

# **PROJECT DISSERTATION**

*ON*

## **STUDY OF CONSUMER'S BUYING BEHAVIOUR FOR PRODUCTS WITH CARBON FOOTPRINT LABEL**

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## CERTIFICATE

This is to certify that the dissertation report titled “Study of consumer’s buying behaviour for products with carbon footprint label”, is a bonafide work carried out by **Mr. Siddharth Singh** of **MBA 2017-19** and submitted to Delhi School of Management, Delhi Technological University, Bawana Road, Delhi-42 in partial fulfillment of the Requirement for the award of the Degree of Masters of Business Administration.

**Signature of Guide**

**Signature of Head(DSM)**

Place:

Seal of Head

Date:

## DECLARATION

I, **Siddharth Singh**, student of MBA 2017-19 of Delhi School of Management, Delhi Technological University, Bawana Road, Delhi – 42, hereby declare that the dissertation report “Study of consumer’s buying behaviour for products with carbon footprint label” submitted in partial fulfilment of Degree of Masters of Business Administration is the original work conducted by me.

The information and data given in the report is authentic to the best of my knowledge.

This report is not being submitted to any other University, for award of any other Degree, Diploma or Fellowship.

PLACE:

SIDDHARTH SINGH

DATE:

## **ACKNOWLEDGEMENT**

It is pleasure to acknowledge many people who knowingly and unwittingly helped me, to complete my project. First of all, let me praise God for all the blessings, which carried me through all those years.

First & foremost, I would like to express my regards to **Mr. Yashdeep Singh** for his constant encouragement and support. I would also like to express my immense gratitude towards all the lecturers of our college for providing the invaluable knowledge, guidance, encouragement extended during the completion of this project.

I extend my sincere gratitude to all my teachers and guide who made unforgettable contribution. Due to their sincere efforts I was able to excel in the work entrusted upon me.

**Siddharth Singh**

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## **TITLE OF THE PROJECT**

**“STUDY OF CONSUMER’S BUYING  
BEHAVIOUR FOR PRODUCTS WITH  
CARBON FOOTPRINT LABEL”**

# CHAPTER - 1

## 1.1 COMPANY PROFILE

A customer is anyone makes regular purchases from a company or a store, while a consumer is one who makes any transactional decisions of economic nature including buying of goods and services. Consumer can be both personal consumer who buy for his or her own person and family consumption and organizational consumer which could include nongovernmental organization, political groups, companies and governments. Consumer behaviour is the study of how individuals, group, and organizations select, buy, use, and dispose of goods, services, ideas, or experiences to satisfy their needs and wants. Buying Behaviour refers to the buying behaviour of the ultimate consumer. Buying Behaviour is the decision processes and acts of people involved in buying and using products which includes social and mental processes. This study was undertaken in order to find out the factors influencing consumer's purchase decision of Meat product from KFC if it has its carbon footprint labelled on its packaging. And the findings of this first objective will provide the basis for the second research objective in the study. Secondly, it is intended to find out whether there are differences among consumer groups of meat product with respect to the importance given to the factors influencing consumers' meat product purchases. The customer base of a company consists of three groups of consumers stayers (those who had never switched from a previous brand), satisfied switchers (those who switched for reasons other than dissatisfaction) and dissatisfied switchers (those who switched because they were dissatisfied from their previous brand). This study, thus looks into the understanding of the attitudes of these three different groups of customers which plays an important role when implementing effective and feasible retention and loyalty strategies. Furthermore, it is also crucial to understand whether there are differences among these groups in terms of the factors affecting their future meat product consumption and purchases.

KFC, also known as Kentucky Fried Chicken is an American fast food restaurant chain headquartered in Louisville, Kentucky, that specializes in fried chicken. It is the world's second-largest restaurant chain (as measured by sales) after McDonald's, with 22,621 locations globally in 136 countries as of December 2018. The chain is a subsidiary

of Yum! Brands, a restaurant company that also owns the Pizza Hut, Taco Bell, and WingStreet chains.

KFC was founded by Colonel Harland Sanders, an entrepreneur who began selling fried chicken from his roadside restaurant in Corbin, Kentucky, during the Great Depression. Sanders identified the potential of the restaurant franchising concept, and the first "Kentucky Fried Chicken" franchise opened in Utah in 1952. KFC popularized chicken in the fast food industry, diversifying the market by challenging the established dominance of the hamburger. By branding himself as "Colonel Sanders", Harland became a prominent figure of American cultural history, and his image remains widely used in KFC advertising to this day. However, the company's rapid expansion overwhelmed the aging Sanders, and he sold it to a group of investors led by John Y. Brown Jr. and Jack C. Massey in 1964.

KFC was one of the first American fast food chains to expand internationally, opening outlets in Canada, the United Kingdom, Mexico, and Jamaica by the mid-1960s. Throughout the 1970s and 1980s, it experienced mixed fortunes domestically, as it went through a series of changes in corporate ownership with little or no experience in the restaurant business. In the early 1970s, KFC was sold to the spirits distributor Heublein, which was taken over by the R.J. Reynolds food and tobacco conglomerate; that company sold the chain to PepsiCo. The chain continued to expand overseas, however, and in 1987, it became the first Western restaurant chain to open in China. It has since expanded rapidly in China, which is now the company's single largest market. PepsiCo spun off its restaurants division as Tricon Global Restaurants, which later changed its name to Yum! Brands.

KFC's original product is pressure-fried chicken pieces, seasoned with Sanders' recipe of 11 herbs and spices. The constituents of the recipe represent a notable trade secret. Larger portions of fried chicken are served in a cardboard "bucket", which has become a well-known feature of the chain since it was first introduced by franchisee Pete Harman in 1957. Since the early 1990s, KFC has expanded its menu to offer other chicken products such as chicken fillet sandwiches and wraps, as well as salads and side dishes such



as French fries and coleslaw, desserts, and soft drinks; the latter often supplied by PepsiCo. KFC is known for its slogans "It's Finger Lickin' Good!", "Nobody does chicken like KFC", and "So good".

## **1.2 OBJECTIVES OF THE STUDY**

### **Secondary objective**

- To study the buying behaviour of the consumers for carbon footprint labels of food items, here Meat products.
- To provide various suggestions in this regard.
- To know the preference of Consumer to the carbon footprint while opting for a Meat product.

## **CHAPTER - 2**

### **2.1 CONCEPTUAL FRAMEWORK**

A carbon footprint is historically defined as the total emissions caused by an individual, event, organization, or product, expressed as carbon dioxide equivalent. Greenhouse gases (GHGs), including carbon dioxide, can be emitted through land clearance and the production and consumption of food, fuels, manufactured goods, materials, wood, roads, buildings, transportation and other services.

In most cases, the total carbon footprint cannot be exactly calculated because of inadequate knowledge of and data about the complex interactions between contributing processes, including the influence of natural processes that store or release carbon dioxide. For this reason, Wright, Kemp, and Williams, have suggested to define the carbon footprint as:

A measure of the total amount of carbon dioxide (CO<sub>2</sub>) and methane (CH<sub>4</sub>) emissions of a defined population, system or activity, considering all relevant sources, sinks and storage within the spatial and temporal boundary of the population, system or activity of

interest. Calculated as carbon dioxide equivalent using the relevant 100-year global warming potential (GWP100)

The concept name of the carbon footprint originates from ecological footprint, discussion, which was developed by William E. Rees and Mathis Wackernagel in the 1990s. This accounting approach compares how much people demand compared to what the planet can renew. This allows to assess the number of "earths" that would be required if everyone on the planet consumed resources at the same level as the person calculating their ecological footprint. The carbon Footprint is one part of the ecological footprint.

