 per cent of the consumers were well aware about green products. It further revealed that green values, knowledge about these products and practice altogether had positive effect on the consumer's conviction on buying and preferring environment-friendly products over other conventional products.

Maheshwari (2014) conducted a study on belief and attitude of green marketing. The study inscribes the influence of marketing attempts made by marketers with regards to the consumers. The samples of the study were 120 women of the age group 21-45 years in cities of Madhya Pradesh. This study ascertains the aliveness of an environmental value-action gap, a gap between consumer's beliefs over being green consumers. It has emphasized varied characteristics of consumer behavior and stated that consumer preference for greener goods could be influenced by marketing. The study included that Indian manufactures have yet to find a market for green products, as consumers have low awareness about them because of the insufficient efforts made by the marketers. But by embracing the green imperative, and investing in green initiatives and consumer education, Indian brands can break this vicious cycle.

Paul *et al*. (2016) remarked that knowledge about environment has great influence on attitude, intuitive norm, and discerned behavioral control towards green products. When consumers have good levels of knowledge about green consumerism then only they will possess a positive attitude towards being green consumers by using green products. With respect to this the government, private ownerships, and marketers have to expand public interventions and making it crystal clear that how use of environment-friendly goods could help in combating and reducing unpropitious impacts on the environment and enhance the consumer's will to purchase green products.

Handayani and Wiwik (2017) in their study found that consumer's attitude for green goods are a psychological tendency that can be revealed by assessing particular entity with some advantageous or disadvantageous considerations. The major issue was the lack of knowledge about green products among consumers which ultimately lead to no usage of green goods for healthcare and environmental protection.

Chen and Tung (2018) carried out a study on consumer's attitude towards being green consumers. 120 samples were selected for the study in Feng Chia University. The study inferred that government establishments are required to encourage in schools and proclaim green strategies and environmental safety. Communal influences and perceived pecuniary values markedly alter consumers attitude for buying green goods.

2.5 COMPONENTS INFLUENCING CONSUMER BEHAVIOR:

D'Souza et al. (2007) conducted a research on Australian green consumers with respect to their buying behavior of green products. They investigated the hold of price and quality attributes of goods and services for purchasing intention of green products by consumers. They developed a model which foretold that consumer behavior was highly regulated by the price and quality attributes of the goods and service in succession with the consumer's environmental beliefs. The analyzed data suggested that consumers were much fascinated by the better quality of green products rather than by high prices of those goods.

Kaman (2008) in his study on 2,975 males and 3,035 females selected by random sampling method observed green buying behavior, concern for environment, earnestness towards environmental hazards, one's duty towards safeguarding

environment, communal influence and concern for self-contemplation in protecting the environment. Results described that communal influence does not majorly affect the buying behavior, following the environmental concern and then the concern towards self-contemplation in environment safety activities, and environmental responsibility as the hindmost predictor.

Gupta and Ogden (2009) undertook a study to give an explanation of the contribution of societal groups in buying green products using social dilemma theory and reference group theory. Study discerned a difference between green and non-green customers using discriminate analysis. It was stated that various aspects of consumer viz. faith and trust, in-group recognition, expectations, liaison and virtue were prominent in distinguishing between green and non-green consumers. Taking into account the value aspects of green consumers, the study revealed that influence of reference groups and hawkers should use the related spokesperson in the marketing communication to gear up the concept of green consumerism.

Peattie (2010) elucidated consumption of green goods and services as, an economic, a physical, and a social affair that is influenced by the person's disposition, circs, and psychology and also the region, traditions, politics and infrastructure of community they live in. This study reveals that consumer behavior is unknown without studying its different facets. Green consumer can be acknowledged as someone who refuses to purchase any product that is hazardous to any flora and fauna and even humans by its production or distribution process.

Mainieri et al (2010) examined variables that speculated consumer behavior towards green purchasing. The results of the study deduced that the predicted particular beliefs of the consumers predicted the green purchasing variables. It was also noted that females were more concerned about the safeguard of the environment than men and on the aspects of green buying as well.

Abeliotis et al. (2010) conducted an analysis and explored the profile of consumers from Greek with respect to their association with the reduce-reuse and recycle deeds in order to combat and reduce the environmental hazards. The study found that 51% consumers had an issue with the eco-friendly products being extortionate, whilst 82.6% consumers were inclined toward paying a high price for eco-friendly products.

Furthermore, it was discovered that men had more accepting nature for green products despite of those products being expensive.

Siringi (2012) did an assessment on green consumer behavior of old grad professors of various subjects such as commerce, arts, science and technology and pharmaceutical sciences of Andhra Pradesh University. The results of the study asserted that university professors favored magazines and television as prominent fount of information about green goods and services. Apart from this, the study gave eight factors that strongly affects the green consumer behavior viz. eco-label, purchase criteria, need for environmental knowledge, shopping behavior, saving energy, buying behavior, preference of green outlets and awareness of green outlets.

Borin*et al*. (2013) selected 416 college students to conduct a study which was aimed to estimate the intent of consumers on buying of new green and revamped goods, green firm procedures and a non-eco-friendly good or process. They estimated that purchase intentions for green product and process strategies are much higher than the non-greens. Cost and brand labels do not support green strategies.

According to**Akenji (2014)** there exist dissimilarities between green consumerism and sustainable consumerism. Green consumerism is majorly about purchasing behavior of green goods, reusing and recycling of goods, and producing them in an efficient manner. It was also elaborated that green consumerism is aided by the government to circumvent the rise of environmental challenges. The buying of green goods and services, just for the sake of flaunting in the community that the individual is concerned with the societal benefits, usually leads to the misapplication of green products.

Laddha and Malviya (2015) carried a study to acknowledge the green buying behavior of consumers. Some of the aspects taken into consideration were pro-environmental concerns, awareness of environmental hazards, knowledge of environment-friendly goods, and the education of consumers. After the analysis it was deduced that the concern about environment is enhancing and the concept of green consumerism is trending.

Karatu*et al*. (2015) examined the reasons behind green buying intentions and to explore the expanse of conciliating effects of green trust and on the determinants. The medium for collecting data were questionnaires which were distributed to lecturers in

universities in Nigeria. It was perceived that awareness and availability of green goods and services will intensify green purchase intentions.

Rahman *et al*. (2017) highlighted the determination of marketers in upgrading green brand awareness in the consumer's intellect. The study encompasses the results of a survey conducted. The study affirmed that despite of scope to a great extent in Bangladesh market for green goods and services to be deployed there was a communication void between marketing of green goods and services and consumers. The study wants such marketing strategies promotion techniques that would fill the void and encourage consumers to buy green.

Rahman and Haliza (2018) found that there are numerous factors that affect buying behavior. Some of them are socio demographic variables, cognizance, acquaintance with green products, parental influence and fellow peer beliefs, and product cost and grade. Consumers worry towards the nature does not certainly renders into green purchases. There is actually a void between consumer's attitude and consumer behavior that needs to be filled.

2.6 Green Marketing:

The environmental problems affect the human activities, government have made policies that says to include green issues in the academics. As the consumers have shown and are showing very much concern towards the nature, business and firms have pioneered steps to make modifications in their attempts and behaviors to address the consumer's fresh concerns. Some of the firms and businesses have very swiftly accepted the environmental management systems and waste minimization procedures and have lent a big hand in the field of environmental protection. One of the few business areas where environmental concern has received much discussion is **"green market".** According to The American Marketing Association, Green Marketing consists of all activities designed to generate and facilitate any exchanges intended to satisfy human needs or wants, such that the satisfaction of these needs and wants occur with minimal detrimental impact on the environment.

Green marketing thus refers to holistic marketing concept wherein the production, consumption and disposal of products and services happen in a way that is less detrimental to the environment with growing awareness about the implications of global warming, non-biodegradable solid waste, harmful impacts of pollutants, etc.

A much detailed understanding of consumer behavior and intentions is needed to be done by the marketers so as to make green consumerism a market acceptance.

Lee (2008) characterizes the development of green marketing as encompassing three stages: introduction in the 80's, the consumer backlash of the 90's and the third stage that commenced with the new millennium. Researcher argues that increasing environmental concerns, technological innovation, and other stricter regulation have created a new momentum that will move eco-friendly business into the mainstream.

However, despite some resurgence of interest, research indicates that green marketing is still failing to engage consumers **(Ozaki et al., 2008).**

Kotler and Keller (2009); Jaideep (2016) said that marketers must identify the circumstances that trigger a particular need. He can collect information from a number of consumers regarding how stimuli spark an interest in products. Based on information, they can develop marketing strategies to trigger consumer interest.

They stated that interested consumers will try to seek information. They read newspapers and magazines, watch TV, visit showrooms or dealers, discuss with friends and relatives, they will visit online sites and try all possible means to get information about green products.

Where the marketers are making efforts and are gearing up towards the pro-environmental behavior, it is also the responsibility of the consumers to adopt green consumerism. **Carrigan *et al.*, (2009)** found that even very ethically conscious consumers are inconsistent and flexible in their purchase behavior.

Ghosal (2011) stated that green marketing is still in the budding stage. In the viewpoint of marketing academic, green marketing is about eco-levels and market segments and a part of structural factors and lucrative inducements in influencing consumer behavior. The green marketers should be cognizant of satisfying two aims: ameliorate environmental quality and gratify customers. **Johnson, (2011)** said that the environmental stimuli can influence the way the marketing stimuli is structured.

Shafaat and Sultan (2012) conducted a study on 150 consumers in Bhopal city to investigate the influence of green marketing mix on buying behavior. They asserted that obstacles confronted by the green marketer include the paucity of standards and consent among the consumers about what literally "green" is. Even with these challenges, green marketing carries on with gaining acceptance, particularly in view

of growing extensive concern about climatic change. Corporations are volunteering to show their allegiance to reduce unpropitious climate impacts of goods and services belonging to them. Green marketing can play a key role in sustainable development so companies must tweak some fresh methods to endure it to be insistent in this competitive environment.

Jaideep (2016) concluded that the need is a source or force of buying behavior. Need impels an individual to act or to buy the products. Marketers must focus on the unmet needs of the consumers.

Tintin (2017) said that the cultural, social, psychological and personal factors cause consumers to develop product and brand preferences. Although many of these factors cannot be directly controlled by marketers, understanding of their impact is essential as marketing mix strategies can be developed to appeal to the preference of the target market.

Through the reviews related to the impacts of environmental degradation, green consumerism and it's benefits, aspects of consumer behavior such as knowledge, attitude and practice, factors affecting consumer behavior and green marketing, varied conclusions can be drawn, such as consumer's attitude has indicated an environmental friendly behavior, knowledge must be regarded as a necessary condition for the decision making process and making green consumerism a practice, as according to **Fielding and Head(2012)** 'even self-reported knowledge, weak as it may be, seems to predict more' besides this there can be various personal and social influences also that decide whether a given person will tend to have concern about the environment or adopt green consumerism.

METHODOLOGY

Methodology is the systematic, theoretical analysis of the methods applied to a field of study. It comprises the theoretical analysis of the body of methods and principles associated with a branch of knowledge. Typically, it encompasses concepts such as paradigm, theoretical model, phases and quantitative or qualitative techniques (**Bruce L. Berg, 2004**).

The research methodology used for the present study has been discussed below:

3.1 Area of the study

3.2 Selection of sample

3.3 Development of research tool

3.4 Procedure of data collection

3.5 Analysis of data

3.1 AREA OF THE STUDY:

The present study has been conducted in the city of Nainital in Uttarakhand state.

This area was premeditatedly selected because the study focuses on the "Assessment of Green Consumerism on Environmental Sustainability" and the people of Nainital are concerned about environmental sustainability, as the place is a hill station visited by several people every year. The means of transport and human activities lead to pollution and depletion of the natural resources. Many NGO's run and organize campaigns in Nainital for saving the environment and natural resources for future generations which helped the researcher in eliciting the information from the respondents.

3.2 SELECTION OF THE SAMPLE:

The sample size for the present study was 120 males and females of 18 years of age and above. Stratified random sampling technique was used to select the equal number of respondents in male and female category and thus 60 male and 60 female respondents were selected.

3.3 DEVELOPMENT OF RESEARCH TOOL:

Questionnaire method was used to collect data and information from the respondents. A semi-structured questionnaire was developed with following categories:

a) General Profile

b) General awareness of the respondents about green products, environmental sustainability, environmental responsibility, impact of consumerism on environment and protecting environment through green consumerism.

c) Developing an Assessment Scale to assess the knowledge, attitude towards buying and practice of using green products.

3.3.1 General profile:

The basic information of the respondents like name, age, occupation, income, education etc. was elicited.

3.3.2 General awareness:

As per the first objective of the study, this part of the questionnaire was framedto find the awareness of the consumers regarding consumption of goods that cause harm to the environment and human health. Semi-structured questions respondents about green products, environmental sustainability, environmental responsibility, impact of consumerism on environment and protecting environment through green consumerism were developed to procure data from the respondents.

3.3.3 Assessment Scale:

A scale was developed for the respondents. Knowledge and awareness about environmental hazards, green consumerism and their relation with each other, awareness of the brands and eco labels, consumer behavior in using green products, price consciousness, purchasing intentions of the consumers, etc. were included. The scale was standardized on the five point Likert rating scale. Likert scale is rating scale which is often used in questionnaires to measure respondent’s preferences or degree of agreement or opinion. Respondents indicate their level of agreement on particular statements.

The steps in developing the assessment scale are as follows:

Step 1- Listing of the statements for scale:

The scale was divided into three categories; **knowledge, attitude and practice** of the respondents in green consumerism and environmental sustainability. The first step was listing of the items on various parameters such as knowledge regarding environmental deterioration, green product's certified marks, eco labels, price consciousness, and availability of green products, market and brands offering green products, buying and using intentions, eco-packaging of the products, awareness of the quality, impact on human health etc. was done. The statements were made in English. A list of total 100 statements was made regarding knowledge, attitude and behavior. The list was then given to a panel of 4 experts from the field of Resource Management and Consumer Sciences, Human Development and Family Studies and Foods and Nutrition. The experts rated each statement as excellent, good and poor. They were also entreated to check the statement for the language, significance and content. Statements which were rated as excellent and good were included in the scale after discussion with the panel of experts. 23 statements were related to knowledge, 17 statements were related to attitude and 18 statements were regarding practice.

