



Open Access

QLANTIC
 JOURNAL OF
 SOCIAL SCIENCES

Reporting Climate Change: Factors Affecting Media Coverage of Climate Change in Pakistan

Saima Khan¹ Muhammad Jawed Aslam² Aasima Safdar³ Muhammad Tariq⁴

Abstract: Climate change is posing challenges to every nation. Its effects are already being witnessed in different parts of the world. Extreme weather conditions and other climate-related disasters have forced world leaders to look for possible solutions. Media is of great assistance in this regard. It can not only highlight the issue but create awareness among people. Among the nations most at risk from global warming, Pakistan comes in at 8th position. However, its media has been witnessed to be ignorant towards the crucial issue. Therefore, this study focuses on the factors affecting Pakistani media coverage of climate change. A qualitative approach was used in the form of interviews from a defined sample of the population comprising ten climate journalists in Pakistan. The findings of the study suggest that agenda setting, economic interest, political inclination, corporate interest and media policy are among the top factors that influence the reporting of climate change in Pakistan's mainstream media.

Key Words: Climate Change, Media coverage, Factors, Media Policy, Agenda Setting

Introduction

Climate change poses a global danger because its causes and effects transcend national boundaries and involve several stakeholders (Anderson, [2009](#)).

Climate change is referred to as "global warming that is explicitly or implicitly, primarily due to human behaviour, distorts the characteristics of the atmosphere and keeps adding to the climate variability discovered over time frames,". Similarly, as stated in the United Nations Framework Convention on Climate Change, long-term, persistent changes in the temperature and weather patterns that have a detrimental impact on human existence are referred to as climate change. In contemporary society, the most frequently discussed topic is climate change (Ahmed, [2022](#)).

A number of factors affect how Pakistani media reports on climate change. Journalists cited financial and professional constraints as the causes of the media's lack of interest in issues related to climate change. They stated that the news selection criteria were not met by Climate News since it frequently lacked drama, excitement, and political ramifications. Furthermore, it was simpler for media outlets to report political news that drew bigger viewers due to their financial difficulties. Nonetheless, a few journalists demanded modifications to the current political conversation and stressed the necessity for the media to take on a more socially conscious role in drawing attention towards Pakistan's climate emergency (Sharif & Medvecky, [2018](#)).

¹ M.Phil., Department of Mass Communication, Lahore College for Women University, Lahore, Punjab, Pakistan. Email: saimaakhan242@gmail.com

² Associate Professor, School of Media and Communication Studies, University of Management & Technology, Lahore, Punjab, Pakistan. Email: jawed.aslam@umt.edu.pk

³ Assistant Professor, Institute of Media and Communication Studies, Bahauddin Zakariya University, Multan, Punjab, Pakistan. Email: aasimasafdar@bzu.edu.pk

⁴ PhD Scholar, Institute of Media and Communication Studies, Bahauddin Zakariya University, Multan, Punjab, Pakistan.

▪ **Corresponding Author:** Muhammad Tariq (xpertyz@gmail.com)

▪ **To Cite:** Khan, S., Aslam, M. J., Safdar, A., & Tariq, M. (2024). Reporting Climate Change: Factors Affecting Media Coverage of Climate Change in Pakistan. *Qlantic Journal of Social Sciences*, 5(2), 159-168.

<https://doi.org/10.55737/qjss.319795411>



Although Pakistan's national emissions account for just 0.46% of world emissions, the country is very susceptible to the consequences of global emissions, including catastrophes, floods, droughts, increasing temperatures, cyclones, and rising sea levels (Zaheer & Colom, [2013](#)).

Reducing gas emissions is not the only solution to climate change; societal stability and human dignity are also important. It concerns how we protect the weakest and most vulnerable among us, how we live and support ourselves, how we discuss difficult subjects in a way that doesn't result in further injustice, and how we accept the duty that is placed upon us (Ghani & Muhammad, [2017](#)).

The major opinions on climate change are shaped in part by the media, including radio, television, newspapers, the internet, and social media. The media is a powerful tool for educating the public and the government about the need to preserve and safeguard climate change-related natural resources. Sustainable global development can only be realized by protecting the environment and using natural resources wisely. The sustainability of the earth's ecology is what really keeps our planet stable and livable (Kheeshadeh, [2012](#)).

