

Public Perception of Climate Change in India – Presented by Himansu Sekhar Fatesingh

Climate change is the most important global environmental issue facing humanity in recent times. The Intergovernmental Panel on Climate Change (IPCC) warns that the global mean temperature may increase 1.8 to 4⁰ C by the end of this Century.

For India the concern with climate change is extremely serious. It could be the submergence of extended coastal lands, melting of Himalayan glaciers leading to drying of major perennial rivers, uncertainty in monsoon, increasing frequency of extreme events like floods and droughts, reducing agricultural production and others. The latest World Bank report titled “Climate Change Impacts in Drought and Flood –Affected Areas: Case Studies in India” has reported that under harsher condition of climate change, agricultural yield in Andhra Pradesh and Sugarcane yields in Maharashtra could decline by over 20 % and 30% respectively. So it is unlikely that million of countrymen are heading towards a great devastation. The climate change will also have serious impact on the country's growing economy. The impact of climate change can be arrested and mitigated effectively on educating the people and increasing public awareness. Improved understanding of public perceptions about global warming can contribute to inform scientific and policy discussions of climate change. Public perception on climate change is crucial to Scientists and policy makers in every respect.

In view of importance of public attitude on climate change and its impact, a study was conducted to understand the perception of public about climate change and related issues in India. Data was collected using a specifically designed questionnaire. The paper finds that most of the people in India perceive the climate change and have awareness and concerns for it. They also express willingness to combat against climate change.

They fail to know about the impacts of climate change due inadequate information on climate change provided by the media is not sufficient for them. So Indian media are required to educate the public on climate change. The study offers trend setting indicators for researchers of communicating climate change.

Key Words: Climate Change, Attitudes, Public perception, Mass media, Communication

Introduction:

Public attitudes on general environmental concern assessed regularly in different countries in the 1970s. A study by Dunlap & Scarce in 1991 revealed about increasing public knowledge and concern on environment. There has been a world-wide revolution in environmental awareness (Milbrath 1984, Dunlap & Scarce 1991). However, study was conducted on climate change and global warming in early 1980s. A study (Bord et al. 1998) the public, both in the United States and in other regions displays a general awareness and concern for Global warming and perceives substantial threat from it.

Importance of the study

Climate change is the most serious environmental issue that India would face in the coming decades. The effects of climate change on India vary from the submergence of coastal lands and islands to the melting of glaciers in the Himalayas, threatening the flow of many important rivers. In India, Major rivers like the Ganges and the Yamuna

provide water for drinking, household uses and farming for more than 500million people. But with the threat of climate change, all this would dry up over the next few decades as a UN report says that , the Himalayan glaciers that are the sources of Asia's biggest rivers - Ganges, Indus, Brahmaputra, Yamuna, Mekong etc - could disappear by 2035 as temperature rises. The most famous Gangorti glacier is said to be retreating by 30 meters a year. The sea level rise resulting from climate change would submerge coastal landmass and affect the millions of country men adversely. The impact of climate change can be arrested and mitigated effectively on educating the people and increasing public awareness. Improved understanding of public perceptions about global warming can contribute to inform scientific and policy discussions of climate change. So public perception on climate change in India has its own importance for the scientists, policy makers and science communicators crucial

Methodology

Surveys are being conducted widely in all areas for their every day decision making. To understand the public opinion on any point, survey research can provide a better way to do it. Therefore, research survey method has been used in the present study. A sample of 328 people from three different states of India was taken for the study. The sample was selected in such a manner that all sorts of people may be included in the study. For collecting the data, a well defined questionnaire was framed. The questionnaire gives an opportunity to express views regarding climate change and its impact.

Results and Analysis

All the questions included in the questionnaire were analyzed separately. The salient findings of the analysis are shown as follows.