Step 2- Rating of the statements:

The list of the statements was then given to 120 respondents selected for the study to give their responses on each item on a five-point Likert scale viz:

S. No	**Response**	**Score**
1.	Strongly agree	1
2.	Agree	2
3.	Undecided	3
4.	Disagree	4
5.	Strongly disagree	5

3.4 DATA COLLECTION:

The questionnaire was given to 60 males and 60 females selected randomly. The subjects were contacted and responses were collected personally from them.

3.5 ANALYSIS OF THE DATA:

Data analysis is a process that relies on methods and techniques to take raw data, mining for insights that are relevant to the methodology primary goals, and drilling down into this information to transform metrics, facts, and figures into initiatives for improvement. The data on the background information, awareness of the respondents regarding environmental sustainability and green consumerism, knowledge, attitude and practice of adopting green consumerism was put to suitable analysis to draw results.

Statistical measures used:

- **Frequency**

With the provided data of the respondents frequency was found for each category. In statistics, a frequency distribution is a list, table or graph that displays the frequency of various outcomes in a sample. Each entry in the table contains the frequency or count of the occurrences of values within a particular group or interval.

- **Percentage**

Percentage method refers to special kind of ratio which is used in making comparison between two or more series of data.

The total scores acquired were tabulated and converted in percentage and similarly ratings acquired from the knowledge scale, attitude scale and practice scale were noted in conformity with the scores and the percentage was calculated.

$$P = X/Y * 100$$

- **Correlation analysis**

Correlation analysis is a technique used to measure some type of correlation, means a statistical relationship between two or more variables. The variables may be columns of a given data set of observations known as sample or components of a multivariate random variable known as distribution. This particular type of analysis is useful when a researcher wants to establish if there are possible connections between variables. In

the present study correlation was done to find the correlation between age, gender, occupation, income, occupation and marital status with knowledge, attitude and practice of the respondents for green consumerism.

$$r_{xy} = \frac{Cov.(xy)}{\sqrt{Varx.Vary}}$$

3.6 DEVELOPMENT OF IEC MATERIAL:

An informative folder and poster was made to educate and make people aware regarding green consumerism and environmental sustainability.

3.7 EXISTING FACILITIES:

The existing facilities available in the department of Resource Management and Consumer Sciences, College of Community and Applied Sciences, MPUAT, Udaipur were used for conducting the present study.

RESULTS AND DISCUSSION

Consumers play a great role in making the environment sustainable. Global demands and marketing are affecting the consumerism today. Consumers are involved in wasteful and excessive consumption which have alleviated harmful environmental impacts. At present nearly half of the global consumers live in developing countries including approximately 130 million in India. Forces such social, economic and cultural are now setting the framework for green consumerism. The people are being encouraged to become green consumers and use products and services that do not harm the environment.

This chapter presents the results and discussion of the data obtained from the survey of the respondents regarding the present study. The data related to general profile of the respondents like age, occupation, income, educational qualification along with respondent's knowledge, attitude and practices towards green consumerism and environmental sustainability were computed and analyzed.

4.1 GENERAL PROFILE OF THE RESPONDENTS:

The section of general profile of the respondents contains data of attributes like age, annual income, educational qualification, occupation and marital status. The data will help to understand the relation of these attributes with green consumerism and environmental sustainability.

4.1.1 Age of the Respondents:

Age is one of the most important factors to go through when taking consumer behavior into account.

Table 1 : Age of the Respondents

(N=120)

Age	Frequency			Percentage		
	Male	Female	Total	Male	Female	Total
18-30	21	23	44	17.5	19.1	36.6
30-55	23	22	45	19	18.3	37.3
55-65	16	15	31	13.3	12.5	25.8

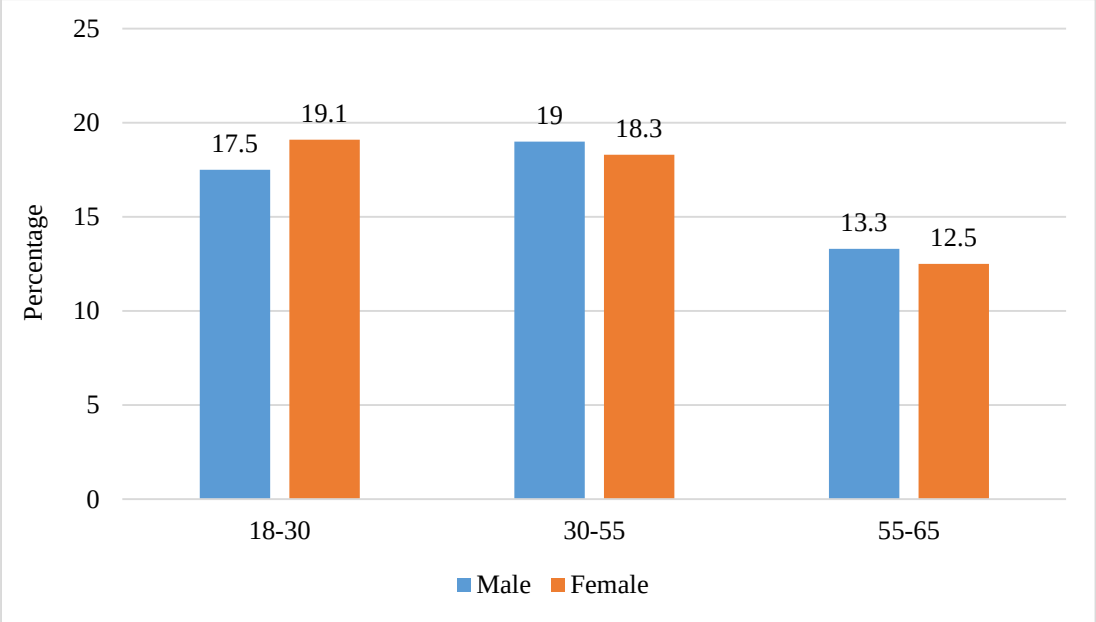


Fig. 1: Age of the Respondents

As depicted in Table 1 and Fig.1 respondents between the ages of 30-35 years were 37.3 per cent out of which 19 per cent were males and 18.3 per cent were females. Respondents of the age group of 18-30 were approximately 36 per cent amongst which 19 percent were male respondents and 18.3 percent were female respondents followed by the 55-65 years age group where total respondents were 25.8 per cent i.e., 13.3 per cent male respondents and 12.5 per cent female respondents. According to the data it can be stated that majority of the respondents i.e. approximately 75 per cent belonged to the age group of years 18-55.

Various research works tell that consumers of young age are more willing to adopt new ideas related to green consumption (**Marielle, 2010).** But in other research, it also has been seen that elderly show more pro-environmental behavior as compared to the younger generation.

4.1.2 Monthly Income of the Respondents:

Income determines the purchasing behavior of the consumer. The change in income leads to the change in purchasing pattern to maximize the income utility. Global data shows that 61 per cent of millennial (aged 22-35) are more likely than any other generation who are ready to pay extra for eco-friendly and sustainable goods followed by the generation (aged 36-54) consumers.

Table 2: Monthly Income of the Respondents

(N=120)

Income(in Rs/-)	Frequency			Percentage		
	Male	Female	Total	Male	Female	Total
Below 30,000	6	4	10	5	3.3	8.3
30,000-60,000	11	17	28	9.1	14.1	23.2
60,000-90,000	23	18	41	19.1	15	34.1
90 and above	20	21	41	16.6	17.5	34.1

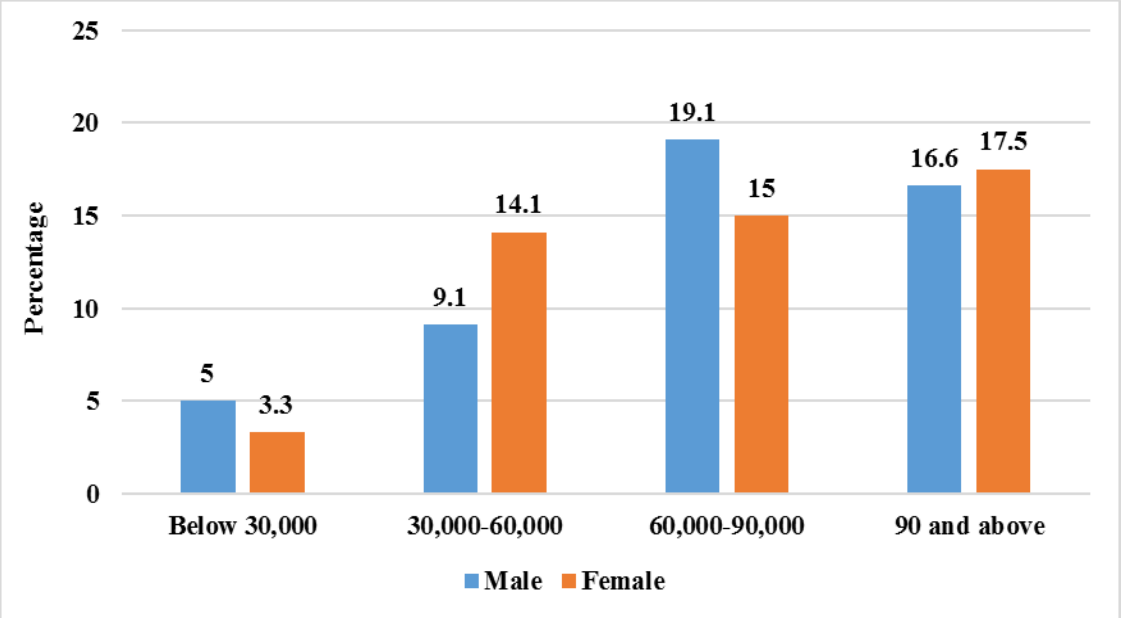


Fig.2 Monthly Income of the Respondents

Global data shows that 61 per cent of millennial (aged 22-35) are more likely than any other generation who are ready to pay extra for eco-friendly or sustainable products followed by the generation (aged 36-54) consumers.

Table 2 and Fig.2 depicts the monthly income of the respondents. It was observed that approximately 68 per cent of the respondents had monthly income of more than Rs.60, 000/-. The monthly income of 8.3 per cent of total respondents was below Rs.30, 000/-. The remaining 23.2 per cent of the respondents had an income of Rs 30,000-60,000/- monthly. The data revealed that all the male and female respondents were earning.

4.1.3 Educational Qualification of the Respondents:

Educational qualification plays a vital role in accumulating the information and knowledge about green products in a beneficial manner. Studies have proven that educated consumers do perceive environmental hazards in a better way and are comparatively more sensitive towards the environmental issues (**D'Souza *et al,* 2007).**

Table 3: Educational Qualification of the Respondents (N=120)

Education	Frequency			Percentage		
	Male	Female	Total	Male	Female	Total
Secondary	9	7	16	7.5	5.8	13.3
Graduate	36	39	75	30	32.5	62.5
Post Graduate	15	14	29	12.5	11.6	24.1

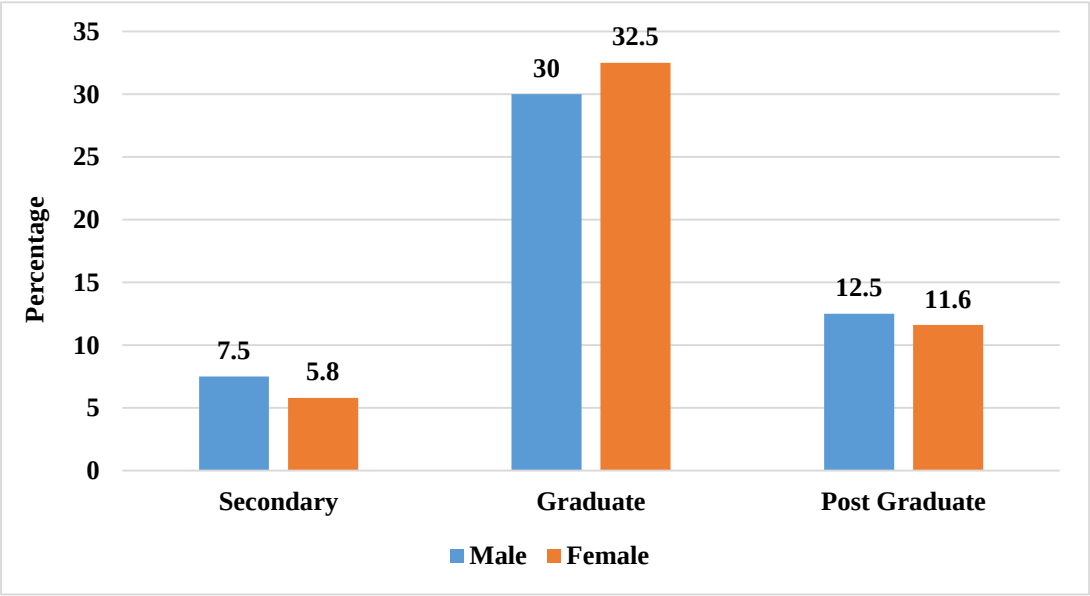


Fig.3 Educational Qualification of the Respondents

Studies have proven that educated consumers do perceive environmental hazards in a better way and are comparatively more sensitive towards those issues (**D'Souza *et al,* 2007).**

Table 3 & Fig.3 depicts the educational qualification of the respondents. It was noted that 62.5 per cent of them were graduates in which 30 per cent were males and 32.5 per cent females followed by 24.1 per cent of the total respondents who were post-graduates. 13.3 per cent of the total respondents had secondary education. Thus, the data reflects that majority of the respondents were graduate or post-graduate.

4.1.4 Occupation of the Respondents:

Occupation plays a vital role in influencing the purchasing decisions of the consumers. It directly affects the brands and products consumers pick for themselves.