Evaluating the package of some products is key to figuring out the carbon footprint. The key way to determine a carbon footprint is to look at the materials used to make the item. For example, a juice carton is made of an aseptic carton, a beer can is made of aluminium, and some water bottles either made of glass or plastic. The larger the size, the larger the footprint will be.

In a 2014 study by Scarborough et al., the real-life diets of British people were surveyed and their dietary greenhouse gas footprints estimated. Average dietary greenhouse-gas emissions per day (in kilograms of carbon dioxide equivalent) were:

- 7.19 for high meat-eaters
- 5.63 for medium meat-eaters
- 4.67 for low meat-eaters
- 3.91 for fish-eaters
- 3.81 for vegetarians
- 2.89 for vegans

Meat production and processing involves most of the carbon footprint in the food sector. Hence this study is conducted to determine the impact of labelling food products, especially meat products, with the data of carbon footprint on it's package along with the nutrients details.

## 2.2 LITERATURE REVIEW

The global human population is growing exponentially and is supposed to reach 9-10 billion by 2050 (Hertwich, UNEP. 2010). Alongside is increasing the demand for consumer goods and services. With every new product that is manufactured or consumed some CO<sub>2</sub> and GHG are released in the atmosphere during the manufacturing process. Carbon Footprint (CF) is being widely used across the globe with increasing consumerism but without being clearly defined in the scientific community. Some of the definitions of CF given by various institutions are as follows.

According to BP (2007), "The carbon footprint is the amount of carbon dioxide emitted due to your daily activities – from washing a load of laundry to driving a carload of kids to school."

British Sky Broadcasting (Sky) (Patel 2006) stated that The carbon footprint was calculated by "measuring the CO<sub>2</sub> equivalent emissions from its premises, company-owned vehicles, business travel and waste to landfill." (Patel 2006).

According to Carbon Trust (2007) "... a methodology to estimate the total emission of greenhouse gases (GHG) in carbon equivalents from a product across its life cycle from the production of raw material used in its manufacture, to disposal of the finished product (excluding in-use emissions). "... a technique for identifying and measuring the individual greenhouse gas emissions from each activity within a supply chain process step and the framework for attributing these to each output product (we [The Carbon Trust] will refer to this as the product's 'carbon footprint')." (CarbonTrust 2007, p.4)

Another organization Energetics (2007) states that "... the full extent of direct and indirect CO<sub>2</sub> emissions caused by your business activities."

ETAP (2007) "...the 'Carbon Footprint' is a measure of the impact human activities have on the environment in terms of the amount of greenhouse gases produced, measured in tonnes of carbon dioxide."

Global Footprint Network (2007) "The demand on biocapacity required to sequester (through photosynthesis) the carbon dioxide (CO<sub>2</sub>) emissions from fossil fuel combustion." (GFN 2007)

Grub & Ellis (2007): "A carbon footprint is a measure of the amount of carbon dioxide emitted through the combustion of fossil fuels. In the case of a business organization, it is the amount of CO<sub>2</sub> emitted either directly or indirectly as a result of its everyday operations. It also might reflect the fossil energy represented in a product or commodity reaching market."

Parliamentary Office of Science and Technology (POST 2006): "A 'carbon footprint' is the total amount of CO<sub>2</sub> and other greenhouse gases, emitted over the full life cycle of a process or product. It is expressed as grams of CO<sub>2</sub> equivalent per kilowatt-hour of generation (gCO<sub>2</sub> eq/kWh), which accounts for the different global warming effects of other greenhouse gases."

Considering all these definitions Thomas Wiedmann and Jan Minx, 2007 coined a definition which is "The carbon footprint is a measure of the exclusive total amount of carbon dioxide emissions that is directly and indirectly caused by an activity or is accumulated over the life stages of a product."

It is widely accepted by many scholars (Dernfed et al. 2013, Kempton 1993) that manufacturing is increasing the global temperature and is going to increase rapidly in the near future. But do consumers understand the ecological implications of the products they consume? Some scholars suggested (Leire and Thidell (2005) and Thøgersen et al. (2010)) there is a need for a better understanding of consumer response to eco-labels.

Some studies (Cowburn and Stockley 2005; Grunert and Wills 2007; Rex and Baumann 2007) on the reviews of food labelling suggest that the nutrition information, particularly if it is complicated, seldom influence the buyer behaviour. Moreover, other studies by many researchers (e.g., Erskine and Collins 1997; Valor 2008; Weightman and McDonagh

2004) suggest that sustainability claims rarely affect the consumers, but others (Laroche et al. 2001; Young et al. 2010) have reported an increasing willingness to pay a premium for “green ” products. According to a study in Europe (Noussair et al., 2002) buyers normally stayed unaware regarding the labelling of genetically modified ingredients in the food.

A study in Australia (Vanclay et al. 2010) reported that the overall change in purchasing pattern was small, with black-labelled sales decreasing 6% and green-labelled sales increasing 4% after labelling. However, when green-labelled products were also the cheapest, the shift was more substantial, with a 20% switch from black- to green-label sales.

In a similar study in Finland (Hartikainen et al. 2013) it was found that only 7% of the respondents linked ‘product carbon footprint’ spontaneously to greenhouse gas emissions associated with the product and an additional 5% of the respondents linked it to climate change. 90% stated that a carbon footprint would have at least a little impact on their buying decision, 86% preferred carbon labels that allow comparisons of carbon footprints to be made among food products.

Many researchers have observed consumer demand for eco-labels that would assist such wise decision-making by shoppers (e.g., Harris 2007; Howard 2006). Leire and Thidell (2005) reported that many Nordic shoppers were familiar with eco-labelling and called for studies of the effect of eco-labels on purchasing decisions.

## 2.3 RESEARCH METHODOLOGY

The research design is Descriptive studies. Descriptive studies are well structured, they tend to be rigid and its approach cannot be changed every now and then.

Descriptive studies are undertaken in many circumstances.

- When the researcher is interested in knowing the characteristics of certain groups such as age, profession.
- When the researcher is interested in knowing the proportion of people in given population who have behaved in a particular manner, making projection of certain things.

The objective of this kind of study is to answer the why, who, what, when and how of the subject under consideration.

I have taken descriptive because my research includes the knowing the behavior of customer to the carbon footprint while opting for a Meat product. I have analyzed how people of various age groups respond towards the carbon footprint while opting for a Meat product.

Research as we know is an art of scientific investigation. It refers to the systematic method consisting of enunciating the problem formulating a hypothesis, collection of the facts or data analyzing the fact and reaching certain conclusions either in the form of solutions towards the concerned problems or in certain generalization for some theoretical formulation. In short, search for through objectives and systematic method of finding solution to the problem in research.

Research methodology is a way to systematically solve the research problem. It may be understood as a science of studying how research is done scientifically. In it we study the various steps, the research process that is generally adopted to study the research problem and basic logics behind them.

