



## PRINT MEDIA COVERAGE ON CLIMATE CHANGE ISSUES: AN EMPIRICAL STUDY

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### Abstract

Media as a source of information is one that makes people aware of their surroundings spanning through different forms such as television, films, books, newspapers, magazines, and radio, as well as by the way of internet in general and social media. It covers almost every issue and subject. However, it is a great source of consternation that there is a paucity on the part of the media when it comes to the subject of Climate change. Today the climate change as an issue is something which is gaining worldwide attention. It is due to the ecocide caused by the people that spreading awareness of the concept of protection and sustainability of the environment with the help of media. However, nowadays, media including print media as well as broadcasting media both have become propaganda for the business promotions of individuals, governments, etc. There is hardly any coverage of climate change issues taken into account by the print media. The author in this paper has restricted himself to print media i.e., newspaper and their coverage for climate changes issue. For this, the author will examine the coverage of

two renowned newspapers including English as well as Hindi language newspaper from 1st January to 31<sup>st</sup> January 2020, further, a questionnaire would also be prepared quid pro quo to check the level of awareness made by these newspapers among the member of society. The author has adopted empirical as well as doctrinal research, based on published resources and first-hand data collected on the basis of survey conducted.

**Keywords:** Print Media, Environment, Climate change, Sustainability.

### INTRODUCTION

*Climate change does not respect the border, it does not respect who you are, rich and poor, small and big. Therefore, this is what we call 'global challenges,' which require global solidarity.*

*-Ban Ki Moon<sup>1</sup>*

The climate change issues and problems are nowadays being one of the global issues which are faced by both developed as well as developing countries around this world and due to this, it becomes an important issue to deal with and to maintain the ecology between human beings and nature. It is a long-term change in the statistical distribution of weather patterns over periods ranging from decades to millions of years.<sup>2</sup> It is primarily caused by humans who have exploited the earth as much as possible. Humans have built industries by cutting down a lot of trees; the requirement for

<sup>1</sup> Ban Ki Moon, *Remarks at "Momentum for Change" Initiative*, THE UNITED NATIONS SECRETARY GENERAL (Mar. 10, 2020, 02:15 PM), <https://www.un.org/sg/en/content/sg/speeches/2011-12-06/remarks-momentum-change-initiative>.

<sup>2</sup> Mrs. Namrata Raut, *Coverage of Climate Change Issues in Newspapers A Comparative Study of Kannada and English Dailies*, SHODHGANGA : A RESERVOIR OF INDIAN THESES @ INFLIBNETV (Apr. 01, 2020, 08:21 AM), <http://hdl.handle.net/10603/246060>.



energy for the world has increased because of huge fuel consumption, burning coal as much as possible leading to the emission of carbon dioxide also the emission of a huge amount of Greenhouse Gases (GHGs) in the atmosphere. Further, the Intergovernmental Panel on Climate Change (IPCC) has given much evidence confirming the fact that climate change is mainly created by the anthropogenic activities and if the rate of GHGs emissions is not reduced significantly there will be a damaging effect on the global climate.<sup>3</sup> The IPCC in the year 2014 has observed that the continued emission of greenhouse gases will cause further warming and increase “the likelihood of severe, pervasive and irreversible impacts for people and ecosystems”.<sup>4</sup>

### Definition of Climate Change

The lexicon defined "climate change" as "it refers to changes in the earth's climate, especially the gradual rise in temperature caused by high levels of carbon dioxide and other gases" (*Collins Dictionary*).<sup>5</sup> The Article 1 of United Nation Framework Convention on Climate Change 1992 (UNFCCC 1992) the Climate Change means

- "a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods".<sup>6</sup> Further, as per Intergovernmental Panel on Climate Change (IPCC 2001) the climate change is "any change in climate over time, whether due to natural variability or as a result of human activity."<sup>7</sup> Through these definitions researcher can say that human beings play a vital role in affecting the global atmosphere around the world and which led to this issue increasing day today.

### The mass media an influencer

The respective issue is having the most disastrous consequences, affecting all areas of life. While often still perceived as “far away”, sooner or later, consequences of climate change will concern everyone.<sup>8</sup> However, "the causes and consequences of climate change and its implications are not directly and easily perceivable, and what most people know about them stems from

<sup>3</sup> G C PREMNIIVAS, *A study on media framing of climate change in NDTV24x7 and CNN-IBN, SHODHGANGA : A RESERVOIR OF INDIAN THESES @ INFLIBNETV* (Mar. 10, 2020, 10:00 AM), <http://hdl.handle.net/10603/195674>.

<sup>4</sup> IPCC, 2014: Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, R.K. Pachauri and L.A. Meyer (eds.)]. IPCC, Geneva, Switzerland, 151 pp (Mar. 16, 2020, 09:04 AM), [https://www.ipcc.ch/site/assets/uploads/2018/05/SYR\\_AR5\\_FINAL\\_full\\_wcover.pdf](https://www.ipcc.ch/site/assets/uploads/2018/05/SYR_AR5_FINAL_full_wcover.pdf).

<sup>5</sup> *Definition of 'climate change'*, COBUILD ADVANCED ENGLISH DICTIONARY (Mar. 07, 2020, 11:13 AM),

<https://www.collinsdictionary.com/dictionary/english/climate-change>.

<sup>6</sup> United Nations framework convention on climate change, The United Nations, art. I (1992).

<sup>7</sup> IPCC. (2001) Annex B: Glossary of terms, *Climate change 2001: Working group II: Impacts, adaptation and vulnerability*, INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (IPCC): UNITED NATIONS (Mar. 05, 2020, 01:11 PM), [https://www.ipcc.ch/site/assets/uploads/2018/03/wg2\\_TARchap1.pdf](https://www.ipcc.ch/site/assets/uploads/2018/03/wg2_TARchap1.pdf).

<sup>8</sup> Julia Sandbrand Nisipeanu, *Media Coverage on Climate Change: An Analysis of the Relationship between Newspaper and Government Frames*, KENT ACADEMIC REPOSITORY (Apr. 02, 2020, 05:15 PM), <https://kar.kent.ac.uk/57548/>.



media communication," (Schafer, 2015)<sup>9</sup>, and in this way one can pursue, that this issue is something which gains worldwide attention and becomes a core issue for media. In the twenty-first century or an era of technology, most of the information about climate change is received through the media. The media plays a significant role in spreading information and raising awareness of climate issues.<sup>10</sup> "Studies have also found that the public learns a large amount about science through consuming mass media news," (Wilson, 1995)<sup>11</sup> It is due to the ecocide caused by the people that spreading awareness of the concept of protection and sustainability of the environment is the main concern which is possible only with the help of media. However, today the public demands more and more information and coverage on issues related to sustainability of the environment, climate change, GHGs, etc. and a great link between awareness and action through mass media.