Table 4: Occupation of the Respondents

(N=120)

Occupation	Frequency			Percentage		
	Male	Female	Total	Male	Female	Total
Students	2	3	5	1.6	2.5	4.1
Doctors	19	5	24	15.8	4.1	19.9
Teachers	15	33	48	12.5	27.5	40
Engineers	8	4	12	6.6	3.3	9.9
Business Person	12	7	19	10	5.8	15.8
Others	4	8	12	3.3	6.6	9.9

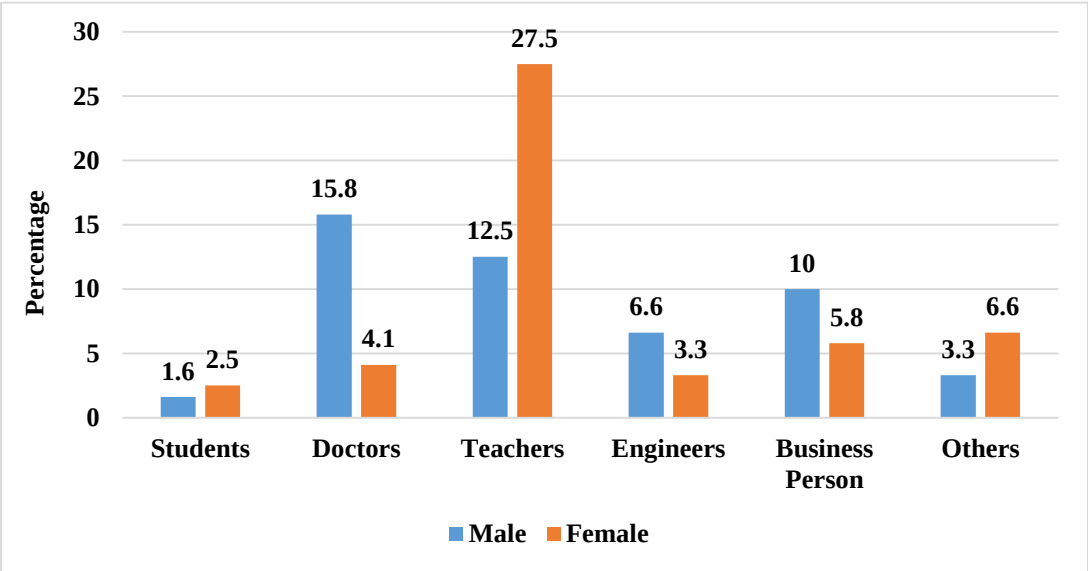


Fig.4 Occupation of the Respondents

Data in Table 4 and Fig.4 reveal that the respondents were engaged in various occupations. 19.9 per cent were doctors, 40 per cent were in teaching profession in schools and colleges, approximately 16 per cent were in business and engineers were 9.9 per cent. Approximately 10 per cent were engaged in other occupations such as farming, etc. It can be asserted t\from the data that majority of the female respondents were from the teaching profession and more male respondents were doctors by profession.

4.1.5 Marital Status of the Respondents:

Consumer purchasing behavior is depends on marital status. Studies have found that married consumers are highly influenced as compared to unmarried consumers with reference to purchasing decisions and buying behavior.

Table 5: Marital Status of the Respondents

(N=120)

Marital Status	Frequency			Percentage		
	Male	Female	Total	Male	Female	Total
Married	47	52	99	39.1	43.3	82.4
Unmarried	13	8	21	10.8	6.6	17.4

The data in Table 5 reveal that majority of the respondents i.e., 82.4 per cent were married i.e., 39.1 per cent males and 43.3 per cent were female respondents were in this category. The remaining 17.4 per cent of the total respondents were unmarried including 10.8 per cent males and 6.6 per cent females.

4.2 Awareness of the respondents regarding Environmental Sustainability and Consumerism:

This section reflects theawareness of the respondents regarding the harmful effects that non-green goods cause to the environment and the causes of environmental degradation. Also the awareness of the respondents regarding green products, source of information and the buying practices of the respondents was elicited.

4.2.1 Consumerism and its Impact on Environment:

As the demand for goods is increasing, it is obvious that the need to produce these goods is also increasing. The consumerism is destroying the environment as it is

leading to more pollutant emission, destruction of forest, biodiversity, climate change and increased waste accumulation on earth. The consumption of non-green goods is having a significant impact on the environment.

The data revealed that about 98 per cent of the respondents were aware of green products. Approximately 63 per cent of them considered themselves as green consumers. All 100 per cent of the respondents had heard about organic food items, disposable cutlery and solar energy appliances followed by approximately 96 per cent who were aware of green personal care and beauty products amongst which majority i.e. 50 per cent were female respondents. Further the data depicted that approximately 92 per cent of the respondents were knowing that green products and environment are related. From amongst the total respondents, 97 per cent considered themselves environment friendly and 100 per cent felt that use of green products helps in protecting the environment.

Table 6 depicts that for approximately 98 per cent of the respondents the biggest environmental concern was environmental pollution followed by 98 per cent who considered increased global warming as the biggest concern. Approximately 93 per cent considered health degradation as the major concern followed by 90 per cent who considered deforestation and waste accumulation as the major concern.

Table 6: Consumerism and its Impact on Environment (N=120)

Impact on Environment	Male	Female	Total
Pollutes the Environment	60 (50.00%)	57 (47.50%)	117 (97.50%)
Increase Global Warming	46 (38.33%)	52 (43.33%)	98 (81.66%)
Leads to deforestation	58 (48.33%)	50 (41.66%)	108 (90.00%)
Accumulate waste on Earth	60 (50.00%)	48 (40.00%)	108 (90.00%)
Degrade the health	66 (46.66%)	56 (46.66%))	112 (93.33%)
Damage to biodiversity	47 (39.16%)	39 (32.50%)	86 (71.66%)
Resource depletion	53 (44.16%)	49 (40.83%)	102 (85.00%)
Toxic by-products	41 (34.16%)	37 (30.83%)	78 (65.00%)
Greenhouse gas production	57 (47.56%)	50 (41.66%)	107 (89.16%)

4.2.2 Environmental Responsibility of the Respondents:

Environmental responsibility refers to the state when a person shows his intention to take action in remediation of environmental problems acting not as sole consumer with his own economic interest but acting as a responsible citizen with the concept of societal environmental wellbeing **(Stone et al., 1995).**As the natural resources and environment is getting degraded day by day at a very rapid pace, consumer being the king of the market needs to become more responsible towards their buying behavior and adopt such activities that results in very less harm to the environment. Therefore the sense of responsibility of the respondents towards environment was found. This data will help to interpret whether the respondents were responsible consumers.

Table 7: Environmental Responsibility of the Respondents (N=120)

Particulars	Male	Female	Total
Buying quality products warranted against failure or wearing out.	47 (39.16%)	51 (42.50%)	98 (81.66%)
Learning about the materials that are used for manufacturing.	13 (10.83%)	25 (20.83%)	38 (31.66%)
Use of energy efficient equipment in homes/offices	58 (48.33%)	58 (48.33%)	116 (96.66%)
Purchasing products that can be reused/recycle	12 (10.00%)	23 (19.16%)	35 (29.16%)
Community resource sharing	3 (2.50%)	3 (2.50%)	6 (5.00%)
Looking for new and safe ways of waste disposal	39 (32.50%)	40 (33.33%)	79 (65.83%)
Buying local products rather than global products	54 (45.00%)	56 (46.66%)	110 (91.66%)
Seeking for organic/eco-friendly products	42 (35.00%)	54 (45.00%)	96 (80.00%)
Making changes in lifestyle to support future generation	50 (41.66%)	50 (41.66%)	100 (83.33%)
Having a pro-environmental attitude	52 (43.33%)	49 (40.83%)	101 (84.16%)
Using organically grown food rather than processed food	53 (44.16%)	60 (50.00%)	113 (94.16%)
Less use of meat/pork etc. as it require more water during processing	49 (40.83%)	38 (31.66%)	87 (72.50%)
Use of renewable energy sources	39 (32.59%)	23 (19.16%)	62 (51.66%)

According to the data depicted in Table 7majority of the respondent i.e. approximately 97 per cent of the respondents consented that energy efficient equipment should be used in homes and offices. Around 94 per cent of the total respondents considered using organically grown food over processed food important. 81 per cent of the respondents preferred buying quality products warrantied against failure or wearing out followed by approximately 84 per cent who were having pro-environmental attitude and who considered changing lifestyle as an important responsibility for future generation. Very few respondents i.e. 5 per cent considered community resource sharing important.

Rex and Baumann (2007) explained that increment of environmental responsibility of an individual definitely triggers his/her green buying behavior. **Sinnapan and Rehman (2011)** in their study revealed that consumer would take actions if the environmental hazards affect their health and life quality severely.

4.2.3 Causes of Environmental Degradation:

Environmental degradation is the destruction of natural resources, ecosystem, increase in pollution, extinction of wildlife, etc. Any harm to the environment and natural resources is environmental degradation. The major cause of degradation of the environment is the disturbance caused by human activities. Urbanization and industrialization, increase in population growth, rapid increase in consumption of energy and natural resources causes an adverse impact on environmental as well as on human kind.

Table 8: Causes of Environmental Degradation(N=120)

Things that cause harm	Male	Female	Total
Plastic	60 (50.00%)	60 (50.00%)	120 (100%)
Smoke/CO2 emissions, etc.	49 (40.83%)	49 (40.83%)	98 (81.66%)
Domestic Waste	25 (20.83%)	31 (25.83%)	56 (46.66%)
Greenhouse Gases	55 (45.83%)	52 (43.33%)	107 (89.16%)
Industrial Waste	59 (49.16%)	58 (48.33%)	117 (97.50%)

According to the data depicted in Table 8 it can be said that 100 per cent of the respondents considered plastic as the major cause of environmental degradation followed by approximately 98 per cent and 89 per cent who considered industrial waste and greenhouse gases as the cause of environmental degradation respectively. More than 80 per cent indicated smoke, CO2 emissions as one of the cause while approximately 47 per cent were of the opinion that domestic waste is one of the factor causing harm to the environment.

4.2.4 Perception and usage about Green Products of the Respondents:

Consumers today are becoming more ecologically conscious and they have the desire to purchase products which are safe and healthy for their families. Therefore the green values of the consumers, their perception and preference to use were elicited through data is presented in Table 9 and Fig.9.

In a study done by **Ivanova*et.al* (2015)**on Environmental Impact Assessment of Household Consumption found that consumers are responsible for more than 60 per cent of greenhouse gases on earth and approximately 80 per cent of use of water.

Table 9: Perception of the Respondents regarding Green Products

(N=120)

Characteristics of Green Products	Perception of green products	Total Percentage
Eco-Friendly	120	100
Bio-Degradable	105	87.50
Reusable	56	46.66
Recyclable	59	49.16
Naturally made	115	95.80
Environmentally Safe	120	100
Minimize Waste	108	90
Organic	120	100
Non-toxic	114	95
Non-polluting	120	100
Healthy for consumption	112	93.33

The data regarding the perception of the respondents towards green products (Table 9) shows that 100 per cent of the respondents perceived green products as eco-friendly,

environmentally safe and organic. Approximately 95 per cent of the respondents considered green products were made naturally and are non-toxic whereas approximately 93 per cent of the respondents considered green products healthy for consumption.

In a survey conducted by National Geographic Society and Globe Scan (2017) it was determined that the consumer's green attitude was termed as **"Consumer Green Due"** and it was found that Indian consumers were making use of recycled products and ranked India among the top countries in using recycled products.

On average everyone uses 16 kilos of resources extracted from earth everyday **(www.theworldcounts.com, 2020).** Resources are the raw materials for making products that we use every day from our toothbrush and lunchbox to our clothes, cars, computers, refrigerators, etc. The data given in Table 10 will help to interpret the use of green products by the respondents.

Table 10: Usage of Green products

(N=120)

1. Food items		**Male**	**Female**	**Total**
1.	Locally grown vegetables	60 (50%)	60 (50%)	120 (100%)
2.	Foods in biodegradable packaging	18 (15%)	23 (19.16%)	31 (25.83%)
3.	Organically grown food	31 (25.83%)	44 (36.66%)	75 (62.50%)
4.	Eco-standardized or marked products	36 (30.00%)	16 (13.66%)	52 (43.33%)
5.	Locally manufactured	15 (12.55%)	11 (9.16%)	26 (21.66%)
6.	With no chemical preservatives	42 (35.00%)	47 (39.16%)	89 (74.16%)
7.	Storage bags for refrigerator	0 (0%)	5 (4.66%)	5 (4.66%)
2. Clothing		**Male**	**Female**	**Total**
1.	Made from natural fibers of plants or animals	43 (35.66%)	58 (48.33%)	101 (84.16%)
2.	Biodegradable	3 (2.50%)	5 (4.66%)	8 (6.66%)
3.	Cultivated in ecofriendly manner	9 (7.50%)	11 (9.16%)	20 (16.66%)
4.	Recyclable	3 (2.50%)	12 (10%)	15 (12.50%)
5.	Dyed with natural colors	5 (4.16%)	3 (2.5%)	8 (6.66%)

6.	Have certification of green/organic	9 (7.50%)	13 (10.80%)	22 18.33(%)
7.	Are more durable	21 (17.50%)	37 (30.83%)	58 (48.33%)
8.	Wool footwear	41 (34.14%)	57 (47.50%)	98 (81.66%)
3. Green building		**Male**	**Female**	**Total**
1.	Made economically/minimum waste	6 (5%)	3 (2.50%)	9 (7.50%)
2.	Made using recycled/reused materials	11 (9.16%)	5 (4.66%)	16 (13.33%)
3.	Make more use of natural resources	32 (26.66%)	34 (28.33%)	66 (65%)
4.	Water efficient	16 (13.33%)	23 (%)	39 (%)
5.	Having good indoor air quality	60 (50%)	60 (50%)	120 (100%)
6.	Natural paints used on wall	4 (3.33%)	3 (2.50%)	7 (5.83%)
7.	Material obtained locally	58 (48.33%)	42 (35%)	100 (83.33%)
4. Home decoration		**Male**	**Female**	**Total**
1.	LED Lights	60 (50%)	60 (50%)	120 (100%)
2.	Art and craft made with natural materials	0 (0%)	4 (3.33%)	4 (3.33%)
3.	Natural wall paints	4 (3.33%)	3 (2.50%)	7 (5.83%)
4.	Garden pots	40 (33.33%)	53 (44.16%)	93 (77.50%)
5. Personal care/beauty		**Male**	**Female**	**Total**
1.	Jewelry/Accessories	24 (20%)	40 (33.33%)	64 (53.33%)
2.	Makeup products	40 (33.33%)	60 (50%)	100 (83.33%)
3.	Shopping bags	42 (35%)	56 (46.66%)	98 (81.66%)
6. Electronic appliances		**Male**	**Female**	**Total**
1.	3 star	10 (8.33%)	5 (4.16%)	15 (12.50%)
2.	5 star	40 (33.33%)	24 (20.00%)	64 (63.33%)
7. Green toys		**Male**	**Female**	**Total**
1.	Wooden toys	4 (3.33%)	3 (2.5%)	7 (5.83%)

2.	Recyclable plastic toys	2 (1.66%)	2 (1.66%)	4 (3.33%)
3.	Made from natural fibers	1 (0.83%)	2 (1.66%)	3 (2.5%)
8. Home cleaning products		**Male**	**Female**	**Total**
1.	Floor cleaners	12 (10%)	17 (14.16%)	29 (24.16%)
2.	Bathroom/Toilet cleaners	9 (7.5%)	11 (9.16%)	20 (16.66%)
3.	Air fresheners	13 (10.83%)	21 (17.5%)	34 (28.33%)
4.	Bin liner bags	3 (2.5%)	5 (4.16%)	8 (6.66%)
9. Solar energy appliances		**Male**	**Female**	**Total**
1.	Solar panels	2 (1.66%)	1 (0.83%)	3 (2.50%)
2.	High efficiency water conserving appliances	3 (2.50%)	2 (1.66%)	5 (4.16%)
3.	Solar lights	6 (5%)	14 (11.66%)	20 (16.66%)
4.	Solar invertor	5 (4.16%)	7 (5.83%)	12 (10%)
5.	Solar rechargeable fans	2 (1.66%)	3 (2.5%)	5 (4.16%)
10. Disposable cutlery/plates/glasses		**Male**	**Female**	**Total**
1.	Tree leaf and bark made items	54 (45%)	59 (49.16%)	113 (94.16%)
2.	Recyclable plastic made items	42 (35%)	51 (42.50%)	93 (77.50%)
3.	Earthen made items	10 (8.33%)	12 (10%)	22 (18.33%)

Table 10 depicts the usage of different kinds of green products by the consumers like food items, clothing, green building, home decoration, personal care/beauty, electronic appliances, green toys, home cleaning products, solar energy appliances and disposable cutlery/plates/glasses.