Table -1 shows that the percentage of people that able to perceive about the climate change in the present time. The study reveals that 97.6% of people feel taht the climate has changed whereas only 1.2% people do not feel so. Only 1.2% of people do not have any opinion about it. The same results are drawn in figure 1. It shows that the worst climate change has been felt by all most all people in the country.

Table-1: Perceiving on the changing of climate

01	Yes	320	97.6%
02	No	04	1.2%
03	Can't Say	04	1.2%
04	Total	328	100%



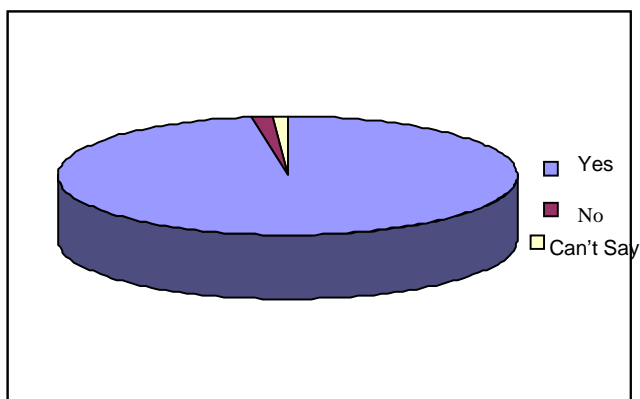


Figure 1: percentage of people feeling about climate change

Table 2 and Figure 2 represent the causes for which people feel about climate change. It shows that most of the people feel about climate change due to increase in temperature, the percentage of which is 61.6% followed by the cause occurrence of flood and cyclone with 15.2%. 14% of people feel so due to increase in summer days and only 1.2% of people due to decrease in winter days. Whereas 6.7% of people points to all the above said causes and only 1.2% of people did have any opinion about this.

Table-2: Preference of the causes for feeling Climate Change

SI No	Causes	No of response n = 328	Percentage
01	Increase in average temperature	202	61.6
02	Increase in Summer days	46	14.0
03	Decrease in Winter days	04	1.2
04	Occurrence of Flood/ Cyclones	50	15.2
05	All	22	6.7
06	Can't Say	04	1.2

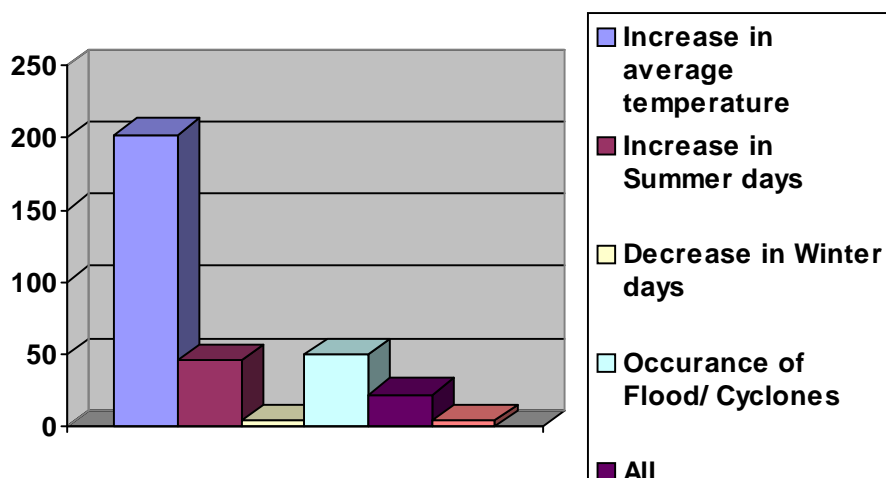


Figure-2: No of people prefer different causes for feeling climate change

At present different terms Climate change (CC), Green House Effect (GHE), Global Warming (GW) is often discussed. These terms not only connected with climate change but also all the environmental issues. Table-3 and Figure-3 show percentage of people ever come across these words in the recent time. It shows 81.1% of the people have heard about these terms whereas only 18.9% haven't heard these terms.

Table-3: Have you ever heard the Terms CC,GHE & GW ?