Research methodology includes the following steps:

- Formulate the objectives of the study.

- Collection of the primary and secondary data.
- Interpreting the data and drawing the conclusions.

A research design is the arrangement of condition and analysis of data in a manner that aims to combine relevance to research purpose with economic in procedure. It is the overall operational pattern or framework of the project. What information is to be collected from which sources by which procedures? Three research designs are:-

- Exploratory Research
- Descriptive Research
- Experimental Research

1. Exploratory Research to gain familiarity with a phenomenon or to achieve new insight into its studies.

2. Descriptive Research to portray accurately the characteristics of particular individual, situation of a group.

3. Experimental Research to determine the frequently with which something occur or with it is associate with sometime else.

I have selected the Descriptive research design for my research.

Research will be Descriptive; the 100 people were chosen for the study. Collected data will be analysed as per need of objectives and hypothesis.

### **Data Collection from Secondary Source**

Information was collected from secondary sources such as customer survey, newspapers advertisements, automobile newsletters, etc.

Beside these the use of internet was also made in collecting relevant information. The data collected from the above mentioned sources has been adequately structured and used at appropriate places in the report. The information gathered included:

- their annual reports.
- pamphlets.
- newsletters.
- pictures.
- exchange schemes.

### **Data Collection from Primary Source**

In order to gather information about the sales of various products, I personally visited a number of KFC outlets and collected data pertaining to the carbon footprint. The market visits were useful in knowing the comparative prices and quality of the offered brands vis-versa the competitive brands.

By interviewing these customers, valuable information was collected. I inquired from them about their buying choices and brand loyalty towards KFC.

### **Scaling Techniques**

Pie chart with the help of Microsoft excels and other Statistical techniques will be used.

### **Data Analysis**

After getting the questionnaire filled from the selected respondents, the data was presented in form of pie-charts. To analyse the data in a useful and meaningful manner, simple statistical tools like percentages were used.

### **Questionnaire Development and Pretesting**

It is the procedure of selecting units in the sample. There are two basic methods of sampling.



1. Probability Sampling: in this method of sampling each unit of the population has a definite chance of being include in the sample.
2. Non – probability sampling: here to particular method for selecting the units of the sample is adopted. The basis of selecting can be simply opportunity convenience and purpose.

Sampling plan: - The plan calls for two decisions.

(a) Sampling Unit: - who is to be surveyed?

Universe or target population for the present study consists of people in Delhi/ NCR .

(b) Sampling Size: - How many people should be surveyed?

Sample size consists of 100 respondents.

## **TOOLS AND TECHNIQUES OF ANALYSIS**

### **Tools for analysis**

- Bar chart (Bar charts will be used for comparing two or more values that will be taken over time or on different conditions, usually on small data set )
- Pie-chart (Circular chart divided in to sectors, illustrating relative magnitudes or frequencies)

## CHAPTER-3

### DATA ANALYSIS & INTERPRETATIONS

The data given below was based on the questions which are asked during the survey.

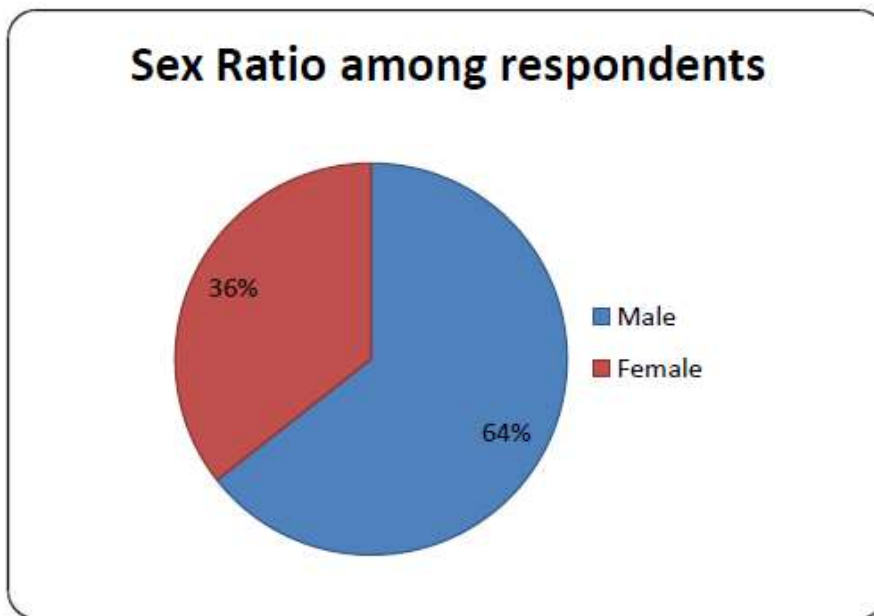
#### DATA ANALYSIS AND INTERPRETATION IN INDIA

##### Q. 1. Sex Ratio among respondents

Table No. 1

	No. of Respondents	Percentage
Male	64	64%
Female	36	36%
Totals	100	

Graph No. 1



##### Interpretation:

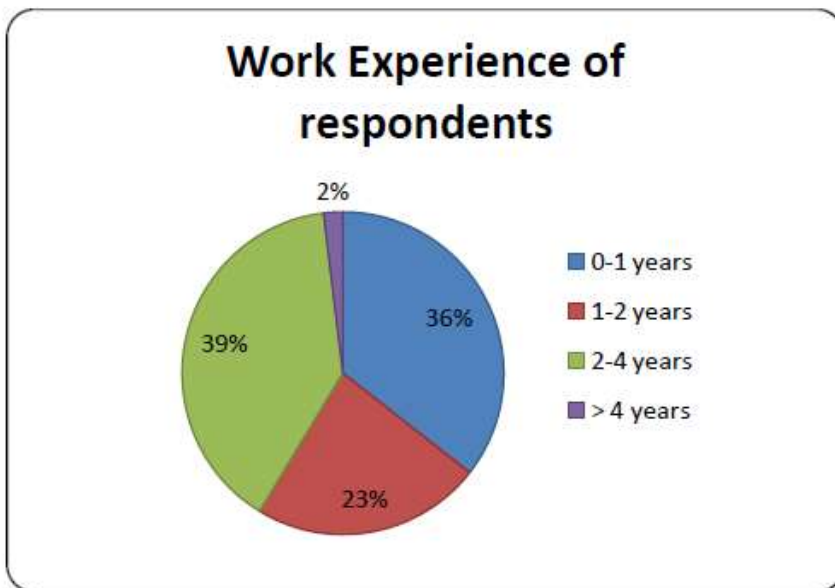
The above graph reveals that our most respondent (male 64 %) is Male.

