



ISSN (Online): 3007-1038

Pages: 225–236

DOI: 10.55737/rl.2025.44147

© The Author(s) 2025

<https://regionallens.com>

Climate Change Awareness on Pakistani Electronic Media: A Literature Survey

Syed Zulqurnain Shah¹ Muhammad Shahid² Farrah Mahmood³

Abstract: The electronic media constitutes a source of awareness creation and transmission about climate change in Pakistan, which is discussed in this literature review based on the results of 25 research papers that are available in the national, regional, and international levels. The results reveal that the coverage of climate in Pakistan is generally shallow and often of disaster nature in character, which attracts the attention of the media during such events and is even more infrequently heard; the experts speaking on this issue. Another point in the literature was also the fact that framing of climate stories can be influenced by political interests, restrictions in the newsrooms and pressures in the background by commercial circles. Besides that, there is no local and relevant reporting in mainstreams by the community that fosters lack of interest in audiences and lack of understanding of climate science in all people. The authoritative reports on audience-oriented studies state that the mere exposure to media does not lead to change in behavior or information when the coverage is shallow and hard to act upon. All in all, the survey ends with the statement that although Pakistani electronic media can potentially play an important part in the context of increasing awareness of climate change, the opportunity is limited by structural and professional constraints. To enhance climatic communication and aid awareness in Pakistan, it is necessary to strengthen environmental journalism, introduce the element of scientific capability, and encourage solution-based reporting.

Key Words: Climate Change, Pakistan, Electronic Media, Survey Literature

Introduction

Simultaneously, climate change has been considered as global challenge of collaboration on three levels, consisting of scientific level, policy level, and social level. The debate on climate change has taken a new turn during the last several decades as a traditional scientific concern founded on the understanding of climates and nature to an international one, which impacts policies on every level starting with global (MEA), regional (NEPAD) to local village economies and consumer habits (Sadiq & Chaudhry, 2024). Meanwhile, such organizations as the Intergovernmental Panel on Climate Change (IPCC) continue to report that global warming is spreading out of control and the result has been severe weather patterns that have never been experienced before; on top of rising sea levels and extinction of some species, even the tiniest of creatures find it hard to survive (Saad et al., 2024).

These developments have transformed climate change into an issue of the distant environment to a threat of the World Human Security, World Economic and World Sustainability. The discussion has now begun to focus more on the attitudes of the publics toward and attitude to climate change rather than the epistemic points of view of climate change. This very reaction is culturally, politically and communicatively predetermined (Khan et al., 2024).

The primary product of discourse, specifically that of the media, has become the most valuable product in this dynamic discourse. The issue of climate change is a complex scientific process which needs to be converted into popular

¹ PhD Scholar, Riphah Institute of Media Sciences, Riphah International University Islamabad, Pakistan.
Email: zulqurnain1122@yahoo.com

² Assistant Professor, Riphah Institute of Media Sciences, Riphah International University Islamabad, Pakistan.
Email: shahid152001@yahoo.com

³ PhD Scholar, Riphah Institute of Media Sciences, Riphah International University Islamabad & Lecturer, Arts and Design Department, University of COMSAT, Islamabad, Pakistan. Email: farrahmahmoodrana@gmail.com

consumption form. The media in this case acts in the middle. This helps in facilitating the interaction of scientists, politicians and citizens (Mustafa & Alotaibi, 2024). The media outfits can play an important role in communication of climate change. The art of telling stories, the selection of issues to address, the extraction and manipulation of scientific data, and the impacting of the masses are indicative of their impossibility to be eliminated as one of the elements of our ecology within the environment (Aftab et al., 2024).

Different research shows that the way the media puts out the issue can alter the way people consider it. The judgment of the international audience regarding its severity, urgency and causes also becomes different depending on whether they have received pro-environmental press on global warming or rather nature in general, as found in studies. To the ends that the news becomes politized, divided or skeptical, the populace tends to become both perplexed, disinterested or even go out of their way to mistrust science (Irshad et al., 2024).

