

**An Evaluation of Environmental News in Select
English Dailies of Assam**

A Dissertation Submitted

To

Sikkim University



In Partial Fulfilment of the Requirement for the
Degree of Master of Philosophy

By

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DECLARATION

I, Tezashree Islary, do hereby declare that the dissertation entitled “**An Evaluation of Environmental News in Select English Dailies of Assam**” has been undertaken by me for the award of Masters of Philosophy. I have completed this study under the supervision of Dr. Manoj Kumar Das, Assistant Professor of Mass Communication, Sikkim University.

I also declare that the information reported in the current study is the result of my own work, except where the due reference is made. The dissertation has not been submitted to any other degree or diploma.

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CERTIFICATE

This is to certify that the dissertation entitled “**An Evaluation of Environmental News in Select English Dailies of Assam**” submitted to Sikkim University in partial fulfillment of the requirement for the degree of **Master of Philosophy in Mass Communication** embodies the results of *bona fide* research carried out by **Tezashree Islary** under my guidance and supervision. No part of the dissertation has been submitted for any other degree, diploma, associate-ship or fellowship.

All the assistance and help received during the course of investigation have been duly acknowledged by the scholar.

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Chapter: 1

INTRODUCTION

1.1. MASS MEDIA AND ENVIRONMENT: THE COMPLEX RELATIONSHIP

Ever since the emergence of environment as a problem for public and political concern globally in the 1960s, environmental issues have witnessed their concomitant rise in terms of their representation on the media. At the same time, public awareness around and concern about environmental issues have seen a rise since then though such a rise in coverage of environment by media has been unsteady and intermittent as it reached the peak in the 1970s and then fell back in the mid-1980s following which again there was a dramatic increase in the the1980s and 1990s (Hansen, 1991). It would be, however, as Anders Hansen (1991) cautions, too simplistic to assume a direct linkage between environmental coverage by the media and public opinion on these issues. It would also be folly to assume that the rise in the coverage of environmental issues by the mass media is a ‘reflection of the sudden deterioration of the environment,’ as it would be equally “misleading to assume that those environmental issues which figure prominently in media and political agendas are necessarily the most immediate threatening or serious” (p. 443-44). Such a lack of simplistic, positive and linear co-relation between mass media coverage of the environmental issue and the actual gravity of such issues as per the scientific community and environmentalists opened up an interesting domain for scholars to investigate the role of mass media in their privileging of some environmental issues over others. Consequently, studies around media and environment began to develop

into an area of intense interest among scholars, further bolstered by the fact that media and communication research, in general, began to draw traction during the period.

The supposedly legitimate prerogative of environmental activist and pressure group organizations as 'primary definers' even in this stifled space is denied (Park, 2012; Anderson, 2014). In fact, the coverage of the environment by the news media has increased in the past few decades with the scientific progress in the field of environment as these unraveled issues hitherto not understood or not known; this was contributed by environmental movements. However, the reporting of environmental issues by the media is often considered to be an initial step to mobilize the public and the agenda-setting process. While the media informs the public about environmental problems and issues, it is widely understood that there has been an under-representation of environmental news (Hansen, 1991). At a time when 'Authority oriented' (ibid.) issues generally command prominence and limelight in the media, today as recent study show the relative marginalisation of environment issues is understandable.

Global media coverage of environmental issues has been largely influenced by the western idea that science and technologies have assisted humans to tame nature and it's only when such technologies are mishandled that man-made environmental disasters occur. Such a view underscores the assumption that modern technology becomes 'dangerous' when left to the underdeveloped or third world countries that were in any case sites of random large-scale disasters. The coverage by the western news media of the greatest post-war disasters is the Chernobyl accident of Ukraine.

Propaganda involving environmental issues also helps in serving the political agenda of advanced nations as was in the case of America's cold war against the erstwhile USSR. Furthermore, the media is also known to sometimes showcase environmental issues as raging political issues.

The current urbanization process in India poses multiple challenges in urban environmental governance. The environmental non-governmental organization (ENGO) based in India, has emerged as an important player that challenged the nation to protect environmental sustainability. They have been acknowledged for their role as the watchdog in the governance of the environment in India (Agarwal, 2008; Mawdsley, 2004). In contrast, some studies show that the role of ENGOs in urban governance is rare (Dembowski, 2001; Veron, 2006). Over the last 25 to 30 years, one has seen the considerable engagement of media and environment that commentators have called it 'media activism' in the environment (Follmann, 2016). As the media had been at the forefront of shaping public and political agenda on environmental issues and reflecting it largely as the degradation of the ecosystem, it played a significant role in promoting environmental awareness. At present in India, as elsewhere in the globe, as environmental problems are increasing with an increase in population, there is an urgent need to preserve the environment for future generations.

As such, the environmental issue gained its global platform after the UN conference on the Human Environment held in Stockholm also referred to as the Stockholm Report of 1972; 'Man and Biosphere'. This report led to the establishment of the United Nations Environment Program (UNEP). However, there are several activities

by the UN in the field of an environment which has been preceded by major conferences and reports. The reports include the Stockholm Report (1972), Brundtland Report (1987), Agenda 21 of Rio Declarations (1992), General Assembly special session on the Environment (1997), World Summit on Sustainable Development (2002), UN Conference on Sustainable Development (2012), and UN Sustainable Development Summit (2015). The United Nations Conference on Environment and Development (1992) held in Rio de Janeiro, Brazil is also known as the Earth Summit that led to the establishment of a commission of Sustainable Development. All these developments have had their implications in various degrees on the global media coverage of an environment.

The crisis that we are facing towards the environment needs to be addressed and analyzed “*within a social frame of reference*” (Arlt *et al.*, 2011). The social frame of reference emphasizes the power to motivate the audience or the readers to engage in social participation and sets an agenda for the masses. The media seems to set an agenda towards such an emergency. As far as environmental issues are concerned, media acts as a promoter of data which smoothens the progress and ascertains that the people develop greater environmental responsibility (Sharma, 2012; Arlt *et al.*, 2011). In the context of environment, the media has played a crucial role in creating awareness among the people on environmental issues. As Sharma “*there is no doubt that the media plays an instrumental role in modern societies*”, the role of media is extremely important in shaping awareness about environmental issues. Thus, as the three main functions of media are to inform, educate, and entertain, its initiatives in generating awareness on environmental issues are critical towards effecting a positive

change. In this regard, the initiatives of different media outlets across all variants (print and electronic) have been considered and are discussed below.

1.2. ENVIRONMENT COVERAGE ON ELECTRONIC MEDIA

The presence of environmental issues can be ostensibly found on the electronic media. Thus, broadcast media such as Prime TV slots in many channels allocate space to the environment. Apart from various documentaries that deals with environmental issues, some channels also often shows the nature and wildlife in the channels like Discovery, Animal Planet, National Geographic, etc. With extensive coverage towards endangered species, sea life, and other environmental issues that draw attention to the audience to the environment. As programs such as BBC's 'Earth Report' offer an exclusive report on the environment, the adventures of 'Captain Planet' broadcast on a cartoon network is specially designed for children.

In Indian context, Doordarshan has some regular programs based on the environment such as 'Earth Matters', 'Terra quiz', 'Nature Plus'. 'Earth Matters' offers information on the sources, where the educated people explain the consequences of the problem and gives suggestion for the environment-related stories. However, 'Terra Quiz' is India's first environmental quiz show on Television. One of the mainstream electronic media of India NDTV in the year 2008 launched the NDTV Toyota Green campaign. It was India's first nationwide campaign to save the environment that aims to create awareness about environmental issues by involving the people of the country. This channel also organized Telethon in 2009- The

Greenathon a 24-hour live fundraising event. However, this event brought people together to donate financial help and support for TERI's lighting a billion lives initiative. This initiative aims to provide solar power to villages. Since its launching date in 2008, this campaign had funded solar lanterns to over 600 villages (Khan, 2016). Similarly, on the occasion of World Environment Day on 5th June 2013, Zee Media as a responsible media organization had engaged its viewers to be a responsible citizen. This campaign presents a deep sense of commitment to environmental awareness. The edition is considered as India's biggest environmental awareness initiative under the name 'My Earth My Duty' which raised awareness about climate change and environmental sustainability. Hungama channel also launched the "Beat Air Pollution" campaign intending to sensitize people about the perils of air pollution in an enticing manner.

On similar lines as television, radio too gives some attention to environmental programs. The Delhi FM Radio broadcasts two weekly programs on the environment with the name 'Kinare – Kinare' and 'Ao Delhi Savaren'. 'Chora Ganga Kinare Wala' was one such campaign broadcast by 92.7 Big FM which aimed towards cleaner *ghats* on the Ganges river. The 'Pani Bachao and Life Banao' campaign was additionally launched by Big FM to preserve water conservation by carrying forward rainwater harvesting initiatives and observing other simple recommendations on saving water. In light of the requirement to use low-cost and environmentally friendly technology to cultivate ecology attitudes (Kapoor, 2011), there has been a wide application of the new media technology and the internet to highlight environmental issues. There are several platforms to create environmental awareness among the public through new

media. However, the question that remain is: “Are these coverages sufficient enough? Are the media doing enough?”

1.2.1. Print Media and Environment

Print media is one of the most effective media variants which reaches out to a large number of people, especially in suburban settings. Apart from other issues, it also proves to be a major tool that focuses on the factors that cause environmental problems and highlights the adverse impact on people. It helps people to notice the threats to the environment through their articles, feature stories, columns, and editorials. News reports play an important role in shaping public opinion and effectively addresses environmental issues by creating awareness among the general public. The first environmental reporting in Mass Media was established in the United States. It began when the book “Silent Spring” published in 1962, to challenge Americans where they started worrying about ecological destruction (McCormick, 1989). The book was also seen as the beginning of the age of the present environment awareness movement (Rubin and Sachs).

The environment stories are some of the most complicated of present times. It involves probabilistic science, abstract, speculative economics, laws, politicians, amongst other contexts. Therefore, the complex interplay of people and societies and it concerns the way forward for life as we know it is sometimes influenced by superficial undercurrents. Until and unless there is any natural calamity caused by nature to people, the media doesn't report on environmental issues and does not do any follow-up stories thereon. The frequency of environmental news items is less

compared to other news items and is usually a seasonal affair. Despite this dearth, the efforts of some media houses have majorly contributed to inform the people about the day to day progress of the efforts to protect the environment, recycling programs, conservation of natural resources and other such initiatives.

Although environmental issues posit a major challenge towards the universal population, alarmingly the mainstream news organizations tend to focus on issues such as politics, crime, and entertainment aspects (Patrick, 2018). Perhaps the organizations should allow greater space to the environment-related issues to uphold their responsibility as the fourth estate. As low reporting of environment stories allow people to remain ignorant and misinformed until the calamities approach, the disasters and their magnitude are constantly expanding. Given that environmental stories have a hard time competing with political and economic stories media houses should perhaps strike a balance between social responsibility and commercial efficacy. This is often where the role of the Print medium becomes significant. Given the lesser cost of production in expanding their presented space, it has considerable opportunity to help inform and educate the common people regarding the varied measures for safeguarding the environment through thought invoking articles, stories, columns, and editorials.

But then, as environmental problems and issues are gradually increasing around India due to pollution, drought, landslide, floods, etc., there is a growing fear amongst the public, thus fuelling a rising demand for more information or environmental issues. It is shown in Boykoff & Luedecke (2016) that environmental topics are the prominent

topic in the elite's discussion. Hence, mass media plays a significant role in creating knowledge and covering news on the environment (Pompper, 2004).

1.2.2. Role of print media in creating Environmental Awareness

Journalism in India is flourishing where media and press continue to play a divergent role in disseminating the news and helps in deconstructing the diversity discourse. A major effort in print media was made by the language newspapers where more than ten copies are sold per 100 persons (Bhatt, 1997). Mass media [print] often creates higher awareness about environmental issues (Poornananda, 2008:30). As Mc Quail (1994) explains, the media provide relevant attention to issues in news coverage by influencing the general public awareness of issues and attribution of significance could influence public policy needs. Thus, the media acts as a strategic communication process/tool to promote knowledge of the environment.

In the context of India, print media is still dominant and the most influential form of communication (Jharotia, 2018). It plays a serious role in providing issues associated with the environment. It is also an important source to disseminate information and to educate the people. Therefore, print media is an important source that people use to collect information about environmental issues (Mc Combs, 1995). Environmental reporting contributes awareness among the readers *The Times of India* newspaper features a regular column focusing on environmental news such as local and national issues under certain topics like air, water, climate change, deforestation, and many other environmental factors. Strikingly, some regional print media organizations have

also conducted major awareness campaigns through their newspapers. For instance, the Hindi language newspaper daily *Dainik Bhaskar* majorly contributed towards ‘JAL BACHAO ABHIYAN’ environmental campaign which became extremely popular amongst its readers in various parts of the country. This campaign had a great impact on its readers. After this campaign in April and May, the Government’s ‘JAL SATYAGRAH’ initiative was majorly popularized by the *Dainik Bhaskar* newspaper group. The newspaper’s objective towards the initiative was to create awareness and to inform people about the conservation strategies and encourage them to pledge to save water that was majorly accomplished.

1.3. ENVIRONMENTAL JOURNALISM

The environmental beat of a journalist is extremely challenging and sophisticated because it encompasses the subject of many other beats like law, business, and politics (Friedman, 1991). Environment journalists are always expected to contribute towards improving the awareness thresholds and advocate positive changes toward the planet. As the environmental journalists working in print media deal with a ‘shrinking news hole’ (constricted space allotment) whilst yet facing a growing need to tell longer, complicated, and more in-depth stories (Friedman, 2004; 176). Their main objectives are to educate the readers about the serious environmental threats or issues and to use the power of news media to bring changes in the quality of resources. After Carson’s *Silent Spring* (1962), the concept of environment journalism was amplified and some newspapers started environmental beats where the reporters began to write about environmental issues like smog, air pollution, endangered species, etc. (Palen, 1998). As journalists outline that lack of resources and

specialization are the major challenges to better coverage of the topic. The foremost problem of environmental journalism is the lack of focused academic training. Institutions do not give any importance to the specialized journalistic tools, says Baghwan (senior journalist) reaffirming that academic programs such as environmental education are necessary for the journalists working on environmental beat.

Environmental education is defined as education that helps individuals to become more knowledgeable about their environment and to develop responsible environmental behavior and skills so that they can improve the standard of the environment (UNESCO, 1978). There are several founding fathers of environmental education (Gough, 1994). As they promoted the concept of environmental education in countries like North America and Europe, Carson's (1962) *Silent Spring* or the *Limits of growth* report of the club of Rome (Meadows, 1952) are landmark contributions in environmental education and also referred to as the foundation of Environmental education, with "*The concept of environmental education*" in the first volume of the Journal of environmental education often referred to as the starting point of environmental education (Stapp, 1969).

1.4. **BACKGROUND OF THE STUDY**

1.4.1. **Environment issues: An Indian context**

The State of India's environment (SOE), 2019 has given exclusive data on the major development of several environmental sectors where the analysis and statistics are put

together by the magazine “*Down to earth*” published by the Centre for science and environment (CSE). They have divided the environmental issues into different parameters that include air, development, water, land and agriculture, health, cities, waste, energy, climate, forests, wildlife, and employment. According to this report, Air pollution is responsible for 12.5 percent of all the deaths in the country. One of the key findings of this report is global climate change. There has been a 22 percent increase in India’s greenhouse gas (GHG) emission between 2010 and 2014. As India continues to bear the brunt of extreme weather events, according to the report of 2018, 11 Indian states recorded that extreme weather events claimed 1,425 lives. Furthermore, as presented in the 2018 report, 37 species of animals were poached or seized.

1.4.2. Media’s Attention to the environmental issues in Assam

The media attention to the environment scenario in Assam is not different from that of the whole of India. Assam is a state in the northeastern part of India which is famous for its tea plantations, archaeological sites, and wildlife sanctuaries. The state features a heterogeneous mixture of a variety of landscapes, plants, birds, and animals. Because of its climatic conditions, location and forest reserves, Assam is a favorable region for birds, animals, and natural vegetation. Currently, there are a total of 5 national parks and 18 wildlife Sanctuaries. Out of those national parks, Kaziranga and Manas are UNESCO World Heritage sites. Assam is home to several endangered animals and rare species such as the one-horned Rhinoceros and Golden Langur. But then, although Assam constitutes 2.39% of the entire geographical area within the

country (2001 census), the state is said to possess rich natural resources, water, flora, fauna and fertile soil.

In this era of globalization, economic growth and development have ensured that the environment has been shaken. As the environment is treated negatively and harmed, several major threats due to human intervention that gained the media's attention on the environment are explained below.

Deforestation: Media paid considerable attention to Deforestation. This has been one of the major threats ensuring Assam's environmental deterioration. The main reason for deforestation in the state is the increase in population. Due to a large-scale migration in the region, deforestation is increasing thus leading to grave consequences for both humans and wildlife (Nath & Mwachahari, 2012). Kashyap (2016) stated that the massive scale of deforestation results in soil erosion, landslide, and flash flooding. The most affected area in Assam is Majuli Island which has been severely threatened. Its 1.5 million residents had to incur a heavy loss of property, human life and agriculture, a threat to the ecological balance altogether.

Climate change: Climate change has always been at the forefront of any news story. It has emerged as the most global challenge of the 21st century. The Himalayas support about 20 percent of the world's population. Among the 12 states in the region, Assam is found to be most vulnerable to climatic change. (study by Indian Himalayan Region). The other criteria of climate change in the state are often characterized by

high rainfall and a sub-tropical climate. The state thus faces annual floods and droughts which severely affected the adverse climate condition.

Poaching: As Assam is a state enriched with its biodiversity and natural resources, amongst other rare breeds, the one-horned Rhinoceros is found in Assam. According to the census of 2012, the National parks and Wildlife sanctuaries such as Kaziranga National Parks, Manas National park, Pabitora, and Orang were home to a minimum of 2,505 rhinoceros. Poaching for horn has been a significant threat in the state. The poachers target their horns and smuggle. Over the years, the media paid considerable attention to poaching through stories on man-animal conflict, poachers, etc. Further deteriorating their population, more than 90 rhinos were killed since 2013 according to a news report. Apart from floods being one of the major factors which force the animals to maneuver into distant lands and become easy prey for poachers, sometimes they simply drown. For instance, recent news stories mention how in Kaziranga National park, when the low lying areas flooded, the animals were forced to migrate to higher land and were poached for their horns.

1.5. A BRIEF HISTORY OF PRINT MEDIA IN ASSAM

The history of the Print medium in Assam is nearly 160 years old. In Assam, although print media had started in the pre-independent period, yet the impact of print media is still very influential in society even in present times. The first printing press in Assam was bought by an American Baptist Missionary in Sibsagar in 1836 AD. As he published a series of brochures informing the public about the merits of Christianity and glorifying the biblical stories (Murthy, 1996), his objective was to propagate the Christian religion. However, as the first Assamese periodical "*Arunodaya*" made its

appearance in 1846 AD, it played an important role in shaping modern Assamese literature (Baruah, 1956). Whereas *Dainik Batori* was the first Assamese daily newspaper of Assam published in the year 1935 by Shivaprasad Baruah, *The Assam Tribune* was the first English daily newspaper published from Assam in 1946.

1.6. FOCUS OF THE STUDY

A newspaper is one of the foremost effective media which reaches a large number of individuals in Assam. It is a powerful tool to impart awareness and plays an advocating role in facilitating knowledge of society by providing them every kind of information. Thus, in the context of environmental issues, the media sets perceptions and creates awareness amongst the people. Although Assam is rich in its biodiversity and natural resources; a large part of it is covered by hills and forests, its environment is being adversely affected because of human intervention in regards to deforestation, pollution, mining, hydropower projects, and fertilizers. Thus the focus of the study is to analyze the content of newspapers related to these environmental issues in Assam from the perspective of three selected English dailies published in Assam, Guwahati. The chosen newspapers are the highest circulated ones in Assam cumulatively reaching out to a considerable number of readers. Furthermore, as certain eco-friendly content appearing in these newspapers attempt to make the readers conscious of the environmental rhetoric, although they rarely find decent space, it encourages the readers to be environmentally active instead of playing passive roles.

1.7. STATEMENT OF THE PROBLEM

As a significant agency responsible for a vibrant democracy, news media, including newspapers, contribute immensely to the public awareness and sensitization of issues and also intervene in public policy. Newspapers play an important role in setting an agenda for society. Environmental issues continue to constitute a growing concern globally as well as in India. However, it is generally held that newspapers do not give adequate importance to environmental issues in terms of covering news and facilitating public discourse; news gets covered only at the time of natural disasters and crises. It is therefore pertinent to examine how the newspapers in Assam, the largest north-eastern state of India and an environmentally rich but fragile state in the country, engage with environmental issues.

1.8. GOALS AND OBJECTIVES OF THE STUDY

The goal of the study was to examine how newspapers in Assam engage with environmental issues in terms of their daily reportage and to assess the positions they take while covering these stories. The study also sought to understand how the newspapers frame the stories when it comes to environment news.

The objectives of the study are to -

- elicit how much space is devoted to environmental news stories by the newspapers in the state.
- determine the priority given by newspapers to environment-related stories.

- examine the ideological slant of these newspapers in terms of environmental news.
- examine how the newspapers frame environmental issues.

1.9. RESEARCH QUESTIONS

- What is the amount of space given to environmental stories by the newspapers? How do they compare with other type of stories?
- What are the different environmental issues that the newspapers cover in their daily reportage? And which of these topics are given prominence by the newspapers?
- How much prominence do environmental news receive in the newspapers in terms of their position in different pages, viz., the front page, inside pages, or last page?
- How much priority do these newspapers attach to state, regional, national and international news on environment?
- What kind of ideological slant is reflected in these newspapers as they cover news on environment? In other words, are the newspaper pro-environment, pro-development or neutral towards environment? Are these stories proactive, reactive or neutral?
- How does the newspaper frame the environment-related news item in terms of Attribution of Responsibility, Human-Interest, Conflict, Economic or Morality frame?