The last 20 years have seen an exponential increase in the amount of media scholarship on climate change, with a primary focus on media coverage of national and international issues in the form of cross-sectional, national case studies, comparative studies, and longitudinal studies conducted globally and in various news environments, including print, electronic, and online media (Hansen, [2010](#)).

The current understanding of climate change usually concentrates on environmental alterations brought about by human activity within ecosystems. One of the most serious environmental problems that civilization has ever faced is climate change. The issue wasn't made public until the 1980s, despite the fact that it has been there for generations. Since then, environmentalists have expressed serious concerns about the effects of human meddling in climate change, arguing that these implications pose serious risks to social, political, and commercial systems (Ahmed, [2022](#)). UN Secretary-General António Guterres warned the world, "Climate change is moving much faster than we are, and humans risk witnessing permanent harm that would be catastrophic if we wouldn't act very rapidly" (Guterres, [2018](#)).

Climate change is having unintended impacts on communities, food crops, freshwater resources, and energy supplies. Despite the lower greenhouse gas emissions of developing countries compared to industrialized ones, their vulnerability is much higher owing to their dependence on climate-sensitive sectors such as agriculture and water. Pakistan ranks sixth in terms of vulnerability to climate change and has several traits that are similar to those of other developing nations (Jan, Khan, & Mahsud, [2020](#)).

Pakistan has a comprehensive Ministry of Climate Change, and its National Climate Change Policy was established in 2012. On the other side, one of the main barriers to the implementation of these initiatives and governmental responses is a lack of environmental knowledge and understanding. People are empowered and motivated by literacy and climate consciousness to identify the problem, take action, and cooperate to find a solution (Ahmed, [2022](#)).

Print, electronic, and digital media in Pakistan are all viable information sources for a diverse readership. The most popular electronic medium for entertainment and information is television. It may be further subdivided into "terrestrial channels" (such as the state-owned Pakistan Television Corporation), "satellite channels" (such as Al-Jazeera, CNN, Fox, and BBC), and "cable channels" (such as Dawn, ARY, Express, Geo Dunya, and Sama TV) (Ricchiardi, [2012](#)).

Next comes the radio. The usage of radio is made easier by Pakistan's cellular networks' explosive expansion. Although there are 162 commercial radio stations, some of the more trustworthy sources of news and information are the state-owned Voice of America and BBC Urdu radio networks. There are 279 monthly magazines, 139 weekly publications, and 252 daily newspapers that makeup Pakistan's print media landscape. In terms of circulation, Dawn, Nawai-Waqt, Jang, and Express Tribune lead the print media market (Ricchiardi, [2012](#)).

Pakistan's involvement in media and climate change research is almost non-existent, in stark contrast to the extensive worldwide research on the topic, which includes viewpoints from Asian countries such as India, Bangladesh, Nepal, Sri Lanka, and others (Kim, [2011](#)).

There is limited work done in this area. According to a study, Pakistani print media's coverage of climate change problems is limited and insufficient (Boykoff, [2011](#)).

In contrast to Pakistani English news, it was found that Pakistani Urdu news media rarely covered climate change-related topics. A quantitative analysis of climate change coverage by electronic news media conducted by the National Council of Environment Journalists (NCEJ) provides more convincing findings that 2.8% of all news coverage is devoted to environmental news (TNN, 30th June 2014).

Pakistani journalists blame professional and commercial concerns, such as the necessity to report on noteworthy events and budgetary restraints, for the lack of interest in the climate change crisis among the media. Due to its apparent lack of drama, sensationalism, and direct political ramifications—all factors that go into choosing news—climate news is frequently disregarded. Journalists propose two solutions to this problem: modifying the current political dialogue on climate change and promoting the media's adoption of a more socially conscious role in emphasizing the gravity of the situation in Pakistan (Hussain, Khan, & Iqbal, [2022](#)).

Climate change is already having an impact on both human and natural systems, say researchers. Rising temperatures, changing precipitation patterns, and more frequent severe weather events are all consequences of climate change, which in turn threatens food and livelihood security, degrades the land, and drives more people to seek refuge elsewhere (Keeley & Scoones, [2014](#)).

People around the world view and experience the effects of climate change in different ways. Many studies have been conducted regarding the effects of climate change, but few have examined people's varied perspectives and experiences (Ayeb-Karlsson, Geest, Ahmed, Huq, & Warner, [2016](#)).