Food items:

According to the data given in Table 10, 100 per cent of the respondents used locally grown vegetables and approximately 63 per cent used organically grown food. Around 74 per cent of the total respondents used products that were declared free from chemical preservatives. Approximately 43 per cent of the respondents considered the products with standardized marks. Only around 26 per cent considered products with biodegradable packaging. In a study done by done by **Martins (2019)** 77 per cent of the respondents considered single use plastic as least environmental friendly whereas 55 per cent of the respondents considered paper as most environmental friendly material for packaging.

In the year 2018, the sale of organic food specially fruits and vegetables increased by 5.6% while sale of conventional food items rose 1.7% **(www.foodbusinessnews.net, 2020)**

Clothing:

Table 10 depicts that approximately 84 per cent of respondents used clothing made from natural plant or animal fibers amongst which 48 per cent were females and 35 per cent males. Approximately 82 per cent of the total respondents used woolen footwear. Half of the respondents i.e. 48 per cent considered the durability of the clothing while purchasing for use. Only approximately 7 per cent used clothing dyed with natural colors.

Gwendolyn Hustvedt*et.al* (2009) in their study found that 38 per cent of the consumers used organic clothing specially made of cotton and they possessed a positive attitude towards sustainable development.

Green Building:

Green building is a building that is designed in such a manner that it reduces the harmful impacts of operation and construction on the environment.

The data in Table 10 depicts that all the respondents were of the opinion that green buildings have good indoor air quality; approximately 84 per cent stated they constructed buildings from material obtained locally and 65 per cent reported that they used more natural products in their buildings.

Home Decoration:

The data given in Table 10 depicts that all of the respondents i.e. 100 per cent used LED lights in their homes.Approximately 77 per cent respondents used garden pots in home decoration amongst which approximately 33 per cent were male respondents and approximately 44 per cent were female respondents. Very few respondents i.e. 5 per cent out of all the respondents used natural wall paints in their houses.

Personal Care/Beauty:

According to Table 10 it can be stated that approximately 83 per cent of the respondents used green make up products amongst which 50 per cent were females and approximately 33 per cent were males. Approximately 82 per cent of the respondents used green shopping bags. Approximately 53 per cent used eco-friendly jewelry and accessories amongst which majority i.e. approximately 33 per cent were female respondents.

Electronic Appliances:

Table 10 depicts that majority of the respondents i.e. approximately 63 per cent used electronic appliances with 5 star rating. Around 12 per cent respondents used appliances with 3 star rating.

Green Toys:

The data given in Table 10 depicts that very few respondents used green toys. Only approximately 6 per cent respondents used wooden toys and approximately 3 per cent respondents used recyclable plastic toys.

Home Cleaning Products:

According to Table 10 approximately 28 per cent of the respondents used eco-friendly air fresheners. Approximately 24 per cent of the respondents used green floor cleaners amongst which 10 per cent were males and 14 per cent were females. Very few respondents i.e. approximately 6 per cent used green bin liner bags.

Solar Energy Appliances:

The data given in Table 10 depicts that approximately 16 per cent of the respondents used solar lights. Approximately 10 per cent of the respondents used solar invertors

amongst which 4 per cent were males and approximately 6 per cent were females.It can be stated that very few respondents used solar energy appliances.

Disposable Cutlery/Plates/Glasses:

The data given in Table 10 it can be stated that approximately 94 per cent of the respondents used tree leaf and bark items amongst which 45 per cent were males and approximately 49 per cent respondents were females. Approximately 78 per cent respondents used recyclable plastic made items. Only approximately 18 per cent respondents earthen made items amongst which approximately 8 per cent were male respondents and 10 per cent were female respondents.

4.2.5 Sources of Information about Green Products:

The sources of information give the consumers opportunity to collect information and intelligence on the product that is needed and ultimately affects the purchasing intentions.

Table 11: Source of Information about Green Products

(N=120)

Sources of information	Male	Female	Total
Television	44 (10.46%)	54 (45%)	98 (81.66%)
Radio	2 (1.66%)	1 (0.83%)	3 (2.50%)
Newspaper	42 (35.00%)	35 (29.16%)	77 (64.15%)
Magazines	51 (42.50%)	59 (49.16%)	110 (91.66%)
Internet	58 (48.33%)	60 (50%)	118 (98.33%)
Advertisements	41 (34.16%)	55 (45.83%)	96 (80%)
Friends/Relatives	23 (19.16%)	51 (42.50%)	74 (61.66%)
Outdoor media	4 (3.33%)	7 (5.83%)	11 (9.16%)
Mobile messages	24 (20%)	28 (23.33%)	52 (43.33%)

According to Table 11 for majority of the respondents i.e. approximately 99 per cent, the main source of information regarding green products was internet followed by approximately 92 per cent for magazines.

Tomasz Hermaniuk (2015) conducted a survey with 373 sample size in Rzeszow University to know about the main source of information of green products to the consumers. The results revealed that amongst the sources including newspapers, magazines, internet, etc. Majority i.e. 83.08% of the respondents had internet as the main source of information regarding green products.

4.3 BUYING BEHAVIOR OF THE CONSUMERS:

Buying behavior refers to the actions that are taken before purchasing any goods and services. There are several factors like personal, social, cultural, economic etc. that strongly affects the buying behavior of the consumers.

This part consists of the factors that tell about the buying behavior of the respondents like factors that affect their buying behavior and their preferences regarding various green products. This was done so as to know about what type of products does consumers buy the most and what are the factors that make them inclined towards green consumerism and vice versa.

4.3.1 Factors affecting Buying Preferences of the Respondents:

Many factors like personal, economic, social, etc. affects the buying behavior of the consumers up to a great extent. Lifestyle, economic condition, personality, self-image, etc have a potential impact on the purchasing behavior of the consumers.

Table 12: Factors affecting Buying Preferences

Factors	Male	Female	Total
Product	49 (40.83%)	57 (47.50%)	106 (88.33%)
Price	60 (50%)	60 (50%)	120 (100%)
Place	5 (4.16%)	3 (2.50%)	8 (6.66%)
Promotion	2 (1.66%)	9 (7.55%)	11 (9.11%)

Table 12 depicts that 100 per cent of the respondents considered price of green products as the major factor that affects their buying behavior followed by approximately 88 per cent who considered the product itself as the main factor. Only around 10 per cent of the total respondents considered promotion as the factor that influenced their buying behavior.

Hansla*etal.*(2008)stated that consumers might possess a totally positive attitude towards green purchasing but they may not pay more or willing to pay extra for green products. **Bukhari (2014)** said that price is the major reason that affects the buying behavior of the consumers as they regard green products to be more expensive.

4.3.2 Preference of Respondents of Green Goods

Preference of the consumers regarding the goods and services are subjective. The purchasing behavior of different consumers from different background and culture may get influenced by various factors regarding the decision making and preference of purchasing the products.

Table 13: Preference of Green products

1. Food items		**Male**	**Female**	**Total**
1.	Locally grown vegetables	60 (50%)	60 (50%)	120 (100%)
2.	Foods in biodegradable packaging	18 (15%)	23 (19.16%)	31 (25.83%)
3.	Organically grown food	60 (50%)	60 (50%)	120 (100%)
4.	Eco-standardized or marked products	36 (30%)	16 (13.33%)	52 (43.33%)
5.	Locally manufactured	20 (16.66%)	15 (12.50%)	35 (29.16%)
6.	With no chemical preservatives	52 (43.33%)	56 (46.66%)	108 (90%)
7.	Storage bags for refrigerator	0 (0%)	5 (4.66%)	5 4.66%)
2. Clothing		**Male**	**Female**	**Total**
1.	Made from natural fibers of plants or animals	60 (50%)	60 (50%)	120 (100%)
2.	Biodegradable	3 (2.50%)	5 (4.16%)	8 (6.66%)
3.	Cultivated in ecofriendly manner	47 (39.16%)	52 (43.33%)	99 (82.5%)
4.	Recyclable	52	54	106

		(43.33%)	(45%)	(88.33%)
5.	Dyed with natural colors	3 (2.50%)	6 (5%)	9 (7.5%)
6.	Have certification of green/organic	21 (17.5%)	32 (26.66%)	53 (44.16%)
7.	Are more durable	38 (31.66%)	46 (38.33%)	84 (70%)
8.	Wool footwear	41 (34.16%)	60 (50%)	101 (84.16%)
3. Green building		**Male**	**Female**	**Total**
1.	Made economically/minimum waste	60 (50%)	60 (50%)	120 (100%)
2.	Made using recycled/reused materials	18 (15%)	7 (5.83%)	25 (20.83%)
3.	Make more use of natural resources	58 (48.33%)	53 (44.16%)	111 (92.5%)
4.	Water efficient	16 (13.33%)	23 (19.16%)	39 (32.5%)
5.	Having good indoor air quality	60 (50%)	60 (50%)	120 (100%)
6.	Natural paints used on wall	4 (3.33%)	3 (2.5%)	7 (5.83%)
7.	Material obtained locally	60 (50%)	60 (50%)	120 (100%)
4. Home decoration		**Male**	**Female**	**Total**
1.	LED Lights	60 (50%)	60 (50%)	120 (100%)
2.	Art and craft made with natural materials	5 (4.16%)	24 (20%)	29 (24.16%)
3.	Natural wall paints	4 (3.33%)	3 (2.5%)	7 (5.83%)
4.	Garden pots	54 (45%)	26 (21.66%)	80 (66.66%)
5. Personal care/beauty		**Male**	**Female**	**Total**
1.	Jewelry/Accessories	32 (26.66%)	58 (48.33%)	90 (75%)
2.	Makeup products	40 (33.33%)	60 (50%)	100 (83.33%)
3.	Shopping bags	42 (35%)	56 (46.66%)	98 (81.66%
6. Electronic appliances		**Male**	**Female**	**Total**
1.	3 star	10 (8.33%)	5 (4.16%)	15 (12.5%)
2.	5 star	56 (46.66%)	52 (43.33%)	108 (90%)

7. Green toys		**Male**	**Female**	**Total**
1.	Wooden toys	16 (13.33%)	23 (19.16%)	39 (32.5%)
2.	Recyclable plastic toys	36 (30%)	38 (31.66%)	74 (61.66%)
3.	Made from natural fibers	27 (22.5%)	34 (28.33%)	61 (50.83%)
8. Home cleaning products		**Male**	**Female**	**Total**
1.	Floor cleaners	26 (21.66%)	51 (42.5%)	77 (64.16%)
2.	Bathroom/Toilet cleaners	18 (15%)	52 (43.33%)	70 (58.33%)
3.	Air fresheners	38 (31.66%)	56 (46.66%)	94 (78.33%)
4.	Bin liner bags	9 (7.5%)	12 (10%)	21 (17.5%)
9. Solar energy appliances		**Male**	**Female**	**Total**
1.	Solar panels	13 (10.83%)	6 (5%)	19 (15.83%)
2.	High efficiency water conserving appliances	3 (2.5%)	2 (1.66%)	5 (4.16%)
3.	Solar lights	6 (5%)	14 (11.66%)	20 (16.66%)
4.	Solar invertor	24 (20%)	11 (9.16%)	35 (29.16%)
5.	Solar rechargeable fans	8 (6.66%)	6 (5%)	14 (11.66%)
10. Disposable cutlery/plates/glasses		**Male**	**Female**	**Total**
1.	Tree leaf and bark made items	60 (50%)	60 (50%)	120 (100%)
2.	Recyclable plastic made items	60 (50%)	60 (50%	120 (100%)
3.	Earthen made items	43 (35.83%)	46 (38.33%)	89 (74.16%)

Table 12 depicts the usage of different kinds of green products by the consumers like food items, clothing, green building, home decoration, personal care/beauty, electronic appliances, green toys, home cleaning products, solar energy appliances and disposable cutlery/plates/glasses.

Food items:

According to the data given in Table 13, it can be said that 100 per cent of the respondents preferred locally and organically grown food and vegetables followed by

around 90 per cent who preferred food items with no chemical preservatives.Around 43 per cent preferred using the products with standardized marks. Only approximately 5 per cent of the respondents preferred storage bags for refrigerator.

Clothing:

Table 13 depicts that 100 per cent respondents preferred clothing made from natural fibers of plants or animals. Approximately 88 per cent of the total respondents preferred recyclable products and 82 per cent out of all preferred clothing items cultivated in eco-friendly manner. Around 84 per cent respondents preferred wool footwear amongst which female respondents i.e. 50 per cent were more as compared to male respondents i.e. 41 per cent.

Green Building:

According to the data in Table 13 it can be stated that 100 per cent of the respondents preferred economical buildings, locally obtained material and good indoor air quality. Approximately 92 per cent preferred making more use of natural resources. Around 6 per cent out of all the respondents preferred natural wall paints.

Home Decoration:

Table 13 depicts that 100 per cent preferred LED lights for home decoration. Approximately 66 per cent preferred garden pots made of natural material. Out of the total respondents only around 6 per cent preferred organic wall paints.