1.10. ORGANISATION OF THE CHAPTERS

Chapter 1: Chapter one deals with the introduction of the study. This chapter presents us with the mass media and environment complex relationship, the relation between print media and environment, the role of print media in creating awareness and a few essential backgrounds of the study. This chapter also highlights the objectives, statement of the problem and purpose of the study.

Chapter 2: Chapter two deals with the related literature and theoretical framework of the study. This chapter reviews the previous research work done by different scholars and books. Both the primary source and secondary sources are utilized in a review. Several journals, books, thesis, and reports are reviewed. The theoretical framework of the study lays the foundation for the research aims and objectives of the study.

Chapter 3: Chapter three explains the methodology of the study. The universe, sample, sampling techniques, sample size, variables, rationale, and profile of the newspapers are all discussed in this chapter. The research questions and operational definitions are also described in this chapter. It also explains the methods used to answer the research questions. Content analysis as a technique and framing and agenda-setting as a theory have been discussed in this chapter.

Chapter 4: This chapter presents the extent, frequency and priority given to environment stories in the selected newspapers. Those newspaper analyses were based upon several categories such as space, number of environmental news stories,

Environment topics, placement and geographical priority. Thus, the parameters were presented and analyzed by using certain tables and graphs.

Chapter 5: This chapter illustrates the nature of the environment news items of the selected newspapers. Ideological Slant, types of reporting and framing were the three categories discussed and analyzed with the assistance of tables and graphs.

Chapter 6: The sixth chapter is the concluding chapter which summarizes the findings. This chapter also carries the conclusions of all the major findings of the study. It is then concluded with the recommendations for further research. Besides all these chapters, the references and appendixes are listed at the end.

1.11. LIMITATIONS OF THE STUDY

There were several newspapers published from Assam in the different regional and national languages. Despite having numerous newspapers, I have chosen only three newspapers; it was because of the time factor that only three newspapers were being analyzed.

Chapter: 2

REVIEW OF LITERATURE

2.1. INTRODUCTION

This chapter discusses the scholarly work and studies on the media coverage of the environment. The works are critically studied and comprises of two sections: review of literature and theoretical framework. In first section, the study looks at what has been done on the coverage of environmental stories in print media, framing of environmental stories and environmental journalism in agenda-setting at international, national and local level. In second section, the theories of framing and agenda-setting theory that helps to explain the evaluation of environmental stories in newspapers of Assam are being explained. Thus, this chapter reveals the gaps that exist in the literature and also lays the foundation for the research aims and objectives of the study.

2.2. PRINT MEDIA COVERAGE ON ENVIRONMENTAL ISSUES

An environmental issues have been growing in salience over the past few decades and have acquired the status of a global news agenda (Anderson, 1997). In regards to Print media and its coverage of Environmental issues, Rachel Carson's (1962) *Silent Spring* challenged readers to take concern about the issues of ecological deterioration, post its release, the American mass media began to report upon environmental issues for the first time (Marukatat, 1991). As Hansen (1991) reaffirms that it is only since the 1960s the western media began its journey in environmental reporting. there have been studies on media and environmental issues which proliferated since the 1980s

(Campbell, 1999). By the end of the 1980s, the environmental journalism began to arouse as a definite topic for a considerable amount of literature.

Newspaper plays an important role in sensitizing the society (Parveen, 2016). Concomitantly in the Indian context, as Thapar's (1995) *Forests and Settlements* traced back to the environmental issues from the Pre-Colonial period she observed that the harmonious relationship between humans and nature was a part of the traditional culture of Indians. In the 1980's the reporting of environmental issues in India are mostly based on the local interest whereas the national and international issues are ignored (Sekar, 1981). English newspapers did not seem much to be in a position to create environmental awareness to the public in a given geographical area and therefore they were more focused on the issues that take place around the big cities. In 2000's there were several studies (Lucas, 2013; Meda 2016; Parveen, 2016; Khan, 2016) undertaken on Indian newspapers. In India, the highest and oldest circulated newspaper of the country are *The Hindu* and *Times of India* (Meda, 2016). *The Times of India* being the oldest newspaper did not provide much space to the environmental and sustainable development issues (Parveen, 2016) and do not present any follow-up stories in both the newspapers (Meda, 2016). Both the study revealed that *The Hindu* gave more coverage to environmental news compared to *Times of India*. Consistent with the results of Lucas (2013) study, it also presents similar findings on the environmental coverage on two Indian dailies. In contrast to Khan's (2016) study on the most important newspapers of India study, he found that *The Times of India* covered more environmental issues stories than any other national newspaper.

Eventually in India, there were several number of regional/ local language newspapers that enjoys highest number of readerships then English language newspapers. One such widely circulated Hindi language newspaper was *Dainik Bhaskar* that promoted the campaign on ‘Jal Bachao Abhiyan’ and initiative on ‘Jal Satyagraha’. The campaign created a great impact on the readers throughout the state (Khan, 2016). Not much of the language newspaper provides importance to environmental issues. The regional Kannada language newspaper covered most of the stories related to other beats and the environmental news was being neglected (Raut & Kakade, 2016). In contrast Varna and Poornanda (2019) in their survey they found that the majority of the audience believes the environmental issues were truthful.

India is one of the countries which have the most vulnerable risks to climate change (Raut & Kakade, 2016). As Dutta, Garg, and Bhatta (2013) studied 31 prominent English language Indian newspapers on the environment coverage that showed the problems associated with climate change and global warming were the most focused article altogether in all the selected newspapers. In contrast, some studies show that climate change issues were mostly neglected in newspapers (Islam, 2014). The topics were scrutinized into its thematic concept where they found that the negative impact of global warming and climate change was the main quorum of those newspapers. The findings were compared with the findings of Islam (2013) conducted on climate change issues in Bangladesh. This study also showed that the dailies mostly concentrate on covering issues of environment and climate changes around World Environment Day after the day the news coverage declines. In contrast to the two above studies, Patwardhan (2000) characterized climate change issues involving three ramifications. The first ramification demonstrated that India did not possess any

obligations under the convention to scale back its greenhouse gas emissions, international pressure will keep increasing in this regard. Secondly, it must develop a transparent and well-articulated position on each of the essential questions indicated earliest. Thirdly, it shall establish the need to recognize that even if countries do undertake immediate and rapid action to reduce their emissions, some degree of climate change is inevitable.

In an International study, from a comparative perspective, Marukatat (1991) investigated two newspapers; *Times*, New York magazine from the developed country, and *The Weekly Review* from the developing nation, Kenya. The analysis of environmental news items in the two newspapers showed “Wildlife conservation” gained more popularity in those two magazines, amongst others, whereas the other environmental issues remained neglected. However, Lawhon and Fincham’s (2006) studied the Natal Witness newspaper as a step towards the understanding of environmental messages portrayed to the South African public through the press. The environmental story in their study had been grouped into six themes - Green, Brown, Ecological Disaster, Resource Use, Ethics, and Others. Firstly, the green themes were those that do not bear little or direct relevance to the everyday lives of most South Africans. Secondly, the brown themes were the debate regarding air quality and plastic bags. Thirdly, the ecological disaster themes generally emphasize sensational incidents. The study found green themes as the most dominated ones in the Natal Witness articles followed by the ecological disaster. The disaster was in isolation and therefore the events were even compared with the previous disasters.

Some international scholars like Langat (2011), Bayagoda (2017) studied the print media coverage of environmental issues in the newspapers of developing countries such as Kenya and Sri Lanka. The social issues that influenced coverage of environmental sustainability issues were only given priority if they featured a political personality and the front page of the newspaper was covered more with political and crime stories but only a few environmental studies were given importance (ibid.). As Bayagoda (2017) explores the news coverage of environmental issues in Sri Lankan newspapers in three languages, the study had investigated *The Sunday Times* (Newspaper of Sri Lanka) had published a considerable number of articles other than those two, which was considered remarkably the positive characteristics of a newspaper. They pointed out that the organization ignored the important environmental events and issues which shows that these newspapers had not understood their social responsibility, as well as environmental journalism itself.

Climate change news covered mainly on the impacts on agriculture, common-pool resources such as forests and pastures, and human health was found to be the most threatening ones (Tairo, 2011). Dewi and Khoirunisa (2018) studied middle school student's perception of Climate change in the Boyolali district, Indonesia. Their study revealed that almost all middle school students were extremely sure about global warming taking place. In the survey, the students suggested that the global warming issue could be reduced by replacing fossil fuels, planting trees, and decreased deforestation. Their study showed that the students got the facts about global warming through different modes of mass media. Wakefield and Elliot (2008) in the construction of news in the local newspapers in Environment Risk Communication, explored the role of local information systems in risk communication. Most of the

stories were created by journalists, focusing in particular on their perception of community concern, the study focuses on the media coverage of the environmental process which was dominated by a trio of themes: process, environmental degradation, and technology. Therefore, the coverage of news was selective and only some issues received coverage while others did not. The newspaper can be defined as an “Inconsistent” source of risk communication, especially when it comes to the aspects of citizen participation in environmental decision making (ibid.).

As Rong (2009) summarized that the local newspaper pays more attention to events occurring in their regional area, the study revealed that geography affects the party newspaper’s environmental coverage in regards to the ‘Party’ and ‘Non-Party’ paper. As the party paper covers less environmental issues, the non-party paper covers more of an environmental news item. Boykoff and Smith (2010) observed that with global climate change, the reporting changes over time. A similar study had also been conducted on the reporting of environmental news. As Chand (2017) studied the content analysis of newspaper coverage on climate change in the south pacific country Fiji for 6 years, revealed that the coverage of environmental news always fluctuates. She divided climate change into four thematic concepts that include Action, Science, Responsibility/Impacts, and Threats. In her first thematic concept, the action theme has been divided into two subparts that are ‘small action’ and ‘need for action’. According to the study, the ‘small action’ refers to the articles highlight small efforts that were taken or should be taken to reduce the impacts of and ‘need for action’ which refers to the contribution towards climate change. The second thematic concept was Science where climate change did exist, environmental change as evidence for climate change, present-day climate change is anthropogenically forced or used

scientific research as evidence for climate change. The majority of the articles took the fact that climate change was a scientific reality. The third concept was Responsibility that did not gain any attention. The fourth thematic concept was the threat and impact which gains minimal attention. Action thematic concept makes the bulk of the content in the selected newspaper articles (ibid.). ‘Small actions’ identified as pragmatic, optimistic and alarmism was found to be the most dominant of all the climate repertoires, prevalent in campaign communications and mainstream popular press. It involves asking a large number of people to do small things to counter climate change (Ereaut & Segnit, 2006). It further showed that the environmental news articles was veered away from the blame game and concentrated more on what was happening and what should be done. Additionally, the researcher also studied local media and foreign reports in Fiji. The analysis had validated that the maximum number of reports published in the selected newspapers were at the grassroots level and the low reporting of foreign reports.

Suresh (2016) in the article “Role of Media in Conserving environment” examines the Health of the environment has not been in good shape and recklessness towards it would lead to serious and irreparable repercussions putting future generations in great jeopardy. Media can play an important role in creating awareness among the people on healthy habits that will boost environmental health. This article suggests media should come out of their TRP centric coverage. They ought to become more responsible by making comprehensive coverage of environmental issues consistently which would reform the attitude of the people towards nature. On the other hand, the study on sustainability showed that respondents agreed to a great extent or control measure instituted or get to be instituted Lagos state to enhance sustainability (Ajayi,

Sofoluwe & Shitu, 2016). This is an agreement with Fashola (2011) observation that two options were available in Lagos state, the first is mitigation and the other is adoption in combating consequences of climate change

2.3. FRAMING OF ENVIRONMENTAL NEWS STORIES

As Trumbo (1996) in her study “Constructing climate change: claims and frames in US news coverage of an environmental issue” done a content analysis on the coverage of five national newspapers in the United States. The researcher used the framing theory of Downs issue attention cycle, a five-stage model describing the rise and fall of social attention to important issues. The researcher emphasized the issue–attention cycle was a social process model and not specifically designed to evaluate news media attention to an issue. The result of the analysis shows that scientists tend to be associated with frames emphasizing problems and causes, while politicians and special interests tend to be associated with frames emphasizing judgments and remedies. Results also show how scientists declined as news sources as the issue became increasingly politicized.

As Clausen (2003) pointed out that, in coverage of international events, journalists prefer to ‘localize’ and equivalent news article by targeting a specific national audience. He identified the journalists in different countries chose different elements in their reporting to fit in the local cultural framework. The amount of coverage given to foreign news events varies over time, depending on many factors, including what is happening domestically and what else is going on in the world. Bonfadelli (2010)

stressed that media and media owners were dependent on advertising which affects the reporting of environmental problems. Thus, this study surveys the level to which their newspapers use advertisements as a news form. The study unveiled the influence of powerful voices over the public (Foori, 2015). The local newspaper covers mainly local issues and the official voices were louder than any other actors in the coverage. The paper by Foori (2015) on the Omani newspaper demonstrated the attribution of responsibility frame was found to be the most prominent frame, followed by Human Interest Frame, Economic/ consequences frame, Conflict frame, and Morality frame.

Takahashi studied the framing and sources of mass media coverage of climate change in Peru during the VALCUE selected 8 newspapers of the formal sort of a newspaper in Peru. The framing was divided into six categories that include “effects”, “international politics”, “solution”, “economics”, “policy” and “science”. The Science concept of framing was the smallest amount covered within the selected newspapers. The result of this study suggested that media coverage of climate change during the VALCUE Summit was limited in terms of both the content and volume. Because of the limited access of environment frames and sources in the public discourse through the media needs to be addressed by the Peru environmental coalition. The audience mostly relies on frames to make sense of and discuss an issue and journalists use frames to craft interesting and appealing news reports (Nisbet, 2009).

Nisbet (2009) in “Communicating Climate Change: Why Frames Matter for Public Engagement” presented two key details about the Framing typology. Firstly, the researcher mentioned framing as general organizing devices that include pro, anti or

neutral arguments. Secondly, the framing typology was the latent meaning of any frame which was often translated instantaneously by specific types of framing devices, such as catchphrase, metaphors, sound bites, graphics, and allusions to history, culture, or literature (Gamson, 1992). However, there were many typologies of frames applicable to climate change by different researchers. The typologies were Social progress, Economic development and competitiveness, morality and ethics, scientific and technical uncertainty, Pandora box, public accountability and governance, a middle way, conflict, and strategy (Gamson & Modigliani, 1989; Dahinden, 2002; Nisbet & Lewenstein, 2002). They reviewed this typology of frames suggest a deductive set of mental boxes and interpretive storylines that used to bring diverse audiences together and mobilize collective actions. As Shyam and Madhu (2015) in “Media and Environmental Framing” studied the regional media of Andhra Pradesh, it pacifies that media can be accredited for making the technical terms of environment like the ozone layer, global warming, and climate change. They had employed the framing theory in their study where they categorized certain types of frames like promotion vs prevention, future vs now, gain vs loss, interconnected frame, local frame, etc. Those frames were used in their study to construct the environmental content by newsreaders.

2.4. ENVIRONMENTAL JOURNALISM AND AGENDA SETTING

As Brosius and Kepplinger (1990) in their study in Germany found in complex agenda-setting on the evidence of relatively strong agenda- settings effects that present the issues of energy and environmental protection. They remarked that the more press increases its coverage of environmental stories, the more likely it is that

readers who have been receiving the messages. It increases their knowledge of ecological problems and includes the problems in their agendas and make the public reliance on mass media. It is indicative of an increase in environmental awareness that perhaps leads to changing attitudes and behaviors and is possible only if the public receives information about the environment through some mass communication channels. But their study revealed that the press did not play an active part in diffusing information about the environment to society.

Abraham (2010) in “Journalists and Environment news in Kerela” showed that the readers seek more political news stories in newspapers followed by human-interest stories and entertainment stories. Environment stories had the lowest percentage of respondents and no respondent felt that newspaper readers in Kerela seek sensational and crime stories. Thus, the coverage of environmental issues was found very less in Kerela newspapers because of the reason that the newspapers do not have a particular reporter to cover environmental issues in Kerela including the national dailies such as *The Hindu* and *The New Indian Express*. Similar findings were presented in Saikia’s (2017) role of mass media in creating environmental awareness where she studied the different types of media that are radio, TV, and newspaper in India. Her study states that there were no journalists specialized in environmental issues and was pointed out to be the common weak point. However, the focus of Indian media while covering the environment was definitely on local and typical Indian problems like water, air pollution, and deforestation. Baghwan(senior journalist) describes the most important problem of environmental journalism was the lack of academic training and institutions does not provide any importance to the environmental journalistic tools. Ogadimma and Abbas (2015) also conducted a study on Environmental Journalism on

the coverage of environmental issues in Omani newspapers. In their study, they had studied the sources of the Omani newspapers where they identified that the coverage of the environmental issue is momentum. Most of the stories on environmental issues were reported from the official's proceedings of conference, symposia, seminar, and workshop. The environmental coverage reflects that environment was not a priority of any journalists. They mostly cover a large extend from agencies rather than local news agenda.

The report on environmental coverage in Vietnamese newspapers (2010) presented the SWOT matrix about the environmental reporting situation of Vietnam. Firstly, the strengths mentioned in the report was that they had specialized journalists in charge of environmental news. Editorials leaders were being paid more attention and guided in environmental reporting. The selected newspaper had all encourage feedback and comments from readers to the editor. Secondly, the weakness of the newspaper was the small section or page dedicated to environmental issues. The journalists have limited English language skills which limit the ability to access non-Vietnamese information sources. Thirdly, the opportunities in the Vietnamese newspapers were that they can access environmental information from MONRE press conferences. They also receive support from external funding to carry out environmental protection. Lastly, the researcher presents the challenges /threats of the newspaper that the news agencies do not sell advertising for environmental news. The news agencies mostly preferred other advertisements that were business-oriented. There were also limitations to access information sources for environmental problems.

Journalists and editors have no clue about what the environment is (Lackemariam, 2000). Similarly, Thakur (2015) studied “Role of media to create Environmental Awareness” where he presented some challenges of Environmental Reporting. Journalists were mainly the quality and the quantity of the information that the public gets from the media is directly related to how well the journalist performs his or her professional duty. The study presents many challenges of environmental reporting like ignorance of environment issues, scarcity of information, lack of editorial support, pressure from industry, and lack of skill and training. A similar report was presented by Dorroh (2015) under the title “Environmental reporting and media development”. In her article, she also mentioned the same challenges like Thakur’s study in Environmental Reporting.

2.5 THEORETICAL FRAMEWORK

2.5.1 Concepts of Framing Analysis

Framing refers to the way “events and issues were organized and made sense of especially by the media professionals and their audiences” (Reese, 2001, p.7). The concept of framing is related to the agenda-setting tradition on the essence of the issues at hand rather than on a specific topic. Framing was first developed by Goffman in his (1974) seminal book “*Frame Analysis: An Essay on the Organization of Experience*”, where he stated that there have been two distinctions within primary frameworks; natural and social. Natural frameworks identify occurrences seen as un-oriented and pure physical, whereas the social framework provides a background understanding of events that incorporate the will, aim, and controlling effort of intelligence. Both play the role of helping individuals to interpret data.

Several scholars have identified that the concept of 'Frame' and the framing process consists of four conceptions. The first conception is a sociological conception given by Goffman (1974) "Frame Analysis is that the analysis which maintains that we all actively classify, organize and interpret our life experience to make sense of them". Giltin (1980) had also used the equivalent conception of framing where he defines frames as "persistent selection, emphasis, and exclusion". Gamson and Mondigliani (1987) also developed the concept further. According to them, a frame is a central organizing idea of storyline that provides meaning to events related to an issue. They have identified five such devices that signify the uses of frames, metaphors, exemplars, catchphrases, depictions, and visual images (ibid.). The second conception is psychological where the framing is viewed as placing information in a unique context so that certain elements of the image get a greater allocation of an individual's cognitive resources (Kahneman & Tversky, 1984). The third and fourth conception is Integration and Distinction which were overlapping from different disciplines. It suggests frames functions as both " internal structures of the mind and devices embedded in political discourse" (Kinder & Sanders, 1990).

There were hardly any studies that focused on journalists 'Framing of climate change'. Bruggemann (2014) was the first to deal with this deficit, with theoretical research into journalistic frame setting. The way climate change is framed in the mass media has important consequences for the development of public opinion on this issue (Corbett & Durfee, 2004). In general, conceive a frame as "central organizing idea or storyline that provides meaning to an unfolding strip of events meaning to an unfolding strip of events"(Gamson & Mondigliani, 1987) and more specifically we

understand a journalist frame as ‘knowledge structure’ that is ‘employed by journalists throughout story construction’ (Dunwoody, 1992).

However, Framing essential involves selection and salience. To frame is to select some aspects of a perceived reality and make them more salient in a communicating text, in such a way as to promote a particular problem definition, interpretation, moral evaluation, and or treatment recommendation for the item described (Entman, 1993). The framing theory explains the differences in media coverage across the globe. Tuchman (1976) noted that framing implies identifying some items as facts, not others. Similarly, Giltin (1980: 6-7) observed that frames ‘were the principles of selection, emphasis, and presentation composed of tacit little theories about what exists, what happens, and what matters’. Framing allows journalists, to focus on facts and still shape discourse- either consciously or unconsciously (Miller & Riechert, 1997). Individuals frame an issue by mentally organizing and discussing with others an issue central idea. However, the frame can greatly influence the nature of the problem who or what they see as being responsible for the problem, and what they feel should be done to address the problem (Swain, 2012).