The Media plays an important task in conveying the latest information, education and changes needed for making the society a better place to live. "Today media, which is found in various forms like television, radio, magazines, newspaper, and now on the information superhighway, can be said to have the power to inform the public about the truth" (Showkat, 2017).<sup>12</sup> It also influences cultural, social, political, economic, religious

and spiritual aspects of society. Its objective is not only to inform the public about the current and past events, but it also determines what the public thinks and worries about.<sup>13</sup> The media can play an extraordinary role to diminish the effects of various kinds of issues related to the environment, climate change, GHGs, etc. with awareness through media, a lot can be done to control these all issues somehow. Climate change is one of the burning issues in the world, badly needs a pro-environment coverage at large in all the forms of media. It can help trigger a positive change in public opinion and behavior on a matter of concern. Earlier being the fourth estate, media seems to have surpassed the first three pillars (estates) of a democracy. Now, it seems to be emerging as the first estate, dictating things to the other three.<sup>14</sup> This power of media can help to lessen the hazards of climate change and save the environment.

#### Different forms of Mass media

The mass media is further sub-divided into three important forms such as Broadcast, print, and new media through which information to the public is exhibited. Broadcast media including radio, television, films use the information which is electronically transmitted. On the other side, print media include newspapers, books, and pamphlets, etc. and the new media include blogs, emails, and websites, etc.<sup>15</sup> In this

<sup>9</sup> Mike S Schafer, *Climate Change and the Media*, 3 IESBS 853, 853 (2015).

<sup>10</sup> Nayeem Showkat, *Climate Change in Indian Press*, 4 J. ADV. RES. JOUR. MASS COMM. 54, 54 (2017).

<sup>11</sup> K.M. WILSON, *Mass Media as Sources of Global Warming Knowledge*, 22 MASS COMM. REV. 75, 79 (1995).

<sup>12</sup> Showkat, *supra note* 10, at 54.

<sup>13</sup> Huma Parveen, *A Study of the Coverage of Environment and Sustainable Development in Indian*

*English Dailies*, 11(2) IMS- MANTHAN: THE JOUR. OF INNOVATION 80, 80 (2016).

<sup>14</sup> Showkat, *supra note* 10, at 54.

<sup>15</sup> Huma Parveen, *The Changing Trends in Reporting Environment in Major English Dailies of India*, SHODHGANGA : A RESERVOIR OF INDIAN THESES @ INFLIBNETV (Apr. 01, 2020, 03:30 PM), <http://hdl.handle.net/10603/220196>.



paper, the researcher will only deal with the information provided through print media forms and their coverage concerning climate change issues.

Print media is a powerful tool in bringing positive changes in society. It encompasses mass communication through printed material.<sup>16</sup> It is one of the oldest, most popular and effective forms of mass communication. It has been playing an important role in transforming and educating society. With more in-depth news and analysis, print media influences and shapes the perception of readers. Print media has the benefit of creating a longer influence on the minds of the reader, with more in-depth coverage and investigation (*Patil, 2011*).<sup>17</sup> It can also help people understand the complexity of environmental issues and they can persuade individuals and communities to adopt eco-friendly practices.<sup>18</sup> It has a pragmatic edge over other forms of media because it reaches large diversified audiences, also it creates a greater impact on the minds of readers and is effective in shaping public opinion. *For example-* the newspaper is one of the kinds of print media, where readers can see the texts accompanied by images in the form of photographs or cartoons or info-graphics and these images help the readers to understand the information provided in the newspaper very easily.

The newspaper is one of the oldest media of providing information to the readers. In India

first newspaper published was the Bengal Gazette started by James Augustus Hickey in 1780. Till now the newspapers play an important role in providing information to people in the far-flung areas where the reach of electronic media is not possible. In rural India, newspapers are still one of the popular media forms among the rural masses.<sup>19</sup> However, nowadays, mass media including print media as well as broadcasting media both have become propaganda for the business promotions of individuals, governments, etc. Going through one month of regional dailies, '*Hindustan Times and The Amar Ujala*,' the researcher is trying to prove the hypothesis that climate change issues are not given more importance in terms of giving enough and more coverage. Locally there is some news on the environment, nationally the number of news is very less. This is to say that nationally the coverage is not given and press waits for the gravity of the problem. The editorial column is one of the places through which the print media can feed information but what we find today is columns mostly relating to politics or analysis of controversial matters. Good articles and writings on the environment or climate change issues are missing. Readers can acquire more knowledge on climate change if the news article gives equal importance to the climate change issues too so, there is hardly any coverage of climate change issues taken into account by the print media.

<sup>16</sup> *ibid.*

<sup>17</sup> Dhanshri M. Patil, *Recent trends of print media in development communication*, 2(2) GLOBAL MEDIA JOUR. INDIAN ED. (2011).

<sup>18</sup> T. Nirmula & I. Arul Aram, *Environmental Images in Indian Newspapers*, 28(1) APME: SAGE PUB. 38, 39 (2018).

<sup>19</sup> Pawan Koundal, *News coverage of environmental issues in Print Media: A Study of two dailies published from Himachal Pradesh*, 4(1) THE RESEARCHER-IJM & SS 22, 23 (Jan-June 2019).



### RESEARCH QUESTIONS

Following research questions has been framed by the researcher to study-

- What is the concept of climate change?
- Whether selected print media have frequently published news stories on climate change to influence the public of Dehradun regions?
- Whether selected print media succeeded in spreading awareness among the public?
- What is the response of the public towards emerging climate change issues?

### RESEARCH OBJECTIVES

Following objectives have been framed for the study-

- To analyze various categories of environment-related news that has been addressed by the selected print media of Dehradun.
- To analyze the peoples' attitudes towards emerging climate change issues.
- To analyze the coverage of selected print media of Dehradun regions concerning climate change issues.
- To trace out total coverage, in terms of a total number of stories related to climate change in selected print media.

### PURPOSE OF THE STUDY

The purpose of this study is to discover the quantity and quality of coverage a print media covers concerning climate change issues. The threat of climate change is one of the most serious issues the world is facing now. Despite ample discussion and agreements globally, the problem of climate change is failing to be addressed at large. The local people in developing countries like India are the most affected by the climate and don't have a voice in the determination of

policy direction. Further, the print media's role as a mind changer is particularly important within the context of increasing environmental problems. Therefore, it is primarily through the print media that climate change issues are publically represented and also construed this issue as social problem. This study will also help the researcher in portraying the accurate coverage of print media concerning climate change issues. It is an attempt to evaluate the importance given by one of the most effective forms of mass media to an issue of paramount significance. The paper would help to unearth the realities regarding print media's coverage of climate change.