**Q. 2. Indicate your work experience**

**Table No. 2**

Options	No. of Respondents	Percentage
0-1 years	36	36%
1-2 years	23	23%
2-4 years	39	39%
> 4 years	2	2%
Totals	100	100%

**Graph No. 2**



**Interpretation:**

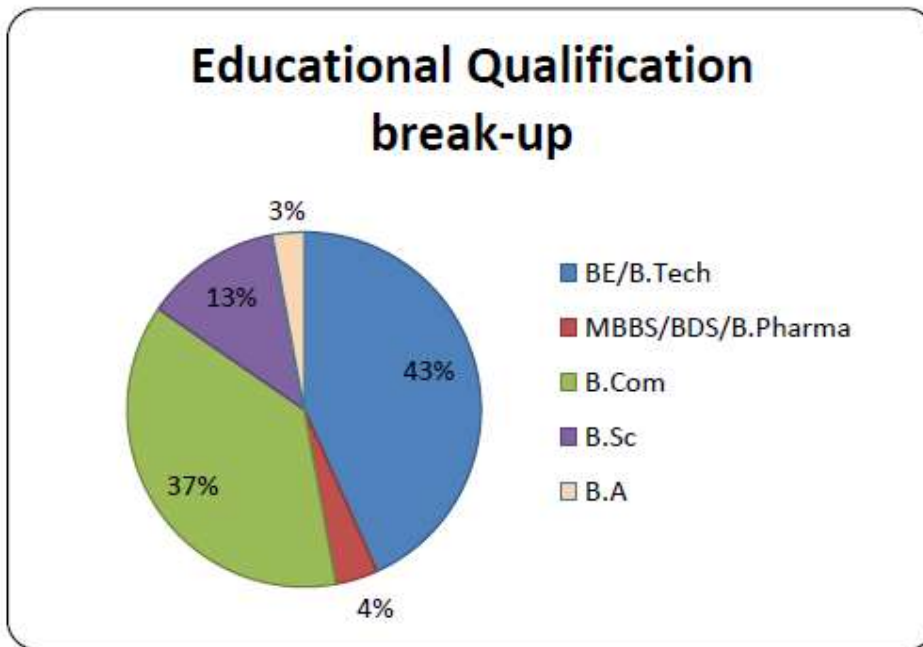
The above graph reveals that 36 % respondents are having a work experience in between 0-1 years. 23 % respondents are having a work experience in between 1-2 years. 39 % respondents are having a work experience in between 2-4 years. And only 2 % respondents are having a work experience in between above 4 years.

**Q. 3. Indicate your educational qualification**

**Table No. 3**

Options	No. of Respondents	Percentage
BE/BTech	43	43%
MBBS/BDS	7	7%
B.Com	37	37%
BSc	13	13%
BA	3	3%
Totals	100	100%

**Graph No. 3**



**Interpretation:**

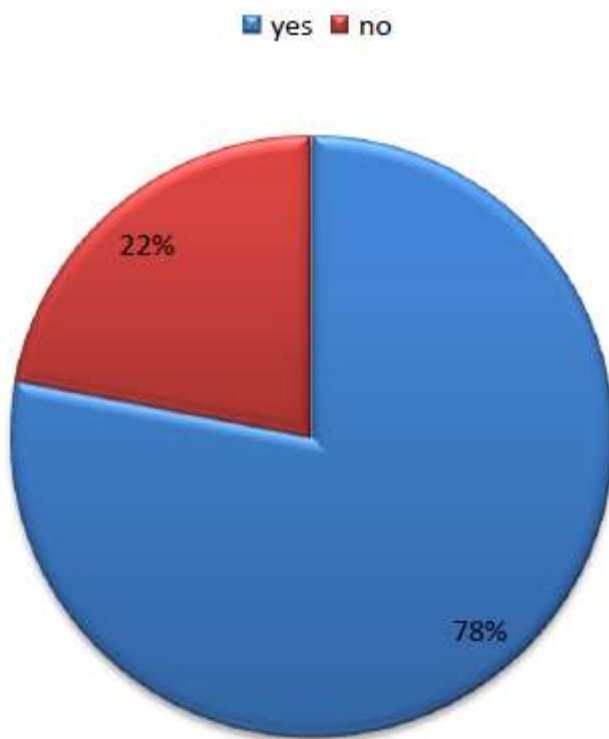
The above graph reveals that 43 % respondents belong to BE/B.tech . 4 % respondents belong to MBBS/ BDS/ B.PHARMA . 37 % respondents belong to B.Com . 13 % respondents belong to B.Sc . 3 % respondents belong to B.A .

**Q.4 : Do you know about climate change and carbon footprint concept?**

**Table No. 4**

Options	No. of Respondents	Percentage
Yes	78	78%
No	22	22%
Totals	100	100%

**Graph No. 4**



**Interpretation:**

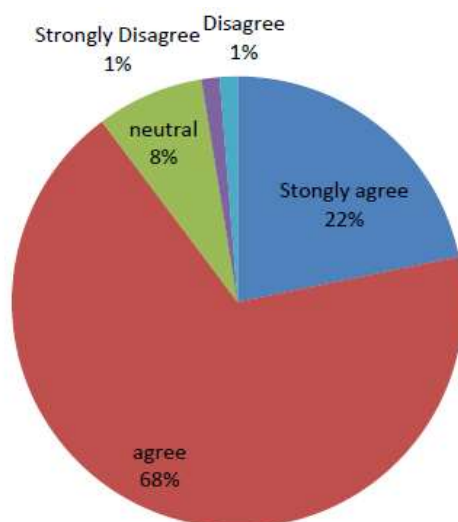
As per the graph above, 78% students have a brief idea about the carbon footprint concept and how it signifies with climate change, and rest 22% are not properly aware of it.

**Q.5 : Do you recognize KFC to be the most famous brand in India that uses Meat as its prime product?**

**Table No. 5**

Options	No. of Respondents	Percentage
Strongly Agree	22	22%
Agree	68	68%
Neutral	8	8%
Disagree	1	1%
Strongly Disagree	1	1%
Totals	100	100%

**Graph No. 5**



**Interpretation:**

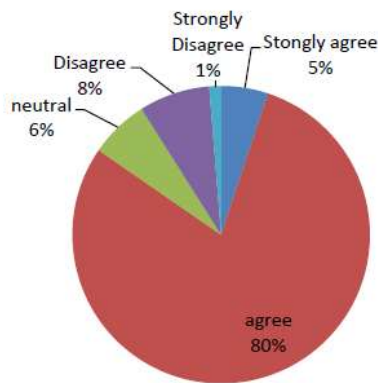
As per the graph above, 90% respondents are agreed with the question, that they recognize KFC as the most famous brands in the market for Meat based products and 10% are not sure about it.

**Q.6 : In the case that there are many Meat Product brands in the market, you would prefer KFC over others?**

**Table No. 6**

Options	No. of Respondents	Percentage
Strongly Agree	5	5%
Agree	80	80%
Neutral	6	6%
Disagree	8	8%
Strongly Disagree	1	1%
Totals	100	100%

**Graph No. 6**



**Interpretation:**

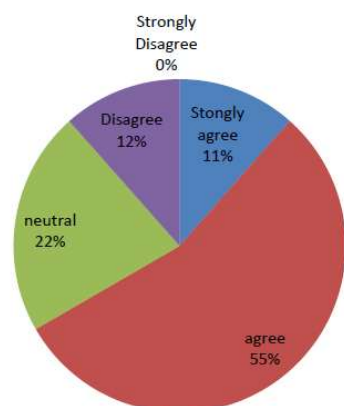
As per the graph above, 85% of respondents are agreed with the question, that they would prefer KFC over other famous brands in the market and 15% are not sure about it or disagreed with it.