2.5.1.1 Semetko and Valkenburg frame

Several researchers used Semetko and Valkenburg framing theory in their study (Gamson & Modigliani, 1987; Iyenger, 1991; De Vreese, 2005; Brunken, 2006; Solsman & Johnston, 2008; Dirikx & Gelder, 2009; Chew, 2012). This theory was used to examine the level of prominence of these five frames. There were many

definitions of framing (Matthes, 2009) but all those different frames replicate the same sense of the concept.

The first group of studies by Gamson and Modigliani (1987) identified eight frames that consistency appears across science-related policy debates: social progress, economic development, morality, scientific uncertainty, runaway science, public governance, alternative, alternative path and strategy. In the study, it was found that US media have consistently represented climate change in a conflict frame, despite contribution to climate change. Another framing theory of Semetko and Valkenburg was used by Iyenger (1991) in his study US network coverage of social issues.

De Vreese (2005) in 'News framing: Theory and typology' describes framing as a communicative process. He stated, "*Communication is not a static but rather dynamic process that involves frame- building and frame setting*" (p. 51). In this study, he employed Semetko and Valkenburg's framing theory where he mentioned how the newsmakers employ many different frames in their coverage of an issue or an event. In addition to the theory, he labeled the frames into two categories *issue-specific frames* and *generic frames*. The issue-specific frames were the typology concerning nature and content. Secondly, the generic frames were those which were identified to different topics over time and different cultural contexts.

Semetko and Valkenburg frame (2000) in their study suggested two approaches inductive and deductive approaches. Inductive frames were the 'loosely defined

preconception' which allows identifying the content categories. It can also be deductive which is easy to replicate and allow large samples to be analysed. Semetko and Valkenburg identified five frames: the Attribution of Responsibility, Human Interest, Conflict, Morality and Consequences/ Economics. They employed these five frames in their study on the analysis of national print and television news. Apparently, in their study, they found out that the Attribution of Responsibility was the most commonly used frame in their analysis followed by conflict, economics, and consequences frame. The least used frame in their study was the morality frame. Dirikx & Gelders (2009) used this model in their study "*Global Warming through the same lens: an exploratory framing study in Dutch and French Newspapers*".

- i. **Attribution of Responsibility Frame:** This frame focuses on who is responsible for causing or solving the problem. "*It is presented in such a way that the responsibility or blame for the cause or the solution is placed on political authorities, individuals or groups*" (Hansen, 2010).

- ii. **Human Interest Frame:** *The human interest frame helps win both "hearts and minds"* (Hansen, 2010, p. 6). This frame focuses on the issue from a more emotional point of view; it personalizes a problem and humanizes it. Feelings such as outrage, empathy, caring, sympathy, or compassion could move the newsreaders, and thus framing analysis considers such emotions (ibid.).

- iii. **Conflict Frame:** The frame reflects the conflict and disagreement among the individuals or groups.

- iv. **Morality Frame:** This frame presents the issue from a moral angle and refers to morality, God, or Mother Nature. Neuman et al. (1992) identified that the morality frame is highly used by journalists indirectly.

- v. **Economic/ consequences frame:** This frame emphasis on how an issue economically affects people. It reports in terms of economic consequences on an individual, group, or organization. This frame is identified as a common frame in any news item by Neuman (1992).

2.5.2. Agenda- Setting theory

Several studies had found agenda-setting effects in relation between media coverage and public opinion environmental issues (Brouis & Kepplinger, 1990). The beginning of agenda-setting theory can be traced as far as 1922 when Walter Lippmann expresses his concern on the vital role that mass media can do in influencing the setting of certain images on the public's mind. McCombs and Shaw (1972) first formally used the Agenda Setting theory in the context of an election campaign where politicians seek to convince the voters about the party's important issues. An agenda is a selection of items arranged to give items more important than others. The theory proposes that the mass media were capable of setting any given agenda for the public (McCombs and Shaw, 1972). People exposed to the information of the media tend to be influenced by the messages. This theory explains how a particular news item can influence the public. The function of agenda-setting asserts mass media that allow them to cause "correlation between the media and public ordering of priorities" (McCombs and Shaw, 1972). Rogers and Dearing (1988) believed that the agenda-

setting theory stands with three agendas such as public agenda, media agenda, and policy agenda. The policy agenda can be developed based on the government and other policymakers. The agenda-setting level can be attributed to two different levels. The first level of agenda-setting is media uses objects or issues to influence the people what people should think about. The second level of agenda-setting theory is media focuses on the characters of issues how people should think about. This level focuses on the political ad, campaigns, business news, PR (public relations), etc (Valenzuela & McCombs, 2009). Therefore the role of Agenda-setting theory implies that the media does not necessarily tell the masses 'what to think' but focuses on 'what to think about' (Baran & Davis, 1999; McQuail, 2000). According to Kumar (2013), "People tend to know about those things which the mass media deals with and adopt the order of priority assigned to different issues".

The concept of agenda-setting describes the press can play a crucial part in creating public awareness of environmental deterioration. As Brosius and Kepplinger (1990) study found the complex agenda-setting in Germany found evidence of relatively strong agenda- settings effects on the issues of energy and environmental protection. Attribute agenda setting assembles with framing theory in that they both draw attention to how particular attributes dominate or frame the way certain topics were addressed among the public. The media frame means the "central organizing idea for news content that supplies a context and suggests what the issue is through the use of selection, emphasis, exclusion, and elaboration" (Tankard, 1991, p. 3). This definition of framing converges with attribute agenda-setting by emphasizing how the media picture certain topics through the news contents. Another approach of framing diverges from agenda-setting by defining frames as overall principles that become

socially accepted over time (Valenzuela & McCombs, 2009). The similarities and differences between agenda-setting and framing were foremost discussed and investigated theoretical connections in the communication field. In this study, the agenda-setting theory is employed in examining certain parameters such as proximity and prominence of the environmental stories and news types.

2.6 CONCLUSION

This chapter explores to study the foundation and the theoretical framework of the study that studies the gap and determines the research design and related concepts with it. According to the literature, there was numerous study that specifically deals with environmental sustainability and climate change. But there were only a few studies that were based on environmental issues as a whole. However, the literature also revealed that there are several studies on national and regional newspapers of India, but not a single literature on the regional English dailies of Assam. Hence, the review defines the gap existed in literature which showed that the environmental issues as a whole and the regional newspaper of Assam were not being undertaken in any literature.

Chapter: 3

METHODOLOGY

3.1. INTRODUCTION

This chapter discusses the methodology which specifically addresses to study the objectives and to answer the research questions. The methodology employed in this study is divided into 5 sections. In the first section, content analysis as a technique in the current research is discussed. In the second section, methods of sampling that includes Universe, Sample, Sample justification, Sampling technique, Sample Size, the rationale behind the Unit of analysis, categories, variables employed in the research are being discussed. In the third and fourth sections, coding of categories and profile of the newspaper examined in this study are shown. The last section deals with the operational definitions of the study.

3.2. CONTENT ANALYSIS

Content as a technique is developed to analyze Print and Broadcast media (Berelson, 1952). There are numerous definitions of content analysis given by different scholars and researchers (Kerlinger, 1986; Keippendrof, 2004). The definition by Kerlinger (1986) states “*Content analysis is a method of studying and analyzing communication in a systematic, objective, and quantitative manner for the purpose of measuring variables*”. However, another definition defines content analysis as a research technique for making replicable and valid references from data to their context (Krippendrof, 2004).

Furthermore, there are studies by Marukatat (1991), Rong (2009), Boykoff & Smith (2010), Dutta, Garg & Bhatta (2013), Meda (2016), Boyagoda (2017), Kuppuswamy (2017), Varna & Poornanda (2019), that justified the use of content analysis related to environmental issues in their studies. The content analysis as a research design is the most appropriate approach/ technique in this study. The method is conducted in several stages. This present research has adopted the following steps -

- i. Formulating research question
- ii. Defining the universe
- iii. Selection of sample from the population
- iv. Defining the unit of study
- v. Identifying the variables
- vi. Training the coders
- vii. Coding the categories
- viii. Analyzing and interpreting the collected data
- ix. Drawing conclusions from the chapter

3.3. SAMPLING

3.3.1. Universe: The English dailies circulated in Assam are the universe of the study.

3.3.2. Sample: The researcher selected the top three English dailies circulated in Assam. The select newspapers are *The Assam Tribune*, *The Sentinel*, and *The Telegraph*.

3.3.3. Sample justification: According to the Registrar of Newspapers for India (RNI), there are a total of 803 registered newspapers in Assam that includes all

monthly, weekly, bi-weekly, and monthly (Purkayasta, 2015). According to RNI, there are presently 158 registered newspapers dailies in Assam (Assamese-59, English-42, Bengali-21, Hindi-15, Urdu-8, Karbi-7, Bodo-4 and Bi-lingual-2) that publishes from Assam (RNI, 2017-2018; Sarma, 2018). English dailies of Assam includes *Always First* (Guwahati), *Assam Express* (Guwahati), *The Assam Tribune* (Guwahati), *The Assam Tribune* (Dibrugarh), *Diphu Post* (Diphu), *Eastern Chronicle* (Silchar), *Eastern Chronicle* (Diphu), *Eastern Chronicle* (Guwahati), *Haflong News* (Haflong), *Eastern Clarioun* (Jorhat), *Hill Observer* (Diphu), *Hills Emissary* (Diphu), *Himalayan Mirror* (Tezpur), *News Front* (Guwahati), *News Star* (Guwahati), *North East Information* (Guwahati), *North East Times* (Guwahati), *North East Express* (Silchar), *The Seven Sister's Post* (Guwahati), *The Assam Age* (Guwahati), *The Assam Rising* (Guwahati), *The Bodoland Express* (Bijni), *The Drongo Express* (Diphu), *The Eastern Today* (Dibrugarh), *The Hills Bulletin* (Diphu), *The Hills Herald* (Diphu), *The Hills Times* (Diphu), *The Karbi Post* (Diphu), *The North East Observer* (Guwahati), *The North East Age* (Guwahati), *The North East Daily* (Guwahati), *The Northeast Herald* (Guwahati), *The North East Reporter* (Guwahati), *The Present Times* (Guwahati), *The Sentinel* (Guwahati), *The Sentinel* (Dibrugarh), *The Sentinel* (Silchar), *The Telegraph* (Guwahati), *The Times of Assam* (Kokrajhar), *The Times of India* (Guwahati), *The Voice Times* (Silchar) (Kumar, 2018). By circulation, *The Assam Tribune* (84,215 copies), *The Sentinel* (90,435 copies) and *The Telegraph* (Guwahati edition 61,889 copies) are the top three English dailies circulated in Assam (RNI, 2017-2018). Those newspapers are selected because they possess the most influential position to reflect the public opinion of the concerned issue. *The Telegraph* as being the national newspaper having its regional edition is chosen due to its three reasons. Firstly, this newspaper is not circulated only amongst the state but it is one of

the highest circulations in the whole northeast. Secondly, the Guwahati Bureau editor in chief Roopak Goswami is an environmental journalist and writes for many environmental columns. Thirdly, this newspaper is chosen so that the study would not be confined to the state.

3.3.4. Sampling Technique: The sampling technique is purposive in terms of choice of the newspapers as these are the most widely circulated English dailies of Assam. The researcher has selected *The Assam Tribune*, *The Sentinel*, and *The Telegraph* also because of their credibility. It has been found in many types of research that these newspapers, especially in Assam exhibit a better deal to environmental issues. The researcher has analyzed three newspapers over one year which means 52 weeks. Newspaper is chosen from any day of the week randomly after the study period begins. Each week provided one day for a selection of newspapers making it a Random Systematic Sampling technique. Each sample newspaper is analyzed for one day in a week starting with Monday and once seven days are covered, the researcher had reverred back to Monday in the eighth week. This process had undertaken different days of the week which ensured importance to all day in a week in the time of conflict and normal time. Since one day in a week is considered, 52 issues of each newspaper were selected for each newspaper making the total sample size 156 or less.

3.3.5. Sample Size: The total sample size consists of 156 issues, based on the quantification of issues on the environment which publishes from 1st January 2018 to 31st December 2018. The study period has a duration of one year (52 weeks= 1 year,

52 issues from *The Assam Tribune*, 52 issues from *The Sentinel*, and 52 issues from *The Telegraph* = 156 issues).

3.3.6. The rationale behind the Unit of analysis: The unit of analysis is the environment news item that appeared on the front page, inside page and back page of the three newspapers namely *The Assam Tribune*, *The Sentinel*, and *The Telegraph*. The extra supplements/ magazines of the newspapers are not included in the study.

3.3.7. Categories: The broad categories to analyze the environmental news items are Space, Number of Environmental News stories, Environmental topics, Placement, Geographical priority, Ideological Slant, Types of reporting and Framing. The categories are discussed below:

3.3.7.1. Extent and frequency of environmental news stories: Space comprises of various news items such as weather forecast and other news, articles, photographs and advertisements, and the total print area of the newspapers. The space of the newspaper is measured in terms of column centimeter where the measurements are carried out by multiplying the length of the story by the number of columns (see chapter 4).

3.3.7.2. Environmental topics: The environmental topics were categorized and are entailed into 17 categories which include i. Natural Hazards; ii. Environmental Sustainability; iii. Cleanliness; iv. Wildlife Conservation, v. Agriculture; vi. Biodiversity; vii. Man-animal Conflict; viii. Disaster Management; ix. Man-made disaster; x. Water Conservation; xi. Eco-tourism; xii. Pollution issues; xiii. Forest

Conservation; xiv. Weather; xv. Climate Change; xvi. World Environment Day; xvii. Marine life conservation (in chapter 4). Some categories namely, natural disasters, wildlife conservation, biodiversity, and pollution issues are divided into subtopics. Natural disaster consists of seven issues floods, erosion, others, storm, earthquake, landslide, and cyclone. Meanwhile, wildlife conservation consists of two different sub-topics, protection of endangered wild species and Wildlife sanctuaries and parks. Whereas, Biodiversity consists of birds, Plants, Animals, Fruits, and pollution forms air pollution and others (see chapter 4).

3.3.7.3. Placement of environmental news stories: The location of the environmental news item also determines how important the news item is. Technically, the important or top news is to be placed on the front page. Hence, to examine the placement of environmental news items it is determined by: Front Page, inside page, and Back page (see chapter 4).

3.3.7.4. Geographical Priority of environmental news items: Geographical priority is one of the most important elements in newsworthiness or news values which means to cater to the news items which are close to the people. Thus, geographical variation during this study was determined by State, Northeast, National, and International stories (see chapter 4).

3.3.7.5. Ideological slant of an environmental news story: To analyze the slant, it is distinguished into three different categories such as pro-environment, pro-development, and neutral (see chapter 5).

3.3.7.6. Types of environmental reporting: In terms of types of story the distinction is formed between the Pro-active, Reactive, and Neutral (see chapter 5).

3.3.7.7. Framing of environmental news stories: Several researchers like Goffman (1974), Giltin (1980), Gamson and Mondigliani (1987), Entman (1993), Trumbo (1996), Miller & Riebert (1997) & Semetko & Valkenburg (2000) have identified several news frames on environmental issues. The framing model given by Semetko & Valkenburg (2000) can address the question of how environmental news is framed. This model helps in understanding some forces of environmental issues. Thus, this model is opted for in this study. The generic frames created by The model comprises of five generic frames: Attribution of Responsibility frame, Human interest frame, Conflict frame, Morality frame, and Economic/Consequences frame (see chapter 5).

3.3.8. Variables

1. Extent in terms of space
 - Space occupied by environmental news items in print and photographs
 - Space occupied by the weather forecast
 - Space occupied by other news, articles, photographs and advertisements
2. No of environmental stories
3. Environmental topics

- Natural Hazards
 - Environmental Sustainability
 - Cleanliness
 - Wildlife Conservation
 - Agriculture
 - Biodiversity
 - Man-animal Conflict
 - Disaster Management
 - Man-made disaster
 - Water Conservation
 - Eco-tourism
 - Pollution issues
 - Forest Conservation
 - Weather
 - Climate Change
 - World Environment Day
 - Marine life conservation
4. Placement of environmental news stories
- Front page
 - Inside page
 - Back page
5. Geographical priority of environmental news items
- State
 - North east
 - National

- International
6. Ideological Slant of environmental news stories
 - Pro-environment
 - Pro-development
 - Neutral
 7. Types of Environment Reporting
 - Pro-active
 - Reactive
 - Neutral
 8. Framing of Environmental news stories
 - Attribution of Responsibility frame
 - Human interest frame
 - Conflict frame
 - Economic/ consequences frame
 - Morality frame

3.3.9. Coding: A total of 482 environment articles were identified in this study based on certain categories such as environmental topics, placement, geographical priority, ideological slant, types of environmental reporting and framing.

3.3.9.i. Inter-coder Reliability: For reliability, the researcher has conducted inter-coder reliability and thus trained two coders. To ensure its reliability, in all the three newspapers the sample which is coded for inter-coder reliability consists of 60 issues:

20 issues from *The Assam Tribune*, 20 issues from *The Sentinel*, and 20 issues from *The Telegraph*. Overall, in this study, the total sample size consists of 156 issues.

Reliability: Reliability test in this study was calculated by the method given by Holsti (1969), which is considered as the simplest method in accessing the coding. Thus, Holsti's method of calculation is undertaken in the present study. The number of judges (i.e. 2 coders) is divided by the sum of the total number of judgments made by coders. The formula calculating the Reliability by Holsti is: $\text{Reliability} = \frac{2M}{N1+N2}$

M is the number of coding decisions on which the two coders agree. N1 and N2 are the total number of coding decisions by the first and the second coder (Wimmer and Dominick, 1997; Ding and Hu, 1999). The coding in this method is done by the two coders they are provided with a coding sheet and instructions by the researcher. The researcher elaborates on the coders about the matter precisely. Subsequently, the coders coded the five categories precisely (environmental topics, geographical priority, ideological slant, types of environmental reporting and framing).

Calculation of Holsti's reliability in terms of environment topics

$$\text{Holsti's Reliability} = \frac{2M}{N1+N2}$$

$$= \frac{2 \times 182}{215+215}$$

$$= \frac{364}{430}$$

$$= 0.846$$

The result of the study showed an agreement of 0.846 on the total number of environment topics in the three newspapers. Holsti's index indicates that the reliability is high.

Calculation of Holsti's reliability in terms of geographical priority of environment news stories.

$$\text{Holsti's Reliability} = \frac{2M}{N1+N2}$$

$$= \frac{2 \times 209}{215+215}$$

$$= \frac{418}{430}$$

$$= 0.972$$

The result of the study showed an agreement of 0.972 on the total number of geographical priority in the three newspapers. Holsti's index indicates that the reliability is high.

Calculation of Holsti's reliability in terms of Ideological Slant

$$\text{Holsti's Reliability} = \frac{2M}{N1+N2}$$

$$= \frac{2 \times 156}{215+215}$$

$$= \frac{312}{430}$$

$$= 0.725$$

The result of the study showed an agreement of 0.725 on the total number of Ideological Slant in the three newspapers. Holsti's index indicates that the reliability is high.

Calculation of Holsti's reliability in terms of types of environmental news reporting

$$\text{Holsti's Reliability} = 2M \div N1 + N2$$

$$= 2 \times 166 \div 215 + 215$$

$$= 332 \div 430$$

$$= 0.772$$

The result of the study showed an agreement of 0.772 on the total number of the types of environmental story reporting in the three newspapers. Holsti's index indicates that the reliability is high.

Calculation of Holsti's reliability in terms of framing

$$\text{Holsti's Reliability} = 2M \div N1 + N2$$

$$= 2 \times 160 \div 215 + 215$$

$$= 320 \div 430$$

$$= 0.744$$

The result of the study showed an agreement of 0.744 on the total number of Framing in the three newspapers. Holsti's index indicates that the reliability is high.

3.3.9.ii. Validity

The validity of the study is based on the earlier research which uses the same techniques of data collection. Likewise, the same measurement was carried out by Rajan Zed in his study "Coverage of Mahatma Gandhi in The New York Times and The Times" (1996). The formula used for space measurement in the above two studies is opted for in this study. The formula states: Column X Length of the story

The instrument used for the measurement of the story is a ruler. The space of each news item is categorized using the standard formula of column multiplied by the length in terms of a centimeter. Thus, to know the total space of a particular news story, the researcher analyzed both the text and pictures combined. Hence, col.cm. the formula has been used to measure the unit of analysis which consists of the front page and inside page having differences in length. The three newspapers consist of the same column of eight.

Similarly, Beam (2003) used this method in their study on content analysis of twelve newspapers to understand the market outcome. A similar method was also used in other works noted in Ramakrishna and Melkote (2010). They employed this method to study the coverage of the front page content of the selected newspapers of Delhi, Lucknow, and few southern states newspapers.

3.4. PROFILE OF THE THREE NEWSPAPERS

This section deals with the profile of three select newspapers. The dailies namely, *The Assam Tribune*, *The Sentinel*, and *The Telegraph* published from Guwahati has been selected as a sample of the study which is circulated among all the Northeastern states in India.

The Assam Tribune: This newspaper is the oldest English daily in the northeast founded in August 1939 by Radha Govinda Baruah simultaneously published from Guwahati and Dibrugarh. The newspaper is the highest circulated English daily in North-East India. This newspaper has a wide reach in terms of circulation in the whole northeast of about 7,00,000 copies and a readership of over 3 million. According to the 62nd Annual Report, the claimed circulation of The Assam Tribune is 84,215 copies (Registrar of Newspapers for India, 2018) making it the second-highest circulated English daily of the state. The Guwahati edition of this newspaper was registered with RNI on 04/03/1957.