### REVIEW OF LITERATURE

The review of literature plays an important role in conducting any kind of research. Here, the researcher will discuss important past scholarly works and recent studies on the coverage of climate change issues in print media. This discussion will probably give an idea about the work done in the past, also helps in providing a basis for interpretation to discuss research findings. This present study attempts to take advantage of that previously missed opportunity and, therefore an exhaustive review of literature having a direct or indirect bearing on the present study was made to structure out a better understanding of the selected problem.

1. *Mrs. Namrata Raut (2018)*, mentioned in her paper that in a world of rising sea levels and melting glaciers, climate change is most likely occurring but with uncertain overall effects. People can adapt to these problems by staying in place and doing nothing, staying in place and mitigating the problems, or leaving the affected areas. The choice between these options will depend on the



extent of problems and mitigation capabilities. People living in lesser developed countries may be more likely to leave affected areas.<sup>20</sup>

2. *Dutt and Gaioli (2007)*, in his study, stated that “climate-related consequences of climate change have already been felt in India.”<sup>21</sup> *Arul Alam (2011)*, identified that India should be concerned about climate change since this will have adverse socio-economic impacts on its people. He has also given a reference to increase in receding rate of Glaciers in the Himalayas than in any other part of the world and, if the present rate continues, the likelihood of them disappearing by the year 2035, and perhaps sooner is very high if the Earth keeps warming at the current rate.<sup>22</sup>
3. *Dr. Dileep Mavalankar, Dr. Gulrez Shah Azhar, (2011)*, found that current efforts to address global warming largely focus on mitigating climate change. However, in light of predictions of increased temperatures, rising sea levels and changing disease patterns in India, there is a pressing need for increased scientific research and strategies on climate adaptation, focused on public health for the most vulnerable populations. Extreme heat already threatens the health of local communities, who suffer dehydration, heat

cramps, heat exhaustion, heat syncope or heat stroke, and even heat-related death. Climate change will only intensify extreme heat events.<sup>23</sup> *Nayeem Showkat (2017)*, according to him the climate change issues has emerged as one of the most serious issues of mankind, potential to affect all the earth’s inhabitants, other than this he also observed, that being the second-most populous country in the world, India is the “fourth-largest greenhouse gas (GHG) emitter, accounting for 5.8 percent of global emissions.”<sup>24</sup>

4. Now further, *John and Shannon (2016)*, in their study had stated about the "role of media in a democracy is to inform citizens, in a dynamic now being altered by social media, has become very complicated and more challenging to navigate for all entities."<sup>25</sup> Further, *Bogart (1998)* states, "that representative democracy is inconceivable without forms of mass communication."<sup>26</sup> Hence, this means the mass media performing the duty of informing the citizenry is a core component of that needed communication.
5. According to *National Environment Policy 2006*<sup>27</sup>, "environmental education is the principal means of enhancing awareness, both among the public at large, and among

<sup>20</sup> Namrata Raut, *supra note 2*.

<sup>21</sup> Gautam Dutt & Fabian Gaioli, *Coping with Climate Change*, 42(42) *Eco. and Pol. Weekly*, (January 2007).

<sup>22</sup> Arul Alam, *Indian media coverage of climate change*, 100(10) *CSA JSTOR* 1477, 1478 (2011).

<sup>23</sup> Dileep Mavalankar, Dr. Gulrez Shah Azhar, (2011), “*Climate Change and Health Preparedness in India: Protecting Local Communities in Ahmedabad, Gujarat from Extreme Heat*”, Summary Report from 2011 Kickoff Workshop on Climate Change: Heat and Health, Addressing Vulnerability (Apr. 05, 2020, 10:13 PM), <https://www.coolrooftoolkit.org/wp-content/uploads/2012/04/India-Heat-Health-Report-NRDC.pdf>.

<sup>24</sup> Nayeem Showkat, *Climate Change in Indian Press*, 4 *J. ADV. RES. JOUR. MASS COMM.* 54, 54 (2017).

<sup>25</sup> John A. Fortunato and Shannon E. Martin, *The Intersection of Agenda-Setting, the Media Environment, and Election Campaign Laws*, 6 *JINFOPOLI JSTOR* 129, 129-130 (2016) (Oct. 01, 2019, 17:49 PM) <https://www.jstor.org/stable/10.5325/jinfopoli.6.2016.0129>.

<sup>26</sup> *Id.* at 131.

<sup>27</sup> NATIONAL ENVIRONMENT POLICY 2006, GOVERNMENT OF INDIA MINISTRY OF ENVIRONMENT AND FOREST 47 (Approved by Union Cabinet, 2006).



focused groups. Such education may be formal, or informal, or a combination of both. It may rely on educational institutions at different levels; the print, electronic, or live media; and various other formal and informal settings. However, there is a need for further strengthening existing programs and making them more inclusive and participatory.

6. According to *Pharr (1996)*, the role of media is as similar as "watchdog", where media should actively participate in environmental movements and the society should also play a pivotal role in the betterment of the environment.<sup>28</sup>
7. Further, *Dr. Onkargouda Kakade, Shilpa Hiremath, and Namrata Raut*<sup>29</sup> in their research has referred the observation of *Dr. Y Prabhanjan Yadav, Rapaka Jhansi Rani, (2011)*, where they have said that media plays a vital role in educating and enlightening the people and governments to protect and preserve natural resources in the interests of future generations and the climatic chaos, so basically, they gave observation to protect the environment and to attain the goal of sustainable development.
8. *IK Jae Chung, (2018)*<sup>30</sup> in his study observed that there is not enough media space for all the accidents or social events in our daily lives. Many social issues receive no print or broadcasting media attention. The focused

media coverage can have a strong impact on public awareness and reaction to social issues by transmitting and sharing information about them. The role of the media is increasingly influential in the public agenda-setting process because most of our understanding and knowledge about social issues or public problems come not from direct personal experience but diverse online and traditional media.<sup>31</sup> As the environmental issue is also one of the public problems by which the public are not directly get affected but they are somehow get affected indirectly.

9. *Pawan Koundal (2019)*, in his study, referred that in the Indian context, newspapers are particularly important; bearing in mind that the circulation of print is increasing in Asia, but declining in mature western markets.<sup>32</sup> Further, according to *Boykoff (2008)*, study the subject of media and climate change is arguably the most heavily politicized issue providing a number of opportunities.<sup>33</sup> These communications can inform and anticipate other current science issues. Focusing the interactions of media and climate change represents various challenges leading to the policy level decision making. Also, he adds that increased visibility of climate science information will increase the public understanding of science and engagement with scientific issues.<sup>34</sup>

<sup>28</sup> Zahid Yousaf, Zil-e-Huma and Ehtisham Ali, *Reporting of Environmental Issues in Pakistani Press*, 28(6) WASJ 829, 829 (2013).