Personal care/Beauty:

According to Table 13 it can be said that approximately 83 per cent of the respondents preferred organic makeup products amongst which female respondents were more i.e. 50 per cent as compared to male respondents i.e. 40 per cent followed by around 81 per cent who preferred shopping bags. 75 per cent respondents preferred green jewelry and accessories.

According to **www.statista.com (2019),** 50 per cent of the consumers of age group 18-29 purchased mainly organic skin care goods. When selecting personal care and beauty products, quality of the products was considered as the most important factor by the consumers.

Electronic Appliances:

Table 13 shows that 90 per cent of the respondents preferred electronic appliances with 5 star rating and only around 12 per cent preferred appliances with 3 star rating.

Green Toys:

The data given in Table 13 reveal that approximately 62 per cent respondents preferred recyclable plastic toys. Approximately 51 per cent respondents preferred toys made from natural fibers. Only approximately 33 per cent of the respondents preferred wooden toys.

Home Cleaning Products:

According to Table 13 it can be stated that majority of the respondents i.e. 78 per cent preferred green air fresheners. Approximately 64 per cent respondents preferred eco-friendly floor cleaners amongst which approximately 22 per cent were males. And approximately 43 per cent were females. Only 17 per cent of the respondents preferred bin liner bags.

Solar Energy Appliances:

Data in Table 13 depicts that approximately 29 per cent of the respondents preferred solar invertors followed by approximately 16 per cent who preferred solar panels. Only approximately 12 per cent respondents preferred solar rechargeable fans and very few i.e. 4 per cent preferred high efficiency water conserving appliances.

Disposable cutlery/plates/glasses:

Table 13 reveal that similar per cent of the respondents i.e. 100 per cent preferred tree leaf and bark made items and recyclable plastic made items. Approximately 74 per cent respondents preferred earthen made items.

Hempel and Hamm (2016) conducted a study in Germany with 641 consumers to get insight of the consumer's preferences for different green products. Mixed attributes were estimated to draw conclusion on consumer's preferences. The findings of the study revealed that maximum of the consumers preferred organic food items mostly. It was also revealed that consumers residing in rural regions of Germany preferred locally grown products more and the consumer's residing in the urban areas preferred organic food items more.

Vietoris (2016) conducted a study on 350 consumers in Romania with the aim of knowing the preferences of the consumers regarding purchasing of organic food. It was revealed that 42 per cent of the respondents preferred organic food. The main reason for purchasing was concern for health for self and of their family.

Ghazali*et al.* (2015) conducted a study on 343 consumers in Malaysia to investigate the values of the consumers regarding organic cosmetics and health care products. Their findings indicated that 33 per cent of the total consumers preferred and purchased organic cosmetic and PCP. The reason behind was lack of awareness among the consumers. It was further stated that better knowledge of the products would lead to much better and positive attitudes.

4.4ASSESSMENT OF KNOWEDGE, ATTITUDE AND PRACTICE OF THE RESPONDENTS:

Coequal to globalization and rapid growth in the world's population, a huge growth in the variety of goods and services has been seen. But the increased demand for goods and services has brought a rapid depletion of environment and natural resources and rise of environmental problems has also been noticed. Today the stage has come where there is no other way for humans thanof adopting pro environmental behavior so as to satisfy the needs of consumption along with retaining the sustainability. In order to guarantee a sustainable economic growth, both the consumers and producers have to realize the importance of going green and understand the factors that affect the behavior of consumers towards green products. A scale was developed to assess the knowledge of the respondents, attitude and practice of the respondents towards green consumerism.

Sharma (2017) stated that factors like age, occupation, education etc. play a major role in influencing the consumer's buying intentions towards green goods and services. The data collected from these factors help the researcher to understand consumer behavior deeply.

Devinney*etal.* (2010) stated that it is different to possess great knowledge about environmental problems, and then being agreed to the fact that practices involve labor and also that the knowledge about environmental issues is important to the society, than just considering these problems. The consumers believe that manufacturers and producers should take up the responsibility to tackle these issues caused by non-

conventional goods and services. The green trend has been pioneered and evolved due to consumer pressure, government policies, etc. to go green **(Singh, 2013).** Human behavior is termed as the most important source as well as the prominent solution to major environmental hazards. Subsequently, the individual's buying decision is of interest in the companies and firms and many a companies have changed their culture to be more environmental friendly **(Sachdev and Mahna, 2014)**.

Knowledge and attitude can be the basis of consumer behavior and buying practices and these factors can ultimately affect the growth of the country and the environment. Developing countries like India cannot acquire sustainability in the growth and protect the environment and health without protecting natural resources. This scale was an attempt in the way of knowledge, attitude and practice of the consumers to sensitize their behavior towards green consumerism.

Table 14: Knowledge of the Respondents on Green Consumerism and Environmental Sustainability

Statements	Strongly Agree			Agree			Undecided			Disagree			Strongly Disagree		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Green products have good quality.	40 (33.33%)	38 (31.66%)	78 (65%)	15 (12.5%)	21 (17.5%)	36 (30%)	3 (2.5%)	1 (0.83%)	4 (3.33%)	2 (1.66%)	0	2 (1.66%)	0	0	0
Green products are good for health.	56 (46.66%)	49 (40.83%)	105 (87.5%)	4 (3.33%)	10 (8.33%)	14 (11.66%)	-	1 (0.83%)	1 (0.83%)	0	0	**0**	0	0	0
Green products help in protecting the environment.	53 (44.16%)	55 (45.83%)	108 (90%)	5 (4.16%)	4 (3.33%)	9 (7.5%)	2 (1.66%)	1 (0.83%)	3 (2.5%)	0	0	**0**	0	0	0
Green products reduce global warming and greenhouse gases.	52 (43.33%)	60 (50%)	112 (93.33%)	6 (5%)	-	6 (5%)	2 (1.6\6)	-	2 (1.66)	0	0	**0**	0	0	0
Green products are organic and eco-friendly.	54 (45%)	59 (9.16%)	113 (94.16%)	4 (3.39%)	1 (0.83%)	5 (4.16%)	2 (1.66%)	-	2 (1.66%)	0	0	**0**	0	0	0
Environmental issues are caused due to unfair means of production goods.	46 (38.33%)	53 (44.16%)	99 (82.50%)	11 (9.16%)	6 (5.00%)	17 (14.10%)	3 (2.5%)	1 (0.8%)	4 (3.3%)	0	0	**0**	0	0	0

The data in Table 14 depicts that the respondents are well aware and possess good knowledge of green consumerism and environmental sustainability. Almost two-third of the respondents i.e. 65 per cent of the respondents strongly agreed that green products are of good quality among which 33.33 per cent were males and 31.66 per cent were females whereas 30 per cent agreed to this out of which 12.50 per cent were males and 17.59 per cent were females. Only 1.66 per cent of the respondents disagreed that green products do not have good quality.

The data further reveal that 87.50 per cent of the respondents strongly agreed that green products are good for health as they are made from natural things out of which 46.66 per cent were males and 40.83 per cent were females whereas 11.66 per cent agreed on this. Maximum of the respondents i.e.90 per cent strongly agreed that using green products helps protecting the environment out of which 44.16 per cent were males and 45.83 per cent were females and 93.33 per cent of respondents strongly agreed that green products reduce global warming and greenhouse gases amongst which 43.33 per cent were males and 50 per cent were females. 94.16 per cent of the respondents i.e. 45 per cent males strongly agreed that green products are organic and eco-friendly. Regarding environmental issues caused due to unfair means of production of goods, 82.50 per cent respondents strongly agreed amongst which 38.33 per cent were males and 44.16 per cent were females. From data in Table 14 it is evident that majority of the respondents have good knowledge about green consumerism and they were well aware of the effects of green consumerism on environmental sustainability. Therefore, it can be said that while buying a product, respondents were well aware of the environmental impacts a product can make not only on humans but also on the environment.

Robelia and Murphy (2012) also ascertained high level of knowledge about several environmental problems like what are renewable resources, what gives rise to habitat deterioration but dispiriting levels of knowledge about climatic change, production of energy and quality of water. Around 75% of the consumers had knowledge about the above mentioned problems. They said, pro-environmental choices are tough to be made if the consumer has inaccurate or no knowledge.

Divyapriyadarshini(2019) conducted a study on 30 consumers with the aim of knowing about the consumer's level of awareness about green products and how will the consumers help in protecting the environment if they become green consumers.

The findings elaborated that majority of the consumers had knowledge about green products. It was further stated that awareness about green products was a critical factor that affects the consumer buying behavior.

Maheshwari (2014) affirmed that around the globe, knowledge and awareness about going green has risen but in India, consumers are in the budding stage of knowledge about green consumerism. She added that there is no single product in the market which is entirely eco-friendly. There is a vast gap between consumer behavior and their beliefs. Consumers have knowledge of green consumerism and green products; still they are not green consumers.

4.5 Attitude of the Respondents towards Green Consumerism and Environmental Sustainability

Table 15: Attitude of the Respondents towards Green Consumerism and Environmental Sustainability

Statements	Strongly Agree			Agree			Undecided			Disagree			Strongly Disagree		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
I consider myself eco-friendly as I favor green products.	42 (35%)	33 (27.5%)	75 (62.5%)	15 (12.5%)	25 (20.83%)	40 (33.33%)	3 (2.5%)	2 (1.66%)	5 (4.16%)	0	0	0	0	0	0
I want to be green consumer by using green products.	47 (39.16%)	50 (41.66%)	97 (80.83%)	12 (10%)	9 (7.5%)	21 (17.5%)	1 (0.83%)	1 (0.83)	2 (1.66%)	0	0	0	0	0	0
I prefer green products over non-green products.	42 (35%)	33 (27.5%)	75 (62.5%)	15 (12.5%)	25 (20.83%)	40 (33.33%)	3 (2.5%)	2 (1.66%)	5 (4.16%)	0	0	0	0	0	0
I agree to buy green products in spite of their high price.	6 (5%)	6 (5%)	12 (10%)	36 (30%)	36 (30%)	72 (60%)	5 (4.16%)	4 (3.33%)	9 (7.5%)	9 (7.5)	12 (10%)	21 (17.5%)	4 (3.33%)	2 (1.66%)	6 (5%)
I believe that use of green products ensures clean and pollution free environment.	50 (41.66%)	51 (42.5%)	101 (84.16%)	10 (8.33%)	9 (7.5%)	19 (15.83)	0	0	0	0	0	0	0	0	0
I think it is important to educate consumers about the relationship between green consumerism and environmental sustainability.	60 (50%)	60 (50%)	120 (100%)	0	0	0	0	0	0	0	0	0	0	0	0

The data regarding attitude of the respondents towards green consumerism and environment sustainability is presented in Table 15. As per the results it can be stated that 62.5 per cent respondents strongly agreed that they favored green products and were eco-friendly amongst which 35 per cent were males and 27.50 per cent were females.**Mittleman (2012)** found that in the numerous researches, the attitude towards sustainability by and large seemed to be very positive. All consumers were well acquainted with the sustainability hurdles and thought it is of utmost importance to build a healed world for their descendants. Consumers admire the fact that agencies think about the sustainability hurdles and proffer customers an option to purchase green. The attitude towards purchasing green products is positive, albeit in a minor degree. Consumers indicated the viewpoint that it would be better for them to buy green goods and all ascertained to become green consumers and will not buy regular products.

Approximately 81 per cent of the respondents strongly agreed to be a green consumer by using green products i.e. approximately 39 per cent were males and 42 per cent females. Data regarding the preference of green products over non-green products show that 62.50 per cent strongly agreed to this in which 35 per cent were male respondents and 27.50 per cent were females. Very few respondents were unable to decide. Only 10 per cent of the respondents strongly agreed that they would buy green products even on high prices and 60 per cent of them agreed to buy green products on high prices. Approximately 84 per cent respondents strongly agreed and believed that usage of green products ensures clean and pollution free environment.**Morel and Kwayke (2012)** did a study on 174 consumers to know about their attitude and purchasing behavior towards green products. Their findings indicated that the consumers who already considered themselves green consumers were more willing to buy green products further. Positive attitude was noted towards green consumerism. But it was also stated that positive attitude towards green consumerism does not always lead to the purchasing of green products. Difference between attitude and purchase intentions was noted.

It can be concluded from the data that all the respondents had positive attitude towards green consumerism and all the respondents have strongly agreed that it is important to educate consumers about the relationship between green consumerism and environmental sustainability which will help the future generations to become a

green consumer from the early stages of their life. **Saxena et al. (2010)** examined the attitude of the consumers for green consumerism and also recognized some of the demographic variables of consumers who were much solicitous for environmental preservation and have positive attitude regarding green varieties. He asserted that with the positive view of consumers towards green consumerism, firms can hold out to diverse green sections by designing effectual unified marketing communications going with the associated profiles, by emphasizing on their product's utility proposition and competitive disparities which will ultimately contribute to environmental sustainability.

Yusuf and Fatima (2015) conducted a study on 70 college students of Aligarh Muslim University. The study was conducted to explore the green marketing concepts in relation with consumer behavior. It was noted that the attitude of the respondents towards green products was found to be remarkable. It was further stated that majority of the respondents agreed to the fact that green products are better than the conventional goods.