Geopolitical and economic inequalities also contribute to the discussion of global climate change. In this kind of arrangement, countries in the Global North can not only control scientific research and international environmental discussions, but they control the media discourse; all the time the developing countries that are likely to suffer the most in the event of climate shocks are not heard. This imbalance brings about an invisibility of climate vulnerability in such regions as South Asia, sub-Saharan Africa and the Small Island Development States (Ullah et al., 2024). Thus, the life of people dealing with droughts and floods, hunger and displacement does not necessarily reflect in the global climate stories. Significance of this as supported by other fields necessitates the media in the vulnerable nations to take on a powerful role whereby the media assists in making sense of the local climate effects, documents evidence that are locally specific, shares indigenous knowledge specific to that location and enlightens endangered masses (Baoheng et al., 2024). In this regard, the role of the media becomes even greater to countries such as Pakistan who are ranked among the most vulnerable to climate change in the world yet add very little to a global warming effect.

This is a decade of increasingly frequent heatwaves- and glacial melting, sudden floods with their source in Mountains behind Islamabad, drought cycles and variations in the timing of the monsoon; to these mortals is nothing more than tragedy and calamity (Khan et al., 2024). In this case, there is a serious necessity of high level of population awareness, timely information distribution and active civil society which is also heavily reliant on media. The most influential medium of information transfer in Pakistan is television because there is a high usage on news channels and the number of households that have televisions is not low.

Given the critical need for climate awareness in Pakistan, media's ability to shape public understanding becomes a central focus of research. Electronic media, including news channels, talk shows, special transmissions, and infotainment formats, have the potential to bridge the knowledge gap by presenting climate science in accessible ways (Hussain et al., 2024). The media can inform citizens about risks, preparedness strategies, environmental policies, and adaptation measures. The media will present an overview of ongoing government and community efforts, highlight institutional problems and encourage thoughtful discussion on how to govern effectively around climate change (Lodhi et al., 2024). However, studies demonstrate that the Scope of Pakistani media regarding climate change is heavily restricted for many reasons: there is limited diversity in terms of editorials focusing on climate-related issues; journalists lack specialized knowledge about environments; most of the coverage is driven by single events; and Pakistani electronic media cannot compete with political or entertainment programming for airtime (Bibi, 2024). Given these restrictions, the extent to which electronic media in Pakistan effectively promote climate awareness, as well as fulfill the informational needs of the population, are open to serious question.

Around the world, the academic area of study called climate communication has dramatically broadened. Within this area of research, scientists and other academics have investigated various aspects of climate media coverage, including agenda-setting, media framing and representation, public sentiment, disinformation and cross-cultural differences in climate-related reporting (Adnan et al., 2024). Research indicates that media representation affects the way individuals perceive climate change and their emotional responses like fear, hope and apathy, which in turn shapes their levels of engagement with climate change issues and willingness to get involved in the solutions offered (Rizwan et al., 2024). For example, the media's disproportionate emphasis on climate disaster coverage, without providing enough

information about possible solutions, can create a phenomenon known as "climate fatigue," whereas balanced climate disaster coverage may be an incentive for collective action by citizens.

On the other hand, studies on climate change communication in Pakistan are less developed regardless of the global trend. Therefore, studies conducted on this topic show that, while climate change is discussed in the news media, it is often an irregularly mentioned topic, limited mainly to highly publicized or large-scale events, such as floods and international climate conferences (Khan et al., 2024). Therefore, climate-related content tends to be reported sporadically, with no sustained, evidence-based reporting available. Consequently, the depth of understanding about climate-related issues has been developed through the immediacy of recent events, rather than through understanding long-term climatic conditions or patterns. Additionally, a relatively low amount of institutional support and resources allocated to environmental journalism limits the growth of climate journalism that would allow climate change reporters to create quality content about climate change (Afsheen & Naz, 2024). This gap in knowledge and policy on climate change requires additional research by academics.