<sup>29</sup> Dr. Onkargouda Kakade, Shilpa Hiremath and Namrata Raut, *Role of Media in Creating Awareness about Climate Change-A case study of Bijapur City*, 10(1) IOSR-JHSS 37, 39 (Mar.-Apr. 2013).

<sup>30</sup> Ik Jae Chung, *Dynamics of media hype: Interactivity of the media and the public*, JSTOR 211, 211-212

(2018) (Aug. 28, 2019, 13:10 PM) <https://www.jstor.org/stable/j.ctt21215m0.14>.

<sup>31</sup> *Id.* at 213.

<sup>32</sup> Pawan Koundal, *supra note 19*, at 23.

<sup>33</sup> Maxwell T. Boykoff, *Media and scientific communication: a case of climate change*, 305 COMMUNICATING ENVIRONMENTAL GEOSCIENCE. GEOLOGICAL SOCIETY, LONDON, SPECIAL PUBLICATIONS 11, 16 (2008).

<sup>34</sup> G.C. Premnivas, *supra note 3*.



10. *Neuzil, 2008*, took note of newspaper coverage of several wildfires in the US and noted that they underwent two phrases. *Firstly*, the newspapers covered such environmental news only when there was a disaster or when the corporate sector had done something wrong. *Secondly*, the newspapers covered the environmental concerns when it was established that they were the consequences of economic, social, or cultural factors.<sup>35</sup>

11. *Bhatta, Nagarathinam & Kumar (2015)* analyzed articles of three Indian newspapers namely "The Hindu", "The Times of India" and the "Indian Express articles". They state that the Indian media did not stress much in terms of giving out news stories that have scientific evidence rather it focused more on the political negotiations. They also found that Indian mainstream media was not much dependent on science for reporting climate change. They argue that this practice is against science journalism.<sup>36</sup> Finally, *Kahn (2014)* in his study analyzed 28 newspapers from India and found that scientific institutions are the greatest source of information for the media when communicating climate change information and the evidence shows that IPCC is not the most used scientific source by the Indian newspaper. Also, the Indian media did not have any articles that mention the uncertainty of climate change, which usually exists in the developed world.<sup>37</sup>

## RESEARCH METHODOLOGY

In this heading, the researcher will discuss the research methodology adopted for this research, and further, will provide the research steps that were taken during the collection of data. The researcher gained his views to research this respective area, by observing the coverage of selected dailies from 1st January 2020 to 31st January 2020 over climate change issues. Thus, empirical data, as well as secondary data, has been referred by the researcher to make this paper most effective. The secondary data were collected through, two different language print media namely "*The Amar Ujala (Hindi)* and *The Hindustan Times (English)*" of Dehradun regions only. The selection of these two newspapers was based primarily on their highest circulation in the area of research i.e., Kandoli village Dehradun. The total number of newspapers is 39, 18 newspapers from *Amar Ujala* and 21 newspapers from *Hindustan Times*, and was published between January 1st, 2020 to January 31st, 2020.

The researcher also desires to understand social thinking concerning the print media coverage on climate changes and for this, empirical research was conducted through the questionnaire prepared by the researcher. A total of 11 questions have been framed in Hindi by the researcher to carry out the present survey physically, to collect the views of the different persons living around the Kandoli village of Dehradun. The researcher has chosen to conduct survey in Hindi because his research is restricted to the

<sup>35</sup> Mark Neuzil, *The nature of media coverage: Two Minnesota fires*, *FOREST HISTORY TODAY* 32-38, (2008).

<sup>36</sup> Archita Bhatta, S Nagarathinam & Sanjeev Kumar, *The Scientific Temper of Climate Change Coverage in*

*Indian Newspapers*, 3 (3&4) *JOURNAL OF SCIENTIFIC TEMPER* 101, 117 (2015).

<sup>37</sup> Kahn, Chelsea L. "The Climate of Newspaper Coverage: Communication of Climate Change Uncertainty in India." (2014).



villagers of Kandoli Village, Dehradun as the people is familiar with Hindi only. Later, during research analysis, all the responses would be translated into English. The total number of responses received is 27 to the researcher.

Content analysis was applied to trace out the coverage in terms of variables of frequency and prominence given to the topics under study. The nature of the story and trends of the articles analyzed to understand and draw conclusions about how important the print media source felt the covered topic was or should be regarded by its' reader. Finally, the findings presented in tables and graphs. Further, the author has relied upon other secondary sources of information including journals, and other similar forms of published documents. In the later chapter, the researcher will analyze the collected empirical as well as secondary data during the research.

### RESEARCH ANALYSIS

In this part, the researcher would analyze the collected data from selected newspapers as well as the data collected through the questionnaire as mentioned earlier. From the collected data, it became evident that the Indian newspaper does cover climate change issues in a certain way but not frequently. The researcher has analyzed the collected data in the following categories:

- A. Analysis of data collected from two dailies,
- B. Analysis of data collected through questionnaires for the survey.

#### A. Analysis of data collected from two dailies-

The researcher has made the categorisation regarding environmental and climate change

issues based on the broad perspective reflected in the National Environmental Policy 2006. Each of the published items that are qualified for inclusion into the database had to fit into at least one of the environmental quality categories which were described from the policy areas of the National Environmental Policy 2006. Besides, these few more categories are added to further enlarge the scope of the study. Thus, on this basis following categories has been made:

1. Quantity of Environmental news coverage,
2. Types of Environmental issues covered by newspaper,
3. Frequency of Coverage,
4. Nature of story covered by two newspapers,
5. Placement of articles regarding climate changes issues in the selected dailies,
6. Comparison of coverage of Climate change issues in both the dailies.

#### (1) Quantity of Environmental news coverage

The table mentioned below depicts the quantity of environmental news coverage by each of the print media namely "*Hindustan Times and Amar Ujala*" between dated 1<sup>st</sup> January 2020 to 31<sup>st</sup> January 2020.