01	Yes	266	81.1%
02	No	62	18.9%
03	Total	328	100%

Figure-3

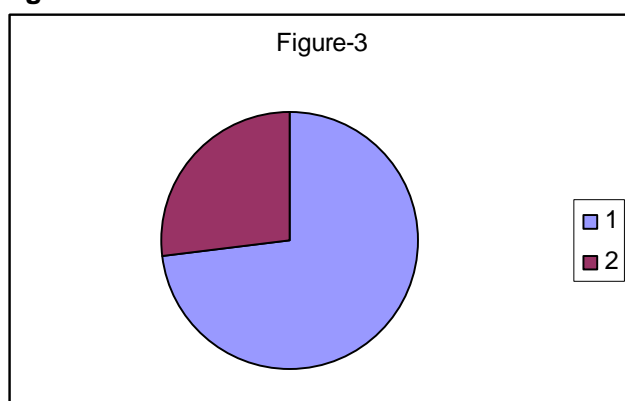


Table-4 and Figure-4 represent the people's view on the gases which is responsible for the worst climate change. It shows that most of the people with the percentage of 81.7% indicate that Carbon Dioxide is responsible for climate change followed by the gas Ozone, with 8.5%. About 1.8% of the people say that the culprit gas are both Carbon Dioxide and Ozone whereas only 0.6% of people say that climate change is due to the gas Oxygen. However 7.3% of the people fail to say any of the gases.

Table-4: Preference of the gases responsible Climate Change

SI No	Name of the Gases	No of response n = 328	Percentage
01	Carbon Dioxide	268	81.7%
02	Oxygen	02	0.6%
03	Ozone	28	8.5%
04	Ozone and Carbon Dioxide	06	1.8%
06	Can't Say	24	7.3%

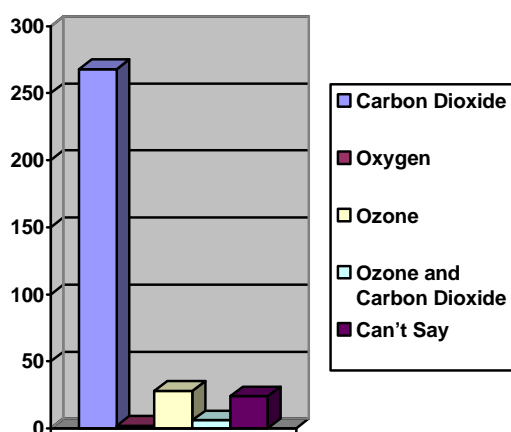

Figure-04: Preference of the gases responsible for Climate Change

Table 5 shows people's attitude on the human activities which is causing climate change. It shows that 96.3% of the people are with the opinion of growing energy consumption, and growing of vehicles are main causes behind the climate change whereas only 3.7% of people say no to it. According to them there may be some other causes behind the fact.

Table-5: Human activities prompted to causes of Climate Change

01	Yes	316	96.3%
02	No	12	3.7%

Table 6 represent the percentage of people aware about the consequence of climate change. It shows 34.8% of people have awareness on the consequence of climate change whereas 58.5% of the people do have any information on the impact of climate change. 6.7% of people do not have any response to this.

Table-6 Information on impact of Climate Change

Sl No		No. of response	Percentage of response
01	Yes	114	34.8%
02	No	192	58.5%
03	No response	22	6.7%

Table 7 shows people's efforts to combat against climate change. It shows 81.1% of people express willingness to plant trees in order to arrest climate change and only 18.9% whereas is reluctant to do so.

On the other hand 87.2% of total people are willing to use energy and resource judiciously to serve the purpose while 12.8% have no interest in this.

Table-7 What can you do combat against Climate Change

		Yes	No
01	Planting Trees	81.1	18.9
02	Use of energy and resources	87.2	12.8

Table 8 gives notion on the percentage of people have information on energy saving equipments i.e. CFL/ Fluorescent lights. It shows that 92.7% of people have information on these equipments whereas 7.3% of the people do not have any. Of course it is unlikely that known these people are using such equipments.