Pakistan was the fifth most impacted nation in the world by severe weather events between 1999 and 2018 (Eckstein, Künzel, Schäfer, & Wings, [2020](#)). Because agriculture accounts for a significant amount of Pakistan's economy, any changes in the country's temperature, water supply, or monsoon patterns might have a severe impact on the lives of millions. The nation already has significant issues in poverty and food security, which are exacerbated by the consequences of climate change and harsh weather. Between 1998 and 2018, Pakistan saw 152 episodes of severe weather, resulting in 9989 deaths and \$3.8 billion in economic damages (Abubakar, [2020](#)).

In comparison to the majority of other countries, the media in Pakistan does not discuss climate change nearly as regularly or as frequently. In addition, the vast bulk of the study that has been conducted on the manner in which the Pakistani media covers topics related to climate change is quantitative in nature and focuses mostly on print media. There is also very little or no academic empirical research on electronic or online media, and there is no qualitative analysis that sheds light on the reasons why Pakistani media may be falling behind the majority of the rest of the world in terms of reporting topics related to climate change (Sharif & Medvecky, [2018](#)).

Numerous studies show that the media's coverage of climate change is reduced as a result of the political and financial clout of fuel lobbyists, multinational corporations, and state apparatus (Djerf-Pierre, [2012](#)). The political-economic approach contends that the media functions under certain regulations and standards (such as formal state control or privatized systems) and is reliant on advertising income or government subsidies to remain in operation. As a result, it supports the goals of those with financial and political power to shape the form and content of news (Cox, [2013](#)).

According to a study, the media ought to launch more campaigns and special sections to raise public awareness of climate change. An examination of the editorial content of Pakistani print newspapers revealed that while agriculture and food security received less attention, water scarcity was heavily covered. Economic, Political, cultural, social, technological, and scientific factors were blamed for the news media's limited coverage of climate change (Javed, Basit, & Hussain, [2020](#)).

Research Objectives

This study focuses on the following research objectives;

1. To understand the level of media coverage of climate change in Pakistan
2. The Factors Affecting Climate Change Coverage in Pakistan



Research Questions

Does climate change get equal coverage as other issues in Pakistan's mainstream media?
What are the factors involved in climate change coverage in Pakistan's mainstream media?

Literature review

Climate change is a very significant phenomenon that has been scientifically proven. It is worldwide in scope and has an impact on all living and nonliving things on Earth. It has a trans-border quality since it disregards national political boundaries and has significant ramifications for both developed and poor countries. However, compared to creative and developed nations, the suffering of countries with lower resilience and coping capacity to adapt and alleviate the impacts of climate change is greater (Khan & Khan, 2016).

A climate-related calamity struck 10% of Pakistan's territory in the summer of 2022, displacing 7.9 million people, destroying 1.7 million homes, killing over 1,700 people and thousands of animals, and causing an estimated \$10–40 billion in damage (Wyns, 2022).

During this time, Pakistan saw 243% more rainfall overall than typical. These tragic occurrences received substantial coverage in both Pakistani and foreign media (Kamboh, Ittefaq, & Yousuf, 2022). Human misery, severe floods brought on by greenhouse gas emissions, and climate justice concerns accounted for the majority of media coverage (Reed & Bokhari, 2022).

In a similar vein, another study examined ten years' worth of climate change coverage in Pakistan's three biggest English-language newspapers. The study, which uses a computational content analysis approach, discovered that there are six themes that emerge from Pakistani media coverage of climate change: climate politics, climate science, climate solutions, climate change and society, climate governance and policy, and consequences. Furthermore, from 2010 to 2021, Pakistan's press coverage of climate change expanded significantly overall (Ejaz, Ittefaq, & Arif, 2022).

The way that climate change has been framed in the news media has significantly influenced how the public views it. The subject of climate change mitigation is often emphasized through the use of credible sources to convey to their audiences the evolving ideas about climate change. The public learns about climate change from media sources rather than from personal experience, which shapes their opinions (Chen, Seiner, Suzuki, & (Eds), 2012).

People frequently learn about this delicate and inconspicuous topic through the news media. News can, therefore, affect public concern about climate change by drawing more attention to it in the media (Newman, Fletcher, Schulz, Andl, & Nielsen, 2020).

However, his impact varies greatly across nations (Bathiany, Dakos, Scheffer, & Lenton, 2018). As a result, national and international viewpoints on what causes climate change, who is impacted, and how it might be addressed are included in the coverage of the problem (Konieczna, Mattis, Tsai, Liang, & Dunwoody, 2014). For example, different national obligations on climate-related laws, activities, or vulnerabilities may affect how much attention and coverage climate change receives (Vu, Y, & Tran, 2019).