The Assam Tribune front page covers all types of stories such as hard news, soft news, feature stories of regional, northeast, national and international. The 2nd page covers classifieds and advertisements and the 3rd page consists of the continuation of the front page and national news stories. The 4th and 14th page consists of international news stories with classifieds in the right. The 5th and 7th page presents the stories related to the city (Guwahati) and 6th as the editorial page accompanied by letters to the editor on its lower half of the newspaper. 8th and 9th page consist of state (Assam) stories. The 10th page of the newspaper mostly contains north east stories and the 11th

page deals with the business and economy beat of the story. The 12th and 13th page are dedicated to national, leisure and lifestyle. In this newspaper, the 15th and 16th page are solely devoted to sports.

The broadsheet consists of 16 pages and 20 pages on all days except Thursday, Saturday, and Sundays. The supplement as page 4 broadsheet is published on the aforesaid days i.e. on Thursday has Planet Young for kids, Saturday and Sunday have Horizon and Sunday Reading. This newspaper is one of the most important newspapers in the northeast which bears responsibility for the development of the nation.

The Sentinel: The Sentinel newspaper has total five editions published from Guwahati, Dibrugarh, Shillong, Silchar, and Itanagar. For this study, the Guwahati edition of this newspaper is selected which registered at RNI on 23/10/2013. The Sentinel newspaper is circulated in the entire northeastern part of India founded in the year 1983. It has the circulation of over 1,20,000 newspapers per day (Northeast) and it is counted as one of the largest media groups in Northeast India (Audit Bureau of Circulations). According to the 62nd Annual Report in *The Sentinel* claimed a circulation of 90,435 (Registrar of Newspapers for India, 2018) making it the highest circulated English daily of the state. The tagline of this newspaper reads “*of this land, for its people*”.

However, *The Sentinel* daily consists of a 16-page broadsheet where the 1st page presents the reader with the most important news of the day. The 2nd page is solely devoted to tender notices and others, while the 3rd is city and 4th an Editorial page. Thus, 5th and 6th page of the newspaper consists of state events and 7th, 8th, 9th to national news. 11th page is for international news events, 12th for business, 14th and 15th for fun facts, crossword, astrology, and advertisement.

The Telegraph: This newspaper is an Indian English daily founded in Kolkata on 7th July 1982. It is published by the ABP Group. In India, it has a circulation of 352,972 copies (Audit Bureau of circulations, 2019) and is the eighth most widely read newspaper in India (Indian Readership survey, 2019). *The Telegraph* has five editions Calcutta, South Bengal, North Bengal, Guwahati, Jharkhand, Patna, and Bhubaneswar. In this study, the Guwahati edition of this newspaper is selected. *The Telegraph* (Guwahati) of Assam is the 3rd most circulated dailies and popular in the state and northeast part of India. This newspaper consists 16 pages covering different beats, namely, foreign, east, nation, business, metro, portfolio, sport, the woods, editorial, Know-How, and business. The last two pages 15th and 16th are devoted to sports plus, sports.

3.5. OPERATIONAL DEFINITIONS

1. **Print Space:** The total space of the newspaper.
2. **Column cm.:** This is the unit of measurement of all the stories. Since, the newspaper is in hard copy form all the measurements are done via scale.

3. **News stories:** It is a news report that includes both the hard news and soft news of the newspaper and follows the Inverted pyramid style of 5 W's and 1 H format.
4. **Front page:** The newspaper page which ideally carries the biggest importance news stories of the day in the region of where it is being circulated in
5. **Inside page:** This page usually consists of editorial, opinion pieces, business etc.
6. **Back page:** The last page of the newspaper mainly consists of sports story.
7. **State news:** Any news item dealing with environmental issues within the state (i.e. Assam).
8. **Northeast News:** Any news item dealing with the environmental issue within northeast India (i.e. Arunachal Pradesh, Mizoram, Meghalaya, Nagaland, Tripura, Mizoram, and Sikkim).
9. **National news:** It deals with environmental issues within the boundary of India.
10. **International news:** Any news item dealing with environmental issues outside the boundary of India, (i.e. United States, China).
11. **Pro-environment stories:** The environment story that presents the minimization of the negative impact of their action on the environment. In other words, it can be studied as a story that increases the positivity of their actions on the environment. Some of the key contents include beautification, cleanliness, recycle, environmental sustainability, etc.
12. **Pro development stories:** The news items which present the story in terms of advancements on the environmental issues. Some of the key content of this

slant are Energy, natural resources, non-renewable, development of resources, etc.

13. **Neutral in Ideological slant:** This slant neither provides the report on pro-development nor pro-environment.
14. **Pro-active:** It is mostly focused on the story that calls for action and focus on the problems with sustained action to solve the environmental issue.
15. **Reactive:** This is a type of reporting where the reporter reports the aftermath of the event, for instance, aftereffects of a natural disaster.
16. **Neutral in types of story:** It is the type of story which is neither proactive nor reactive. The story relates to neutrality consists often of announcements, campaigns, or awareness programs.

Environmental topics:

17. **Natural hazards:** The stories or articles that deal with catastrophic events such as floods, landslides, cyclones, erosion, storm, earthquakes, and others.
18. **Environmental Sustainability:** Any stories that deal with the Environmental protection, economic development, sustainable goals and 3 R's (Reduce, Reuse and Recycle)
19. **Cleanliness drive:** Any stories that deal with immersion drive.
20. **Wildlife conservation:** The stories or articles that deal with the protection of endangered wild species or protection of sanctuaries and national parks. It refers to the practice of protected wild species and wildlife sanctuaries and national parks.
21. **Agriculture:** The stories related to a farmer, farming, farming technologies, introduction of schemes to farmers.

22. **Biodiversity:** Issues concerning the threat, extinction, mortality rate. Endangered of any species. Some species coded under this category are Bird, Animal, Fruit and Plant.
23. **Man-Animal Conflict:** Any issues that deal with human and animal conflict.
24. **Disaster Management:** The stories concerning the safety measures aftermath or during the disaster. It also includes the precautions tips of the disaster.
25. **Man-Made Disasters:** This kind of story deals with the environment disaster that is directly or indirectly caused by human. For example: flash floods, water logging etc.
26. **Eco-Tourism:** The stories that deal with the conservation of tourist spots and any related information about the spot or any festivals.
27. **Pollution Issues:** The issues concerning different types of pollution such as air, water, others.
28. **Water Conservation:** Stories concerning safe drinking water and conservation of water.
29. **Weather:** The stories that report the weather modification, temperature, hot or cold wave.
30. **Climate change:** Issues concerning climate change.
31. **World Environment Day:** The stories which deal with the celebration of World Environment Day on 5th June.
32. **Marine Life Conservation:** Stories concerning the conservation of the Marine life species.

3.6. CONCLUSION

This chapter explores the methodology used in this study, which consists of Content analysis, methods of sampling coding of variables, a profile of the newspaper, and operational definitions. The content analysis was used to examine the extent, frequency, priority, ideological slant and framing of environmental stories in the selected newspapers. Apart from the quantitative methods to enhance the validity and reliability of the present study certain qualitative aspects of the gathered sample have also been looked into from the perspective of headlines, stories and editorials. The information of these has revealed an interesting perspective and validated the findings of the quantitative approach. Within the sample that has been taken into account for this purpose of triangulation the stories selected are based on relevance to the objectives of the study.

Chapter: 4

ANALYSIS OF ENVIRONMENTAL NEWS STORIES: EXTENT AND PRIORITY

4.1. INTRODUCTION

This chapter deals with the content analysis of environmental stories published in *The Assam Tribune*, *The Sentinel*, and *The Telegraph* during the selected period of the study (1st January to 31st December, 2018). As quantitative methods have been extensively employed and thus divided into two sections to provide clarity. In the first section, the extent and the frequency of environmental news stories are discussed. Whereas, the second section shows the priority given by newspapers to environment-related stories. The second section is further divided into four sub-sections encompassing Environment Based Topics, Placement, Geographical Priority of environment news stories. The data collected by quantitative methods are presented in tables with their frequency and percentage. However, the graphs are used for a better understanding of data and each newspaper is analyzed separately.

4.2. EXTENT AND FREQUENCY OF ENVIRONMENTAL NEWS ITEMS.

This section presents the extent of space given to the print, photographs and advertisements and the number of environmental stories in all the three newspapers. It deals with the R.O. To elicit how much space is devoted to environmental stories by the newspapers in the state and is an attempt to answer the R.Q. What is the amount of space given to environmental news stories by the newspapers? How do they compare with other type of stories?

4.2.1. Extent of space given to environmental stories by the newspapers in comparison with other types of stories.

The space of the newspaper is measured in terms of column centimeter where the measurements are carried out by multiplying the length of the story by the number of columns. *The Assam Tribune*, *The Sentinel*, and *The Telegraph* are the broadsheet newspaper that consists of the equal number of page. The page size of the three newspapers are identified as having the same column and a slight difference in length. Since this quantitative assessment follows the random systematic sampling of 52 issues, each newspaper are likely to be considered making the total sample size 156.

Table No. 4.2.1. Extent of space given to environmental news stories in *The Assam Tribune*, *The Sentinel* and *The Telegraph* in comparison with other stories.

| Name of the newspaper | Space occupied by environmental news items in print and photographs (Space and Percentage) | Space occupied by the weather forecast. (Space and Percentage) | Space occupied by other news, articles, photographs and advertisements (Space and Percentage) | Total print area and advertisements |
|--------------------------|--|--|---|-------------------------------------|
| <i>The Assam Tribune</i> | 8,311colcm (2.29%) | 1,040 col.cm (0.28%) | 3,53,225 col.cm (97.70%) | 3,61,536col.cm (38.53%) |
| <i>The Sentinel</i> | 7,111colcm (2.63%) | Nil | 2,63,185col.cm (97.36%) | 2,70,296col.cm (28.81%) |
| <i>The Telegraph</i> | 3,575colcm (1.16%) | 552col.cm (0.18%) | 3,02,793col.cm (98.83%) | 3,06,368col.cm. (32.65%) |
| Total | 18,997col.cm (2.02%) | 1,592colcm (0.16%) | 9,19,203col.cm (97.97%) | 9,38,200col.cm (100%) |

*Rounding error

Table 4.2.1. shows the total space or news hole in *The Assam Tribune* is 3,61,536col.cm. Out of the total print area, 8,311col.cm. (2.29%) is occupied in environmental new stories both print and photographs; 1,040 col.cm. (0.28%)

allocated to the weather forecast. This newspaper has allotted two weather forecasts, one for the State or local and the other for the entire northeast. The state weather forecast consists of 312col.cm. (6cm*1col) and Northeast consists of 728col.cm. (14cm*1col) Additionally, the other news items have occupied the maximum space of 3,53,225 col.cm (97.70%) which includes different news beats and pages such as Sports, Leisure and Lifestyle, crime, political, entertainment, Business and Economy, Classifieds and many more. However, the newspaper published magazines such as Planet Young, Horizons, Sundays, Page 4 which are not included or analyzed in this study (mentioned in chapter 3).

Consequently, the total print area and advertisement area in *The Sentinel* is 2,70,296 col.cm. Out of the total print and advertisement area, 7,111 col.cm (2.63%) is occupied in environmental stories and photographs. 2,63,185 col.cm (97.36%) is occupied by other news beats such as politics, crime, business, photographs, and advertisements. *The Sentinel* has many different pages and had been taken under under consideration namely mixed bag, city, sports plus, the world of sports, international, business, national, tender notice, leisure, and others. Unlike, the two other English dailies *The Sentinel* do not publish any weather forecast in their newspaper.

Furthermore, *The Telegraph* gave the least importance to the environment news item of 3,575 col.cm. (1.16%). This newspaper provided space of 3,02,793 col.cm. (98.83%) to other news items that include different news beats such as politics, crime, entertainment, business, economy, etc. The total space of the daily is 3,06,368col.cm

(32.65%) where the weather forecast receives 552 col.cm (12cm*1col) making a percentage of 0.18%. Alike, *The Assam Tribune*, *The Telegraph* also allotted space to the weather forecast.

Overall, the table shows that the total print and advertisement area of the three dailies are 9,38,200col.cm. (100%) where *The Assam Tribune*, *The Sentinel*, and *The Telegraph* covers 38.53%, 28.81%, and 32.65% respectively. Out of the total print area 18,997col.cm (2.02%) is occupied by the environment news and 1,592 col.cm (0.16%) in weather forecast. The other news, articles, photographs, and ads include different news beats concerning politics, crime, entertainment, business, etc. which occupied a total of 9,19,203col.cm consisting the maximum percentage of 97.97%. Hence, the above data shows the negligence of the three dailies in covering up the environmental issues. The spaces given for them are limited in comparison to the other news beats.

Thus the overall findings reveals that in terms of environmental news stories *The Assam Tribune* gave more space compared to the other two newspapers. *The Sentinel* comes second and *The Telegraph* stands in third.

4.2.2. Frequency of environmental news items in three newspapers.

This section presents the number of environmental news items in *The Assam Tribune*, *The Sentinel* and *The Telegraph*, a duration of 1 year (1st January-31st December, 2018).

Table no 4.2.2: Number of environmental news items and percentage in the three newspapers.

| Newspaper | Number of environmental news stories | Percentage (%) |
|--------------------------|--------------------------------------|----------------|
| <i>The Assam Tribune</i> | 214 | 44.39% |
| <i>The Sentinel</i> | 168 | 34.85% |
| <i>The Telegraph</i> | 100 | 20.74% |
| Total | 482 | 100% |

*Rounding error *n=Frequency

Table No. 4.2.2 reveals that *The Assam Tribune* n=214 (44.39%) devotes the maximum number of stories on environmental news, then *The Sentinel* and *The Telegraph*. *The Sentinel* carries n=168 (34.85%) and *The Telegraph* with n=100 (20.74%). Thus, the table reveals that in terms of frequency and percentage, *The Assam Tribune* provided more number of stories related to environmental news.

Figure 4.1. Percentage of environmental news stories in *The Assam Tribune*, *The Sentinel* and *The Telegraph*.

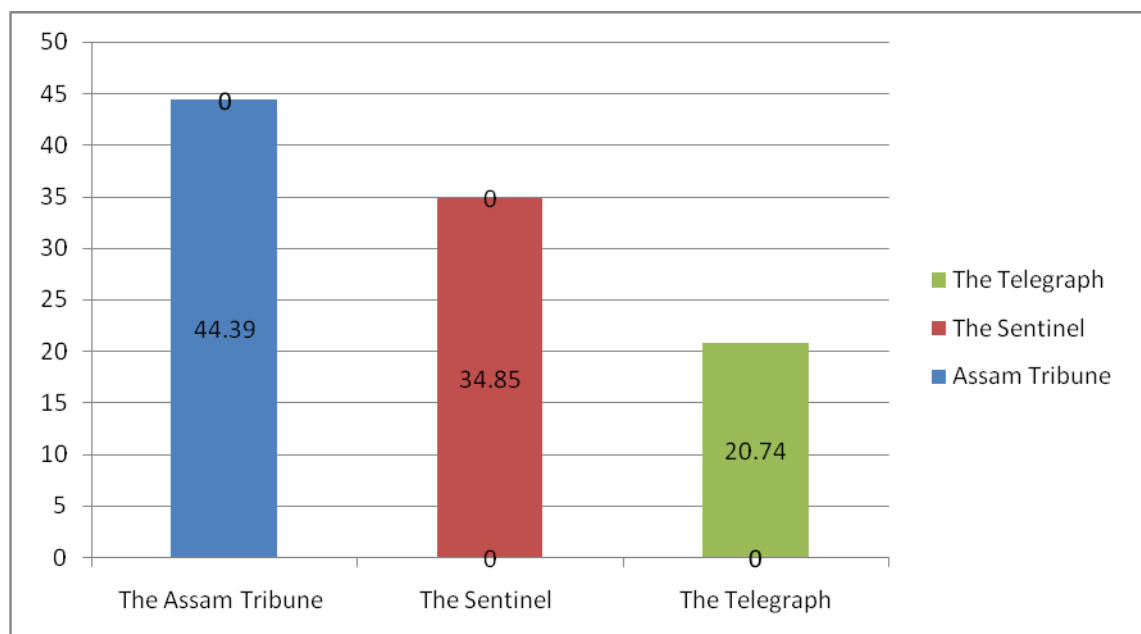


Figure 4.1 indicates *The Assam Tribune* newspaper has significantly more coverage on the environmental stories than *The Sentinel* and *The Telegraph*. *The Assam Tribune* apart from being one of the second-highest readerships and circulation in Assam not only reaches more people but also educates their readers about the issues related to the environment.

4.3. PRIORITY GIVEN TO ENVIRONMENT RELATED NEWS STORIES BY THE THREE NEWSPAPERS

The second section presents the priority given by the three newspapers to environment related news stories. This is further divided into four sub-sections that deals with the second R.O. To determine the priority given by newspapers to environment related stories. It is an attempt to answer the four research questions includes Environmental topics, Placement, geographical priority of environment stories in the newspapers.

4.3.1. Environmental topics

This first sub-section shows the relevant topics related to environment related topics in the study. The total number of environmental story is 482 stories, where the environmental topics are scrutinized into 17 relevant environmental topics. The topics includes i. Natural Hazards, ii. Environment Sustainability, iii. Cleanliness drive, iv. Wildlife Conservation, v. Agriculture, vi. Biodiversity, vii. Man-Animal Conflict, viii. Disaster Management, ix. Man-Made Disasters, x. Eco-Tourism, xi. Pollution Issues, xii. Water Conservation, xiii. Forest Conservation, xiv. Weather, xv. Climate change, xvi. World Environment Day and xvii. Marine Life Conservation. This section is an attempt to answer R.Q. What are the different environmental issues that the

newspapers cover in their daily reportage? And which of these topics are given prominence by the newspapers?

Table No 4.3.1. Frequency and percentage of environmental topics in the three newspapers.

| Sl no | Environmental topics | The Assam Tribune (Frequency and Percentage) | The Sentinel (Frequency and Percentage) | The Telegraph (Frequency and Percentage) | Average (Frequency and Percentage) |
|-------|------------------------------|--|---|--|------------------------------------|
| 1 | Natural hazards | 24 (11.21%) | 34 (20.23%) | 20 (20%) | 78 (16.18%) |
| 2 | Environmental sustainability | 19 (8.87%) | 14(8.33%) | 8(8%) | 41(8.50%) |
| 3 | Cleanliness drive | 12 (5.60%) | 16 (9.52%) | 9(9%) | 37(7.67%) |
| 4 | Wildlife conservation | 17 (7.94%) | 8 (4.76%) | 11(11%) | 36(7.46%) |
| 5 | Agriculture | 21 (9.81%) | 10 (5.95%) | 4(4%) | 35(7.26%) |
| 6 | Biodiversity | 15 (7%) | 10 (5.95%) | 9(9%) | 34(7.05%) |
| 7 | Man animal conflict | 10 (4.67%) | 15 (8.92%) | 7(7%) | 32 (6.63%) |
| 8 | Disaster management | 12 (5.60%) | 9 (5.35%) | 10(10%) | 31(6.43%) |
| 9 | Man made disasters | 10 (4.67%) | 13 (7.78%) | 4(4%) | 27(5.60%) |
| 10 | Water conservation | 13 (6.07%) | 8(4.76%) | 0 | 21(4.35%) |
| 11 | Eco tourism | 10 (4.67%) | 5 (2.97%) | 5 (5%) | 20 (4.14%) |
| 12 | Pollution issues | 13 (6.07%) | 2 (1.19%) | 4(4%) | 19 (3.94%) |
| 13 | Forest conservation | 12 (5.60%) | 5 (2.97%) | 1(1%) | 18(3.73%) |
| 14 | Weather | 8 (3.07%) | 5 (2.97%) | 3(3%) | 16(3.31%) |
| 15 | Climate change | 7 (3.27%) | 6 (3.57%) | 2 (2%) | 15 (3.11%) |
| 16 | World environment day | 6 (2.80%) | 8 (4.76%) | 0 | 14(2.90%) |
| 17 | Marine life conservation | 5 (2.33%) | 0 | 3(3%) | 8(1.65%) |
| | Total | 214(100%) | 168(100%) | 100(100%) | 482(100%) |

*Rounding error; n=Frequency

Table 4.3.1. shows that all the three newspapers covered a highest amount of stories on Natural Disaster that constitutes of 16.18%. However, the story on environment sustainability ranked the second most prominent ones with 8.50% followed by cleanliness drive (7.67%). Similarly, stories on other environmental topics mentioned in the study include Agriculture 7.26%, Biodiversity 7.05%, Man Animal conflict 6.63%, Disaster management 6.45%, Man-made disasters 5.60%, Ecotourism 4.14%, Pollution issues 3.94%, Water conservation 4.35%, Forest conservation 3.73%., Weather 3.31%, and Climate change 3.11%. Environmental stories on World environment day (2.90%) and Marine life conservation (1.65%) gained the least of all.

Firstly, Table 4.3.1. reveals that out of 214 stories (100%), the most covered topic in *The Assam Tribune* is Natural disaster (11.21%) followed by Agriculture (9.81%). The stories on environmental sustainability (8.87%) is the third important environmental topic in this newspaper. The other mentioned topics are Wildlife Conservation (7.94%) followed by Biodiversity (7%); Pollution issues and Water conservation with same percentage (6.07%); Cleanliness, Disaster Management and Forest Conservation also possesses the same percentage (5.60%); Man-made disasters, Man-animal conflict, and Eco-tourism constitutes 4.67% followed by Climate change (3.27%); Weather (3.07%); and World Environment Day (2.80%). The stories relate to Marine Life conservation (2.33%) was found to be the least mentioned topic.