Name of the Newspaper	Frequency of Articles (in numbers)	No. of Newspapers
Hindustan Times	43	21
Amar Ujala	32	18
Total	75	39

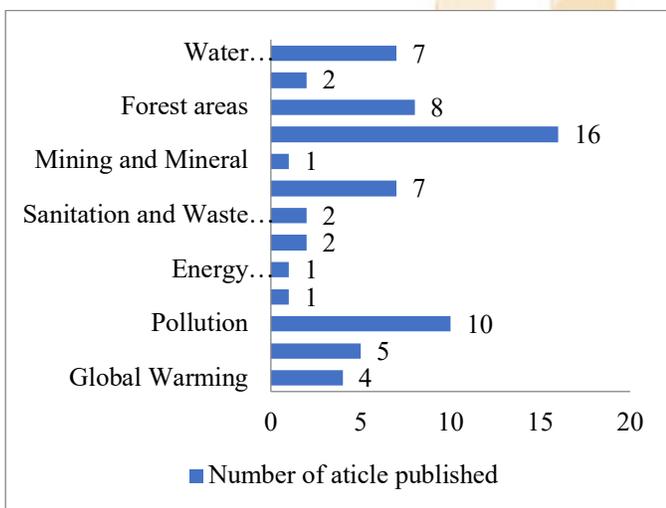
*Table 1. Total number of articles published*



The study conducted provides that out of the 39 newspapers there were only 75 environmental articles in total were published during the said period. These all-newspaper articles are referring to the different environmental issues concerning to Uttarakhand regions. The analysis further shows that the *Hindustan Times* has covered only 43 articles out of 21 newspapers over the environmental issues, and the *Amar Ujala* has covered only 32 articles out of 18 newspapers over the respective issues.

**(2) Types of Environmental issues covered by newspapers**

The *table 2.1* mentioned below depicts the different categories of environmental issues and article published with respect to them, in "*Hindustan Times*" from 1<sup>st</sup> January 2020 to 31<sup>st</sup> January 2020.

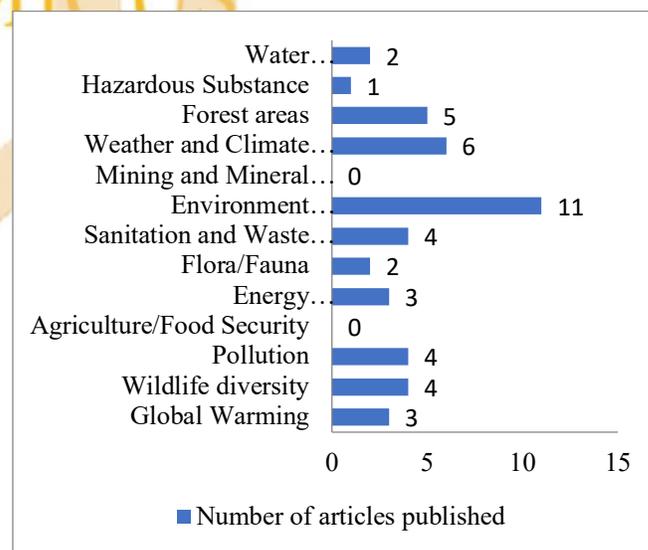


**Table 2.1** Number of articles which covered environmental issues in *Hindustan times*.

The study conducted above provides the following inferences:

- a) The maximum sixteen articles have been published regarding the Weather and climate change issues by the *Hindustan Times*.
- b) Seven articles have been published regarding the environmental conservation by the *Hindustan Times*.
- c) Ten articles have been published concerning different kinds of the population such as air pollution, sound pollution, soil pollution, etc.
- d) Eight and Seven articles have been published simultaneously concerning issues related to forest areas and water pollution/management respectively.
- e) The minimum one article has been published by the *Hindustan Times* regarding issues related to mining and mineral, Agriculture/Food security and Energy Production/Resources.
- f) The categories that covered on average are global warming, wildlife diversity, flora/fauna, sanitation and waste management, and hazardous substances.

Further, *table 2.2* mentioned below depicts the different categories of environmental issues and articles published with respect to them, in "*Amar Ujala*" during date referred.





**Table 2.2** Number of articles which covered environmental issues in Amar Ujala.

The study conducted above provides the following inferences:

- a) A Maximum of eleven articles has been published regarding environmental conservation by the Amar Ujala.
- b) Six articles have been published concerning weather and climate change issues.
- c) The categories that covered on average between two to five articles are water management/water pollution, forest areas, sanitation, and waste management, flora/fauna, energy production/resources, wildlife diversity, pollution, and global warming.
- d) The minimum one article has been published concerning Hazardous substances by the Amar Ujala between the said time period.
- e) Further, there was no coverage found on mining and mineral resources and agriculture/food security.

**(3) Frequency of Coverage**

The frequency of publishing climate change issues by the above-referred newspaper shows that the "Hindustan Times" clearly takes the lead by publishing the maximum number of stories on "climate change issues", then the "Amar Ujala". Further, with respect to environmental conservation coverage in the above-referred newspapers shows that the "Amar Ujala" clearly takes the lead by publishing the maximum number of stories on "environmental conservation", then "Hindustan Times". Surprisingly, issues related to mining and mineral resources, agriculture and food security, flora and fauna, hazardous substance, were highly under-represented. Now, the total frequency of coverage published in various identified categories of study in the two dailies shows

that the category that received maximum attention of the leading dailies were "weather and climate change (22)", followed closely by "environmental conservation (18)", "pollution (14)", and "forest area (13)".

**(4) Nature of story covered by two newspapers**

It has been found that most of the stories reported by the print media are without any in-depth analysis further, some time without the solution of the issue ascertained. The table mentioned below provides the nature of articles/stories covered by the print media during the said time period.

News paper	News Reports	Article/Editorial	Photos	Features	Solutions	Law & Policy	Total
Hindu stan Times	19	4	3	8	6	3	43
Amar Ujala	12	7	1	4	5	3	32

**Table 4.** Nature of coverage reported in two newspapers.

From the above findings of the study, it is evident that most coverages concerning environmental issues including climate change issues in these two newspapers are published as "news reports" giving low importance to the "solutions", "article/editorial", followed with "photos", "law and policy". Thus, it means that these dailies focused very less on law and policy



related to climate changes and environmental conservation issues to the public. Henceforth, from the above analysis, it could be seen that the climate change, as well as environmental conservation coverage, triggers more in "news reports" and less in "law & policy" and "solution" sections, thus leading to the inference that the newspapers are shying away from extending in-depth treatment to climate change and environmental issues in articles and editorials.

**(5) Placement of articles regarding climate changes issues in the selected dailies**

The study shows that most of the climate change issues in the selected dailies were provided inside the page of the respective dailies. Further, it can also be seen from the below-mentioned *table 5*, that no any such coverage regarding the climate change issues was provided on the front page of "Amar Ujala" newspaper.

Name of Newspaper	Front Page	Inside Page	Editorial	International	Op Editorial	Total
Hindustan Times	2	7	1	5	1	16
Amar Ujala	0	4	1	1	0	6
Total	2	11	2	6	1	22

**Table 5.** Climate change coverage on different pages.

It is also seen, that total of 22 climate change news has been published by both the newspapers selected for the study. It is clear that 11 climate change news was published inside pages, followed by 6 on the international page, 2 each on front pages as well as on editorial pages, and 1 article in OPED (Opposite the editorial page).