The news media is a key platform for spreading awareness of climate change (Carvalho, 2010). Issues compete for this finite resource, and issue attention, defined as “the amount of attention given to one issue in relation to the amount of attention given to other issues at the same time”, is the result, making it an “indicator for social problem construction” (Schmidt, Ivanova, & Schäfer, 2013).

The way the media converges on the topic of climate change has altered. More than ten years of research, according to some studies, have only looked at the patterns of how climate change affects the atmosphere; however, media consumers and newspaper readers are no longer as interested in learning about it, despite the fact that the public lacks a basic understanding of the science underlying the 99% consensus among climate scientists (Manzoor & Ali, 2021).

Another study revealed that the framing and substance of US mass media coverage of climate change are impacted by journalistic norms and principles (BoykoV & BoykoV, 2007).

In 2017, there was a variation in the amount of global media attention dedicated to climate change and global warming, with June seeing the highest level of coverage. The surge in popularity is mostly attributed to the announcement of US President Donald J. Trump's withdrawal from the 2015 United Nations (UN) Paris Climate Agreement. In addition, the media has persistently emphasized the increasing isolation of the United States after the G7 conference that took place a few weeks later (Boykoff, et al., 2007).

The powerful fourth estate can organize the public for a cause by posing pertinent questions. In the era of abundant knowledge, the power of the media is growing dramatically. As the public is the media's audience, it informs the masses and poses questions, so creating an "epistemic community." As a result, the media can spur global action to combat climate change. The ability of the media to influence governmental and institutional decisions has been demonstrated and recognized (Manzoor & Ali, 2021).

The Times frequently discussed the greenhouse warming mechanism in the 1980s, when the idea of global warming was still relatively new to many readers. In certain years, this reference was made in every piece. Despite a whole new generation of readers, this mechanism is still rarely discussed, even after 30 years. People who research public opinion on climate change today claim that the scientific consensus is a gateway belief, something the public does not want to know about. They discover that if you can make people aware of that information, it kind of opens doors for them to learn more and possibly even change their beliefs (Sanders, 2019).

In 2017, the Media and Climate Change Observatory published a report indicating that the media's focus on climate change has grown dramatically and is receiving the most media coverage (Khan M. A., Khan, Ali, Ahmad, & Ahmad, 2016).

There has been a shift in the manner in which the media converges on the subject of climate change. More than ten years of research have only looked at the patterns of how climate change affects the atmosphere, according to some studies; however, consumers of media and readers of newspapers are no longer as interested in learning about it. This is despite the fact that the general public does not have a fundamental understanding of the science that underpins the 99% consensus among climate scientists (Manzoor & Ali, 2021).

The importance of environmental and climate change news is acknowledged by the media. In particular, there has been a lot of interest in and work to increase public awareness of the climate issues surrounding scientists' communications about climates and policymakers' remarks and recommendations through the mass media (Kakade, Hiremath, & Raut, 2013).

A related study found that of the editorial framing in all four leading newspapers in Pakistan, 60% took a suggestive attitude, 35% took a critical stance, and only 5% took an appreciative stance. Therefore, it was observed that climate change themes were covered more suggestively by the mainstream Pakistani news. Overall, the study found that Nawa-i-Waqt, the mainstream Pakistani newspaper, covered climate change more extensively and that the framing of the topic was very suggestive and helpful toward a solution. This study also noted that mainstream English and Urdu newspapers in Pakistan covered and framed climate change in line with their newspaper principles (Javed, Basit, & Hussain, 2020).

Natural disasters and environmental change are generally ignored in Pakistan, as is the gravity of the issues. It appears that the mainstream media is uninterested in covering climate issues thoroughly and persistently (Muzamill, 2012). The public can be informed and educated about climate change and its various effects through the media. Being aware of changes in the environment can help people live healthy, fulfilling lives (Naeem, 2013).

Newspaper research has pinpointed the precise ways in which newspapers shape public perceptions of climate change. According to studies, newspapers present climate change as a geopolitical issue requiring international cooperation, frame it as a pressing issue requiring immediate attention, and highlight controversial issues like climate compensation and mitigation funds. They also highlight India's role in mitigation efforts (Zafar, 2023).