Secondly, the close observation of Table No. 4.3.1. shows that *The Sentinel* has 168 stories (100%). The Natural disaster ranks at the first by 20.23% followed by

Cleanliness and Man animal conflict of 9.52% and 8.92% respectively. In the same way, the news related to Environmental sustainability receives 8.33%; Man-made hazards 7.78%; Agriculture and Biodiversity 5.95%; Disaster Management 5.35%; Water Conservation, World Environment Day and Wildlife Conservation with the same percentage 4.76%; Climate Change 3.57%; Forest Conservation, Weather, and Eco-tourism 2.97% and Pollution 1.19%. This newspaper does not carry any story on Marine Life conservation.

Thirdly, it is evident from the above table that most of the environmental topics in *The Telegraph* are Natural Disaster 20%. The second and third most prevalent are Wildlife Conservation (11%) and Disaster Management (10%) respectively. The other environmental topics mentioned in the newspaper are Cleanliness and Biodiversity carries (9%); Environment Sustainability (8%); man-animal conflict (7%); Eco-tourism (5%); Man-made hazards, Pollution issues, and Agriculture (4%); Weather and Marine life conservation (3%); Climate change (2%). The least mentioned topic in these newspapers is the Forest Conservation which constitutes only 1%. However, this newspaper does not carry any story on Water conservation and World Environment Day.

4.3.1.1. Natural Disaster:

As depicted in Table 4.3.1. the environmental topics on the 'Natural Disaster' in overall category occupied a maximum of 78 (16.18 %) amount of stories. Likewise, in a similar study conducted by Saeed (2001) also revealed that the natural disaster topic

is the most prominent environmental issues covered in any Indian newspapers. In this study, natural disaster stories are broadly classified into seven categories. These are flood, storm, earthquake, landslide, cyclone erosion, and others. Those subtopics which are not considered prominent in the selected newspapers are being included in the sub-topics ‘Others’ i.e. Typhoon, lightning, volcano, and avalanche.

Firstly, *The Assam Tribune* carries Flood:12, Landslide:4, Cyclone:2, Erosion:2, Storm:2, Earthquake:1, Others:1. Secondly, *The Sentinel* possesses Flood:16, Storm:7, Earthquake:4, Others:4, Cyclone:2, Erosion:1. Thirdly, *The Telegraph* comprises Flood:10, Others:4, Landslide:2, Storm:2, Earthquake:2.

Table No 4.3.1.1. Frequency and Percentage of the sub-topics of Natural Disaster in three newspapers.

| Sub-topics of Natural Disaster | <i>The Assam Tribune</i> (Frequency and percentage) | <i>The Sentinel</i> (Frequency and Percentage) | <i>The Telegraph</i> (Frequency and Percentage) | Average (Frequency and Percentage) |
|--------------------------------|---|--|---|------------------------------------|
| Flood | 12 (50%) | 16 (47.05%) | 10(50%) | 38(48.71%) |
| Storm | 2(8.33%) | 7 (20%) | 2(10%) | 11(14.10%) |
| Others | 1(4.16%) | 4 (11.42%) | 4(20%) | 9(11.53%) |
| Earthquake | 1 (4.16%) | 4 (11.42%) | 2(10%) | 7(8.97%) |
| Landslide | 4 (16.66%) | 0 | 2(10%) | 6(7.69%) |
| Cyclone | 2 (8.33%) | 2 (5.71%) | 0 | 4(5.12%) |
| Erosion | 2 (8.33%) | 1 (2.85%) | 0 | 3(3.84%) |
| Total | 24(100%) | 34 (100%) | 20 (100%) | 78(100%) |

*Rounding error

The above table presents the sub-categories of a natural disaster. Assam is a state prone to a natural disaster such as floods, erosion, and landslides. It is interesting to note that the most prominent topic of the disastrous floods in Assam that ranges from

June- July consists of 38 stories (48.71%). Some news stories in the present study represents flood includes the critical situation of Mangaldai (*The Assam Tribune*, September; p-9), Sivasagar (*The Sentinel*, August; p-8), and Dhansri floods (*The Telegraph*, August; p-8).

The sub-topic ‘Storm’ is ranked in the second position of all consists of 11 environmental news stories (14.10%). Mostly the storm-related issues reported in the newspapers are an international story of Central U.S. (*The Assam Tribune*, May; p-4) and (*The Telegraph*, March; p-2). However, the sub-topic in ‘Others’ categories ranks the third which constitutes of 11.53%. Typhoon, Lighting, volcano, avalanche, and Drought do not possess a high frequency of stories because those disasters are not prevalent in the state or nation. Therefore the story that deals with these stories are categorized as ‘Others’ where the International stories played the most dominating role.

Out of 78 stories earthquakes possess only 7 stories (8.97%). Most of the stories that reported in all the three newspapers are the national or an international story. The *The Assam Tribune*, contributes a single story on Earthquake that talks about the low-intensity tremor in Kashmir (October; p-3) and *The Sentinel* reported the earthquake of Hawaii (May; p-11). Taking the context of the region, Assam is an earthquake-prone zone in Northeast India but not a single story is reported.

In all the newspapers, the stories on landslide rank at fifth (7.69%). *The Sentinel* does not have any story on Landslide while *The Assam Tribune* has the majority of story n=4 and *The Telegraph* with n= 2 stories. Both the two newspapers have reported about the story on the havoc caused by a landslide in Nagaland (August).

The Telegraph, as being one of the most circulated newspapers in the region does not provide any stories on cyclones and erosion. There are only 4 stories on cyclone and 3 stories on erosion published in *The Assam Tribune*. An example of the cyclone can be the story in *The Sentinel* which provided the aftereffects of the cyclone Gaja. The table also shows that Erosion is the least reported of all the subcategories which constitute only 3 stories, whereas *The Assam Tribune* has 2 stories and *The Sentinel* with 1 story. An example of this can be the panic caused by erosion in Dibrugarh (*The Assam Tribune*) and the Subansri river heavy erosion in Lakhimpur (*The Sentinel*).

4.3.1.2. Environmental sustainability

In this study, the Environmental sustainability stories are found to be the second most prominent topics which carries 8.50%. The story on sustainability is determined by Environmental protection, economic development, and sustainable goals. However, the 3 R's Reduce, Reuse, and Recycle are regarded as a responsible action in the protection of an environment. The report published in *The Assam Tribune* talks about how these 3 R's helps in the growth of development alongside resource and energy

consumption. Another example highlighted in *The Telegraph* is the seminar on sustainable goals.

4.3.1.3. Cleanliness drive

Considering the table 4.3.1, in the overall findings, Cleanliness drive is found as the third most prominent story. Out of 482 stories, 37 stories (7.67%) are the stories on cleanliness drive. Since all the three newspapers are published from the same place i.e. Guwahati the stories on this category are about in and around the region. Some stories related to cleanliness drive includes, the immersion drive after chat puja (*The Telegraph*, November; p-9) and the project Clean Dhubri and Green Dhubri campaign conducted to make the town free from garbage and transform it into healthy living (*The Sentinel*, March; p-6).

4.3.1.4. Wildlife conservation

Table No 4.3.1.4. Frequency and percentage covering wildlife conservation in three newspapers.

| Wildlife conservation | <i>The Assam Tribune</i> (Frequency and Percentage) | <i>The Sentinel</i> (Frequency and Percentage) | <i>The Telegraph</i> (Frequency and Percentage) | Average (Frequency and Percentage) |
|-----------------------|--|---|--|---------------------------------------|
| EWS | 12(70.58%) | 3(37.5%) | 8(72.72%) | 23(63.88%) |
| WSP | 5(29.41%) | 5(62.5%) | 3(27.27%) | 13(36.11%) |
| Total | 17(100%) | 8(100%) | 11(100%) | 36(100%) |

*Rounding Error.

Wildlife protection in Al- Simani study (2001) ranked as the second most dominant environment issue in the study. Unlike Al-Simani's study, wildlife conservation is ranked in the fourth category in this study. Major stories under this category are EWS: protection of endangered wild species which contains 23 stories (63.88%) and WSP: protection of Wildlife sanctuaries and parks limits 13 stories (36.11%). The majority of stories in the EWS story is about the protection of rhino and the WSP story is about the wildlife sanctuaries and the national parks of Assam. Some examples of EWS are the Bordoisila foundation raise funds to save the rhino (*The Assam Tribune*, September; p-8), Rise of Leopard mortality (*The Sentinel*, March; p-10), “Rhino count raise doubts” (*The Telegraph*, April; p-11).

4.3.1.5. Agriculture

Agriculture is ranked at the fifth in the overall environmental topics that constitutes of 7.26%. In India, the agricultural sector comprised 18 percent of India’s Gross domestic product. Undoubtedly, it is the most important sector of the Indian economy which employs 50% of the countries workforce (as per the report of 2016). In this study, agricultural practices are classified into the problems faced by the farmers, schemes introduced and the problems faced in development. The story on Agriculture concern in Assam mentioned the problems faced by the farmers in the agriculture sector (*The Assam Tribune*, February; p-6). A story with the headline “*Agriculture runs the world*” states that in 2016 it was found that 65% of the poor working people are dependent on agriculture. Moreover, the economic growth sector is accounted for one-third of the Gross Domestic Product (GDP) (*The Sentinel*, July; p-4). The other factor that defined this category is the farmer’s scheme, one such story on *The*

Telegraph covers the short term loans in the agricultural season which provided a neutral statement announced by the government (December; p-10).

4.3.1.6. Biodiversity

In *The Assam Tribune*, out of the total 15 biodiversity stories Birds consists of 46.66%; Animal constitutes 26.66%; Fruits 13.33% and Plants 13.33%. *The Sentinel* has 10 stories out of which 30% devoted to Birds; 60% to Animals; and 10% to fruits. *The Telegraph* has 9 stories out of which 66.66% dedicated to birds; 22.22% to Animal; 11.11% to fruits. *The Sentinel* and *The Telegraph* do not have any story related to plants of any kind. Therefore, the overall percentage of all the categories under biodiversity are Bird 47.05%; animal 35.29%; fruit 11.76% and the least are the plants with 5.88%.

Table No 4.3.1.6.: Frequency and percentage covering biodiversity in three newspapers.

| Biodiversity | <i>The Assam Tribune</i> (Frequency and Percentage) | <i>The Sentinel</i> (Frequency and Percentage) | <i>The Telegraph</i> (Frequency and Percentage) | Average (Frequency and Percentage) |
|--------------|--|---|--|---------------------------------------|
| Bird | 7 (46.66%) | 3 (30%) | 6 (66.66%) | 16 (47.05%) |
| Animal | 4 (26.66%) | 6 (60%) | 2 (22.22%) | 12 (35.29%) |
| Fruit | 2 (13.33%) | 1(10%) | 1 (11.11%) | 4 (11.76%) |
| Plant | 2 (13.33%) | 0 | 0 | 2 (5.88%) |
| Total | 15 (100%) | 10 (100%) | 9 (100%) | 34 (100%) |

*Rounding error *n=Frequency

Overall biodiversity stories, 47.05% and 35.29% are dedicated to birds and animals. Several factors influenced the stories, a few of them which dominated the stories on biodiversity is ‘threat’, ‘extinction’, ‘endangered’, ‘mortality rate’ and the rise in the number of birds and animals. An example of bird ‘threat’ is reported in *The Assam Tribune*, the threat is given more weightage in the headline where it reports about how the major bird species in the valley are decreasing in a dwindling manner (May; p-5). One study carried by the ornithologists is reported in *The Telegraph* that presents the report of the Rise in the bird population in India. Another example is the report of the “mortality rate” of animals in the state zoo where they state that the animals are reaching its alarming rate and on the verge of extinction.

The topics related to fruits and plants covered 11.76% and 5.88% respectively. Plants and fruits plays a vital role in maintaining ecosystems which is also the source of medicinal and food components. There is one story in *The Assam Tribune* about conservation and planting large scale medicinal trees and plants to make the state pollution-free. Generally, *The Assam Tribune* is the only newspaper that presented a story on plants.

4.3.1.7. Man animal conflict

Assam is a state with rich and diverse biodiversity giving rise to man-animal conflict such as encroachment and poaching of animals. There are more than 1,608 humans killed in conflict cases involving elephants, leopards, tigers, and bears between 2013 and 2017 according to the data from the Union environment ministry. In an article published by Green Ubuntu on Man animal conflict about Assam. The Greenpeace wildlife campaigner Rachel Pearlín said

“Man- elephant conflict has been on the rise in the past 10 years in both northeast and central India. We are invading their habitats. It is the same for other animals too”.

The major cause of human-elephant conflict is the human encroachment in the forest areas. Referring to the above statement, one such story on the rise of man-elephant conflict in Assam is reported on *The Sentinel*. Similarly, *The Assam Tribune* and *The Telegraph* reported various stories about the consequences of the encroachment.

Poaching of animals is regarded as an explicit threat to wildlife. Kaziranga national park in Assam hosts one of the highest densities of one-horned rhinoceros. As the state is explicitly famous for the one-horned rhinoceros there are several cases on poaching. Rhino poaching in Assam is one of the major environmental issues in the wildlife sanctuaries and national parks of the region. They are being illegally killed by the poachers to carry out the international trade of ivory, horns and other body parts. “In the year 2015, there are altogether 74 rhinos killed by the poachers and 316 poachers are arrested during the year 2015 and 2017 in Assam” according to the report presented by forest minister Pramila Rani Brahma. One example is the news story published in *The Sentinel* about the poachers who are arrested due to the smuggling of rhino horns (March; p-4). Moreover, there is a similar story published in *The Assam Tribune* which reported the illegal smuggling of rhino horns (February; p-8).

4.3.1.8. Disaster management

The prime focus of all the countries in the world today is Disaster preparedness (Coppola, 2015). Disaster management in the newspaper helps us to educate about the protective measures during the disaster either it is natural or man-made. It enables individuals or a group to respond to the situation and how to cope with them. Since the edition of all the newspapers is from Guwahati it is obvious that the story related to the region would be focused more. In focus, as Assam being one of the most disaster-prone areas there are a total of 31 stories (6.43%) stories and it is ranked in 8th place of all the total newspapers. Compared to other environmental topics this gained importance which is a sign that the newspapers are educating their readers in an informative way.

In June, when the state is about to face its natural disaster i.e. flood *The Telegraph* (June; p-13) dedicated one whole page story on safety tips, preparedness, and coping with the situation at the time of disaster. The safety tips such as dos and don'ts on floods and earthquakes are highlighted. Another example can be *The Assam Tribune* news story on the plan for earthquake management in Guwahati.

4.3.1.9. Man-made disaster

Man-made disasters provoke serious damages in economy agriculture and settlement. According to Table 4.3, it ranks in ninth place with 5.60%. The man-made disaster has a long term impact which disrupts people's surroundings. Every year Assam faces a serious threat from floods (*The Assam Tribune*) where they have presented how

human beings are the main cause of their suffering (August, p-6). A similar story was reported in *The Sentinel* on the cause of Waterlogging in the state. In the broad sense, water logging is described as a natural disaster but in those articles, the newsmakers provided the readers with a negative side, where they have problematized it as a man-made. In both the above-mentioned story, the newsmakers have pointed out the poor drainage system of the city which causes are simplified as the large scale hill cutting and destruction of the forest.

4.3.1.10. Water conservation

In developing countries, there is nearly one- fifth of disease which is linked to environmental risks where poor hygiene and sanitation, unsafe water causing 1.7. million premature deaths every year (World Bank, 2005). The discussion on water conservation amounted to 21 (4.35%) of the total stories ranks in tenth place. The news story does not only focus on “safe water” but also talks about enough clean water for drinking water or any domestic household. The stories focused on Water Conservation addressed the safe rural drinking water in Assam that continues to be a mirage (*The Sentinel*, May; p-1).

4.3.1.11. Eco-tourism

Taking note of the reviewed stories, the stories Eco-tourism story on those three newspapers focuses mainly on Assam. As Assam being one of prime eco-tourism destination in India, considering different topics it is less concentrated which consist of only 20 (4.14%) stories. The state attracts a large number of nature and animal

lovers with their explicit beauty. Two factors that dominated Eco-tourism in the newspapers are the conservation of tourist spots and any related information about the spot or any festivals. The stories based on those two factors are published in *The Assam Tribune* and *The Telegraph*. One story informs about the famous eco-tourism festival of the state Bhabraibkunda (January; p-9) and information about the reopening of the famous botanical garden in the capital (May; p-10). The stories related to these categories are meant to publish to attract the tourist that helps in boosting the economy of the state.

4.3.1.12. Pollution issues

In this study, pollution issues are divided into two subcategories air pollution, and others. Since, noise, light, water, and plastic pollutions are not the dominant ones in the newspapers they are subjected under the category “Others”. According to the study of 2019, 21 out of 30 polluted cities in the world are in India. Since air pollution in India is the most serious concern it is highlighted more in all the newspapers.

Table No 4.3.1.12.: Frequency and percentage covering pollution issues in three newspapers.

| Pollution issues | <i>The Assam Tribune</i> (Frequency and Percentage) | <i>The Sentinel</i> (Frequency and Percentage) | <i>The Telegraph</i> (Frequency and Percentage) | Average (Frequency and Percentage) |
|------------------|---|--|---|------------------------------------|
| Air pollution | 3 (23.07%) | 1(50%) | 1 (25%) | 5 (26.31%) |
| Others | 10(76.92%) | 1(50%) | 3(75%) | 15 (78.94%) |
| Total | 13 (100%) | 2(100%) | 4(100%) | 19 (100%) |

*Rounding error *n=Frequency

Table 4.3.1.12. shows that in *The Assam Tribune*, air pollution and “others” consist of a percentage of 23.07% and 76.92%; whereas, *The Sentinel* possesses 50% on air pollution and 50% on others. However, in *The Telegraph* air pollution consists of 25% and others of 75%. Overall the table above illustrates that “others” predominates the stories n=15 with the highest percentage of 78.94% and air pollution stories by 26.31%.

To tackle this environmental threat the awareness and protection from the pollution needs to be highlighted in the newspapers. Taking into consideration, the newspapers published more of international, national, and state reports by the government and failed to inform the risk factor caused by them. An international report published in *The Assam Tribune* addresses the issue of air quality getting better in China (October; p-4) which provided a detailed report to readers about air quality in China. A similar story on the air quality of Delhi is also reported in *The Sentinel*.

4.3.1.13. Forest conservation

The Government of India introduced the first Forest Conservation Act in 1980 which helps to conserve the forest and forest land. Being an established act this topic does not gain any importance and hence ranked 13th (3.73%) of all the newspapers. The story demonstrates the drive to evict encroachments from the forests (*The Sentinel*, November; p-4).

4.3.1.14. Weather

Weather reports determine certain elements such as weather modification, temperature, a hot or cold wave which consists of 16 (3.31%) stories. Some listed stories on weather conditions include the story on the coldest day faced by Shillong and Patna. Other listed stories are about the extreme weather and the cold wave in Nepal (*The Sentinel*, January; p-9).

4.3.1.15. Climate change

In the level of all newspapers, climate change ranks at the 15th place scoring 3.11%. The stories on Climate Change have certain factors such as global warming, a report on climate change, climate protection, and climate change. In *The Assam Tribune*, Climate change is reported repeatedly in different contexts. The feature story on climate change as India's biggest developmental challenges reflects on the people who are severely facing a major threat by climate change and hence blamed the human beings (*The Assam Tribune*, May; p-6). Another story is on Global warming which reported about the preservation of muga in various seasons due to extreme weather and an increase in temperature caused by global warming (*The Assam Tribune*, February; p-1). One story reflects the aids seeking by the government from developed nations to combat climate change (*The Sentinel*, June; p-9).

4.3.1.16. World Environment Day

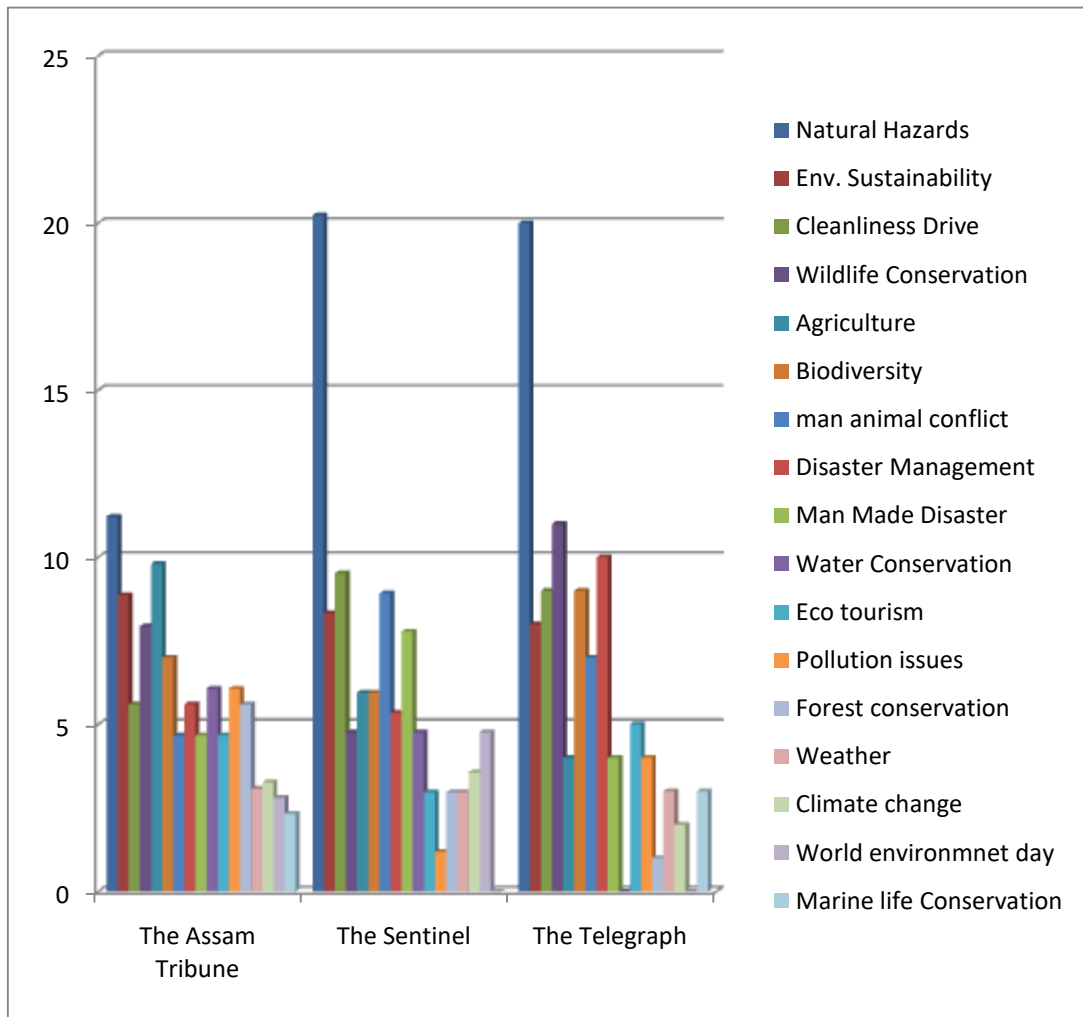
World Environment Day (WED) is the United Nations Day which is celebrated every year. It began in 1974 which over the years, has gained a global platform. WED is

celebrated on 5th June every year to encourage people worldwide about the awareness and action to protect the environment. In this study the reporting on the celebration of World Environment Day is ranked in 16th place which constitutes 14 (2.90%) stories.