4.6 Practice of the Respondents towards Green Consumerism

Table 16: Practice of the Respondents towards Green Consumerism

Statements	Strongly Agree			Agree			Undecided			Disagree			Strongly Disagree		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
I prefer green products over conventional products	39 (32.5%)	36 (30%)	75 (62.5%)	14 (11.66%)	17 (14.16%)	31 (25.88%)	0	1 (0.83%)	1 (0.83%)	6 (5%)	5 (4.16%)	11 (9.16%)	1 (0.83%)	1 (0.83%)	2 (1.66%)
I prefer green products which ensures the health of the family	39 (32.5%)	36 (30%)	75 (62.5%)	14 (11.66%)	18 (15%)	32 (26.66)	0	0	0	7 (5.83%)	6 (5%)	13 (10.83%)	0	0	0
I am very much concerned about environment	48 (40%)	48 (40%)	96 (80%)	10 (8.33%)	11 (9.16%)	21 (17.5%)	0	0	0	2 (1.66%)	1 (0.83%)	3 (2.5%)	0	0	0
Family income affects the purchase intention of green goods	60 (50%)	60 (50%)	120 (100%)	0	0	0	0	0	0	0	0	0	0	0	0
I prefer buying green products when price discounts are offered	41 (34.16%)	43 (35.83%)	84 (70%)	14 (11.66%)	12 (10%)	26 (21.66%)	4 (3.33%)	5 (4.16%)	9 (7.5%)	1 (0.83%)	0	1 (0.83%)	0	0	0
I prefer buying green products even if they are expensive	18 (15%)	18 (15%)	36 (30%)	24 (20%)	25 (20.83%)	49 (40.83%)	8 (6.66%)	9 (7.9%)	17 (41.16%)	7 (5.83%)	6 (5%)	13 (10.83%)	3 (2.5%)	2 (1.66%)	5 (4.16%)
I usually buy organic food items	37 (30.83%)	31 (25.83%)	68 (56.66)	16 (13.33%)	21 (17.5%)	37 (30.83%)	0	0	0	5 (4.16%)	5 (4.16%)	10 (8.32%)	2 (1.66%)	3 (2.5%)	5 (4.16%)

The data in Table 16 reflects that 62.50 per cent respondents preferred green products over conventional products amongst which 32.5 per cent were males and 30 per cent were females. Similar data was also reflected for the preference of green products which ensured the health of their family. Majority of the respondents i.e. 80 per cent strongly agreed that they are very much concerned about the environment. 70 per cent of the respondents strongly agreed that they prefer buying green products when discounts were offered i.e. approximately 34 per cent males and 36 per cent females. Further approximately 41 per cent respondents agreed to buy green products even if they were expensive whereas approximately 11 per cent of the respondents disagreed showing their concern about higher price.

Hence, it can be stated that family income and high prices of green products are the major concerns while buying a green product. Although the respondents had good knowledge and positive attitude towards green consumerism and environmental sustainability majority of the respondents were unable to bring the use of green products to practice due to several constraints out of which high prices of green products and family income were the major issues.

Testing

For applying Correlation Coefficient knowledge level, attitude and practice scale was classified as strongly agree, agree, undecided, disagree, strongly disagree. In order to find out the relation between the three variables correlation coefficient was applied.

Table 17: Correlation coefficient value for knowledge, attitude and practice

S.No.	Variable	Gender	Calculated correlation coefficientvalue	Result
1	KnowledgeX Attitude	**Male**	0.965**	Highly Significant
		Female	0.924*	Significant
		Total	0.942*	Significant
2	KnowledgeXPractice	**Male**	0.981**	Highly Significant
		Female	0.977**	Highly Significant
		Total	0.966**	Highly Significant
3	PracticeXAttitude	**Male**	0.985**	Highly Significant
		Female	0.967**	Highly Significant
		Total	0.947*	Significant

*Significant at 5% level of significance

** Significant at 1% level of significance

The results of correlation coefficient test revealed the significant relationship between knowledge and attitude, knowledge and practice, practice and attitude of males, females and then in total towards green consumerism.

4.7 Development of IEC material:

Information, Education and Communication (IEC) material was developed with the aim of providing respondents with knowledge about the prevailing environmental hazards,concept and benefits of green consumerism, environmental sustainability, green marketing, availability of green products, etc. For this a descriptive folder and poster related to green consumerism and environmental sustainability were made.

using.

8. Don't wash your clothes:
Don't wash your clothes as much. You don't need to wash your clothes after every wash. If you do need to wash your clothes, try to make it as big a load as possible, so you don't have to use as much water.

9. Unplug your sockets:
If you are not using something, switch it off and unplug it because even if it is switched off, it is still leeching a little energy while it is plugged in.

10. Switch off:
Our digital life can also be detrimental to our health and wellbeing. It can strain our eyes, contribute to mental health issues and anxiety, can cause MSD's and makes us more sedentary and less fit.
It is important to switch off every once in a while not just for the environment but for yourself.

11. Sell or donate old furniture and home ware:
Don't forget one person's trash is another person's treasure. Donate your furniture to a charity shop, or sell it online for someone to up cycle it. But don't throw it away.

12. Energy efficient light bulbs:
Switch your current bulbs to energy-efficient ones can help reduce carbon emissions. CFL, LED, etc. are energy efficient.

13. Save your food:
Buy, put it in your freezer and use it later if not consumed immediately or in a few days.

Sustainable swaps:

- Rags instead of paper towels.
- Cloth napkins instead of paper napkins.
- Walk to the shops instead of driving or getting public transport.
- Get a refillable water bottle instead of single use plastic ones.
- Use hemp bags instead of plastic bags.
- Avoid using straws.
- Use cotton or plant wraps for your food instead of aluminum foil or plastic wraps.
- Use a tea strainer instead of tea bags (micro plastics).
- Compost your food waste.
- Donate instead of throwing.
- Request online bills instead of paper bills.

GREENER HOME MANAGING SKILLS

"Your home is where you spend most of the time, so why not start from there?"

Begin to conserve the green cover and natural resources by becoming "Green Consumers."

Green Consumerism is the state in which consumers want to buy things that are produced in a way that protects the environment.

HOW TO MAKE YOUR HOME MORE SUSTAINABLE?

1. Reduce:

We consume far too much and we need to top unnecessary consumption.
Ask yourself when buying:

· Do I really need this?
· Will it be used by me?
· Why do I want to buy this very product?
· What purpose does this really serve to me?

When you actually consider what you are buying rather than impulsively grabbing things, you will find that you buy a lot less, save money and also reduce the harmful carbon dioxide emissions by the products when they get thrown into landfills or during their packaging.

2. Reuse:

Before you throw away old stuff like T-shirt, think about how you can use it around the house as cleaning rag, napkins, hair towel, etc. It also helps to buy things that last longer, save money and dreaded landfill. This is just a simple example. Apart from the T-shirt there are many a things that can be reused in household.

3. Recycle:

Recycling comes after reducing and reusing. When you have reduced and reused as much as you can and you have to throw something away. Just because you recycle doesn't mean you are an eco-warrior. Not everything can be recycled. Plastic products have various confusing symbols which look like they all can be recycled. But that is not true. Plastic types 1,2 and 5 are commonly recyclable. Plastic type 4 can be sometimes recycled. The best thing to do in the first instance is to study what can be recycled where you are, and to put thought into what you are buying that has packaging. The best thing is to buy things without packaging but make sure you can recycle it where you are.

4. Grow your own:

Grow your own fruits and vegetables. But if you lack space to grow fruits and vegetables then at least grow your own herbs which are regularly used in cooking like rosemary, mint, thyme, sage, coriander, mint etc. It is so handy and saves money buying dried herbs that just don't taste as good. Grow your own plants. They help producing more oxygen, and consume carbon dioxide and help with the carbon emissions crisis.

5. Make your own cleaning products:

Most cleaning products come in plastic containers that you throw out as soon as you are done with them, and they are made up of tones of chemicals. When you make your own, you know exactly what goes into them, and you can tweak the recipes to suit you. Some of the examples of home-made cleaners are:

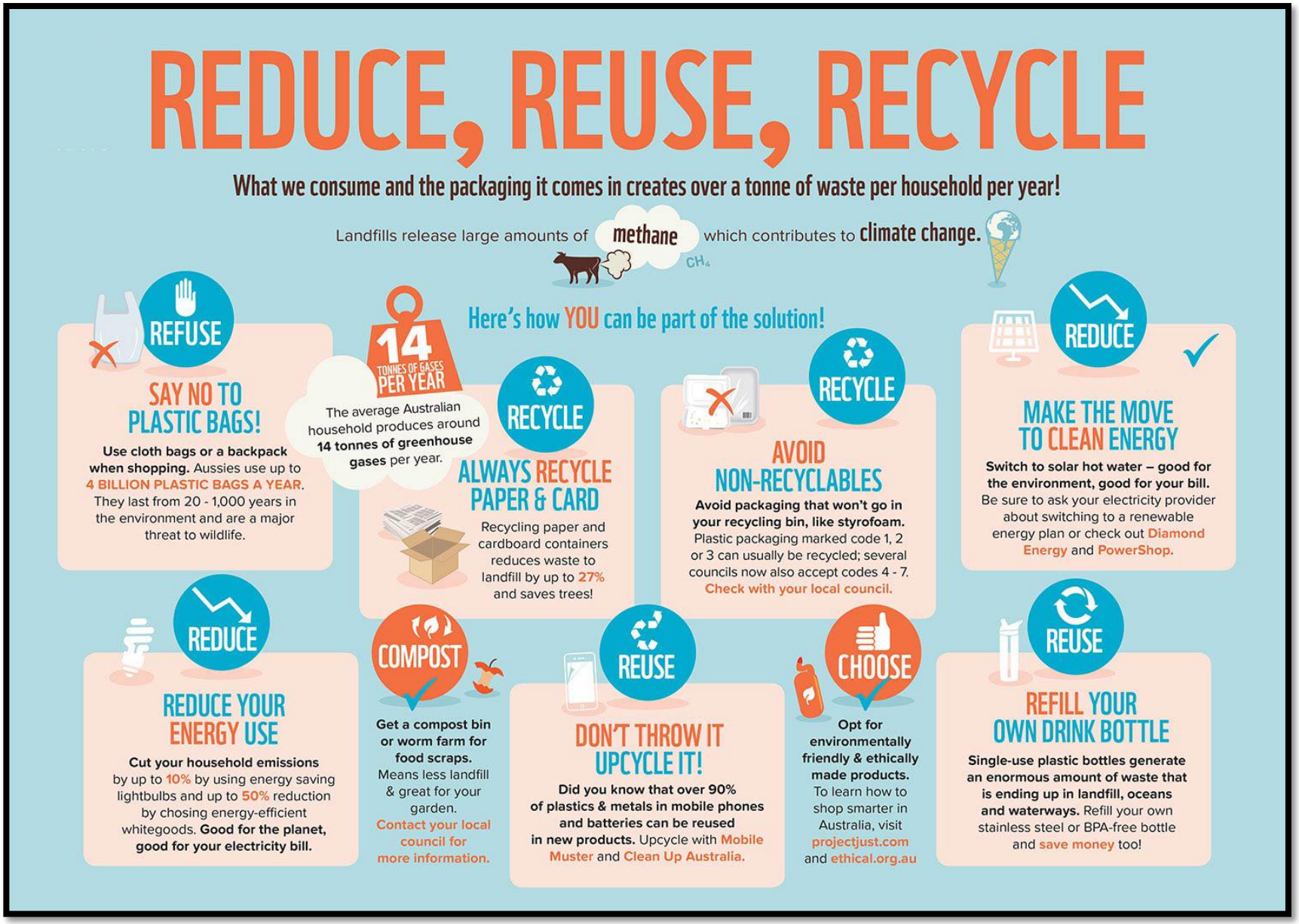
- Window cleaner: ¼ cup of white vinegar, 2 cups of warm water and tea tree oil.
- Anti-bacterial cleaner: ¼ cup of white vinegar, 1 tbsp of baking soda, 1 liter of hot water and orange essential oils.
- Room spray: 2 cups of warm water and any essential oils of your choice.

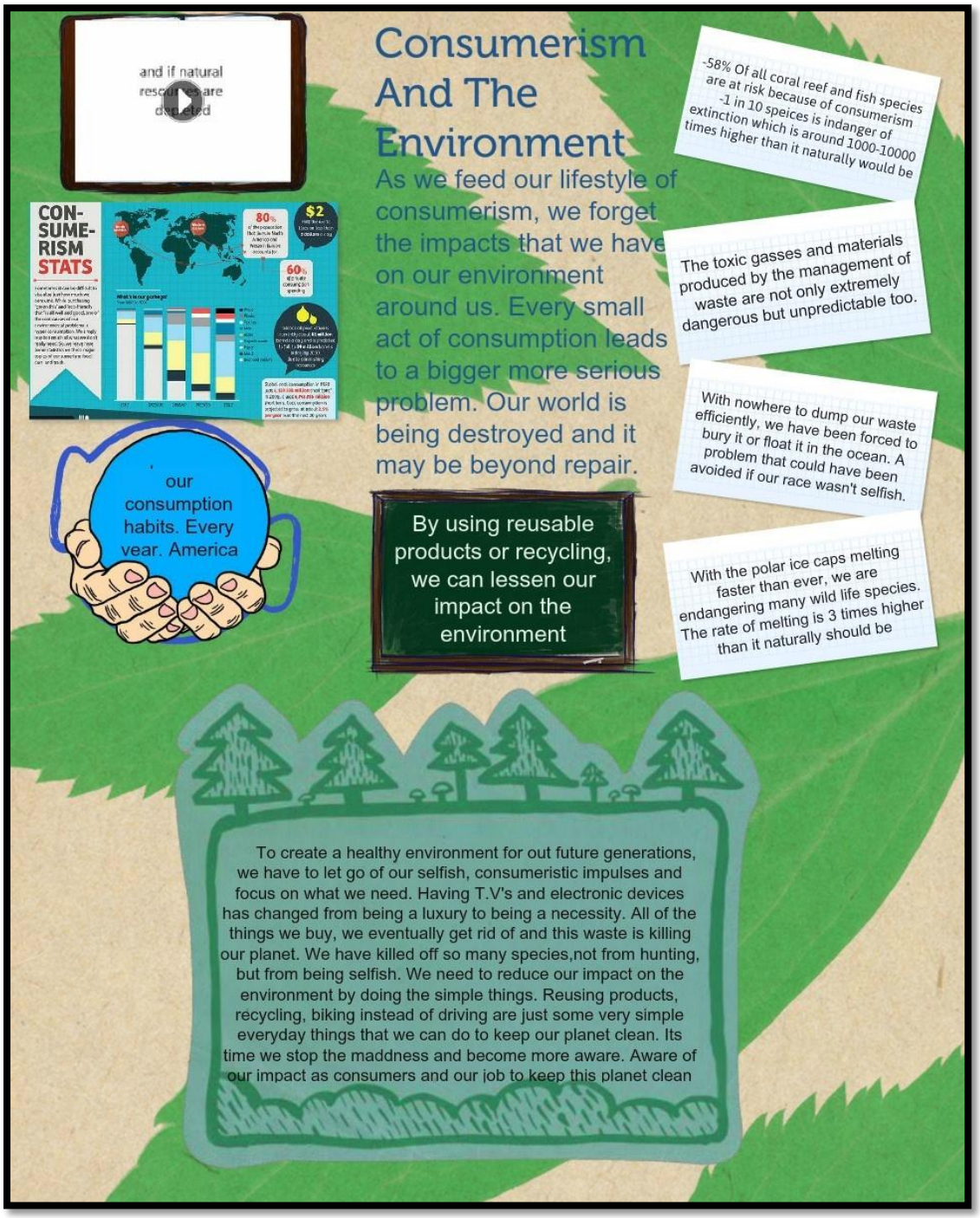
6. Save water:

Harvest rain water, turn off water while brushing, shaving, applying face wash etc, check pipes and faucets for leaks.