After reviewing the literature of the study, it has been revealed that climate change is a critical issue the world is going through. Press and media can contribute to minimising its effects by creating awareness



among people and convincing governments to observe caution while meddling with nature. Literature also reveals that Pakistani media lags behind while addressing climate change and its consequences. Therefore, the current study investigates the factors that affect the coverage of climate issues by Pakistani media.

Methodology

Under the theoretical realm of agenda-setting and framing theory, this study uses qualitative research methods to collect relevant data. Interviews of 10 climate journalists were conducted using a purposive sampling technique. Collected data later have been analyzed on the basis of defined categories and sub-categories.

Table

Themes	Sub-themes
Level of coverage	Frequency Nature (positive, negative, balanced, cause and effect)
Media agenda	Agenda setting Level of significance Creating awareness Getting revenue
Economic factors	Corporate media Cross-media ownership Increased Viewership Engaging content
Political factors	Image building Political agenda Media censorship
Media policy	Newsworthiness Corporate interest Dramatization and sensationalism Maximum viewership

Results and Analysis

After transcribing data collected from interviews, results and analysis have been given as follows;

Level of Coverage

A number of factors affect how Pakistani media report on climate change. Journalists cited financial and professional constraints as the causes of the media's lack of interest in issues related to climate change. They stated that the news selection criteria were not met by Climate News since it frequently lacked drama, excitement, and political ramifications (Sharif & Medvecky, 2018). In this case, journalists also opined that Pakistani media is not frequent in climate reporting. They believed that English print media is comparatively more frequent when covering climate change than Urdu press. Additionally, the nature of climate reporting is more of an effect than a cause. In most cases, floods, earthquakes and heatwaves are simply reported as natural catastrophes without mentioning the cause, i.e. climate change. Journalists also related that news media coverage is mostly concerned with political issues, minimizing the scope of climate change in reporting. When asked by the reporters and journalists, they stated that since climate-related issues are not dramatized or sensationalized, they get limited consumers. It means to get more viewership, and such content is replaced with more sensational content, such as political news. Additionally, local issues get more attention than climate change. On the other hand, Pakistan has long struggled with security issues and political unrest. Therefore, such issues get more coverage by the country's media.

Agenda Setting

Media choices and agenda setting play a significant part in deciding the most important issues in media coverage. Journalists opined that Pakistani media is more concerned about localized issues such as politics and security. Climate change is often ignored in media agenda-setting. They believed that it is important to observe that the media agenda is highly based on increased viewership and more profit. Thus, among all events, the media selects topics that are more likely to attract the maximum number of consumers. Media can prioritize climate change by using its power of agenda setting. Moreover, framing climate change has the power to shape public perceptions and understanding by emphasizing or downplaying its importance (Waleed, 2024). In Pakistan, public opinion of climate change can be influenced by media narratives, which can portray it as an immediate threat or a distant issue that needs to be addressed. Most of the interview participants suggested that Pakistani media, particularly electronic media, downplay climate change despite the country's apparent vulnerability to its effects. They observed that Pakistani media covers natural disasters such as floods, earthquakes, heat waves, and food insecurity when certain tragedies take place. Such coverage by the media often lacks awareness about climate change, and when the calamity is already over, the media ignores the coverage of climate change. Thus, journalists suggest that the media should include climate change as part of its regular coverage without waiting for the consequences to take place.

Economic Factors

Pakistan's media landscape has largely transformed into a corporate and private nature. Different media groups have become profit-oriented. In such circumstances, media attention is focused on those issues that bring increased rating points. Participants of the study believed that climate-related news/content is given limited coverage due to the media practitioners' interest in it being less. Privatization of media has facilitated free speech, though media does not seem to be using this opportunity freely. Media owners are more interested in economic gains than promoting topics of general interest. Since climate change-related news does not get the media more rating points or financial benefits, such content faces ignorance at the hands of the media. Another significant factor involved is cross-media ownership. One of the most apparent drawbacks in this case is a lack of awareness about the choice of content. Topics of public good are ignored. Such type of media ownership has turned into businesses with large financial benefits for the owners. Thus, participants suggested that economic benefit has become the key agenda of all types of media ownership. Public service messages are not given space and time, leaving important issues such as climate change underreported or unreported.