**Q.7 : You will choose a well-known brand when the other brands offer similar feature or price but are more eco-friendly in terms of carbon footprint ?**

**Table No. 7**

Options	No. of Respondents	Percentage
Strongly Agree	11	11%
Agree	55	55%
Neutral	22	22%
Disagree	12	12%
Strongly Disagree	11	11%
Totals	100	100%

**Graph No. 7**



**Interpretation:**

As per the graph above, 66% of the respondents are agreed with the question that they will choose an eco-friendlier brand in spite the other brands offer the same features and 22% of the respondents are neutral and the rest 12% of the respondents says that they disagree with the question.

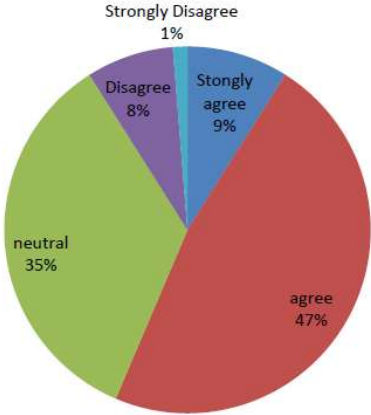


**Q.8 : Do you agree well-known brands hold responsibility towards helping in combating with climate change with advances in innovation?**

**Table No. 8**

Options	No. of Respondents	Percentage
Strongly Agree	9	9%
Agree	47	47%
Neutral	35	35%
Disagree	8	8%
Strongly Disagree	1	1%
Totals	100	100%

**Graph No. 8**



**Interpretation:** As per the graph above, 56% of the respondents agreed with the notion that brands have a significant role to play in combatting global climate change with advance in innovation whereas 35% of the respondents remains neutral and 9% of the respondents disagree with the question.

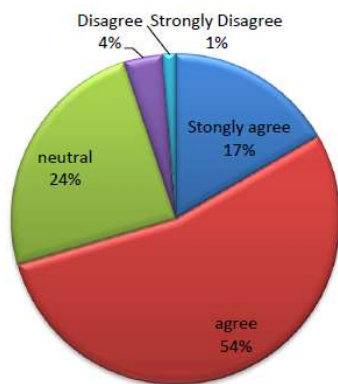
**Q.9 : What do you think, daily use product should be regulated according to their overall effect on climate change?**

**1. Strongly Agree 2. Agree 3. Neutral 4. Disagree 5. Strongly Disagree**

**Table No. 9**

Options	No. of Respondents	Percentage
Strongly Agree	17	17%
Agree	54	54%
Neutral	24	24%
Disagree	4	4%
Strongly Disagree	1	1%
Totals	100	100%

**Graph No. 9**



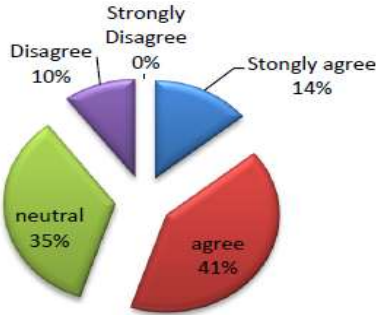
**Interpretation:** As per the graph above, 71% of the respondents are agreed on regulating daily use product should be regulated according to their overall effect on climate change whereas 24% of respondents remain neutral and the rest 5% disagree with the question.

**Q.10 : You will purchase a well-known brand because well-known brands provides labelled data about its carbon footprint, better quality and service even you need to pay a price premium?**

**Table No. 10**

Options	No. of Respondents	Percentage
Strongly Agree	14	14%
Agree	41	41%
Neutral	35	35%
Disagree	10	10%
Strongly Disagree	0	0%
Totals	100	100%

**Graph No. 10**



**Interpretation:**

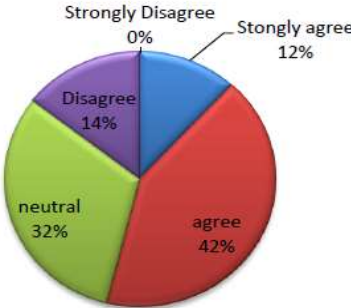
As per the graph above, 55% of the respondents are agreed with the question that they will purchase a well-known brand even they need to pay the price premium for an added information of Carbon Footprint, whereas 35% of the respondents remains neutral and 10% of the respondents are disagreed with this.

**Q.11 : Do you agree that brand should be more transparent about the processes involved that affects the environment?**

**Table No. 11**

Options	No. of Respondents	Percentage
Strongly disagree	12	12%
Disagree	42	42%
Neutral	32	32%
Agree	14	14%
Strongly agree	0	0%
Totals	100	100%

**Graph No. 11**



**Interpretation:**

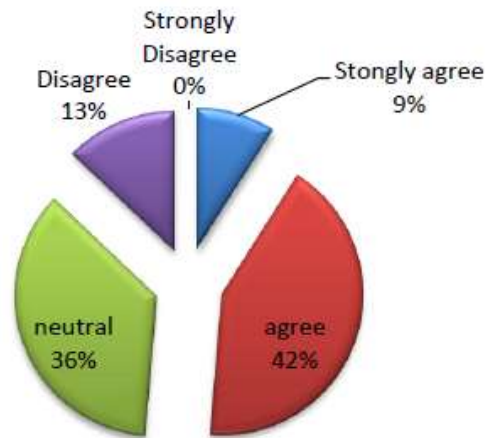
As per the graph above, 54% of the respondents agreed that brand should be more transparent about the processes involved that affects the environment where 32% of the respondents remains neutral and 14% of the respondents showed their disagreement.

**Q.12 : Do you agree that brands like KFC will have a better brand image if they exhibit and optimises the amount of Carbon footprint it has on its products ?**

**Table No. 12**

Options	No. of Respondents	Percentage
Strongly Agree	9	9%
Agree	42	42%
Neutral	36	36%
Disagree	13	13%
Strongly Disagree	0	0%
Totals	100	100%

**Graph No. 12**



**Interpretation:**

As per the graph above, 51% of the respondents are agreed with the question whereas the 36% of the respondents remains neutral and 13% of the respondents disagreed to it.

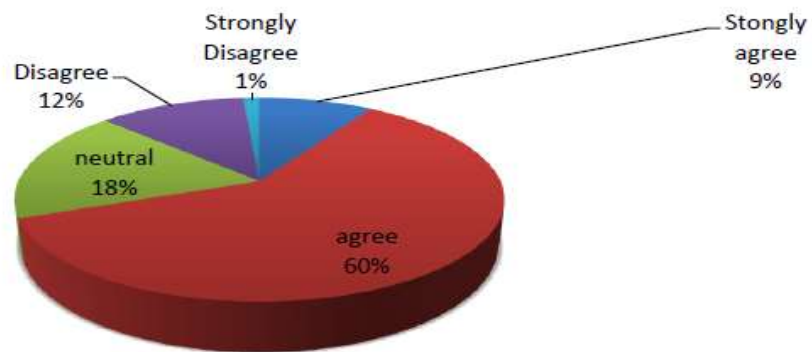
**Q.13 : Do you agree that the Govt should intervene and introduce a policy/law for companies to track and publish the carbon footprint details to the public?**

**1. Strongly Agree 2. Agree 3. Neutral 4. Disagree 5. Strongly Disagree**

**Table No. 13**

Options	No. of Respondents	Percentage
Strongly Agree	9	9%
Agree	60	60%
Neutral	18	18%
Disagree	12	12%
Strongly Disagree	1	1%
Totals	100	100%