**(6) Comparison of coverage of Climate change issues in both the dailies**

Newspapers' name	No. of Climate Change Coverage	Percentage
Hindustan Times	16	72.72%
Amar Ujala	6	27.28%
Total	22	100%

**Table 6.** Comparison of climate change issues.

*Table 6.* shows the comparison of coverage of Climate Change Issues in both the selected newspapers taken for the study. It is seen that the "Hindustan Times" published 16 (72.72%) Climate Change Issues, whereas the "Amar Ujala" published 6 (27.28%) Climate Change Issues. The "Hindustan Times" have more 6 Climate Change Issues than the "Amar Ujala" Newspapers selected for the study.

**B. Analysis of data collected through the questionnaire for survey-**

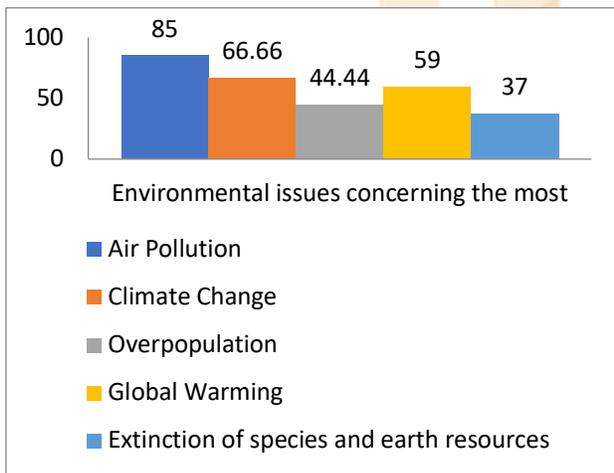
The researcher has conducted an empirical study wherein a list of questions was



prepared dealing with the issue as peoples' attitudes towards climate change and media's role in creating awareness concerning climate change issues to the public. An analysis has been drawn pertaining to each question in the questionnaire.

**1. The environmental issues that concern the most to the public-**

The human beings are living on this planet earth, and it's their activities which have evolved such type of environmental issues or crisis. It is very difficult to trace the beginning of these issues but we can observe that this issue is increasing day by day. These issues are affecting directly or indirectly to every living body of the earth, but today in the 21<sup>st</sup> century we still concern very less about it.



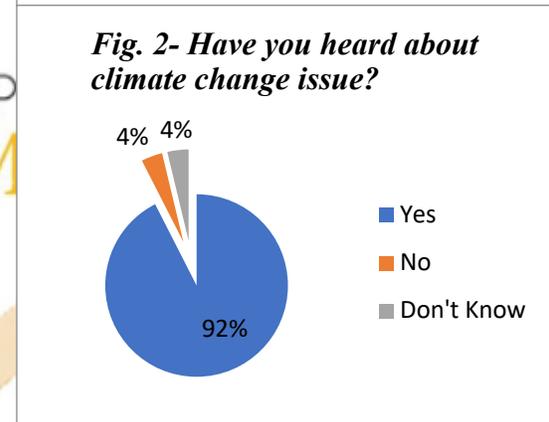
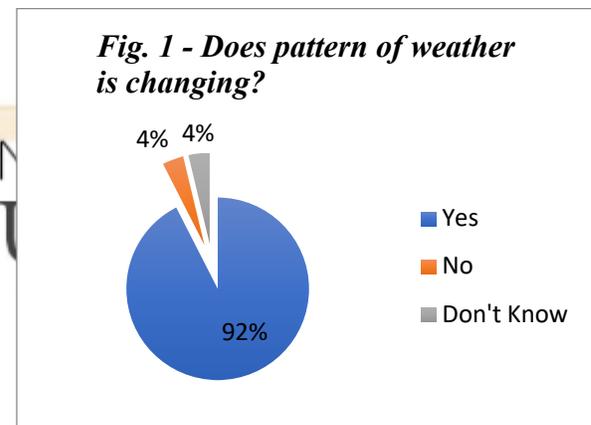
**Table 7.** Environmental issues concerning the most to the public.

The researcher has received about 27 responses which provide that 85% of people believe that today air pollution issue concerned the most, followed with 66.66% to climate change issues, 59% global warming issues, 44% to overpopulation issues and

lastly 37 % to the extinction of species and earth resources.

**2. Do you feel in climate change issues weather condition is also generally changing?**

The researcher for this particular issue clubbed the question no. 2 and 3 because both were interrelated to each other and peoples' response towards this is also the same.

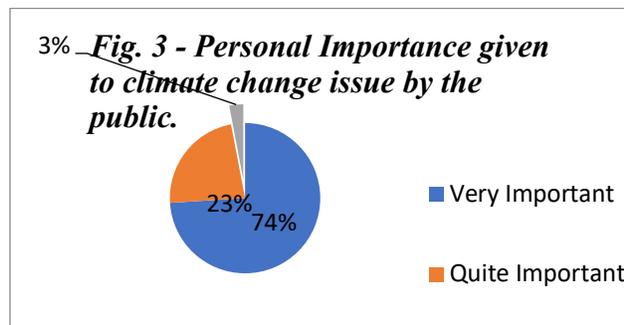


The researcher has received about 27 responses which provide, that climate change issues are known to 92% of the people and they all feel that weather is generally changing. Whereas, there exist only 4% people who are unaware of these situations.



**3. How important is the issue of climate change to public personally?**

The researcher framed this question so that he could get the personal mindset of the people such as "how they look to these types of issues?", "do they care about this issue", etc.

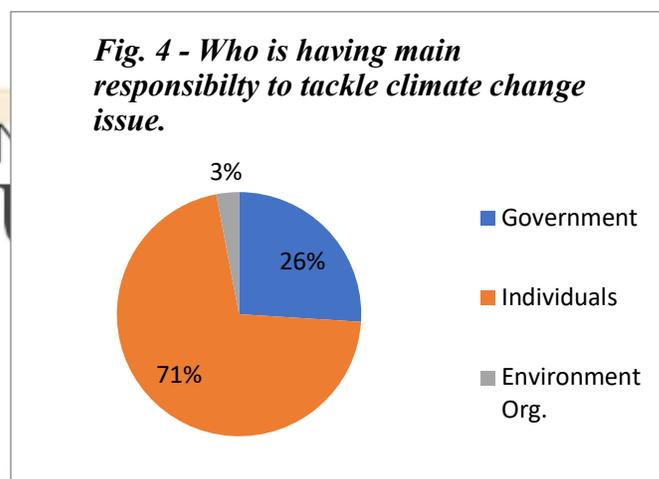


The researcher has received about 27 responses out of which only 74% of people who think that today the climate change issue is very important to deal with because according to them it somehow affecting their life either directly or indirectly. Whereas, 23% of people think that this issue is not severe in nature and should be given only quite importance because according to them climate change issue does not directly affect them. Further, 3% of people believe that this issue is not so important because this is not affecting their day to day lives.