4.3.1.xvii. Marine life conservation

Table 4.3.1. illustrates that the Marine life Conservation is reported the least of all the 17 other topics with just 1.65%. As India, being the second-largest producer of fish in the world (report of 2017) the journalist/ newsmaker does not pay any attention to the conservation of marine life. There are only 8 stories out of which *The Assam Tribune* has 5 (2.33%) and *The Telegraph* constitutes 3 (3%). In contrast, *The Sentinel* does not possess a single story on marine life conservation. The stories which are published in those two newspapers possess an aspect of conservation of fishing and marine life species. One such factor-related is reported in *The Telegraph* which presented the story on the illegal fishers (February; p-3) and another example published in *The Assam Tribune* is about the negligence of Silphukri pond (May; p-5). Undoubtedly, the present section has similar findings like Al Abd (1993) where his findings revealed that marine life conservation is the least covered topic.

Figure 4.2. Environmental topics in *The Assam Tribune*, *The Sentinel* and *The Telegraph* in terms of percentage.



In terms of percentage, Figure 4.2. shows the level of coverage of environmental topics where most prominent topic in all the newspapers are the news stories related to natural disasters.

4.3.2. Placement of environmental news stories

The placement of the news item plays a vital role in setting an agenda for the readers.

This section analyses the placement of an environmental story which is divided into

three sections i.e. Front Page, inside page, and back page. It is based on the R.Q. How much prominence do environmental news receive in the newspapers in terms of their position in different pages, viz., the front page, inside pages, or last page?

4.3.2.1. Placement of environmental news stories in *The Assam Tribune*.

Table No 4.3.2.1.: Frequency and Percentage of placement of environmental items in *The Assam Tribune*.

| Placement | Frequency (n) | Percentage (%) |
|-------------|---------------|----------------|
| Front page | 20 | 9.34% |
| Inside page | 194 | 90.65% |
| Back page | 0 | 0 |
| Total | 214 | 100% |

*Rounding error; n=Frequency

The above table shows that *The Assam Tribune* carries n=194 (90.65%) on environmental news stories on the inside page. Only n=20 (9.34%) stories are featured on the front page of the newspaper. Most of the important stories relating to floods and other natural disaster warning stories are placed on the inside pages in this newspaper. However, this newspaper does not feature any story on the back pages as the pages are reserved for sports.

It is a matter of fact that the front page stories consist of the most important stories of the region or the country where it is being circulated. Hundreds of stories are being

published daily but only the important news which grabs the reader’s attention is featured on the front page. But in contrast, the table shows that the newspaper covers more stories on the environment in the inside pages rather than on the front page. This is indicative of the fact that the news organizations or the editors do not take note of any environmental issues of the region in particular or of the country in general. Thus, the findings reveal that this newspaper does not give much priority to environmental issues.

4.3.2.2. Placement of environmental news stories in *The Sentinel*.

Table no 4.3.2.2...: Frequency and Percentage on the placement of environment news stories in *The Sentinel*.

| Placement | Frequency (n) | Percentage (%) |
|-------------|---------------|----------------|
| Front page | 14 | 8.33% |
| Inside page | 154 | 91.66% |
| Back page | 0 | 0 |
| Total | 168 | 100% |

*Rounding error; n=Frequency

The above table reveals that *The Sentinel* featured n=154 (91.66%) of the total news items in the inside pages. Only a few n=14 (8.33%) environment items are featured on the front page of the newspaper. However compared with *The Assam Tribune*, *The Sentinel* also does not possess any story on back pages and hence is reserved for different beats such as sports or entertainment. The front page of the newspaper usually presents the most important news items of the day. Thus, it can be said that these newspapers does not prioritize the stories on the environment in their newspaper.

4.3.2.3. Placement of environmental news stories in *The Telegraph*.

Table No 4.3.2.3.: Frequency and Percentage on placement of environmental news stories in *The Telegraph*.

| Placement | Frequency (n) | Percentage (%) |
|-------------|---------------|----------------|
| Front page | 3 | 3% |
| Inside page | 97 | 97% |
| Back page | 0 | 0 |
| Total | 100 | 100% |

Table 4.3.2.3. shows of all the stories reviewed, n=97 stories are featured on inside pages of the newspaper with a percentage of 97% followed by n=3 articles (3%) are featured on the front page of the newspaper. Alike *Assam Tribune* and *The Sentinel*, *The Telegraph* also does not feature any story on back pages, and hence reserved for the sports.

Of all the three newspapers, *The Telegraph* possesses the least percentage which published the environmental issues on their front page. Only 3% of the news items are dedicated to matters relating to the environment. This mere percentage reflects that the national based newspaper does provide much importance if not completely overlooked the environmental aspects and issues.

4.3.2.4. Placement of environmental news stories in *The Assam Tribune*, *The Sentinel* and *The Telegraph*.

Table No 4.3.2.4.: Frequency and Percentage of placement of environmental news stories in *The Assam Tribune*, *The Sentinel* and *The Telegraph*.

| Placement | <i>The Assam Tribune</i> (Frequency and Percentage) | <i>The Sentinel</i> (Frequency and Percentage) | <i>The Telegraph</i> (Frequency and Percentage) | Average (Frequency and Percentage) |
|-------------|--|---|--|---------------------------------------|
| Front page | 20 (9.34%) | 14 (8.33%) | 3 (3%) | 37 (7.67%) |
| Inside page | 194 (90.65%) | 154 (91.66%) | 97 (97%) | 445 (92.32%) |
| Back page | 0 | 0 | 0 | 0 |
| Total | 214 (100%) | 168 (100%) | 100 (100%) | 482 (100%) |

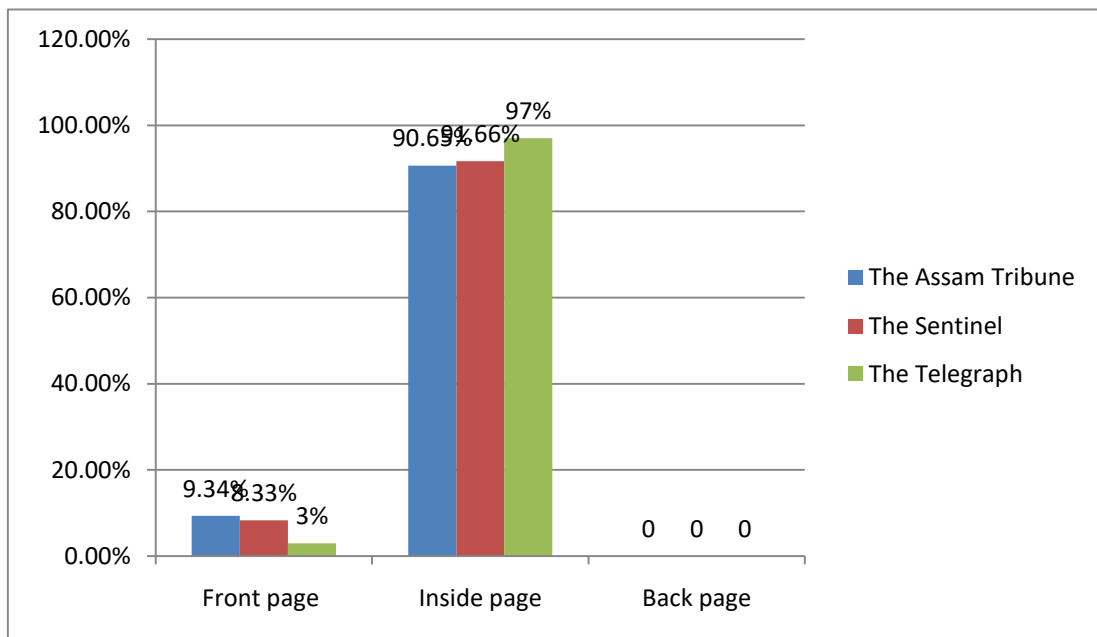
*Rounding error; n= Frequency

It is an accepted norm that the placement of any news item has its significance. The above table shows that the stories on environment issues are mainly published in the inside pages n=445 (92.32%) followed by the front page i.e. n=37 (7.67%). Overall, the above table in the placement of the environmental story in terms of frequency reveals that *The Assam Tribune* possesses the highest number of environmental stories on its front page and also on the inside page which is followed by *The Sentinel* and *The Telegraph*. All the three newspapers do not publish any environmental stories on the back page of their newspapers. It has been found out that all the back pages of the three newspapers are reserved for sports beat.

Thus, it would not be out of place to say that none of the three newspapers published any story at their back page related to environmental issues. But, the three newspapers under discussion gives more space in the inside pages of the newspaper. Unlike

AlAbd's (1995) study which showed that the environmental coverage is primarily placed on the front page of the newspaper. This study tends to find contrasting instances where the environmental stories are placed mostly on the inside pages. However, this is also confirmed by various studies (Saeed, 2000; Al Sinani, 2001; Sakir, 1973) that the placement of environmental news is placed mainly on the inside page of the newspapers.

Figure 4.3. Placement of environmental news stories on *The Assam Tribune*, *The Sentinel* and *The Telegraph* in terms of percentage.



The figure reveals that in terms of percentage, *The Assam Tribune* has the highest percentage of environmental stories published on the front page followed by *The Sentinel* and *The Telegraph*. In contrast, *The Telegraph* has published more environmental story on the inside page of the newspaper followed by *The Sentinel* and *The Assam Tribune*.

4.3.3. Geographical Priority of environmental news stories

This section discusses the geographical priority of the environmental news items in the selected newspapers that are divided into the State, Northeast, National and International. Since the state is considered all the selected newspapers are published from Guwahati (Assam). The newspaper selected in this study is the highest circulated English dailies in the northeastern part of India also known as eight sisters of India consisting of eight different states i.e. Assam, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura. This part is an attempt to answer R.Q. How much priority do these newspapers attach to state, regional, national and international news on environment?

4.3.3.1. Geographical priority of environmental news stories in *The Assam Tribune*.

Table No 4.3.3.1: Frequency and Percentage of geographical priority of the environmental news stories in *The Assam Tribune*.

| Geographical priority | Frequency (n) | Percentage (%) |
|-----------------------|---------------|----------------|
| State | 150 | 70.09% |
| Northeast | 23 | 10.74% |
| National | 28 | 13.08% |
| International | 13 | 6.07% |
| Total | 214 | 100% |

*Rounding error; n=Frequency

The above table reflects the priority of the geographical focus on environmental news stories of *The Assam Tribune*. The newspaper has a total frequency of n=214

environmental news. Almost one-third n=150 (70.09%) are focused on the state issues, while 28 (13.08%) stories focused on the national events followed by northeast n=23 (10.74%) and internationally as being the least n=13 (6.07%). It however becomes clear that more attention is paid to the region as compared to the national and international events.

4.3.3.2. Geographical priority of environmental news stories in *The Sentinel*.

Table No 4.3.3.2. Frequency and Percentage of geographical priority of the environmental news stories in *The Sentinel*.

| Geographical priority | Frequency (n) | Percentage (%) |
|-----------------------|---------------|----------------|
| State | 116 | 69.04% |
| Northeast | 15 | 8.92% |
| National | 27 | 16.07% |
| International | 10 | 5.95% |
| Total | 168 | 100% |

*Rounding error; n=Frequency

The above table represents the geographical focus in *The Sentinel*. As concerned with the table, the daily consists of total n=168 stories where one- third of the story is devoted to the state or the region with n=116 (69.04%). Then is followed by National events n=27 (16.07%), Northeast n=15 (8.92%), and International events with n=10 having the minimum percentage (5.95%).

4.3.3.3. Geographical priority of environmental news stories in *The Telegraph*.

Table no 4.3.3.3.: Frequency and Percentage of geographical priority of the environmental news stories in *The Telegraph*.

| Geographical priority | Frequency (n) | Percentage (%) |
|-----------------------|---------------|----------------|
| State | 45 | 45% |
| Northeast | 17 | 17% |
| National | 27 | 27% |
| International | 11 | 11% |
| Total | 100 | 100% |

Table No 4.3.3.3. shows the overall environmental news stories in *The Telegraph* is n=100. In this regard, out of 100 stories of 45% is concentrated on State issues and 27% is given to National coverage followed by Northeast (17%) and the slightest of 11% to International events.

Unlike *The Assam Tribune and The Sentinel*, this newspaper does not dedicate 50% of the story to the state. *The Telegraph* of Guwahati edition, despite being one of the most circulated newspapers in Assam covers a fewer number of stories relating to the region. With this least coverage, it is understandable that the geographical indications are being underrepresented in this newspaper.

4.3.3.4. Geographical priority of environmental news stories in *The Assam Tribune, The Sentinel and The Telegraph*.

Table no 4.3.3.4.: Frequency and Percentage of geographical priority of the environmental news stories in *The Assam Tribune, The Sentinel and The Telegraph*.

| Geographical Priority | The Assam Tribune (Frequency and Percentage) | The Sentinel (Frequency and Percentage) | The Telegraph (Frequency and Percentage) | Average (Frequency and Percentage) |
|-----------------------|--|---|--|------------------------------------|
| State | 150 (70.09%) | 116 (69.04%) | 45 (45%) | 311 (64.52%) |
| Northeast | 23 (10.74%) | 15 (8.92%) | 17 (17%) | 55 (11.41%) |
| National | 28 (13.08%) | 27 (16.07%) | 27 (27%) | 82 (17.01%) |
| International | 13 (6.07%) | 10 (5.95%) | 11 (11%) | 34 (7.05%) |
| Total | 214 (100%) | 168 (100%) | 100 (100%) | 482 (100%) |

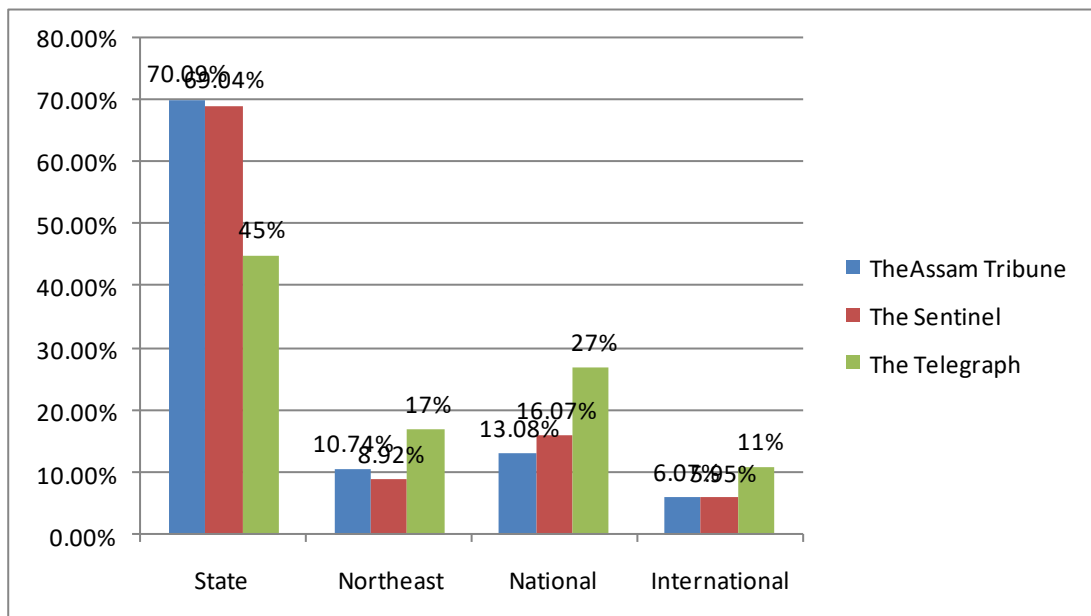
*Rounding error *n=Frequency

Bendix and Liebler's (1999) research had shown that events tend to be more important to those who are closer to them. Likewise, the three dailies that are published from Guwahati attached its importance to the events occurring in and around the region. It can be seen from the above table that most environmental coverage in the newspaper is mainly confined particularly within the State. The above table shows that the stories on environment issues mainly dealt with the state stories n=311 (64.52%) followed by National stories n=82 (17.01%), Northeast stories n=55 (11.41%) and International stories n=34 (7.05%)

In terms of frequency, *The Assam Tribune* has the maximum number of state, national and international related environmental related stories which are followed by *The*

Sentinel and *The Telegraph*. However, the table reveals that the environmental stories that dealt with the northeast issue had the maximum number of stories in *The Assam Tribune* which is then followed by *The Telegraph* and *The Sentinel*. This implies that the regional newspapers failed to highlight and provide space for international events in their newspapers. Looking into the results of these discussions, it shows much closer proximity to the views propounded by the authors like Bendix and Liebler (1999).

Figure No 4.4: Geographical priority of the environmental news stories in *The Assam Tribune*, *The Sentinel* and *The Telegraph* in terms of percentage.



In terms of percentage, the above figure reveals that *The Assam Tribune* published more of State stories related to environment than *The Sentinel* and *The Telegraph*. *The Telegraph* possess the maximum percentage on The North east and International stories followed by *The Assam Tribune* and *The Sentinel*. However, in terms of

national issue also *The Telegraph* possess the highest percentage followed by *The Sentinel* and *The Assam Tribune*.

4.4. CONCLUSION

There is a need to create further awareness about the issues in the environment. In terms of the space allotment, it was revealed that the three newspapers did not provide maximum space for the environment stories. Although all the newspapers contains percentage of the space provided to environmental news is slightly different. *The Assam Tribune* had allotted 2.29 percent and *The Sentinel* allows 2.63 percent making *The Telegraph* at the least of 1.19 percent. The weather forecast in *The Assam Tribune* allotted 0.28 percent of its space and 0.18percent in *The Telegraph*. Unlike two newspapers, *The Sentinel* did not allow any space on the weather forecast. *The Assam Tribune* had published more of the environment news item with 44.39 percent, *The Sentinel* with 34.85 percent, and *The Telegraph* at the least of 20.74 percent.

Furthermore, the second section dealt with priority and was divided into four sub-sections. The first sub-section of the study explores the kind environmental topics the newspapers cover prominently. *The Assam Tribune*, *The Sentinel*, and *The Telegraph* mostly gave prominence to the same environmental topic. They paid more attention to “Natural Hazard” than any other environment-related topics. Almost 20 percent of all the environmental topics were related to natural hazards published in *The Sentinel* and *The Telegraph* and 11.21 percent in *The Assam Tribune*. The natural hazard was categorized into seven sub-topics such as Flood, Landslide, Cyclone, Erosion, Storm, Earthquake, and Others. As Assam being one of the hotspots of the flood, it was

reported more. However, the most covered topics in all the newspapers were Agriculture, Cleanliness drive, and Wildlife Conservation. The three newspapers determined the environmental topics in certain categories ranging from *Environment Sustainability, Cleanliness drive, Wildlife Conservation, Agriculture, Biodiversity, Man-Animal Conflict, Disaster Management, Man-Made Disasters, Eco-Tourism, Pollution Issues, Water Conservation, Forest Conservation, Weather, Climate change, World Environment Day to Marine Life Conservation.*

However, the second sub-section dealt with the level of prominence the environment stories enjoy in newspapers i.e. front page, inside page, or last page. Besides, it is explicit to agree that all the newspapers paid the least attention to environmental issues. This study reveals that *The Assam Tribune, The Sentinel, and The Telegraph* does not treat environment stories as important; and therefore most of the stories were found in the inside pages. Overall, there were only 7.67 percent of stories that adorned the front page of the newspaper and the back page was completely ignored.

Moreover, the third sub-section in regards to priority dealt with the degree of geographical priority in the newspapers in terms of environmental news. In terms of geographical focus, the state stories (i.e. Assam) gained more importance in those three newspapers. The state-related stories were embedded as the most prominent ones. Of all the four categories the national determining India, gained the second and international stories being the least. The newsmakers merely reported the happenings around the globe.