Political Factors

Considering that the media is often controlled by political and economic elites, it is possible that climate change concerns will be underreported or misrepresented in order to serve the interests of the powerful rather than the requirements of the vulnerable communities that are most impacted by climate change. It is essential, however, for effective climate reporting that the injustices associated with climate change be brought to light. Journalists opined that Pakistani media is highly influenced by political agendas and serves the political elite by reporting those issues that are helpful in image building. Climate-related issues lack political motivation. Everybody knows that Pakistan is often hit by extreme weather conditions, and millions of people are affected. However, very little knowledge is disseminated through the media about the actual cause. Participants of the interviews observed that Pakistani mainstream media is overwhelmed by high political content. Recent political unrest has added to the situation by assigning more space and time to political coverage. Polarized political content is the prevailing media in Pakistan. Apart from this, climate coverage also seems to be politically motivated. Different political views and policies are promoted, undermining a collective and effective solution to the situation. Media censorship is also important in this regard. There are different politically motivated development projects that get media boosts for the sake of image building of the political elite, which undermines climate effects. The way that climate change has been framed in the news media has significantly influenced how the public views it. The subject of climate change mitigation is often emphasized through the use of credible sources to convey to their audiences the



evolving ideas about climate change. The public learns about climate change from media sources rather than from personal experience, which shapes their opinions (Chen, Seiner, Suzuki, & (Eds), 2012).

Media Policy

Good news about conservation initiatives, renewable energy, and community resiliency can motivate people to take action and promote sustainable lives. On the other hand, drawing attention to the negative effects of inactivity might spur calls for environmental preservation and legislative changes. Although the media has been working hard to spread this message to the people worldwide, both locally and globally, news pieces, editorials, and media reports present this subject in a way that is predetermined by their own policies. More than ten years of research, according to some studies, have only looked at the patterns of how climate change affects the atmosphere; however, media consumers and newspaper readers are no longer as interested in learning about it, despite the fact that the public lacks a basic understanding of the science underlying the 99% consensus among climate scientists (Manzoor & Ali, 2021). Journalists observed that media choices are based on agenda setting and framing to shape public views about climate change. The media needs to shift its policy toward the public good.

Conclusion

Sensitizing the public and policymakers, developing leaders who are cognizant of climate change, and forming well-informed decision-making processes can all be greatly enhanced by effective reporting. Here, the media can be quite useful. First, the media acts as a conduit between the general public and scientific communities. The findings of the study suggest that the media's role in reporting climate-related issues is effective. However, the Pakistani media landscape is defined in such a way that gives insufficient coverage of climate change. There are certain factors that play a pivotal role in incorporating climate change into media coverage. Such factors may include a level of coverage, i.e., frequency, agenda setting and framing. Economic and political factors also influence such coverage. Media policies, while determining the nature of media content, are also crucial. Journalists may educate the public and decision-makers about the effects of climate change by covering these issues and providing study results and expert commentary. In order to promote a sense of urgency and accountability for implementing sustainable practices and endorsing climate policy, this understanding is essential. The public can be informed and educated about climate change and its various effects through the media. Being aware of changes in the environment can help people live healthy, fulfilling lives (Naeem, 2013).

References

- Abubakar, S. M. (2020). *Pakistan 5th most vulnerable country to climate change, reveals Germanwatch report*. DAWN News. <https://www.dawn.com/news/1520402>
- Ahmed, K. (2022). Role of Media Creating Awareness with respect to Climate Change. *Pakistan Journal of Humanities and Social Sciences*, 10(1), 77–88. <https://doi.org/10.52131/pjhss.2022.1001.0176>
- Anderson, A. (2009). Media, politics and climate change: Towards a new research agenda. *Sociology Compass*, 3(2), 166–182. <https://doi.org/10.1111/j.1751-9020.2008.00188.x>
- Ayeb-Karlsson, S., Van der Geest, K., Ahmed, I., Huq, S., & Warner, K. (2016). A people-centred perspective on climate change, environmental stress, and livelihood resilience in Bangladesh. *Sustainability Science*, 11(4), 679–694. <https://doi.org/10.1007/s11625-016-0379-z>
- Bathiany, S., Dakos, V., Scheffer, M., & Lenton, T. M. (2018). Climate models predict increasing temperature variability in poor countries. *Science Advances*, 4(5). <https://doi.org/10.1126/sciadv.aar5809>
- Boykoff, M. T. (2011). *Who speaks for the climate? Making sense of media reporting on climate change*. Cambridge, U.K: Cambridge University Press.
- Boykoff, M., Andrews, K., Daly, M., Katzung, J., Luedecke, G., & Maldonado, C. (2017). A Review of Media Coverage of Climate Change and Global Warming in 2017. *Media and Climate Change Observatory, Center for Colorado: "A Review of Media Coverage of Climate Cha Media and Climate Change Observatory, Cooperative Institute for Research in Environmental Sciences, University of Colorado*.
- Boykoff, M. T., & Boykoff, J. M. (2007). Climate change and journalistic norms: A case-study of US mass-media coverage. *Geoforum*, 38(6), 1190–1204. <https://doi.org/10.1016/j.geoforum.2007.01.008>