**4. Who do you think should have the main responsibility for tackling climate change?**

The government is appointed by the people, for the people, and to the people, this is what democracy means. But nowadays people fail to perform their duty which is enshrined under Art. 51A of the Constitution of India, where it is provided that *"it is the fundamental duty of every citizen of India to protect and improve the natural environment including forests, lakes, rivers, and wildlife, and to have compassion for living creatures"*.

The people think that once the government is elected by them their works are done, from now onwards it's the governments' responsibility to tackle all kinds of matters including climate change issues, environmental conservation issues, pollution issues, etc. And, people are having no role in the sustainability of the environment. Thus, this question is included in survey form to know their sensitivity towards climate change issues.



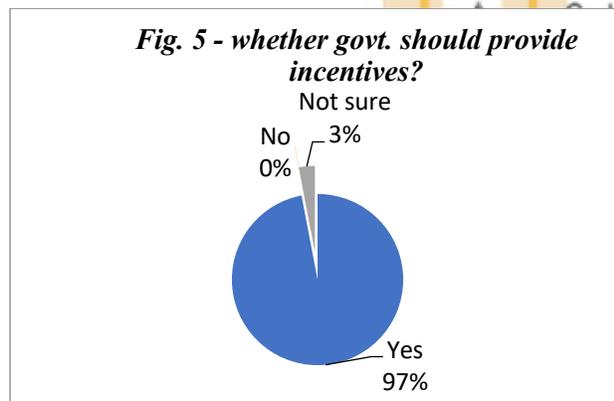
The researcher has received total 27 responses out of which only 71% people think that every individual has to tackle the climate crisis, whereas 26% person believes that it is the responsibility of the government to tackle these all kind of issues and rest 3% beliefs that it should be the responsibility of the environmental organisation.

**5. Should the government provide incentives for the people to look after the environment?**

With the development of science and technology, there are several activities that have contributed to the development of the countries on the verge of the environment. To improve the situation of the deteriorating



environment, it is important to have control over these activities. There are several policies and acts entered into by the government to spread awareness and adopt such methods which help in controlling the dangerous situation of the environment. In such a situation it is important that such technologies are adopted that lead to development but not on the stake of the environment and for the production of such technologies or adoption of such methods, there is a requirement of essential funds by the people. It is not possible for people with a low salary or wage scale to make a contribution or adopt such methods. Therefore, in such a situation it is important for the government especially in a country like India where there is a large number of low scale workers, to provide an incentive for the benefit of the environment and people and the country at large. Thus, this question is included in the survey form to know the governments' sensitiveness towards climate change issues.

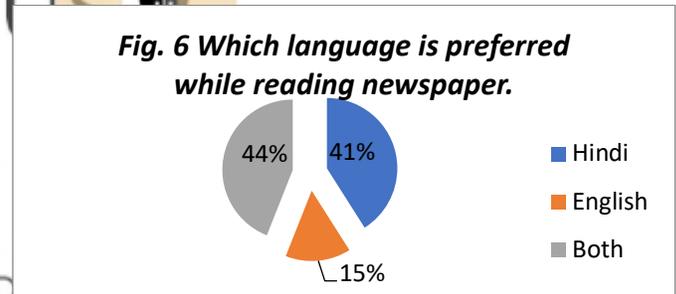


The researcher has received a total of 27 responses out of which 97% of the people believe that the incentive should be provided by the government for the development and adoption of such technologies which are essential for the environment. However, 3%

of people are unaware and have no opinion with respect to it.

**6. Which language do people prefer while reading a newspaper?**

India is one of the unique countries in the world that has a legacy of the diversity of languages. And, due to this, the print media is also available to the people of India in any language. Hindi and English languages are some of the common forms in which India's print media is dependent. This question is framed to check the diversity of language in a reading newspaper because every person prefers to read those languages which makes them understand the issue in question.



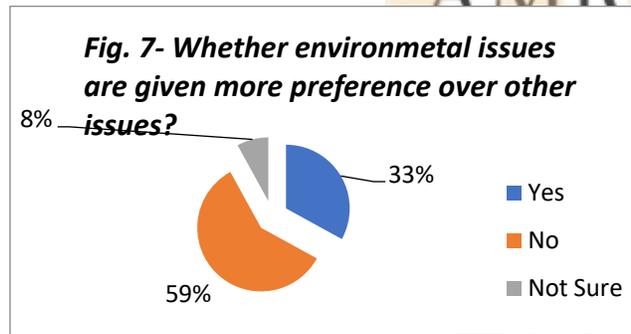
The researcher has received a total of 27 responses out of which 44% of people read both English as well as Hindi newspaper, whereas 41% of people read only the Hindi newspaper and 15% of people read only English newspapers.

**7. Does environmental issues are given more preference over other issues by the newspapers?**

The media is having the "freedom of speech and expression" enshrined under Art. 19 of the Constitution of India. Further, the "right of information" is an inalienable component of freedom of speech and expression guaranteed by Article 19(1) (a) of the Indian



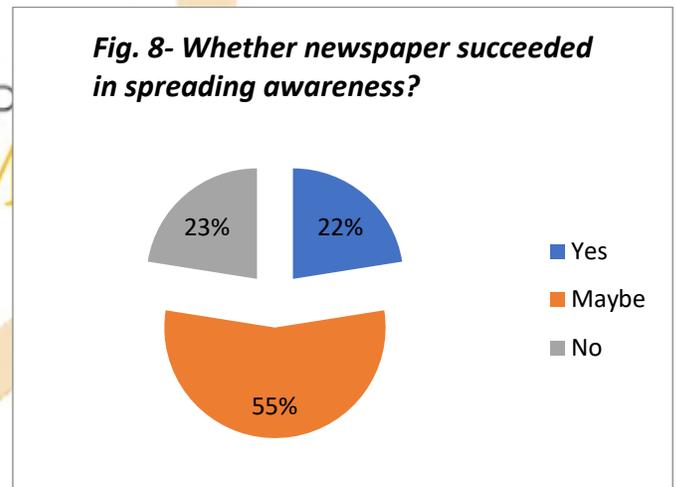
constitution.<sup>38</sup> But the media is not using their fundamental right in a correct sense to provide substantive information to the public, they mainly focus on covering the issues related to politics, sports, business, entertainment, etc. the major aspect of the environment on which the sustenance of the life depends, is nowhere the major part of the coverage. This is the major reason that majority of the population in the country are unaware of the situation, the consequences which the deteriorating environment may have on them. The following issue provides an insight into the opinion of the public on the coverage of news made and the actual coverage of news they want. The responses received in this behalf are:



The researcher has received a total of 27 responses out of which 59% of people believe that the environmental issues are not given more preference over the other issues, whereas 33% of people believe that environmental issues are having sufficient coverage and given more preference over other issues. Further, 8% of people are not sure about which issues are given more preference and are unaware of the provided fact.