Chapter: 5

ANALYSIS OF ENVIRONMENTAL NEWS STORIES: SLANT AND FRAMING

5.1. INTRODUCTION

This chapter deals with the analysis of the environmental news stories published in *The Assam Tribune*, *The Sentinel*, and *The Telegraph*. The chapter is divided into two sections that deal with the last two objectives that are Ideological Slant and Framing. The first section i.e. Slant is divided into two sub-parts. The first sub-part deals with the environmental ideological slant whether pro-environment, pro-development or neutral and the second subpart deals with the types of environment reporting such as pro-active, reactive or neutral. The second section deals with the Framing of an environmental news story. The data collected are analysed and presented in tables with their frequency and percentage. However, the graphs are used for a better understanding of data and each newspaper is analysed separately.

5.2. Slant of environmental news stories

This section presents the frequency and percentage based on the slant used in environmental stories. This section deals with the R.O. "To examine the ideological slant of these newspapers in terms of environmental news" and is an attempt to answer the R.Q. What kind of ideological slant is reflected in these newspapers as they cover news on environment? In other words, are the newspaper pro-environment, pro-development or neutral towards environment? Are these stories proactive, reactive or neutral? This section is divided into two subparts the first subpart deals

with the Ideological slant and the second deals with the types of environmental reporting. Each newspaper i.e. *The Assam Tribune*, *The Sentinel*, and *The Telegraph* is elaborately discussed.

5.2.1. Ideological Slant of an environmental news stories

The first sub-part of Slant deals with the ideological slant of the newspaper that is categorized under three categories as pro-environment, pro-development, and neutral. Mostly, pro-environment content includes environmental sustainability, recycle, beautification, cleanliness, biodiversity, organic, ecology, ecologically friendly, environment friendly, biodegradable, clean, green, natural, non- polluting, eco, renewable and conservation. Meanwhile, the stories that deal with developmental issues such as energy, natural resources, development of environment are placed under this category. However, the story that does not reflect either Pro-environment nor pro-development content is placed under the neutral stories.

5.2.1.1. Ideological Slant of environmental news stories in *The Assam Tribune*.

Table No: 5.2.1.1. Frequency and percentage on ideological Slant of environmental news stories in *The Assam Tribune*.

| Slant | Frequency (n) | Percentage (%) |
|-----------------|---------------|----------------|
| Pro environment | 97 | 45.32% |
| Pro development | 50 | 23.36% |
| Neutral | 67 | 31.30% |
| Total | 214 | 100% |

*Rounding error; n=Frequency

Table 5.2.1.1. reveals the pro-environment carries the maximum number of all the stories. Out of n=214, n=97 (45.32%) news stories are pro-environmental slant. One example published in this newspaper can be the news story on Call for water conservation (March; p-5). This news story constitutes the content on “conservation” that provides the pro environmental slant on the conservation of water that can be used in agriculture, household and other chores. This news story also pro-actively disseminates the readers of how to conserve the rainwater and use it for any domestic chores.

Considering significance the Neutral slant posses n=67 (31.30%) environmental stories. The report presented by the government or the aftermath of an event can be an example of this slant. An example that relates to this content can be the havoc created by Landslide in the city (August; p-10). This is a reactive environmental story that do not possess any slant and provides us the information aftermath of the event.

Moreover, the pro-development stories possess the least with n=50 (23.26%). The news story on the government initiatives to handover the wildlife sanctuary to the private firm that presents the view of local environmental activists who are opposing the the privatization of Kaziranga National Park. However, the privatization helps the area in development but the local environmental activists are opposing the descision by stating the limitation of exploitation of nature and how that will lead to the extinction of animals.

The Assam Tribune has more stories on pro-environment which reveals that this newspaper paid a huge amount of importance in reporting the issues related to the environment which considerably creates awareness among the readers.

5.2.1.2. Ideological Slant of environmental news stories in *The Sentinel*.

Table No: 5.2.1.2. Frequency and percentage on ideological Slant of environmental news stories in *The Sentinel*.

| Slant | Frequency (n) | Percentage (%) |
|-----------------|---------------|----------------|
| Pro environment | 62 | 36.90% |
| Pro development | 29 | 17.26% |
| Neutral | 77 | 45.83% |
| Total | 168 | 100% |

*Rounding error; *n=Frequency

From the above table, it is evident that the most prominent slant is Neutral n=77 (45.83%). Several factors distinguish this neutrality; some informs us about the event, causes, and the causalities of any natural hazards or disasters and also the stories. One such story identified as those mentioned factors is the story reported in July that informs the state about the causalities of a flood.

The second most prominent slant is the Pro-environment consists of n=62 (36.90%). It is the kind of slant where the newsmaker promotes and creates awareness about environmental activities. Some of the examples include the Beautification drive (March; p-3) and the launch of the Swaachta campaign under the “Clean Nagaon Green Nagaon” mission (September; p-5). The newsmaker in these two stories

reported about promoting the beautification and campaign towards conserving the environment. Consequently, the least covered is the pro-development story which focuses on the development of an environment that carries n=29 (17.26%) stories.

5.2.1.3. Ideological Slant of environmental news stories in *The Telegraph*.

Table No: 5.2.1.3. Frequency and percentage on ideological Slant of environmental news stories in *The Telegraph*.

| Slant | Frequency (n) | Percentage (%) |
|-----------------|---------------|----------------|
| Pro-environment | 35 | 35% |
| Pro development | 17 | 17% |
| Neutral | 48 | 48% |
| Total | 100 | 100% |

The table shows that this newspaper mainly provided a maximum number of Neutral stories n=48 (48%) followed by Pro-environment stories n=35 (35%) and Pro development n= 17 (17%). The stories based on the neutral slant are the news story on fear of drought, the story presents the fear and does not deal with any pro-environment nor pro-development story. An example of a pro-environment contained the factors of the “Go Green” campaign in the state and the plantation drive carried out by the university. An example of a Pro-development story can be the story on farmer plans implemented by the government. The story presents the scientific/ technology development for farmers and the second part presents the obstacles of the farmers due to technology development (December; p-10).

However confined with *The Assam Tribune*, *The Telegraph* provided more stories on a neutral stand. The result indicates that as being one of the most circulated dailies in the region and national daily this newspaper does not give priority to pro-environment stories.

5.2.1.4. Ideological Slant of environmental news stories in *The Assam Tribune*, *The Sentinel* and *The Telegraph*.

Table No: 5.2.1.4. Frequency and percentage on ideological Slant of environmental news stories in the three newspapers.

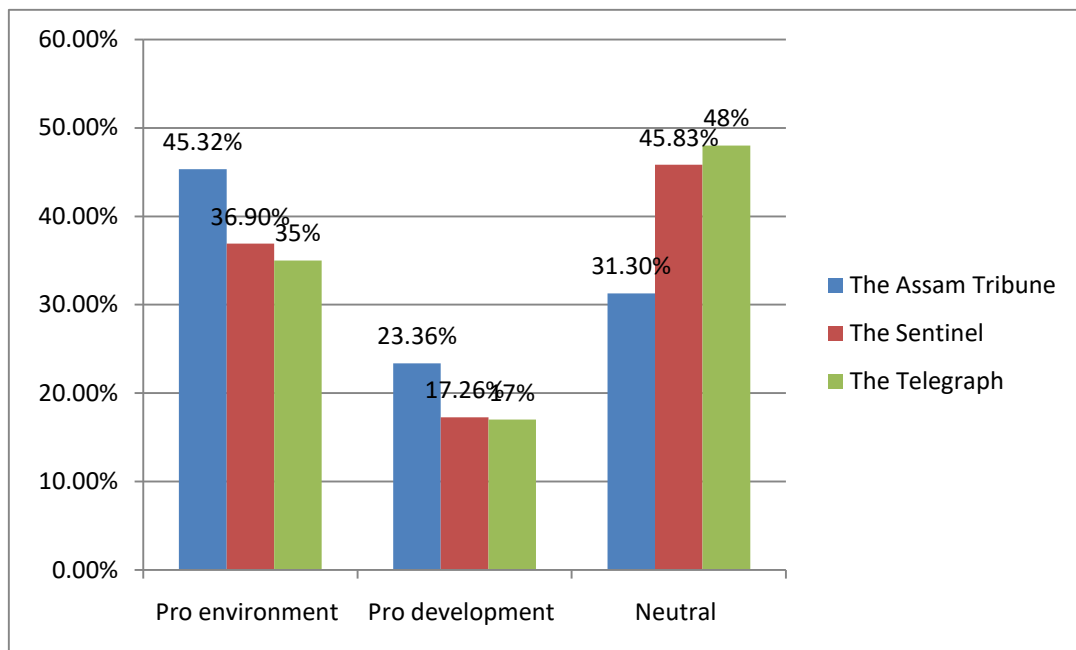
| Ideological Slant | The Assam Tribune (Frequency and Percentage) | The Sentinel (Frequency and Percentage) | The Telegraph (Frequency and Percentage) | Average (Frequency and Percentage) |
|-------------------|--|---|--|------------------------------------|
| Pro-environment | 97 (45.32%) | 62 (36.90%) | 35 (35%) | 194 (40.24%) |
| Pro-development | 50 (23.36%) | 29 (17.26%) | 17 (17%) | 192 (39.83%) |
| Neutral | 67 (31.30%) | 77 (45.83%) | 48 (48%) | 96 (19.91%). |
| Total | 214 (100%) | 168 (100%) | 100 (100%) | 482 (100%) |

*Rounding error; * n= Frequency

The sample consists of 482 stories from the three newspapers where pro-environment constitutes 194 (40.24%); Neutral carries 192 (39.83%) and Pro-development consists of 96 (19.91%). Moreover, by summing up all the newspapers in terms of frequency it reveals that *The Assam Tribune* represented the pro-environment stories as the prominent ones giving a small amount of consideration to the pro-development stories. In contrast, *The Sentinel* and *The Telegraph* gave more dominant stories on a neutral stand in their newspaper. Meanwhile, the newspapers failed in addressing or informing their readers about the pro-environment stories. Rather than reporting on

pro-environment or pro-development stories, they presented the stories more on the press releases and the reports of the government. Besides, the development stories of the environment are the most underrepresented in all those newspapers under observation. The results itself speaks that the newspapers neglected the development stories if not ignored.

Figure 5.5. Ideological Slant of environmental news stories in *The Assam Tribune*, *The Sentinel* and *The Telegraph* in terms of percentage.



As shown in the figure, *The Assam Tribune* publishes the maximum percentage of Pro-environment story followed by *The Sentinel* and *The Telegraph*. Similarly, in the Pro-development story, *The Assam Tribune* publishes the maximum percentage followed by *The Sentinel* and *The Telegraph*. In Neutral stories, *The Telegraph* possesses the maximum percentage followed by *The Sentinel* and *The Assam Tribune*.

5.2.2.Types of Reporting on environmental news stories

The second sub-part of Slant presents the frequency and percentage of nature based on the types of reporting on environmental issues. It is categorized under three categories: pro-active, reactive, and neutral. Firstly, the pro-active contents are mostly focused on the story that calls for an action and focus on the problems with sustained action to solve the environmental issue. Secondly, the reactive type of reporting presents the story or reports of the aftermath the event, for instance, aftereffects of natural disaster. Thirdly, the neutral contents deals the story that is neither proactive nor reactive, often the announcements, campaigns, or awareness programs.

5.2.2.1. Types of reporting on environmental news stories in *The Assam Tribune*.

Table no. 5.2.2.1.: Frequency and percentage on the types of reporting on environmental news stories in *The Assam Tribune*.

| Types of reporting | Frequency (n) | Percentage (%) |
|--------------------|---------------|----------------|
| Pro-active | 106 | 49.53% |
| Reactive | 65 | 30.37% |
| Neutral | 43 | 20.09% |
| Total | 214 | 100% |

*Rounding error; *n= Frequency

The above table indicates that pro-active covers the maximum number of n=106 (49.53%) and the reactive stories carries n=65 (30.37%) making neutral stories the least n=43(20.09%). There are several pro-active stories featured in this newspaper, one such example can be the Conservationists call for the complete ban on picnics in protected areas. The news story presents the conservationist's view who indulged the

call for action on the complete ban of a picnic area in any protected areas of Assam (January; p-7). An example of a reactive story contributes to the factors of the improvement of the flood situation in the state (June;p-1). In contrast to the proactive and reactive story, the neutral stories dominated with the content relating to the news which provides the information of certain announcements by the government. One example of a neutral story which presents us the report of the government can be the press release of the Assam government on increasing pollution levels (July, p-5). In this context, the trend shows that the reporters kept emphasizing mostly in the hard stories rather than follow up stories concerning environmental issues, which indeed is a positive side of an organization.

5.2.2.2. Types of reporting on environmental news stories in *The Sentinel*.

Table no. 5.2.2.2: Frequency and percentage on the types of reporting on environmental news stories in *The Sentinel*.

| Types of reporting | Frequency (n) | Percentage(%) |
|--------------------|---------------|---------------|
| Pro-active | 66 | 39.28% |
| Reactive | 65 | 38.69% |
| Neutral | 37 | 22.02% |
| Total | 168 | 100% |

*Rounding error; *n= Frequency

As shown in the above table, n=66 (39.28%) of the environment news items are pro-active while n=65 (38.69%) reactive and n=37 (22.02%) are the neutral stories. However compared with *The Assam Tribune*, *The Sentinel* has published almost the same number of pro-active and Reactive stories just with the difference of 1%. An example of a pro-active story is on the awareness campaign arranged by the district

administration on disaster management in rural areas (March; p-7). One reactive story provides us a report of the aftermath of the flood where it was shown that nearly 65,000 people were affected, this story is neutral by its slant (June, p-6). An example of neutral story is the state government press release where they published the release about the adoption of water management practices of keeping pace with climate change (July, p-4).

5.2.2.3. Types of reporting on environmental news stories in *The Telegraph*.

Table no. 5.2.2.3.: Frequency and percentage on the types of reporting on environmental news stories in *The Telegraph*.

| Types of reporting | Frequency (n) | Percentage (%) |
|--------------------|---------------|----------------|
| Pro-active | 43 | 43% |
| Reactive | 37 | 37% |
| Neutral | 20 | 20% |
| Total | 100 | 100% |

*Rounding error; *n= Frequency

According to Table No 5.2.2.3, the findings are somewhat similar as *The Assam Tribune* and *The Sentinel*. *The Telegraph* also possesses the pro-active environment story as a maximum with 43%. One example of pro-active environmental reporting is titled as “Green worry over highway project”. This news story presents the concern of the people over the destruction of the environment that highlighted the activist opposition to the construction and the story provided awareness about how this project will lead to the destruction of an environment and how will people suffer. This story calls for an action to stop the building of the highway (April; p-3).

The second type of environmental reporting which is prominent in this newspaper is the reactive environmental stories that constitute of 37%. One example of a Reactive story is about the Dhansri floods in Assam (August; p-8). In this story, the reporter informs us of the aftermath of the flood, where they provide us with information on how many people had lost their lives and livelihood. The third type of environmental reporting is the Neutral stories that possess the least of the three with 20%. An example of Neutral environment story can be the report published by the Ministry of Environment and Forest in India. The story presents the reports of Delhi pollution (February; p-5). Overall, it is observed that pro-active stories have gained the foremost importance in this newspaper.

5.2.2.4. Types of reporting on environment in *The Assam Tribune*, *The Sentinel* and *The Telegraph*.

Table no. 5.2.2.4.: Frequency and percentage on the types of reporting on environmental news stories in the three newspapers.

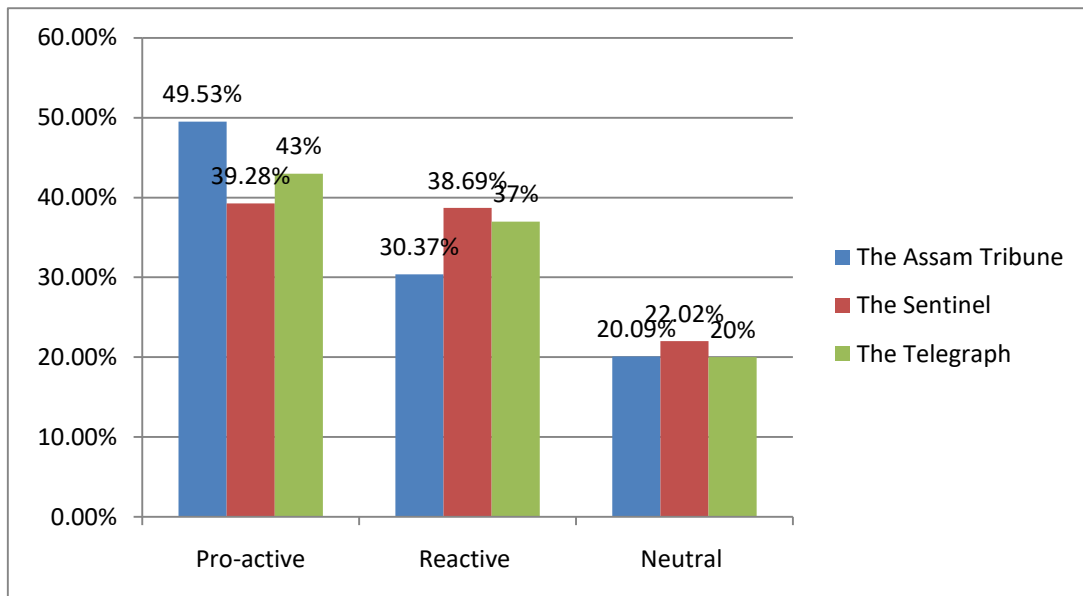
| Types of reporting | <i>The Assam Tribune</i> (Frequency and Percentage) | <i>The Sentinel</i> (Frequency and Percentage) | <i>The Telegraph</i> (Frequency and Percentage) | Average (Frequency and Percentage) |
|--------------------|---|--|---|------------------------------------|
| Pro-active | 106 (49.53%) | 66 (39.28%) | 43 (43%) | 215(44.60%) |
| Reactive | 65 (30.37%) | 65 (38.69%) | 37 (37%) | 167 (34.64%) |
| Neutral | 43 (20.09%) | 37 (22.02%) | 20 (20%) | 100 (20.74%) |
| Total | 214 (100%) | 168 (100%) | 100 (100%) | 482 (100%) |

*Rounding Error *n=Frequency

Out of 482 stories from the three newspapers where Pro-active constituted of n=215(44.60%); Re-active carries n=167 (34.64%) and Neutral with the least n=100

(20.74%). In terms of frequency, *The Assam Tribune* constitutes the more pro-active environment stories than reactive and neutral stories. Considering the table, it can be said that the newsmakers gave more attention to the proactive stories which are indeed a good gesture of any organization.

Figure 5.6: Types of reporting on environmental news stories in *The Assam Tribune*, *The Sentinel* and *The Telegraph* in terms of percentage.



As shown in the figure, *The Assam Tribune* publishes the maximum percentage of a pro-active by *The Telegraph* and *The Sentinel*. Secondly, in terms of the reactive story, *The Sentinel* publishes more reactive environmental news stories followed by *The Telegraph* and *The Assam Tribune*. Thirdly, in terms of neutral stories The Sentinel has the highest percentage followed by *The Assam Tribune* and *The Telegraph*

5.3. FRAMING OF ENVIRONMENTAL NEWS STORIES

As earlier discussed in methodology (chapter 3), the theory used in this study is the framing theory given by Semetko and Valkenburg (2000) “generic frames” that can address how environmental news are framed (in chapter 2). The model helps in understanding some forces of environmental issues. Thus, Semetko and Valkenburg model is opted for in this study that is categorized into five different frames Attribution of Responsibility, Human interest, Conflict, Morality and Consequences/ Economic frame. The section deals with the R.O. “To examine how the newspapers frame environmental issues” and is an attempt to R.Q. How does the newspaper frame the environment-related news item in terms of Attribution of Responsibility, Human-Interest, Conflict, Economic or Morality frame? Each newspaper i.e. *The Assam Tribune*, *The Sentinel* and *The Telegraph* is elaborately discussed and shown differently.

5.3.1. Framing of environmental news stories in *The Assam Tribune*.

Table no: 5.3.1. Frequency and percentage on Framing of environmental news stories in *The Assam Tribune*.

| Framing | Frequency | Percentage |
|-------------------------------------|-----------|------------|
| Attribution of Responsibility frame | 60 | 28.03% |
| Human interest frame | 95 | 44.39% |
| Conflict frame | 11 | 5.14% |
| Morality frame | 10 | 4.67% |
| Economic/ consequences frame | 38 | 17.75% |
| Total | 214 | 100% |

*Rounding error; *n=Frequency

Table 5.3.1. shows that the dominant frame in this newspaper is the Human Interest frame consisting of n=95 (44.39%). The responsibility of the government featured to solve and create awareness relating to the environmental issues is the second most dominant frame with n=60 (28.03%). The third most dominant frame in the newspaper is the Economic/ consequences frame with n=38 (17.75%) followed by the conflict frame with n=11 (5.14%) and morality frame with n=10 (4.67%).

An example that focused on a Human Interest frame is of 27th September 2018 news story which generates sympathy towards the farmers. The loss of their means of livelihood due to flood in Kohuban are reflected which once has a vibrant landscape. The narratives of the farmers have an emotional appeal where they demonstrate how they are growing stronger every year after posing a new threat. This story enhances the readers to sympathize with the farmers and make readers inspire by them.

An example of Attribution of Responsibility framing of environment is about the conservationists who demanded the complete ban on picnic spots. In this story, the individuals or groups are being criticized and blamed for behaving inappropriately and by not giving enough effort for the protection of wetlands areas (January; p-7) This story can alleviate certain problems by not letting the individuals or a group litters the protected areas.

The economic/ consequences frame ranked third in this newspaper. This frame consists of several factors such as compensation, providing aids, financial gains or

losses, and economy. Two such examples reflected the economy of the state. The story on “Silk Industry of Assam” (February; p-10) that presents the industry as the economic booster of the state. The story that constitutes a conflict frame is under the headline “*Urbanization, encroachment pushing city wildlife to the brink*” (July; p-7). This story triggered the unplanned urbanization along with the encroachment that pushes the wildlife to the brink. The conflict between man and animal is also reflected in this story. Meanwhile, the morality frame is ranked as the least that revealed that the news reporters are not interested in conveying the privileged stories on the moral message to the readers.