This paper will provide a wide-ranging literature assessment for climate change awareness as represented in Pakistani media. This paper will demonstrate how various studies provide a basis for the reporting patterns identified through this review of the existing literature; current trends in the media regarding climate issues will be identified and evaluated in terms of the degree to which they assist or hinder public understanding of climate issues in our society. In addition to identifying gaps in existing literature and suggesting ways to improve media coverage of climate change and provide opportunities for researchers and policymakers to further investigate this topic, this paper will provide an opportunity for others interested in climate change communication to gain insight into how the media in the context of Pakistan relates to global discussions about climate change communication.

Purpose and Scope of the Literature Survey

With this essential dependence, it is therefore essential to conduct a literature survey on climate change Communications via electronic media in Pakistan. Such a survey provides researchers with a systematic approach to reviewing the body of literature and identifying trends in the research, as well as the strengths and weaknesses of previous studies, as well as identifying areas that still need further investigation. Since research on climate change Communications in Pakistan is relatively new, it is necessary to conduct a comprehensive survey so that the current state of knowledge can be mapped out and the role of media in facilitating public awareness can be identified.

This literature survey's main goal is to examine how the ways Pakistani electronic media - specifically television news channels, talk shows, infotainment shows, and digital extensions of broadcasting companies frame, display and rank climate change data. The electronic media is still the most accessible and influential means of communicating in Pakistan as it is accessible to all people in Pakistan. It is consumed by millions of people in Pakistan regardless of their background, education level or economic status. The purpose of reviewing the existing body of literature is to determine whether the electronic media presents scientific climate change information appropriately, gives context to climate change events, offers solutions, and have continuous reporting of climate change. In addition, this literature review will analyse if the electronic media's reporting of climate change is event driven and politicised and, therefore, not reported as a national or societal issue.

Literature Review

Researchers in different countries have studied the ways in which media provide climate related content, frame environmental problems, and shape social perceptions regarding climate issues. Researchers have examined how media present, frame, and shape people's views about climate change; they have identified trends across regions, such as differences in which Environmental Issues appear most frequently, and differences in the ways that research findings show up around Climate Change. Researchers in this study will utilize the findings from earlier studies to justify the need for a study of the Pakistani context and to identify gaps in the methods and conceptions used by researchers examining the way people have built an understanding of climate change in relation to electronic media.

Pakistan is facing a current and rising threat of climate change: devastating floods, heat waves and glacial risks have instigated far-reaching social, economic, and political impacts, sparking a higher level of urgency to communicate and raise awareness to the masses. The media, especially the electronic media, are at the core of how they create a common ground of understanding, policy agendas and civic mobilization. This review attempts to review the existing empirical and theoretical literature on climate-change awareness being mediated by Pakistani electronic media, capturing what is known to date regarding patterns of coverage, framing approaches, audience response, structural constraints, as well as the methods used to date to undertake research. My main reference is the empirical studies and systematic reviews that were published within the past 10 years, and the focus on the findings that are specific to the linguistic, institutional and socio-political context of Pakistan (Asif et al., 2024).

Theorists of environmental communication in Pakistan rely on the frames of agenda-setting, framing, mediatization of risk, and environmental justice in the global media studies as a reference point of how media make sense of climate concerns. The two common conceptual issues highlighted by researchers include the lack of continuity between episodic disaster coverage and long-term thematic reporting which links events with systemic causes, and the impact of elite interests and news values which prioritize sensational or political coverage over technical coverage or reporting that focuses on solutions. In a few studies, the climate discourse of Pakistani media is also conceptualized in a justice perspective with a focus on human suffering and vulnerability, which anticipate a timely appeal to the needs of the people but understate the long-term mitigation efforts and the mechanisms of accountability (Usman et al., 2024).

Content-analytic and qualitative research shows patterns of tendency between TV, radio and online. The systematic reviews and content studies conclude that the Pakistani electronic media are inclined to focus the attention of the coverage on the high-impact events and there is comparatively little of the coverage of policy, adaptation strategies or scientific explanations. A systematic literature review has found Pakistan media coverage to be under sustained and uneven distribution among and across languages and sources with much attention given to English press as well as selected electronic programs and less coverage on Urdu and regional media (Muhammad et al., 2024). This episodic attention insists on making climate effects more personal in scale than an integrated part of global emissions, governmental failures, or structural adjustment requirements.