7. Showers instead of baths:

There's been a long debate in the eco-friendly world as to whether baths or showers are better for environment. It depends on how big your bath is and how long you tend to shower for. Generally speaking, showers use less water than baths, but only if you take around five minutes. If you are planning on taking a little longer, then have a bath instead, but be aware of how much water you are


REDUCE, REUSE, RECYCLE
What we consume and the packaging it comes in creates over a tonne of waste per household per year!
Landfills release large amounts of methane which contributes to climate change.
CH4
Here's how YOU can be part of the solution!
REFUSE
SAY NO TO PLASTIC BAGS!
Use cloth bags or a backpack when shopping. Aussies use up to 4 BILLION PLASTIC BAGS A YEAR. They last from 20 - 1,000 years in the environment and are a major threat to wildlife.
14 TONNES OF GASES PER YEAR
The average Australian household produces around 14 tonnes of greenhouse gases per year.
RECYCLE
ALWAYS RECYCLE PAPER & CARD
Recycling paper and cardboard containers reduces waste to landfill by up to 27% and saves trees!
RECYCLE
AVOID NON-RECYCLABLES
Avoid packaging that won't go in your recycling bin, like styrofoam. Plastic packaging marked code 1, 2 or 3 can usually be recycled; several councils now also accept codes 4 - 7. Check with your local council.
REDUCE
MAKE THE MOVE TO CLEAN ENERGY
Switch to solar hot water – good for the environment, good for your bill. Be sure to ask your electricity provider about switching to a renewable energy plan or check out Diamond Energy and PowerShop.
REDUCE
REDUCE YOUR ENERGY USE
Cut your household emissions by up to 10% by using energy saving lightbulbs and up to 50% reduction by chosing energy-efficient whitegoods. Good for the planet, good for your electricity bill.
COMPOST
Get a compost bin or worm farm for food scraps. Means less landfill & great for your garden. Contact your local council for more information.
REUSE
DON'T THROW IT UPCYCLE IT!
Did you know that over 90% of plastics & metals in mobile phones and batteries can be reused in new products. Upcycle with Mobile Muster and Clean Up Australia.
CHOOSE
Opt for environmentally friendly & ethically made products. To learn how to shop smarter in Australia, visit projectjust.com and ethical.org.au
REUSE
REFILL YOUR OWN DRINK BOTTLE
Single-use plastic bottles generate an enormous amount of waste that is ending up in landfill, oceans and waterways. Refill your own stainless steel or BPA-free bottle and save money too!


and if natural
CON-
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STATS
80%
$2
60%
our
consumption
habits. Every
vear. America
Consumerism And The Environment
As we feed our lifestyle of consumerism, we forget the impacts that we have on our environment around us. Every small act of consumption leads to a bigger more serious problem. Our world is being destroyed and it may be beyond repair.
-58% Of all coral reef and fish species are at risk because of consumerism -1 in 10 speices is indanger of extinction which is around 1000-10000 times higher than it naturally would be
The toxic gasses and materials produced by the management of waste are not only extremely dangerous but unpredictable too.
With nowhere to dump our waste efficiently, we have been forced to bury it or float it in the ocean. A problem that could have been avoided if our race wasn't selfish.
By using reusable products or recycling, we can lessen our impact on the environment
With the polar ice caps melting faster than ever, we are endangering many wild life species. The rate of melting is 3 times higher than it naturally should be
To create a healthy environment for out future generations, we have to let go of our selfish, consumeristic impulses and focus on what we need. Having T.V's and electronic devices has changed from being a luxury to being a necessity. All of the things we buy, we eventually get rid of and this waste is killing our planet. We have killed off so many species,not from hunting, but from being selfish. We need to reduce our impact on the environment by doing the simple things. Reusing products, recycling, biking instead of driving are just some very simple everyday things that we can do to keep our planet clean. Its time we stop the maddness and become more aware. Aware of our impact as consumers and our job to keep this planet clean

SUMMARY AND CONCLUSION

Today we are faced with an array of environmental problems, which together indicate a change in the ecosystem caused by human activities and challenge our present lifestyles. Environmental problems, such as climate change, ozone depletion, large-scale exploitation of natural resources, and increasing contamination of air, water, and soil, increasing carbon emissions, are a continually growing concern worldwide. Degradation of environment and natural resources is happening at a rapid pace. Industries are one of the major sections that contribute in enormous amounts to deterioration of the environment. All these issues are raising numerous questions regarding protecting the environment and devising sustainable strategies. Environmental sustainability has received immense academic and industrial attention in last few years.

Some of the severe issues that cannot be overlooked have been mentioned above. Saving the natural resources and behaving in an earth-friendly way is a desideratum so that the environment and people's health could be hedged from detrimental effects caused by industrial pollutants and by continuous economic growth. This scenario has fostered a new idea of consumption of goods and services which is known as the **"Green Consumerism".** Green Consumerism refers to a state in which consumers demand products and services that have undergone an eco-friendly production process or the one that involves recycling and safeguarding the planet's resources.

The perception of people towards goods and services has changed up to an extent today. They have become much perturbed about the goods they are consuming concerning about the environment and their own health. In most parts of the world the increase in demand is seen but still in many places there is still lack of knowledge about the concept of green consumerism and behavioral issues are noticed regarding green consumption. Hence, it is pivotal for the consumers to know each and everything about green products. Educating consumers and making them aware about the perks of these products is essential so that consumers use them to the maximum and its usage increase overtime. It must be guaranteed that the negative perception about green products in any facet is pulled down and consumers should be encouraged to make their maximum use.

Seeing the current scenario of the deterioration of the environment, it has become a necessity to make environment sustainable and therefore, there is an urgent need to take up work in this reference. The current work entitled as "**Assessment of Green Consumerism on Environmental Sustainability"** was undertaken on the notion of making consumers deterrent towards the hazards of using non eco-friendly products. At present, it is prominent to get to the depth of knowledge consumers have about green consumerism and their willingness towards being green consumers. The study was intended to make them aware about green products on the basis of their knowledge to the uttermost so that they use these products to the maximum and contribute in preventing environmental degradation by being green consumers in relation with the basic human needs i.e., food, shelter, clothing and healthcare which will ultimately help in sustainable development. The objectives of were:

1. To find the awareness of the consumers regarding consumption of goods that cause harm to the environment and human health.
2. To assess the knowledge, attitude and practices of consumers towards green products.
3. To elicit the factors that affects the decision making of consumers towards buying intention and consumption of green products.
4. To impart knowledge to the consumers regarding benefits of green products consumption those are important for environmental protection.

Methodology:

The current study was conducted in Nainital District of Uttarakhand. The samples were selected using stratified random sampling technique from the urban population of Nainital. 120 respondents (60 males and 60 females) were equally selected. A questionnaire on "Assessment of Green Consumerism on Environmental Sustainability" was developed consisting of the general profile of the respondents, questions related to general awareness about environment and green consumerism and assessment scale (knowledge, attitude and practice) scored on 5 point Likert Scale. The questionnaire was used to collect data from the respondents.

The respondents were contacted and data was collected from them by distributing the questionnaire. The collected data was then put to analysis i.e. frequency, percentage and correlation to draw the results.

Major Findings:

Some of the major findings are discussed as follows:

I. **General Profile:**

The variables that were included in the general profile are name, age, sex, occupation, educational qualification, monthly income and marital status.

1. **Age**: The age was distributed in three ranges. The findings revealed that majority of the respondents were in the age group of 30-35 years with approximately equal per cent of male and female respondents (18.3 per cent females and 19 per cent males).

2. **Occupation**: The data pointed out that majority of the female respondents belonged to teaching profession and more male respondents were doctors by profession.

3. **Monthly Income**: Data depicted that all the respondents (male and female) were earning and majority of them i.e. approximately 68 per cent earned above Rs/- 60,000 per month.

4. **Educational Qualification**: According to the data majority of the respondents were graduate or post graduate.

5. **Marital Status**: The data revealed that 82 per cent of the respondents were married amongst which 39 per cent were males and 43 per cent were females.

II. Awareness about Green Consumerism

1. **Consumerism and its Impact on Environment**: 98 per cent of the respondents were aware of green products. Approximately 63 per cent of them considered themselves as green consumers. All 100 per cent of the respondents had heard about organic food items, disposable cutlery and solar energy appliances followed by approximately 96 per cent who were aware of green personal care and beauty products amongst which majority i.e. 50 per cent were female respondents. Further the data depicted that approximately 92 per cent of the respondents were knowing that green products and environment are related. From amongst the total respondents, 97 per cent considered themselves environment friendly and 100 per cent felt that use of green products helps in protecting the environment.

2.Environmental Responsibility of the Respondents: With respect to the environmental responsibility, majority of the respondent i.e. approximately 97 per cent of the respondents consented that energy efficient equipment should be used in homes and offices. Around 94 per cent of the total respondents considered using organically grown food over processed food important. 81 per cent of the respondents preferred buying quality products warrantied against failure or wearing out followed by approximately 84 per cent who were having pro-environmental attitude and who considered changing lifestyle as an important responsibility for future generation. Very few respondents i.e. 5 per cent considered community resource sharing important.

3. Causes of Environmental Degradation: Regarding the causes of environmental degradation, 100 per cent of the respondents considered plastic as the major cause of environmental degradation followed by approximately 98 per cent and 89 per cent who considered industrial waste and greenhouse gases as the cause of environmental degradation respectively. More than 80 per cent indicated smoke, CO2 emissions as one of the cause while approximately 47 per cent were of the opinion that domestic waste is one of the factor causing harm to the environment.

4. Perception and Usage about Green Products:

- **Perception about Green Products:** 100 per cent of the respondents perceived green products as eco-friendly, environmentally safe and organic. Approximately 95 per cent of the respondents considered green products were made naturally and are non-toxic whereas approximately 93 per cent of the respondents considered green products healthy for consumption.

- **Usage of Green Products:** Regarding the usage of green products, 100 per cent of the respondents used locally grown vegetables. Approximately 84 per cent respondents used clothes made of natural fibers. Regarding home decoration, 100 per cent respondents used LED lights. Approximately 83 per cent of the respondents used organic personal care products and majority were female respondents. Approximately 63 per cent of the respondents used electronic appliances with 5 star rating. With respect to disposable cutlery/plates/glasses, approximately 94 per cent of the total respondents used tree leaf and bark items while only18 per cent used earthen made items. Very few respondents used green toys.

- **Sources of Information regarding Green Products:** Majority of the respondents i.e. approximately 99 per cent, the main source of information regarding green products was internet followed by approximately 92 per cent for magazines.

III Buying Behavior of the Consumers:

1. Factors affecting Buying Preferences of the Respondents: Regarding the factors affecting buying preferences, 100 per cent of the respondents considered price of green products as the major factor that affects their buying behavior followed by approximately 88 per cent who considered the product itself as the main factor. Only around 10 per cent of the total respondents considered promotion as the factor that influenced their buying behavior.

2. Preference of the Respondents of Green Goods: With respect to the preference of green goods, similar per cent of the respondents i.e. 100 per cent preferred locally and organically grown food and clothing made from natural fibers and also the same per cent preferred LED lights for their homes and offices. Approximately 83 per cent of the respondents preferred organic makeup products. 100 per cent respondents preferred disposable cutlery/plates/glasses made of tree leaf and bark and recyclable plastic while 74 per cent preferred earthen made items.

IV Knowledge of the Respondents on Green Consumerism and Environmental Sustainability: Regarding the knowledge on green consumerism and environmental sustainability, respondents were well aware and possessed good knowledge. Almost two-third of the respondents i.e. 65 per cent of the respondents strongly agreed that green products are of good quality among which 33.33 per cent were males and 31.66 per cent were females whereas 30 per cent agreed to this out of which 12.50 per cent were males and 17.59 per cent were females. Only 1.66 per cent of the respondents disagreed that green products do not have good quality. 87.50 per cent of the respondents strongly agreed that green products are good for health as they are made from natural things out of which 46.66 per cent were males and 40.83 per cent were females whereas 11.66 per cent agreed on this. Maximum of the respondents i.e.90 per cent strongly agreed that using green products helps protecting the environment out of which 44.16 per cent were males and 45.83 per cent were females and 93.33 per cent of respondents strongly agreed that green products reduce global warming and greenhouse gases amongst which 43.33 per cent were males and 50 per cent were

females. 94.16 per cent of the respondents i.e. 45 per cent males strongly agreed that green products are organic and eco-friendly. Regarding environmental issues caused due to unfair means of production of goods, 82.50 per cent respondents strongly agreed amongst which 38.33 per cent were males and 44.16 per cent were females. Majority of the respondents have good knowledge about green consumerism and they were well aware of the effects of green consumerism on environmental sustainability. Therefore, it can be said that while buying a product, respondents were well aware of the environmental impacts a product can make not only on humans but also on the environment.

V Attitude of the Respondents towards Green Consumerism and Environmental Sustainability: Regarding attitude of the respondents towards green consumerismit can be stated that 62.5 per cent respondents strongly agreed that they favored green products and were eco-friendly amongst which 35 per cent were males and 27.50 per cent were females. Approximately 81 per cent of the respondents strongly agreed to be a green consumer by using green products i.e. approximately 39 per cent were males and 42 per cent females. 62.50 per cent preferred green products over non-green products in which 35 per cent were male respondents and 27.50 per cent were females. Very few respondents were unable to decide. Only 10 per cent of the respondents strongly agreed that they would buy green products even on high prices and 60 per cent of them agreed to buy green products on high prices. Approximately 84 per cent respondents strongly agreed and believed that usage of green products ensures clean and pollution free environment. It can be concluded from the data that all the respondents had positive attitude towards green consumerism and all the respondents have strongly agreed that it is important to educate consumers about the relationship between green consumerism and environmental sustainability which will help the future generations to become a green consumer from the early stages of their life.

VI Practice of the Respondents towards Green Consumerism: 62.50 per cent respondents preferred green products over conventional products amongst which 32.5 per cent were males and 30 per cent were females. Majority of the respondents i.e. 80 per cent strongly agreed that they are very much concerned about the environment. 70 per cent of the respondents strongly agreed that they prefer buying green products when discounts were offered i.e. approximately 34 per cent males and 36 per cent

females. Further approximately 41 per cent respondents agreed to buy green products even if they were expensive whereas approximately 11 per cent of the respondents disagreed showing their concern about higher price.