**8. Does the newspaper succeed in spreading awareness among people concerning climate change issues?**

There are several areas for a news article that are required to be covered, to make people aware of the different facts and their responsibility or right towards it. But surprisingly from the spread of essential information, the elements of news coverage have become more public centric. The news which soothes the ears of the public is one presented and printed the most and the news which essential to make people aware is either nowhere or is given very less importance as compared to the other issues. Due to this the issue of climate change is one which is given very less importance by the media and hence, making the people unaware of the seriousness of this issue. There are several responses received by the researcher in this regard.



The researcher received 27 responses out of which 22% of the people believe that the newspaper has succeeded in its way to spread awareness to the public about the climate

<sup>38</sup> Secretary, Ministry of information and broadcasting v. Cricket Assn. of Bengal (1995) 2 SCC 161.

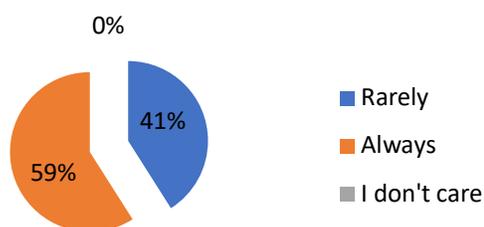


change issues. However, 23% of people believe that newspapers have failed in their practice and duty. Further, 55% of the people unaware of the type and quality of awareness which is needed to be produced with respect to climate change issues.

**9. Do people agree with the contents of an article published by newspapers concerning climate change issues?**

It is very difficult to analyze the views, needs and requirements which a person may have from a newspaper. The researcher put forward the following questions to know and analyze the needs of the reader and the demand they urge to have when it comes to climate change issues.

**Fig. 9 - How much people agree with the contents of article published by newspaper?**

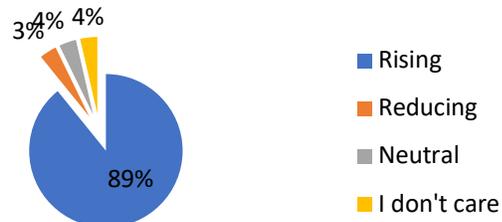


According to *fig. 9*, the researcher received 27 responses out of which 41% of people rarely agree to the amount of information a news article contains on the issue of climate change. However, 59% of people state that they are satisfied with the contents of the article, provided within a newspaper concerning climate change issues.

**10. What is the earth's temperature in the last decade?**

With the advent of urbanization and industrialization, there has been an increase in the level of pollution and the release of gaseous pollutants in the atmosphere, which led to the cause of global warming. The GHGs substantially is the one that traps the heat onto the earth surface, making the temperature to rise, leading to further environmental destructions. There have been several reports from IPCC and UNFCCC which provides that there has been a significant increase in the temperature of the earth's surface, which has become the reason behind the melting of glaciers, depletion of the ozone layer, etc. There are different responses which the researcher received in this behalf.

**Fig.10 - Peoples' response towards earths' temperature.**



The researcher received 27 responses out of which 89% of people believe that the temperature of the earth is rising and 3% of people believe that the temperature is reducing. However, 4% of people believe that earth's temperature is neutral and other 4% don't care about the issue whether the temperature of the earth is rising or not.

**VIII. CONCLUSION:**

In a democratic country like India, where media serves as the fourth pillar of democracy due to its responsibility towards society. Further, the Constitution of India



embodies the framework of protection and preservation of nature without which life can't be enjoyed. This chapter summarizes the findings based on the four objectives of this paper.

*Firstly*, to analyze various categories of environmental news that addressed by both the newspapers collectively, as according to the research and their analysis it could be seen that environmental categories that received maximum coverage are "weather/climate change issues", followed closely by "environmental conservation", "pollution", and "forest areas". Whereas other environment-related issues such as "water management/pollution", "sanitation and waste management", "Global warming", followed by "wildlife diversity", and "mining & mineral" issues are covered on an average basis. From the conducted research, the researcher has observed the importance given on environmental issues by the selected print media, and concluded that the above-mentioned newspapers don't cover the environmental issues to a large extent as politics, sports, international news etc are covered.

*Secondly*, to analyze the peoples' attitudes towards emerging climate change issues, the researcher has observed the affirmative responses in this case. As per the collected data, it is found that 66.66% of people believe that climate change issues should be concerned more, 92% person feel the changing pattern of weather, 71% people believe that it's "individuals" responsibility to tackle the concerning issue. Further, according to the research, it is also shown that 59% of people believe that environmental issues are not given preferences over other issues by the newspapers, also 55% of people believe the newspaper doesn't effectively

succeed in spreading awareness regarding climate change issue. From these all findings, the authors conclude that an effective awareness is necessary from the side of the newspaper to the area of research so that they people can also able to contribute their part towards tackling the climate change issue.

*Thirdly*, to analyze the coverage of selected print media of Dehradun regions concerning climate change issues by both the dailies, the researcher has explored the priority given by the selected dailies to climate change issues through their placement and frequency and, the study shows that only 11 climate change news were published in inside pages and climate change issues in these two dailies are published as "news reports" giving low importance to the "solutions", "article/editorial", followed with "photos", "law and policy". Also, on the issue of placement of coverage concerning climate change issues, the researcher found that articles on climate change issues have rarely given priority through being placed on the front page or in editorial section whereas, most articles regarding the climate change issues have been published inside pages of the selected dailies.

*Fourthly*, to trace out total coverage in terms of a total number of stories related to climate change in selected dailies, the researcher did a comparative coverage among the two newspapers which shows that the "*Hindustan Times*" has given maximum coverage to climate change in the said period. Again, an attempt is made to conclude that the "*Amar Ujala*" does not seem to make much impression among the readers by its lack of fair coverage on environmental issues, whereas in comparison to the former newspaper, the "*Hindustan Times*" has been fair in its approach to environmental issues.



By covering various types of news on the environment it makes people keep in touch with nature. Also, according to the observation done, it is shown that lots of pages were allocated for advertisements. This finding indicates the poor placement of stories and it also shows that the environment is not a prominent topic of discussion for the selected newspapers. It is also found during the research that issues of climate change were only given priority if it featured a political personality, further many issues are thrown up in news were not followed up. Therefore, it is concluded that by giving extensive coverage, print media will be able to generate interest and a sense of positive attitude towards the environment among people.

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