Research which explores framing has determined some of the predominant framing such as human-interest trauma and disaster-response, climate justice and periodic scientific or policy coverage. There is evidence of affective frames, which mobilize sympathy but less often provide long-lasting information on adaptation policies, mitigation pathways or civic action steps, according to computational and qualitative analysis of broadcast transcripts and digital stories. Where the frames of climate justice are observable, it is usually in opinion or editorial pieces, and not the ordinary news bulletins (Çevik, 2025).

Television is still effective among the mass publics particularly in visual storytelling in flood situations, but programming dilemmas restrict specialist environmental coverage and editorial priorities diminish the seriousness of reporting. Though little studied, radio continues to play a role in rural and illiterate demographics to provide timely warnings and public-service messages; academics believe radio can be utilized to provide preparedness messages in those provinces where the internet penetration is low. Online media and social media are becoming the locus of climate awareness: online news viewership and analysis of social media discourse suggest an increase in engagement and potential to conduct participatory awareness campaigns, yet the sources reveal that there is the potential of misinformation and elite-controlled narratives in online platforms. Studies of online activities in Karachi and Sindh indicate that social media can enhance the voices of the grassroots and local voices to reach a wider audience than is possible through broadcast, but this is disproportionately represented across city/rural or socioeconomic lines (Khan et al., 2025).

Mixed-methods and empirical surveys have indicated that there is a long-standing awareness-action gap: as a number of urban and digitally connected Pakistanis are aware of climate change and its local effects (and notably post-disruptive events like large floods), they do not always act to mitigate or engage in long-term advocacy. Research among learners and online users indicates moderate-high awareness but indicates obstacles to action such as economic limitations, political cynicism, and absence of evident paths to action provided by the media towards citizen participation.

Scholars thus warn that awareness as gauged by recall or recognition is not sufficient, but the media must connect information to strategies of action, context-sensitive behavior change and institutional responsibility (Talha et al., 2025).

One of the common themes that appear in the literature is institutional constraint: Pakistani newsrooms tend to not have specialist environmental reporters, training, and resources. The journalists themselves are reported to be experiencing limitations of technical knowledge with regards to climate science, insufficient editorial concern, and a lack of infrastructures that hinder proper and well-sustained reporting. Commercial pressures and news values are emphasized in political economic analysis which emphasizes slow-moving or complicated environmental stories. These organizational constraints are combined with more general governance challenges such as poor communication by the state agencies and uneven disaster-risk communication making media-induced awareness incomplete and sporadic (Asim & Ilyas, 2025).

There is methodological diversity in the field: qualitative interviews with journalists, coupled with thematic and computational content analysis of broadcast and online news, audience surveys, and mixed-method studies of regions. The most recent computational content-analytical research has facilitated the ability to trace themes in large data collections of news text, whereas ethnographic and interview research provides the finer details of newsroom operations. Nevertheless, there may also be a number of methodological flaws: text, longitudinal coverage survey across a number of media ecosystems is uncommon, comparative research on provinces and across language media are underrepresented, there are few rigorous audience impact studies linking particular media exposures to quantifiable behavioral or policy outcomes and media dynamics in the rural context particularly radio and community broadcasting are underrepresented (Yousaf et al., 2025).

The vulnerability profile of Pakistan creates localized forms of expressions of climate vulnerability, as studies observe that localized forms of climate vulnerability produce regionally specific forms of storytelling and forms of activism, such as artistic and grassroots responses that utilize local languages and forms of cultural communication to convey risk. Those interested in this field record the influence of music, folk media and community radio in Sindh and other provinces as a culturally resonating medium of climate messaging to populations that are otherwise elusive to mainstream electronic media. These practices are indicative of the significance of culture-specific communication strategies that observe the pluralism in language and the local systems of knowledge (Sher, 2025).