**Graph No. 13**



**Interpretation:**

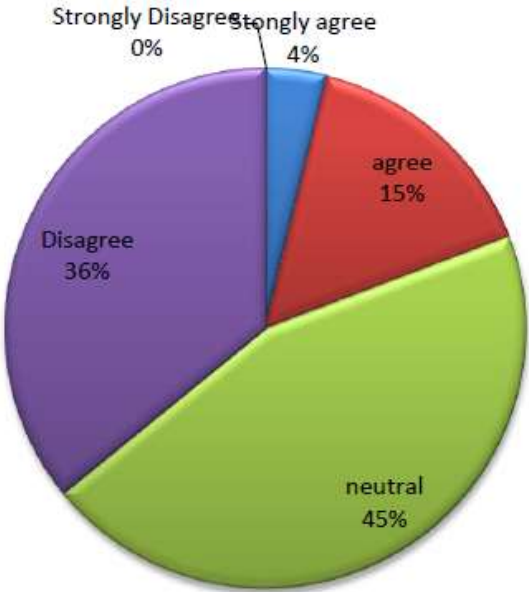
As per the graph above, 69% of the respondents are agreed that the Govt should intervene and provide a framework for companies to be more transparent. Whereas 18% stayed neutral and the rest 13% of the respondents are disagree with this question.

**Q.14 : Do you think, only brand should have the freedom and authority to choose whether they want to publish the carbon footprint details or not?**

**Table No. 14**

Options	No. of Respondents	Percentage
Strongly Agree	4	4%
Agree	15	15%
Neutral	45	45%
Disagree	36	36%
Strongly Disagree	0	0%
Totals	100	100%

**Graph No. 14**



**Interpretation:**

As per the graph above, 36% of the respondents disagreed that only brand should have the freedom and authority to choose whether they want to publish the carbon footprint details or not where as only 19% agreed.

**Q.15 : Would you stop using products from the brands that will have a high carbon footprint score?**

**1. Strongly Agree 2. Agree 3. Neutral 4. Disagree 5. Strongly Disagree**

**Table No. 15**

Options	No. of Respondents	Percentage
Strongly Agree	9	9%
Agree	22	22%
Neutral	20	20%
Disagree	31	31%
Strongly Disagree	18	18%
Totals	100	100%

**Graph No. 15**



**Interpretation:**

As per the graph above, 31% of the respondents are agreed whereas 20% of the respondents are neutral and 49% of the respondents are disagreed with it.

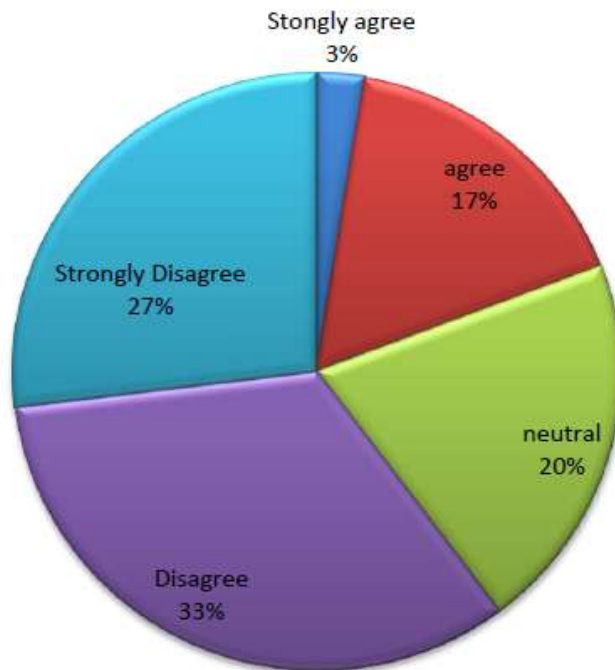


**Q.16 : Do you think brands should be charging premium if they add a Carbon Footprint label along with their products in order to improve upon their production and CF score?**

**Table No.16**

Options	No. of Respondents	Percentage
Strongly Agree	3	3%
Agree	17	17%
Neutral	20	20%
Disagree	33	33%
Strongly Disagree	27	27%
Totals	100	100%

**Graph No. 16**



**Interpretation:**

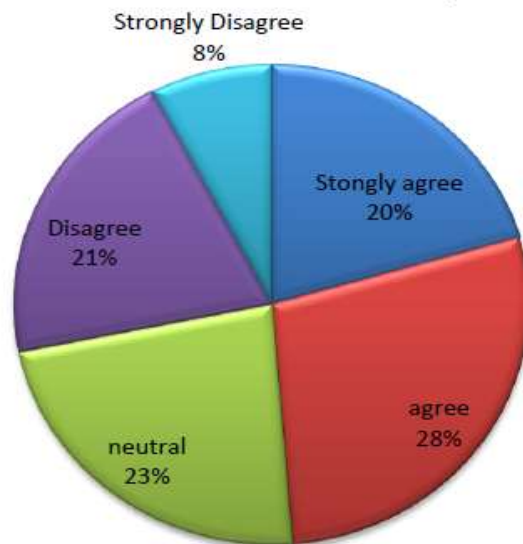
As per the graph above, 20% of the respondents are agreed to paying a premium whereas 20% of the respondents remains neutral and 60% of the respondents says that they disagree with brands charging extra to improve their product and CF score.

**Q.17 : Having a carbon footprint Label will affect your buying decision?**

**Table No. 17**

Options	No. of Respondents	Percentage
Strongly Agree	20	20%
Agree	28	28%
Neutral	23	23%
Disagree	21	21%
Strongly Disagree	8	8%
Totals	100	100%

**Graph No. 17**



**Interpretation:** As per the graph above, 48% of the respondents are agreed to that their buying decision will get affected because of the label whereas 23% of the respondents remains neutral and 29% of the respondents disagreed.

## CHAPTER – 4

### SUMMARY AND CONCLUSIONS

#### 4.1 Finding

- The above graphs reveals that our most respondents have decent knowledge about the carbon footprint and how it is measured.
- The above graph reveals that respondents belonging to BE/B.tech hold the majority. While respondents belonging to MBBS/ BDS/ B.PHARMA are on the other side of the spectrum along with BA.
- As per the graph above, 90% respondents are agreed with the question, that they recognize KFC as the most famous brands in the market for Meat based products and 10% are not sure about it.
- As per the graph above, 85% of respondents are agreed with the question, that they would prefer KFC over other famous brands in the market and 15% are not sure about it or disagreed with it.
- As per the graph above, 66% of the respondents are agreed with the question that they will choose an eco-friendlier brand in spite the other brands offer the same features and 22% of the respondents are neutral and the rest 12% of the respondents says that they disagree with the question.
- As per the graph above, 56% of the respondents agreed with the notion that brands have a significant role to play in combatting global climate change with advance in innovation whereas 35% of the respondents remains neutral and 9% of the respondents disagree with the question.
- As per the graph above, 71% of the respondents are agreed on regulating daily use product should be regulated according to their overall effect on climate change whereas 24% of respondents remain neutral and the rest 5% disagree with the question.
- As per the graph above, 55% of the respondents are agreed with the question that they will purchase a well-known brand even they need to pay the price premium for an added information of Carbon Footprint, whereas 35% of the respondents remains neutral and 10% of the respondents are disagreed with this.