- Carvalho, A. (2010). Media(ted)discourses and climate change: A focus on political subjectivity and (dis)engagement. *WIREs Climate Change*, 1(2), 172-179. <https://doi.org/10.1002/wcc.13>
- Chen, W. Y., Seiner, J., Suzuki, T., & (Eds), M. L. (2012). *Handbook of climate change mitigation*. Springer.
- Cox, R. J. (2013). *Environmental Communication and the public sphere*. 3rd ed. Thousand Oaks, CA, U.S.A: SAGE Publications.
- Djerf-Pierre, M. (2012). When attention drives attention: Issue dynamics in environmental news reporting over five decades. *European Journal of Communication*, 27(3), 291-304. <https://doi.org/10.1177/0267323112450820>
- Eckstein, D., Künzel, V., Schäfer, L., & Wings, M. (2020). *Global Climate Risk Index 2020*. Germanwatch. <https://www.germanwatch.org/en/17307>
- Ejaz, W., Ittefaq, M., & Arif, M. (2021). Understanding influences, misinformation, and fact-checking concerning climate-change journalism in Pakistan. *Journalism Practice*, 16(2-3), 404-424. <https://doi.org/10.1080/17512786.2021.1972029>
- Ghani, A., & Muhammad, A. (2017). Climate Change Implications for Food Security; Pakistan Perspective. *Agricultural Research & Technology Open Access Journal*, 7(4), 104-106. <https://doi.org/10.19080/ARTOAJ.2017.07.555716>.
- Guterres, A. (2018). *Remarks on climate change*. <https://www.un.org/sg/en/content/sg/speeches/2018-09-10/remarks-climatechange>
- Hansen, A. (2010). *Environment, media and communication*. London and New York: Routledge.
- Hussain, S., Khan, A., & Zubair Iqbal, M. (2022). Media reporting of climate change crisis in Pakistan: Identifying corrective strategies. *Information Development*, 40(1), 158-169. <https://doi.org/10.1177/02666669221104612>
- Jan, A., Khan, T. A., & Mahsud, M. I. (2020). The climate Change awareness and literacy in Pakistan: role of media and social actors. *Liberal Arts & Social Sciences International Journal*, 4(2), 256-266. <https://doi.org/10.47264/idea.lassij/4.2.20>
- Javed, M. N., Basit, A., & Hussain, T. (2020). Climate change in the mainstream Pakistani press: Coverage and framing trends. *Global Political Review*, V(I), 192-204. [https://doi.org/10.31703/gpr.2020\(v-i\).22](https://doi.org/10.31703/gpr.2020(v-i).22)
- Kakade, O., Hiremath, S., & Raut, N. (2013). Role of Media in Creating Awareness about Climate Change- A Case Study of Bijapur City. *IOSR Journal of Humanities and Social Science (IOSR-JHSS)*, 10(1), 37-43. <https://doi.org/10.9790/0837-01013743>
- Kamboh, A. S., Ittefaq, M., & Yousuf, M. (2022). Editorial Journalism and Environmental Issues in the Majority World. *International Journal of Communication*, 16, 23.
- Keeley, J., & Scoones, I. (2014). *Understanding environmental policy processes: cases from Africa*. Earthscan from Routledge. New York: Routledge.
- Khan, M. A., Khan, J. A., Ali, Z., Ahmad, I., & Ahmad, M. N. (2016). The challenge of climate change and policy response in Pakistan. *Environmental Earth Sciences*, 75(5). <https://doi.org/10.1007/s12665-015-5127-7>
- Khan, S., & Khan, R. M. (2016). Role of media in tackling climate change issue- a case stud of Pakistan. *Margalla Papers*, 184-199. <https://www.prdb.pk/article/role-of-media-in-tackling-climate-change-issue-a-case-st-9591>
- Kheeshadeh, M. (2012). Effects of globalization on Tv and print media in Pakistan. *International Journal of Asian Social Science*, 2(9), 1441-1456.
- Kim, S. Y. (2011). Public perceptions of climate change and support for climate policies in Asia: Evidence from recent polls. *The Journal of Asian Studies*, 70(2), 319-331. <https://doi.org/10.1017/s0021911811000064>
- Konieczna, M., Mattis, K., Tsai, J., Liang, X., & Dunwoody, S. (2014). Global Journalism in Decision-Making Moments: A case study of Canadian and American television coverage of the 2009 United Nations Framework Convention on Climate Change in Copenhagen. *Environmental Communication*, 8(4), 489-507. <https://doi.org/10.1080/17524032.2014.909509>
- Manzoor, S., & Ali, A. (2021). Media and climate change in Pakistan: Perception of the journalists in mainstream media. *Journal of South Asian Studies*, 9(2), 133-141. <https://doi.org/10.33687/jsas.009.02.3786>