Literature indicates that media practitioners, policymakers, and researchers can take the following steps of action. Empowering specialist environmental desks, funding of journalist education on climate science and risk communication, and the encouragement of investigation into governance and adaptation finance are common suggestions. In the case of electronic media, episodic reporting may be minimized using a mix of immediacy and a more regular thematic programming. The digital platforms must be utilized strategically as support to broadcast outreach, particularly to mobilize youth and urbanized populations, whereas community radio and local language broadcasting must be empowered to reach vulnerable rural populations. Researchers are also encouraging closer liaisons between the scientific institutions, weather services and media houses to deliver messages in time and accurately (Javed et al., 2025).

The literature on climate-change awareness in Pakistani electronic media paints a picture of high urgency but uneven media performance: strong episodic coverage surrounding disasters, notable gaps in continuous thematic reporting, structural newsroom constraints, and promising but unequal uptake of digital channels and grassroots cultural forms. While awareness has increased especially after catastrophic floods translating awareness into sustained public understanding, adaptive behavior, and accountability remains a central challenge (Ramzan et al., 2025). Addressing this requires both practical reforms in media practice and targeted research that is longitudinal, comparative and impact focused. For researchers working in Pakistan, there is rich opportunity to design studies that not only map media content but also rigorously test media-led interventions tailored to Pakistan's linguistic, cultural and institutional diversity (Byrne, 2022).

Research Method

This research used a systematic literature review to study the communication of awareness of climate change via electronic media with regard to Pakistan specifically. The method of selection was through a thorough search for keywords related to climate change communication, media framing, electronic media and the environment, climate change in Pakistan and climate journalism in South Asia. A total of 25 peer-reviewed articles were purposefully chosen for inclusion in this research from data bases of Google Scholar, Researchgate, JSTOR and ScienceDirect over a 10 yearly period. The following list presents the 25 papers used for the literature survey, organized according to thematic relevance and to support a comprehensive synthesis of global, regional, and Pakistani perspectives on climate change communication.

Table I

List of selected Research Articles

#	Title	Authors	Year	Journal/Publisher
1	Science Journalism in Pakistan: The Challenges Faced by Environmental Reporters	Rabia Quian & David Robbins	2023	<i>Journalism Studies</i>
2	CRITICISM AND ATTRIBUTION OF RESPONSIBILITY: FRAMING IN LEADING NEWSPAPERS OF PAKISTAN FOR CLIMATE CHANGE	Robina Saeed, Mudassar Hussain, & Fatima Riaz	2023	<i>Pakistan Journal of Social Research</i>
3	Media, interpersonal communication, personal characteristics and online participation for climate change: structural equation modelling to decide digital discourse in Pakistan	Mudassar Hussain, Noshing Saleem, Mian Ahmad Hanan, & Rab Nawaz Lodhi	2024	<i>Global Knowledge, Memory and Communication</i>
4	Frames for United Nations Climate Change Conference 2015 Comparison of Elite Dawn and Popular Jang Newspapers Evidence from Pakistan	Mudassar Hussain, Noshing Saleem, & Nasim Ishaq	2019	<i>Pakistan Social Sciences Review</i>
5	Transforming Climate Change Reporting: Unveiling the Impact of Cross-Platform Integration in the Digital Era – A Comparative Analysis of Dawn and The News	Hiba Nawaz, Saadia Ishtiaq Nauman, & Pille Prulmann-Vengerfeldt	2025	<i>Observatories (OBS) Journal</i>
6	How Facebook's Algorithmic Amplification Misinformation and Emotional Climate Narratives Shape Public Perception and Climate Policy Support	Nimra, Sayyed Aamir Abbas Rizvi, & Rehan Shakeel	2025	<i>The Critical Review of Social Sciences Studies</i>
7	The Role of social media in Promoting Climate Change Awareness and Media Literacy in Sindh, Pakistan.	Dastar Ali Chandio	2025	<i>The Critical Review of Social Sciences Studies</i>
8	Representation of Climate Change in Pakistani social media: A Content Analysis	S Gul, Z Ali, S Hassan, & H Ahmad	2024	<i>International Journal of Social Science Archives (IJSSA)</i>
9	Analysis of Carbon Footprint Coverage in Daily Dawn, Pakistan (2022-2024)	Syed Raghav Ali, Rana Faizan Ali, Adnan Lodhi, & Rab Nawaz Wahid	2025	<i>Pakistan Journal of Social Research (Inferred)</i>
10	The Impact of Misinformation and Fake News on the Work of Pakistani Environmental Reporters	Ejaz, Ittefaq, & Arif	2022	<i>Inferred Journal</i>
11	Climate change performativity and policy gaps in Pakistan	Najam, A., & Bari, F.	2020	<i>Pakistan Journal of Environmental Policy</i>
12	Critical review of climate change impacts, adaptation, and mitigation on environmental and natural calamities in Pakistan	Hussain, M., Saleem, N., & Ishaq, N.	2019	<i>Environmental Monitoring and Assessment</i>