- As per the graph above, 54% of the respondents agreed that brand should be more transparent about the processes involved that affects the environment where 32% of the respondents remains neutral and 14% of the respondents showed their disagreement.
- As per the graph above, 69% of the respondents are agreed that the Govt should intervene and provide a framework for companies to be more transparent. Whereas 18% stayed neutral and the rest 13% of the respondents are disagree with this question.
- As per the graph above, 36% of the respondents disagreed that only brand should have the freedom and authority to choose whether they want to publish the carbon footprint details or not whereas only 19% agreed.
- As per the graph above, 48% of the respondents are agreed to that their buying decision will get affected because of the label whereas 23% of the respondents remains neutral and 29% of the respondents disagreed.

## **4.2 Conclusion**

Here, in this study the respondents are the students. The respondents are 100 in which 78% are male and 22% are females. Most of the respondents fall in the 21-26 age category which is 94% and rest from 16-20 & 26 above are having just 3-3%. Around 65% students are agreeing to their knowledge of Carbon Footprint, and in terms of labelling, there is 50% respondents who are agreeing whereas around 45% of respondents are giving their vote to agree on brand's decision whether to publish the data or not.

The students prefer to buy the products from brands such as KFC and are optimistic about similar brands working over improving their work force and production in order to reduce the carbon emission during all their production and delivery process. People are getting conscious about the climate change and how our small steps can contribute to reducing it. Hence many respondents are in favour of making it more transparent for the public to

have a better understanding of how the product is produced and whether to buy it or not in order to protect the environment.

The consumer decision-making process, preferences and buying behaviour are still influenced by internal– as well as external factors. The internal factors consist of factors such as needs and motivation. Students indicated that they have dependency as there are no eco-friendly low carbon footprint options available. The needs for food (groceries and fast food) as well as clothing. They also value their social needs and need to have a brand alongside them. These basic and more advanced needs are the driving force behind the shopping behaviour of students. Other factors like age, lifestyle, learning and personality also play a role. Emotions, like the experiencing of guilt after an unplanned purchase, also influence their behaviour.

External factors consist of culture, social class, and family/household and reference groups. One of the important external factors is groups (friends & family).

I. The majority of respondent agree to having an all product labelling for carbon footprint as it will help them decide which product harms the environment the most.

II. The majority of students think that Govt's intervention will help establishing promising structure to it and more defined boundaries for the companies to adhere to

III. Students indicated that they usually play the roles of information searchers/gatherers and product users in their households and would love to have extra information about what they are buying.

IV. Students search for information to obtain a better price and when they plan to buy expensive products and are reluctant to paying premium to the brands just for an extra information label.

V. The majority of students' decision-making style is quality consciousness, followed by price sensitiveness.

### 4.3 LIMITATIONS OF STUDY

#### The limitations of the research were as follows:

In this research, there are some limitations caused by the following reasons.

- Firstly, the main limitation of the research is generated from the small size of the sample. Under time and financial constraints, the study was performed only with a small portion of the population for the whole population. This may influence the generalizability of the samples and may get the incorrect results.
- Secondly, the selection of the survey location has limitation. Only Delhi NCR is selected for conducting the survey. Therefore, the result would be representative of the users of the specific area rather than of the target population as a whole because different cities may reflect different consumer behaviour.
- Moreover, the Likert scale adopted in the questionnaire might limit the range of options. Closed questions could cause bias by forcing respondents to choose between certain alternative corresponding to their personal views on a particular subject.
- In addition, in this study, only quantitative method is used to do the research and statistic analysis is used to examine the topics. Thus, the result may be not depth enough. This also caused the discussion of findings may not so accurate and in detail.
- Finally, as the survey was conducted in crowded area and the respondents were random selected, thus, the respondents might, intentionally or unintentionally provide inaccurate answers to the questions. Thus the findings may not be accurate.
- However, care was taken throughout the study to reduce the negative impact of these Limitations essentially the need for further research is recognized.

#### 4.4 SUGGESTIONS

- The company taken into reference was KFC which represented the biggest meat consumer corporation. Big companies such as KFC should take initiative in educating their customers and providing more transparency into their production system.
- Government should focus on addressing climate change as an issue, and get on with the corporate giants to combat the issues as most of the carbon footprint are produced by these corporate industries.
- Carbon footprint information is an easy way of labelling products as how much energy and carbon has been added into the environment because of its production. Hence it would lead to informed decision by the buyers whether is it necessary to use the product and is there any alternate option.
- Companies should make use of their knowledge management system and deduce ways to curb the amount of energy spent on the production that will reduce the amount of carbon associated with it.
- Government and Companies should work closely in order to reduce the carbon emission and give the buyers right to know how much carbon has been added into the environment by production of that product.

## ANNEXURE

### REFERENCES/BIBLIOGRAPHY

- Boardman, B. (2008). Carbon labelling: too complex or will it transform our buying? *Significance*, 5(4), 168-171.
- BP (2007), What is a Carbon Footprint?, Internet site:  
[http://www.bp.com/liveassets/bp\\_internet/globalbp/STAGING/global\\_assets/downloads/A/ABP\\_ADV\\_what\\_on\\_earth\\_is\\_a\\_carbon\\_footprint.pdf](http://www.bp.com/liveassets/bp_internet/globalbp/STAGING/global_assets/downloads/A/ABP_ADV_what_on_earth_is_a_carbon_footprint.pdf)
- Carbon Trust (2007) "Carbon Footprint Measurement Methodology, Version 1.1". 27 February 2007, The Carbon Trust, London, UK. <http://www.carbontrust.co.uk>.
- Cowburn, G., & Stockley, L. (2005). Consumer understanding and use of nutrition labelling: a systematic review. *Public health nutrition*, 8(1), 21-28.
- Dornfeld, D., Yuan, C., Diaz, N., Zhang, T., & Vijayaraghavan, A. (2013). Introduction to green manufacturing. In *Green Manufacturing* (pp. 1-23). Springer, Boston, MA
- Ehrenberg, A. S. (2000). Repeat buying. *Journal of Empirical Generalisations in Marketing Science*, 5(2).
- Energetics (2007). The Reality of Carbon Neutrality, London.  
[www.energetics.com.au/file?node\\_id=21228](http://www.energetics.com.au/file?node_id=21228)
- Erskine, C. A., & Collins, L. (1997). Eco-labelling: Success or failure? *The Environmentalist*, 17, 125 – 133.
- ETAP (2007). The Carbon Trust Helps UK Businesses Reduce their Environmental Impact, Press Release,  
[http://ec.europa.eu/environment/etap/pdfs/jan07\\_carbon\\_trust\\_initiative.pdf](http://ec.europa.eu/environment/etap/pdfs/jan07_carbon_trust_initiative.pdf)
- Grubb, E. (2007). Meeting the carbon challenge: the role of commercial real estate owners, users & managers. *Report, Chicago, US*.
- Grunert, K. G., & Wills, J. M. (2007). A review of European research on consumer response to nutrition information on food labels. *Journal of public health*, 15(5), 385-399.
- Harris, S. M. (2007). Does sustainability sell? Market responses to sustainability certification. *Management of Environmental Quality: An International Journal*, 18(1), 50-60.
- Hertwich, E. (2010). *Assessing the environmental impacts of consumption and production: priority products and materials*. UNEP/Earthprint.
- Howard, P. (2006). Central Coast consumers want more food-related information, from safety to ethics. *California Agriculture*, 60(1), 14-19.
- Kempton, W. (1993). Will public environmental concern lead to action on global warming?. *Annual Review of Energy and the Environment*, 18(1), 217-245.
- Leire, C., & Thidell, Å. (2005). Product-related environmental information to guide consumer purchases—a review and analysis of research on perceptions, understanding and use among Nordic consumers. *Journal of Cleaner Production*, 13(10-11), 1061-1070.
- Network, G. F. (2007). Ecological footprint glossary. *Oakland, CA, USA*.
- Noussair, C., Robin, S., & Ruffieux, B. (2002). Do consumers not care about biotech foods or do they just not read the labels?. *Economics letters*, 75(1), 47-53.
- Parliamentary Office of Science and Technology. (2006). Carbon footprint of electricity Generation—Postnote 268.