5.3.2. Framing of environmental news stories in *The Sentinel*.

Table No: 5.3.2. Frequency and percentage on Framing of environmental news stories in *The Sentinel*.

| Framing | Frequency (n) | Percentage (%) |
|-------------------------------------|---------------|----------------|
| Attribution of Responsibility frame | 23 | 13.69% |
| Human interest frame | 108 | 64.28% |
| Conflict frame | 15 | 8.92% |
| Morality frame | 3 | 1.78% |
| Economic/ consequences frame | 19 | 11.30% |
| Total | 168 | 100% |

*Rounding error; *n=Frequency

The Human Interest frame ranks the highest in *The Sentinel* with n=108 (64.28%) stories. The story about the school building that is damaged by the storm has been reported in a sympathetic manner where the school children have to suffer by the storm. It contains an emotional appeal from the student and the teachers (March;p-7).

Meanwhile, the Attribution of Responsibility frames is ranked second with n=23 (13.69%). It is interesting to note that more of the stories in this framing is mostly based on the decisions, issues, or implementation of schemes by the government. One such story is about the “Land pattas” which are distributed to flood-affected families by the state government (February; p-5). The Economic/consequences frame ranks third with n=19 (11.30%). The reporting on the Assam flood issues is explicitly mentioned in this newspaper. An example is demonstrated on the relief fund to the victims of Dispur (June; p-1). Hence, several factors determined the conflict frame which is ranked in fourth place in the framing n=15 (8.92%). The factor which determined this frame is to reproach the group or state cited with a story based on the only pave that allows the killing of wild animals (April; p-9). “Killing” itself in the headline denotes a negative connotation which resembles the conflict.

Newsmakers do not usually connote the morality frame in their story. It is the least used framing in many studies (De Vreese, 1991). It is subsequently ranked at the fifth/last n=3 stories making the least percentage of 1.78%. An example of this frame is about the city street animals which deserve a better deal in the environment. This article presented the “cruel reality” of humans towards stray dogs (March; p-4). Alike *The Assam Tribune*, *The Sentinel* also possesses the highest number of Human Interest stories on environmental news in their newspapers.

5.3.3. Framing of environmental news stories in *The Telegraph*.

Table no 5.3.3. Frequency and percentage on Framing of environmental news stories in *The Telegraph*.

| Framing | Frequency (n) | Percentage (%) |
|-------------------------------------|---------------|----------------|
| Attribution of Responsibility frame | 23 | 23% |
| Human interest frame | 61 | 61% |
| Conflict frame | 6 | 6% |
| Morality frame | 0 | 0 |
| Economic/ consequences frame | 10 | 10% |
| Total | 100 | 100% |

Similarly to *The Assam Tribune* and *The Sentinel*, it is found that *The Telegraph* also secured the Human Interest frame in the first rank of all the frames with n=61 (61%). Certain stories empathize with the people, one such story is the flood havoc in Dhemaji and Andhra Pradesh. Adding to the story, it has been mentioned that several states will extend their help to the flood-hit states (July; p-9). However, the Attribution of Responsibility is ranked second with a percentage of 23%. The story on Tripura flood victims denotes the government where they are held responsible and arranged a relief camp for the thirty-eight thousand victims (June; p-10). The story suggested the ability to alienate/decrease the problems of the victims. Moreover, the Economic/ consequences frame is ranked third in this newspaper with n=10 (10%). Certain factors determined this frame such as financial losses or gains, the cost of expenses, and the consequences of not pursuing a particular course of action. One example of this frame could be about the Sales in Onam which is hit by a flood (August; p-4). This is an investigative story that dealt with various marketers and how their sales are being impacted by the flood.

Unlike, *The Assam Tribune* and *The Sentinel*, this newspaper does not provide a single story on the morality frame. Eventually, not even a story is dedicated to the reference of God and none of the stories contains a moral message related to the environment. Overall, it can be said that the Human Interest frame is the most reported in the newspaper under observation.

5.3.4. Framing of environmental news stories in *The Assam Tribune*, *The Sentinel* and *The Telegraph*.

Table No: 5.3.4. Frequency and percentage in Framing of environmental news stories in *The Assam Tribune*, *The Sentinel* and *The Telegraph*.

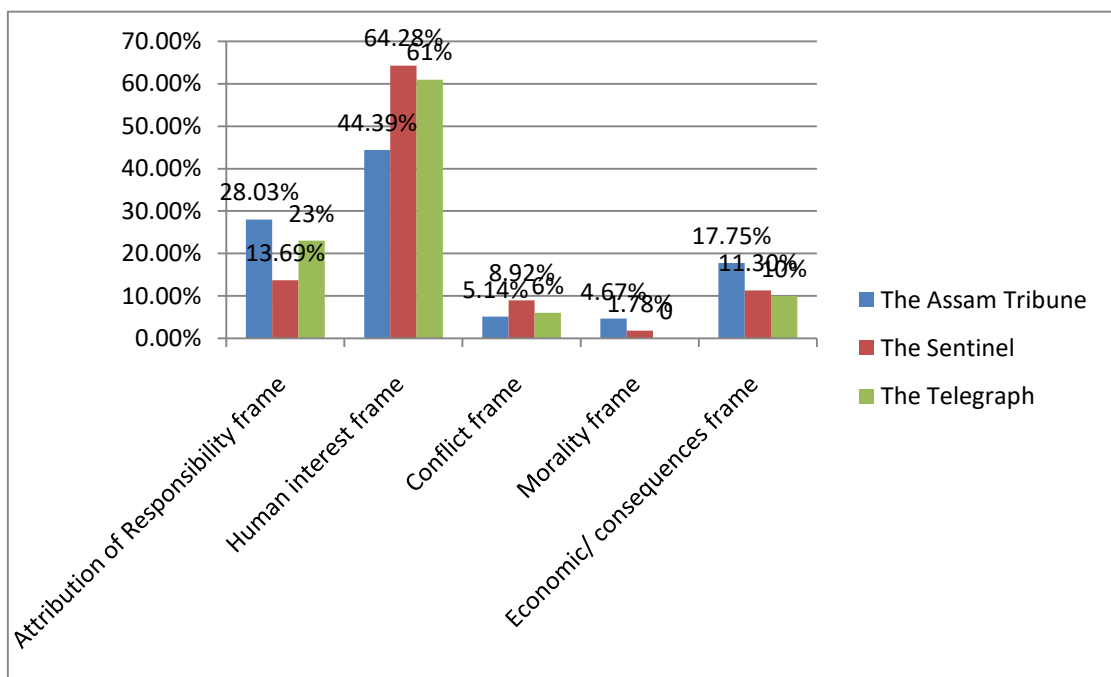
| Framing | <i>The Assam Tribune</i> (Frequency and Percentage) | <i>The Sentinel</i> (Frequency and Percentage) | <i>The Telegraph</i> (Frequency and Percentage) | Average (Frequency and Percentage) |
|-------------------------------------|--|---|--|---------------------------------------|
| Attribution of Responsibility frame | 60 (28.03%) | 23 (13.69%) | 23 (23%) | 106 (21.99%) |
| Human interest frame | 95 (44.39%) | 108 (64.28%) | 61 (61%) | 264 (54.77%) |
| Conflict frame | 11 (5.14%) | 15 (8.92%) | 6 (6%) | 32 (6.63%) |
| Morality frame | 10 (4.67%) | 3 (1.78%) | 0 | 13 (2.69%) |
| Economic/ consequences frame | 38 (17.75%) | 19 (11.30%) | 10 (10%) | 67 (13.90%) |
| Total | 214 (100%) | 168 (100%) | 100 (100%) | 482 (100%) |

*Rounding error; *n=Frequency

Overall the sample consists of 482 stories from the three newspapers where Attribution of Responsibility constituted n=106 (21.99%); Human Interest frame consists of n=264 (54.77%); Conflict frame n=32(6.63%); Economic/ consequences frame n=67 (13.90%) and Morality frame with the least n=13(2.69%). In terms of frequency, *The Assam Tribune* has published the highest number of environmental

stories on Attribution of Responsibility and Economic/ Consequences frame followed by *The Sentinel* and *The Telegraph* with the same number of stories. However, in the Attribution of Responsibility and Conflict frame, *The Sentinel* possesses more number of environmental stories followed by *The Assam Tribune* and *The Telegraph*. In morality frame, *The Assam Tribune* constitutes more number of stories than *The Sentinel* and *The Telegraph* does not have a single environment story that is a morality frame. Journalists mostly use the frames to make the news reports more appealing to the readers. The foremost significant outcome of the above table is that Human Interest stories are mostly covered in the three newspapers. Likewise, Brunken (2006) had similar findings in his study that examines that the morality frame being downplayed by the three newspapers. Dirikx & Gelders (2009) and Brunken (2006) also had a similar findings on morality frame.

Figure 5.7.: Framing of environmental news stories in *The Assam Tribune*, *The Sentinel* and *The Telegraph* in terms of percentage.



In terms of percentage, Figure 5.7. shows that *The Assam Tribune* possess the highest percentage on Attribution of Responsibility frame followed by *The Telegraph* and *The Sentinel*. In both the Human Interest frame and Conflict frame, *The Sentinel* featured the maximum percentage followed by *The Telegraph* and *The Assam Tribune*. In Morality frame, *The Assam Tribune* publishes the maximum number of stories followed by *The Sentinel* and *The Telegraph* with no stories. In terms of the Economic/ Consequences frame, *The Assam Tribune* publishes more stories followed by *The Sentinel* and *The Telegraph*.

5.4. CONCLUSION

The first section in this chapter dealt with the slant of an environment news story that was divided into two sub-parts. The first sub-part was the ideological slant which examined that the three newspapers did not follow the common environmental slant in their newspapers. *The Assam Tribune* provides more environmental news on Pro-environment slant; whereas, *The Sentinel* and *The Telegraph* had provided more stories on Neutral slant. In all three newspapers, the Pro-development environmental story was being downplayed. The second sub-section analyses the types of environmental reporting where all the three newspapers followed the common types of environmental reporting. The majority of the newsmaker presents the story in a pro-active manner which showed that the reporters are engaged and considered important in investigating the event actively followed by the reactive and neutral stories were found the least of all. Therefore, the findings can be determined as indeed one of the positive characteristics of an organization. Overall in the first and second sections, *The Assam Tribune* gains a prominent positivity towards covering the

environmental issues, one reason for this can be that this newspaper has environmental journalist and an activist.

The second section dealt with the framing used in the environmental news stories. The study undertook the theory propounded by Valkenburg and Semetko (2000) generic frames. Overall, it can be concluded with the findings that the nature of the coverage demonstrated by the Human Interest frame was the most prominent one, followed by the Attribution of Responsibility, Economic/ consequences, and Conflict frame. *The Telegraph* did not publish a single-story determining morality frame. Hence, the morality frame gained the least of all the frames with 2.69 percent. According to the findings, it can be said that the newsmakers did not socially construct the concept to the readers in terms of divine or any religious or any religious inferences. But because the Human interest frame was found to be the most dominant frame, it can be said that the newsmakers do not fail to entertain and educate the audiences on human-interest related stories. Thus, the results can be propounded that the selected newspapers mostly presented the story as to empathize, sympathize, and create emotionally appealing stories for its readers.

Chapter: 6

CONCLUSION

Amongst the normative theories of media (Seibert, Peterson & Schramm, 1984), the Indian media has been perceived to adhere to the social responsibility theory (Dutta, 2011). But then, given its dismal role upholding the responsibilities of a fourth estate, nonetheless, the inadequate reportage upon issues critical to national welfare and the well-being of citizens, has severely dismantled its once noble identity. As this research has showcased, the minimalistic weightage that the media provides towards creating awareness in regards to environmental issues is a showcase of its apathy towards its responsibilities. Although print media plays a leading role amongst the media variants, its role in promoting environmental awareness and creating an image on the subject in the mind of the readers is limited. Considering the limited emphasis despite the magnitude of the problem, - the misplaced agendas and contextual inadequacies, unfortunately, showcase tendencies of commercialization, overbearing upon its so-called 'responsible' identity. Furthermore, as the analysis of the coverage of environmental stories has provided various insights, the overall trends that have been deciphered have provided clarity upon their wavering motives.

At present, as environmental problems are increasing with an increase in population, there is an urgent need to preserve the environment for future generations. Accordingly, to capture whether the popular media houses are upholding their responsibility, this study has evaluated the coverage of environmental news in three English dailies of Assam: *The Assam Tribune*, *The Sentinel* and *The Telegraph*, as

earlier mentioned. Using framing analysis and agenda-setting theory concerning the dynamics of coverage, in this concluding chapter, the findings of the research have been organized into overall trends that showcase the urge of the Assam based print media, to uphold their social responsibility.

This study sought to answer the six research questions. These were: i. What is the amount of space given to environmental stories by the newspapers? How do they compare with other type of stories? ii. What are the different environmental issues that the newspapers cover in their daily reportage? And which of these topics are given prominence by the newspapers? iii. How much prominence do environmental news received in the newspapers in terms of their position in different pages, viz., the front page, inside pages, or last page? iv. How much priority do these newspapers attach to state, regional, national and international news on environment? v. What kind of ideological slant is reflected in these newspapers as they cover news on environment? In other words, are the newspaper pro-environment, pro-development or neutral towards environment? Are these stories proactive, reactive or neutral? vi. How does the newspaper frame the environment-related news item in terms of Attribution of Responsibility, Human-Interest, Conflict, Economic or Morality frame?

These research questions have been comprehensively addressed to in the chapters dedicated to the findings, **Chapter 4** is titled “**ANALYSIS OF ENVIRONMENTAL NEWS STORIES: EXTENT AND PRIORITY**” comprises of two sections: Extent (Space and Frequency) and Priority of environmental news stories. As the findings of the first section showed the percentage of environmental

news coverage was extremely low compared to other news items in all three newspapers, This study also showed that amongst the three newspapers, *The Assam Tribune* provided maximum space in the coverage of environmental news items followed by *The Sentinel* and *The Telegraph*. Similarly, in terms of frequency, *The Assam Tribune* carried the highest number of stories on the environmental issues followed by *The Sentinel* and *The Telegraph*. Thus the findings of this section reveal that the percentage in terms of space provided in the three newspapers to environmental news items was very low compared to other news stories.

More than politics, crime, entertainment, sports and advertisement, the news items related to environmental issues were not given priority in all the newspapers. But then, the coverage of the environmental news in the three selected newspapers was somewhat not adequate as they needed to increase the space allotment to environmental items and hence they need to be prioritized by all the newspapers. *The Assam Tribune* had been somewhat fair in reporting the environment stories comparing to the other two newspapers, whereas, *The Sentinel* and *The Telegraph* failed to make its impression to their readers. Therefore, by giving extensive coverage on environmental stories, it will be able to create awareness, generate interest towards the issues on environment.

The second section dealt with the priority given to environmental news stories and was divided into three sub-sections - Environmental topics, Placement and Geographical priority of environmental news items. According to the analysis of the first sub-section Environmental topics, the result showed that *The Assam Tribune*, *The*

Sentinel and *The Telegraph* were most interested in the same environmental issue. The subjects were categorized into 17 relevant environmental topics, that paid more attention to 'Natural Hazard' stories than any other environmental topics. Thus, the results indicated that the natural hazard issues these days were highly covered by the press and the media had to report what is going on in society (McCall., 1992). Subsequently, Natural Hazard as a whole was vast so in this study, it was categorized into seven sub-topics that included flood, landslide, cyclone, erosion, storm, earthquake and others. As Assam is a prone area to flood, it was mostly covered by all the newspapers and therefore the findings reflected the attention of these issues was a major concern of the state or a nation. Besides, the results also showed that the environmental topic on 'Environmental sustainability' and 'Agriculture' was rated as the second and third most important issue in the selected newspapers. The results also showed that the marine life conservation topic was the least reported story.

The front page in the newspaper is the most important page of the newspapers which attracts the reader's attention. The second sub-section of priority dealt with the placement analysis of the environmental stories in terms of frequency and percentage showed that all the newspapers had published their stories on the inside pages followed by the front page and back page as completely ignorable. Thus the study revealed that all three newspapers consist of a similar approach in the placement of the environmental news stories. Similarly, Marukatat (1991) in his study concluded with similar findings. Thus, the researcher observes that all the newspapers had a similar approach to the placement of environmental stories. The preference of the environmental news in all the newspapers is in the inside page which implies that environmental issues are not so worthy enough to be placed on front page.

Another observation of this research was the geographical focus of environmental news stories in *The Assam Tribune*, *The Sentinel*, and *The Telegraph*. In terms of geographical factors, all the newspapers had the highest coverage on state issues. It was evident because all the newspapers were published from the same state and had a large circulation in the state. So it is obvious that all the newspapers focused mostly on state events. However, the national issues were second most frequent followed by northeast and international stories in all the newspapers. It is interesting to note that *The Telegraph* being the national newspaper published more stories on northeast based environmental stories – even more than *The Sentinel* and *The Assam Tribune*. Thus, this study revealed that all three newspapers concentrated mostly on state events and giving international stories the least importance. Readers mostly seek the news stories that happened in an around their region (Marukatat, 2011) which helps the readers to connect with the event emotionally and thus build awareness.

Chapter 5 titled “**ANALYSIS OF ENVIRONMENTAL NEWS STORIES: SLANT AND FRAMING**” comprises two sections: Slant and Framing of environmental stories. The first section of this chapter revealed the findings that the three newspapers do not follow the common slant. *The Assam Tribune* had given the maximum coverage to the Pro-environment slant whereas, *The Sentinel* and *The Telegraph* had provided more stories on the Neutral slant. Besides, the development stories of the environment were the most underrepresented ones in all those newspapers under observation. Therefore, the results itself indicated that the newspapers neglected the development stories if not ignored. The findings suggest that to create awareness among the readers the organizations must publish more stories on having a pro-environment slant. However, the type of environment

reporting showed that all three newspapers followed the pro-active kind of environmental reporting.

The second section dealt with the framing of environmental stories. The Human Interest frame was the most prominent frame found in this study in all the newspapers. This frame showed how the reporter used the words to express feelings of outrage, empathy, caring, compassion and sympathy towards the event. Kyriakidou (2011:309-310) in his study showed how those words could influence the feelings of members of the public. The newspapers had presented how the individuals were affected by the problem and they had provided more with human examples. However, the responsibility of the government to solve environmental issues had gained the second most prominent frame used in the environmental stories. The compensation, providing aids, financial gains or losses, and economic kind of framing that particularly dealt with the economic / consequences frame was found to be the third. The fourth frame; found to be the dominant one, was the conflict frame which revealed that the newspapers do not mostly cover the negativity towards the environment. The least used frame in the stories was the morality frame which other studies have also shown (Dirikx and Gelders, 2009:138). *The Assam Tribune and The Sentinel* had framed the story related to ‘morality’ terms, *The Telegraph* did not possess a single story. As the findings of the present study showed that the reporters mostly used the human interest frame which leaves no doubt that the framing initiatives sometimes present a positive perception of the readers’ actions, the findings are intriguing as in several other inquiries such as Semetko & Valkenburg (2000) as well as Foori (2015) found that attribution to responsibility was the most prominent frame whereas, in the context of Assam, India, this present study contradicts the

western scholars by assigning the Human interest frame as the most dominant frame in all the newspapers.

Overall Findings and Trends

In this study, the findings considerably indicate the trend that the coverage of environmental news was not adequate in these newspapers. Although *The Assam Tribune* compared to *The Sentinel* and *The Telegraph* provided more space to environmental news, but the total space devoted to the environmental news was very low in these newspapers. In terms of Extent, priority (environmental topics, placement, and geographical priority) and nature (Ideological slant, types of reporting and framing), *The Assam Tribune* had provided a significant representation to the environmental stories.

Moreover in terms of priority, it was concluded that the top 10 most prominent environmental topics of the three newspapers were different. It was found that some important environmental topics such as Disaster management, Wildlife conservation, and Pollution issues did not gain much importance in those newspapers. Therefore, the findings of the study indicated that the issues related to environmental issues were needed to be more exposed to educate the public. In terms of placement of the environmental news stories, it was shown that these newspapers mostly allotted the majority of their stories on the inside page. The front page is determined as the most important part of the newspapers. But in this study, only a few stories were allocated on the front page of the selected newspapers. The findings of placement also revealed

that the issues on the environment were not an important issue to be highlighted. Thus, we can conclude that these newspapers do not consider the environmental items as prominent; therefore less coverage was allocated on the front page. However, in terms of geographical priority, it revealed that the prominence of the newspaper edition affects the environment stories. Therefore, the findings of geographical priority were that the newspapers paid more attention to environmental stories at the state level (i.e. Assam) followed by the national level and providing less space to international and northeast stories.

Nevertheless, in terms of the Ideological Slant, the analysis investigates that the slant of the newspaper followed by the newspapers is different. As the findings suggest that the Pro development stories must be reported frequently to create awareness about the development in the environment. upon further analysis investigating the various types of reporting, greater proactive stories were the most dominant in all the newspapers. There was not much difference in the percentage of proactive, reactive, and neutral though. To make readers aware and educate, the newspapers mostly reported reactive rather than proactive stories.

The study indicated that environmental news stories published in all three newspapers framed more of Human Interest stories than Attribution of Responsibility frame stories. The news reporter framed the environmental stories mostly to connect with the readers, that determines the positive attitude towards the readers.

In light of the above findings, it may be concluded that the highest circulated English print media in Assam and northeast India reflects that the environmental news needs to be reported and addressed more frequently in their newspapers.

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