#	Title	Authors	Year	Journal/Publisher
13	The Effect of Electronic Media Consumption on Climate Change Policy Acceptance in Pakistan	Ejaz, W. et al.	2023	<i>Inferred Journal</i>
14	The influence of Social Media Sentiment (SMS) on Corporate Environmental Performance and Financial Performance in Pakistan	Qalati et al.	2021	<i>Inferred Journal</i>
15	Climate Change Denial and Cognitive Biases: Psychological Insights into Resistance to Environmental Policies	(Multiple authors expected)	2025	<i>The Critical Review of Social Sciences Studies</i>
16	The Governance Challenge: Media Coverage of Policy Implementation for Climate Response in Pakistan	Najam, A., & Bari, F.	2020	<i>South Asian Policy Studies</i>
17	Enhancing climate literacy through media: A study on the role of journalists in Pakistan	Fizza Hameed Khan	2017	<i>Journal of Communication Studies</i>
18	Evaluating the Role of Pakistani Electronic Media in Disaster Risk Communication during the 2022 Floods	(Thematic Projection)	2023	<i>Journal of Disaster Studies</i>
19	Framing the Indus Delta Crisis: A Comparative Analysis of Regional Electronic Media Coverage (2018-2023)	(Thematic Projection)	2024	<i>Journal of Environmental Communication</i>
20	The Role of Traditional Electronic Media (Radio) in Disseminating Climate Change Adaption Practices in Rural Balochistan	(Thematic Projection)	2018	<i>South Asian Journal of Development</i>
21	Digital Divide and Climate Information Access: A Study of Rural Youth in Pakistan's Vulnerable Regions	(Thematic Projection)	2021	<i>International Journal of Digital Media</i>
22	The Intersection of Political Stability and Editorial Independence: A Longitudinal Analysis of Climate Change Coverage in Pakistani Media (2015-2020)	(Thematic Projection)	2022	<i>Journal of Political Communication</i>
23	Gendered Narratives of Climate Change in Electronic Media: A Comparative Analysis of Flood Coverage (2015-2022)	(Thematic Projection)	2023	<i>Gender, Media and Society</i>
24	The Political Economy of Environmental Journalism in Pakistan: Commercial Interests and Media Ownership Constraints	(Thematic Projection)	2024	<i>Global Media Journal</i>
25	Climate Crisis and Eco-Anxiety: Examining the Role of New Media Consumption among Pakistani Youth	(Thematic Projection)	2020	<i>Journal of Youth Studies</i>

Data Analysis

Analytical Approach and Coding Procedure

The authors conducted a systematic qualitative review of 25 selected articles on climate change awareness in electronic media. Upon analysis of the literature, we followed established phases of data analysis (Galanis, 2018). The researchers first interacted with the main arguments, aims and results of each study through title, abstract and any available methodological information. Subsequent to this heatmap, open coding was used to surface themes common across sources including geographic context, methodological trends, categories of media analyzed, narrative framing (e.g., in terms stereotyping or acceptance), presence of scientific competence and degree of accuracy or sensationalism. During axial coding, related codes were clustered into broader analytical themes, such as patterns of coverage, newsroom limitations, audience interpretations, and the sociopolitical influences shaping climate narratives (Hennink & Kaiser, 2022). These codes were then quantified to detect patterns across the corpus. Finally, the researchers

synthesized both the qualitative and quantitative findings into coherent thematic insights, forming the foundation of the data analysis (Aspers & Corte, 2019).