- Manzoor, S., & Ali, A. (2021). Media and Climate Change in Pakistan: Perception of the Journalists in Mianstream Media . *Annals of Social Sciences and Perspective*, 2(2), 145-155. <https://doi.org/10.52700/assap.v2i2.82>
- Muzamill, A. (2012). A Comparative Study of Natural Disasters News Coverage in Pakistan by Dawn & the News (The Case of Earthquake 2005, & Floods 2010). *International Conference on Communication, Media, Technology and Design* (pp. 1-5). Istanbul : ICCMTD.
- Naeem, W. (2013). Disaster Reporting: 'Not Only Reporters but Also Editors Need Sensitization Training. *The Express Tribune* .
- Newman, N., Fletcher, R., Schulz, A., Andı, S., & Nielsen, R. K. (2020). *Reuters Institute Digital News Report 2020*. https://reutersinstitute.politics.ox.ac.uk/sites/default/files/2020-06/DNR_2020_FINAL.pdf
- Reed, J., & Bokhari, F. (2022). *It's the fault of climate change*": Pakistan seeks "justice" after floods. *Financial Times*.: www.ft.com/content/
- Ricchiardi, S. (2012). *Challenges for Independent News Media in Pakistan*. Center for International Media Assistance. <https://reliefweb.int/report/pakistan/challenges-independent-news-media-pakistan>
- Sanders, R. (2019). *In media coverage of climate change, where are the facts?* <https://news.berkeley.edu/2019/09/19/in-media-coverage-of-climate-change-where-are-the-facts/>
- Schmidt, A., Ivanova, A., & Schäfer, M. S. (2013). Media attention for climate change around the world: A comparative analysis of newspaper coverage in 27 countries. *Global Environmental Change*, 23(5), 1233-1248. <https://doi.org/10.1016/j.gloenvcha.2013.07.020>
- Sharif, A., & Medvecky, F. (2018). Climate change news reporting in Pakistan: A qualitative analysis of environmental journalists and the barriers they face. *Journal of Science Communication*, 17(01), A03. <https://doi.org/10.22323/2.17010203>
- TNN. (30th June 2014). 'About'. *The Nature News*. <http://thenaturenews.com/about/>
- Vu, H. T., Liu, Y., & Tran, D. V. (2019). Nationalizing a global phenomenon: A study of how the press in 45 countries and territories portrays climate change. *Global Environmental Change*, 58, 101942. <https://doi.org/10.1016/j.gloenvcha.2019.101942>
- Wyns, A. (2022). Disaster diplomacy in the wake of the 2022 Pakistan floods. *The Lancet Planetary Health*, 6(11), e855-e856. [https://doi.org/10.1016/s2542-5196\(22\)00240-6](https://doi.org/10.1016/s2542-5196(22)00240-6)
- Reghunath, L. G., & Zafar, S. (2023). Corpus-assisted frame analysis of climate change editorials in Indian English language newspapers. *Journal of Climate Change*, 9(2), 55-63. <https://doi.org/10.3233/jcc230015>
- Zaheer, K., & Colom, A. (2013). *Climate Asia Report Pakistan: How the people of Pakistan live with climate change and what communication can do*. BBC Media Action. http://downloads.bbc.co.uk/rmhttp/mediaaction/pdf/climateasia/reports/country/ClimateAsia_PakistanReport.pdf