Patel, J. (2006). Green sky thinking. *Environment Business*, 122, 32.

Rex, E., & Baumann, H. (2007). Beyond ecolabels: what green marketing can learn from conventional marketing. *Journal of cleaner production*, 15(6), 567-576.

Stewart, D. W., & Shamdasani, P. N. (2014). *Focus groups: Theory and practice* (Vol. 20). Sage publications.

Thøgersen, J., Haugaard, P., & Olesen, A. (2010). Consumer responses to ecolabels. *European Journal of Marketing*, 44(11/12), 1787-1810.

Valor, C. (2008). Can consumers buy responsibly? Analysis and solutions for market failures. *Journal of consumer policy*, 31(3), 315-326.

Vanclay, J. K., Shortiss, J., Aulsebrook, S., Gillespie, A. M., Howell, B. C., Johanni, R., ... & Yates, J. (2011). Customer response to carbon labelling of groceries. *Journal of Consumer Policy*, 34(1), 153-160.

Weightman, D., & McDonagh, D. (2004). Supra-functional factors in sustainable products. In T. Bhamra & B. Hon (Eds.), *Design and manufacture for sustainable development 2004* (pp. 91 – 101).

Wiedmann, T., & Minx, J. (2008). A definition of 'carbon footprint'. *Ecological economics research trends*, 1, 1-11.

Young, W., Hwang, K., McDonald, S., & Oates, C. J. (2010). Sustainable consumption: green consumer behaviour when purchasing products. *Sustainable development*, 18(1), 20-31.

#### **BOOKS:**

- Kuester, Sabine (2012): MKT 301: Strategic Marketing & Marketing in Specific Industry Contexts, University of Mannheim, p. 110.
- Baker, Michael The Strategic Marketing Plan Audit 2008. ISBN 1-902433-99-8. p.3
- Homburg, Christian; Sabine Kuester, Harley Krohmer (2009): Marketing Management - A Contemporary Perspective (1st ed.), London.
- Aaker, David Strategic Market Management 2008. ISBN 978-0-470-05623-3.
- Aaker, David Strategic Market Management 2008. ISBN 978-0-470-05623-3
- Baker, Michael The Strategic Marketing Plan Audit 2008 ISBN 1-902433-99-8. p. 27

#### **Web links:-**

- <https://timesofindia.indiatimes.com/life-style/health-fitness/diet/is-packaged-fruit-juice-healthy/articleshow/15529421.cms>
- <https://www.bigbasket.com/pc/beverages/fruit-drinks-juices/other-juices/>
- <http://www.myfitnesspal.com/blog/diethack/view/why-you-should-avoid-packed-juices-211>
- <https://www.babycenter.in/thread/414541/is-packed-juices-tropicana-real-active-etc--good-or-bad-for-pregnant-women->

## **ANNEXURE**

### **QUESTIONNAIRE FOR THE SURVEY**

Customer name:- Mr/Mrs/Miss.....

Address: - .....

.....

Contact no: - .....

Age : .....

#### **Q. 1. Sex Ratio among respondents**

- Male
- Female

#### **Q. 2. Indicate your work experience**

- a. 0-1 years
- b. 1-2 years
- c. 2-4 years
- d. > 4 years

#### **Q. 3. Indicate your educational qualification**

- a. BE/BTech
- b. MBBS/BDS
- c. B.Com
- d. BSc
- e. BA
- f. Other (specify): \_\_\_\_\_

#### **Q.4 : Do you know about climate change and carbon footprint concept?**

1. Yes
2. No

**Q.5 : Do you recognize KFC to be the most famous brand in India that uses Meat as its prime product?**

1. Strongly Agree 2. Agree 3. Neutral 4. Disagree 5. Strongly Disagree

**Q.6 : In the case that there are many Meat Product brands in the market, you would prefer KFC over others?**

1. Strongly Agree 2. Agree 3. Neutral 4. Disagree 5. Strongly Disagree

**Q.7 : You will choose a well-known brand when the other brands offer similar feature or price but are more eco-friendly in terms of carbon footprint ?**

1. Strongly Agree 2. Agree 3. Neutral 4. Disagree 5. Strongly Disagree

**Q.8 : Do you agree well-known brands hold responsibility towards helping in combating with climate change with advances in innovation?**

1. Strongly Agree 2. Agree 3. Neutral 4. Disagree 5. Strongly Disagree

**Q.9 : What do you think, daily use product should be regulated according to their overall effect on climate change?**

1. Strongly Agree 2. Agree 3. Neutral 4. Disagree 5. Strongly Disagree

**Q.10 : You will purchase a well-known brand because well-known brands provides labelled data about its carbon footprint, better quality and service even you need to pay a price premium?**

1. Strongly Agree 2. Agree 3. Neutral 4. Disagree 5. Strongly Disagree

**Q.11 : Do you agree that brand should be more transparent about the processes involved that affects the environment?**

1. Strongly Agree 2. Agree 3. Neutral 4. Disagree 5. Strongly Disagree

**Q.12 : Do you agree that brands like KFC will have a better brand image if they exhibit and optimises the amount of Carbon footprint it has on its products ?**

1. Strongly Agree 2. Agree 3. Neutral 4. Disagree 5. Strongly Disagree

**Q.13 : Do you agree that the Govt should intervene and introduce a policy/law for companies to track and publish the carbon footprint details to the public?**

1. Strongly Agree 2. Agree 3. Neutral 4. Disagree 5. Strongly Disagree

**Q.14 : Do you think, only brand should have the freedom and authority to choose whether they want to publish the carbon footprint details or not?**

1. Strongly Agree 2. Agree 3. Neutral 4. Disagree 5. Strongly Disagree

**Q.15 : Would you stop using products from the brands that will have a high carbon footprint score?**

1. Strongly Agree 2. Agree 3. Neutral 4. Disagree 5. Strongly Disagree

**Q.16 : Do you think brands should be charging premium if they add a Carbon Footprint label along with their products in order to improve upon their production and CF score?**

1. Strongly Agree 2. Agree 3. Neutral 4. Disagree 5. Strongly Disagree

**Q.17 : Having a carbon footprint Label will affect your buying decision?**

**Table No. 17**

1. Strongly Agree 2. Agree 3. Neutral 4. Disagree 5. Strongly Disagree