Table-8 Information on energy saving equipments

01	Yes		92.7%
02	No		7.3%

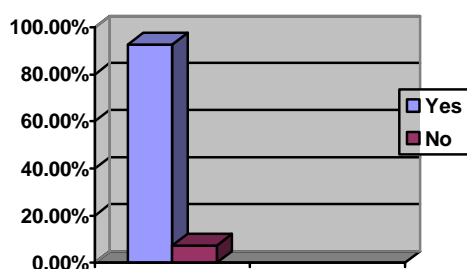

Figure-5

Table 8 and Figure give an idea on sources of information on climate change. It shows that 35.4% of total people gets news on climate change from news papers whereas TV/Radio are main source news for 28.0% of people. People collect news from all the

sources i.e. newspapers, magazines and TV/Radio constitutes 29.9% and people rely on other sources are of only 6.7%.

Table -9: Sources of Information on Climate Change

SI No	Name of the Sources	No of response n = 328	Percentage
01	Newspapers, Magazines	116	35.4%
02	TV/Radio	92	28.0%
03	News Papers, magazines & TV/ Radio	98	29.9%
04	Others	22	6.7%

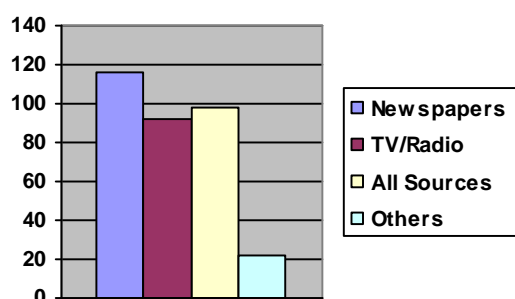


Figure-6: Source of information

Table-10, Figure gives an idea on quantity of news on climate change provided by the media. It is clear that that most of the people i.e 66.5% expresses that news material on climate change provided by the media is not sufficient. Only 25% says that news on climate change supplied by media is sufficient and 8.5% of people fail to have any response.

Table -10: News on Media

SI No	Type	No of Response	Percentage
01	Sufficient	82	25%
02	Insufficient	218	66.5%
03	No response	28	8.5%

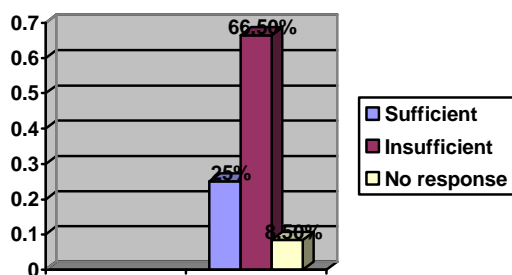


Figure-7

Summary and Implications Conclusions

The result indicates that most of the people in India feel the climate is changing. They claim so due to increase in average atmospheric temperature. They have an idea that growing industries, vehicles and energy consumption is causing climate change. They are also informed that Carbon Dioxide emission is the main GHG causing global warming. They have heard about terms concerned with climate change and they have heard about energy efficient equipments i.e. CFL/ Fluorescent tube lights etc. They express willingness to plant trees and use resources judiciously to combat against climate change.

However it is interesting to note that they fail to know the impacts of climate change on the country. They mainly depend upon news papers and TV and radio for the news on climate change. However the information provided by the media is not sufficient for them. Therefore, Indian media should be careful to educate the public on climate change.

Acknowledgement:

The author is highly grateful to Mr. Lalit Kothiyal, Pauri, Science Writer, Uttarakhand and Dr. A. M. Garode, Reader, Deptt. of Microbiology, Shivaji College, Chikhili, Maharastra and Dr Banamali Kar ,PGT, Ispat College, Rourkela, Orissa for extending their help in conducting the study.

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