Hence, it can be stated that family income and high prices of green products are the major concerns while buying a green product. Although the respondents had good knowledge and positive attitude towards green consumerism and environmental sustainability majority of the respondents were unable to bring the use of green products to practice due to several constraints out of which high prices of green products and family income were the major issues.

CONCLUSION

1. Based on the findings it can be concluded that majority of the respondents (both male and female) had good knowledge and awareness about the environmental hazards seen in the world today. They also possessed good deal of knowledge about green products, green consumerism and how it helps in environmental sustainability. They had a positive attitude towards saving the environment and adding to the healthcare by adopting green consumerism. In spite of having good knowledge and positive attitude, the practice behavior of the respondents was poor. Hence, it can be stated that positive attitude and enough knowledge towards green consumerism does not always lead to the purchasing of green products. There was a difference between knowledge, attitude and purchase intentions of the respondents.

2. On the basis of the above findings it can be concluded that the price of green products was a major factor that influenced the buying behavior of the respondents. The major problem that restricted respondents from adopting green consumerism was the price.

IMPLICATIONS

1. It is implied that the scale developed on Assessment of Green Consumerism on Environmental Sustainability during the present study will be useful in assessing the green or non-green behavior of urban consumers.

2. It is implied that the developed scale will be used to study the personal factors responsible for the consumer behavior.

3. It is implied that the scale can be used to study the environmental factors responsible for the consumer buying behavior.

4. It is implied that the study will make consumers aware about the relation of green products consumption with environmental sustainability.

5. It is implied that the study will bring awareness and enhance the knowledge of green product among consumers and will draw their attention towards practice of these products.

RECOMMENDATIONS

1. It is recommended to use the present scale to study personal as well as environmental factors that influence the buying behavior of the consumers.
2. It is recommended that same study can be conducted in rural areas as well.
3. It is recommended that the scale can be used to know and understand the relation between the consumer behavior and various personal and environmental factors.
4. It is recommended that rural and urban comparison can be done.

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Title: "Assessment of Green Consumerism on Environmental Sustainability"

ABSTRACT

Degradation of environment and natural resources is happening at a rapid pace. The consequences like climate change, global warming, and major catastrophes are appearing. Industries are one of the major sections that contribute in enormous amounts to deterioration of the environment. Environmental impacts are the untoward outgrowth of substandard economic activities. The raw material that is used in the production of goods and the final product that is consumed both are harmful to environment as well as to mankind.

After looking at the current scenario, a study was planned and bottomed on the notion of making consumers deterrent towards the hazards of using non eco-friendly product and make them aware about green products on the basis of their knowledge to the uttermost so that they use these products to the maximum and contribute in preventing environmental degradation by being green consumers in relation with the basic human needs i.e., food, shelter, clothing and healthcare which will ultimately help in sustainable development. The present study was conducted on 120 consumers to assess the knowledge, attitude and practice of consumers towards green consumerism and environmental sustainability in Nainital, Uttarakhand.

Data was collected from the consumers on personal level. Books, internet etc were also used as secondary sources of information.

The findings revealed that majority of respondents were aware of the green products. It was also noted that main source of information that created awareness about green products was internet. Consumers were willing to pay more for green products due to feeling of environmental protection responsibility and some have cited the concern for their health and spending quality life as the reasons. The major factor that strongly influenced the consumers buying behavior of green products is the price of the product. Consumers were found to be highly concerned with the impact of unfair means of production of conventional goods on the natural resources and environment and future ages. Thus, the efforts should be made by the companies and government to spread awareness about the benefits of the green products so that consumers get to know accurate information and facts about green products and they adopt green consumerism to the maximum.

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शीर्षक: "पर्यावरणीय स्थिरता पर हरित उपभोक्तावाद का आकलन"

सार

पर्यावरण और प्राकृतिक संसाधनों का ह्रास तीव्र गति से हो रहा है। जलवायु परिवर्तन, ग्लोबल वार्मिंग और बड़ी तबाही जैसे परिणाम दिखाई दे रहे हैं। उद्योग प्रमुख वर्गों में से एक हैं जो पर्यावरण की गिरावट में भारी मात्रा में योगदान करते हैं। पर्यावरणीय प्रभाव घटिया आर्थिक गतिविधियों का अप्रिय प्रभाव है। कच्चे माल का उपयोग माल के उत्पादन में किया जाता है और अंतिम उत्पाद जो दोनों का सेवन किया जाता है, पर्यावरण के साथ-साथ मानव जाति के लिए हानिकारक है।

वर्तमान परिदृश्य को देखने के बाद, एक अध्ययन की योजना बनाई गई थी और गैर पर्यावरण के अनुकूल उत्पाद का उपयोग करने के खतरों के प्रति उपभोक्ताओं को संवेदनशील बनाने की धारणा के आधार पर और उन्हें अपने ज्ञान के आधार पर हरे रंग के उत्पादों के बारे में जागरूक बनाने के लिए ताकि वे उपयोग करें ये उत्पाद अधिकतम मानवीय आवश्यकताओं अर्थात भोजन, आश्रय, वस्त्र और स्वास्थ्य सेवा के संबंध में हरित उपभोक्ता होने के नाते पर्यावरणीय क्षरण को रोकने में अधिकतम और योगदान करते हैं जो अंततः स्थायी विकास में मदद करेंगे। नैनीताल, उत्तराखंड में हरित उपभोक्तावाद और पर्यावरण स्थिरता के प्रति उपभोक्ताओं के ज्ञान, दृष्टिकोण और अभ्यास का आकलन करने के लिए 120 उपभोक्ताओं पर वर्तमान अध्ययन किया गया था।

व्यक्तिगत स्तर पर उपभोक्ताओं से डेटा एकत्र किया गया था। पुस्तकों, इंटरनेट आदि का उपयोग सूचना के द्वितीयक स्रोतों के रूप में भी किया जाता था।

निष्कर्षों से पता चला कि अधिकांश उत्तरदाताओं को हरे उत्पादों के बारे में पता है। यह भी नोट किया गया कि हरे उत्पादों के बारे में जागरूकता पैदा करने वाली जानकारी का मुख्य स्रोत इंटरनेट था पर्यावरण संरक्षण की जिम्मेदारी की भावना के कारण उपभोक्ता हरे उत्पादों के लिए अधिक भुगतान करने के लिए तैयार थे और कुछ ने अपने स्वास्थ्य और कारणों के रूप में गुणवत्तापूर्ण जीवन बिताने की चिंता का हवाला दिया है। प्रमुख कारक जिसने हरे उत्पादों के व्यवहार को खरीदने वाले उपभोक्ताओं को दृढ़ता से प्रभावित किया वह उत्पाद की कीमत है। कई उपभोक्ताओं ने उत्पाद की गैर-उपलब्धता को जिम्मेदार ठहराया है क्योंकि उनके क्रय व्यवहार को प्रतिबंधित किया गया है। प्राकृतिक संसाधनों और पर्यावरण और भविष्य के युगों में पारंपरिक वस्तुओं के उत्पादन के अनुचित साधनों के प्रभाव से उपभोक्ता अत्यधिक चिंतित पाए गए। इस प्रकार, कंपनियों और सरकार द्वारा हरित उत्पादों के लाभों के बारे में जागरूकता फैलाने के लिए प्रयास किए जाने चाहिए ताकि उपभोक्ताओं को हरित उत्पादों के बारे में सटीक जानकारी और तथ्यों का पता चल सके और वे हरित उपभोक्तावाद को अधिकतम रूप से अपना सकें।

Appendix - I

Assessment of Green Consumerism on Environmental Sustainability

General profile:

1. Name:
2. Age:
3. Sex:
4. Occupation:
5. Annual income:
6. Educational qualification:
7. Marital status:

General awareness:

1. Do you know what green products are?
   Yes/No
2. Do you consider yourself a green consumer?
   Yes/ No
3. Are you a consumer of any green product?
   Yes/No
   If yes, then which products?
   -
   -
   -
   -
4. Do you know the characteristics of green products?
   Yes/No
   - Eco-friendly
   - Bio-degradable
   - Reusable
   - Recyclable
   - Naturally made
   - Environmentally safe
   - Minimize Waste
   - Organic

5. Are you aware of the brands offering green products?

   Yes/No

6. Are you aware of the certified marks and symbols of green products?

   Yes/ No

7. Do you think there is enough information about green features when you buy the products?

   Yes/No

8. Where are the sources of information to you regarding green products?
   - T.V.
   - Radio
   - Newspaper
   - Magazines
   - Internet
   - Advertisements
   - Friends/Relatives
   - Outdoor media
   - Mobile Messages

9. What is the frequency of your buying green products?
   a. Daily
   b. Weekly
   c. Monthly
   d. When needed

10. How do you prefer buying green products?
    a. Local shops
    b. Online
    c. Company's agency
    d. Supply chain

11. What type of green products have you heard the most?
    a. Food items
    b. Clothing
    c. Green Building
    d. Home decoration
    e. Personal care/Beauty

f. Electronic appliances
g. Green toys
h. Home cleaning products
i. Solar Energy Appliances
j. Disposable Cutlery/Plates/Glasses

12. What type of green products do you prefer using the most?
    a. Food items
    b. Clothing
    c. Green Building
    d. Home decoration
    e. Personal care/Beauty
    f. Electronic appliances
    g. Green toys
    h. Home cleaning products
    i. Solar Energy Appliances
    j. Disposable Cutlery/Plates/Glasses
13. Are green products and environment related?

    Yes/ No
14. Do you consider yourself environment friendly?

    Yes/No
15. Do you think use of green products will help in protecting the environment?

    Yes/No
16. Do you think that production of consumer goods that we use cause harm to the environment.

    Yes/No

    If yes; what type of harm does non-green goods cause :

    a. Pollutes the environment
    b. Increases global warming
    c. Lead to deforestation
    d. Accumulates waste on earth
    e. Degrade the health
    f. Damage to biodiversity
    g. Resource depletion
    h. Toxic by products

i. Green house gas production

17. What is the biggest environment concern according to you?
    a. Pollution
    b. Greenhouse gases
    c. Food, farming and diet
    d. Plastic use.
    e. Global warming
18. Are you aware that waste disposal practices play a major role in environment pollution?
    Yes/No
19. Do you think that it is important to educate consumers about the relationship between eco-friendly production of goods and sustainable environment?
    Yes/No
20. What do you think environmental sustainability is?
    a. Saving environment
    b. Saving natural resources for future generations
    c. Pollution free environment
    d. Green environment
    e. All of the above
21. What according to you causes environmental degradation?
    a. Plastic
    b. Smog
    c. Domestic Waste
    d. Green House Gases
    e. Industrial Waste
22. What are the factors that affect buying behaviour?
    a. Product
    b. Price
    c. Place
    d. Promotion
23. What according to you is environmental responsibility of consumers?
    a. Buying quality products warranted against failure or wearing out.
    b. Learning about the materials that are used for manufacturing.
    c. Use of energy efficient equipment in homes/offices

d. Purchasing products that can be reused/recycle
e. Community resource sharing
f. Looking for new ways of waste disposal
g. Buying local products rather than global products
h. Seeking for organic/ecofriendly products
i. Making changes in life style to support future generation
j. Having a pro-environmental attitude
k. Using organically grown food rather than processed food
l. Less used of meat/pork etc.

Appendix - II

Scale for Assessment of green Consumerism on Environmental Sustainability

Knowledge:

S.No.	Statement	Strongly agree	Agree	Undecided	Disagree	Strongly disagree
1.	Green products are available everywhere easily					
2.	Green products can be purchased locally in shops					
3.	There are various brands offering green products					
4.	Green products have certification/standardizations marks					
5.	Green products have good quality					
6.	Green products are very costly					
7.	Green products are good for health					
8.	Green products help in protecting the environment					
9.	Green tax is paid by consumers					
10.	Green tax can help in reducing environmental degradation					
11.	Green products can be easily disposed off					
12.	Green products reduce global warming and green house gases					
13.	Green products are bio degradable, reusable and recyclable					
14.	Green products uses least resources					
15.	Green products can lessen the negative effects of sanitary practices and cleaning operations to the environment					
16.	Green products are organic and eco-friendly					
17.	Green products are eco efficient					

18.	Green products do not use toxic chemicals and are environmental friendly					
19.	Green products are toxic free and hygienic					
20.	Concern about the environment affect the purchasing decision					
21.	Green products have eco friendly packaging					
22.	Sustainable environment can be obtained by using energy efficient amenities					
23.	Environmental problems are caused due to unfair means of production of goods					

Attitude

S.No.	**Statements**	**Strongly agree**	**Agree**	**Undecided**	**Disagree**	**Strongly disagree**
1.	I consider myself eco friendly as I favour green products					
2.	I want to be a green consumer by using green products					
3.	Green products are true to their environment friendly claim					
4.	I prefer green products, over non-green products					
5.	I use green products and they give me a sense of satisfaction					
6.	I agree to buy green products in spite of high prices					
7.	I buy green products as I am concerned for the health of family					
8.	Green products justifies their high price					

9.	Green products are a symbol of status					
10.	The taste, smell and texture of green products are good and different					
11.	I believe that use of green products ensures clean and pollution free environment					
12.	I think it is important to educate consumers about the relationship between green consumerism and environment sustainability					
13.	Green products are essential for better future					
14.	Green products conserve energy and water					
15.	Green production is ecological need and not marketing strategy					
16.	I am highly satisfied when I buy green products					
17.	I feel joyful while using green products					

Practice

S.No.	Statements	Strongly agree	Agree	Undecided	Disagree	Strongly disagree
1.	I prefer green products over conventional products					
2.	I buy branded green products only					
3.	I buy green products even if they are expensive than conventional products					
4.	I usually buy organic food items					
5.	I buy and use cosmetic products having eco labels					
6.	I use eco-friendly electrical appliances that are energy efficient					
7.	I avoid buying products from companies which are not environmentally responsible					
8.	I buy green products from retail outlets after being satisfied					
9.	I prefer buying green products when price discounts are offered					

10.	I look for certification marks which declares that the product is environment friendly or not					
11.	I prefer green products which ensure the health of my family					
12.	I give weightage to country of origin manufacturing green products					
13.	Quality of green product is important					
14.	I usually buy products which have been used and tested by close family relatives, friends or peers					
15.	Family income affects the purchase intention of green products					
16.	Functionality of the green product is important to me					
17.	I am very much concerned about environment and therefore I choose products accordingly					
18.	I buy green products because I want to show my uniqueness and foster my self-image					