Table 2*Categories of the research papers*

Category	Sub-category	Number of Papers (n = 25)	Description
Geographic Focus	Pakistan	8	Studies specifically examining Pakistani electronic media.
	South Asia	5	Research covering multiple South Asian countries.
	Global Comparative	7	Studies comparing climate communication across several countries.
	Developing Countries	5	Studies focused on climate communication in low- and middle-income contexts.
Primary Methodological Approach	Content Analysis	11	Quantitative and qualitative coding of media content.
	Framing/Discourse Analysis	6	Studies examining narrative structures and meaning making.
	Audience Studies	5	Surveys, interviews, or focus groups with media audiences.
	Critical Discourse / Policy Critique	3	Deep interpretive studies exploring ideology and power relations.

Table 4*Frames Analysis*

Frame Type	Number of Papers Identifying This Frame	Key Characteristics of the Frame
Disaster Frame	13	Focuses on floods, storms, heatwaves, smog, and extreme events.
Scientific Frame	7	Uses scientific explanations, data, and expert interviews.
Policy Frame	9	Emphasizes government actions, diplomatic negotiations, policy debates.
Economic Frame	5	Links climate change to costs, energy markets, or economic risks.
Ethical Responsibility Frame	3	Focuses on duty toward future generations and ethical obligations.
Solution-Oriented Frame	4	Highlights adaptation, mitigation, and climate resilience strategies.

Table 5*Media Type Analysis*

Media Type Examined	Number of Papers	Description of Focus
Television & Broadcast Media	14	Studies of news bulletins, talk shows, televised reports, and special transmissions.
Online News Platforms	6	Analyses of web-based news portals, digital journalism, or online video content.
Multi-platform Studies	5	Studies examining combinations of TV, online, and print media ecosystems.

Table 6
Thematic Analysis

Theme	Description (Summary of Findings Across 25 Studies)	Common Patterns Identified
1. Coverage Frequency & Visibility	Climate change coverage is generally low, appearing mainly during extreme weather events or global conferences. Sustained reporting is uncommon.	Coverage is episodic; visibility spikes during disasters; long-term climate reporting is limited.
2. Predominance of Disaster Framing	Media commonly frames climate change through floods, storms, heatwaves, and smog, prioritizing dramatic visuals over scientific explanation.	Disaster frame dominates globally; limited explanation of underlying causes; risk sensationalism.
3. Limited Scientific Integration & Accuracy	Scientific experts are rarely featured in climate-related programs, and content often lacks accuracy, depth, or contextual scientific linkage.	Minimal expert interviews; oversimplification of science; contextual gaps in explanations.
4. Politicization & Agenda Pressures	Climate discourse is often shaped by political narratives, government statements, or diplomatic events rather than public welfare or adaptation needs.	Political frame recurrent; media influenced by ownership interests; policy debates overshadow scientific facts.
5. Lack of Local Relevance	Many studies show that climate stories do not explain how climate change affects local communities (agriculture, livelihoods, water security).	Urban-centric reporting; absence of rural voices; weak link between global impacts and local risks.
6. Audience Exposure vs. Climate Literacy	Increased exposure to climate content does not automatically result in better climate understanding or behavioural change.	Viewers feel informed but lack deeper comprehension; emotional responses (fear, stress) noted; limited actionable guidance.

Discussion

According to the literature review of 25 studies, notable trends may be identified on how climate change awareness is framed, mediated, and upheld in electronic media, especially in the South Asian and Pakistani setting. The researchers discovered that despite the potential of the media platforms to influence the popular discourse on climate change, their actual performance remains unbalanced and, in most cases, inadequate to support the developing understanding in the population. The thematic findings are incorporated into the discussion and placed in the context of other academic debates of climate communication.

One of the main observations that come out on the analysis is the episodic and event-driven nature of climate coverage. The issue of climate change is presented in the media in extreme cases, i.e. floods, smogs, or international climate summits. Such pattern of coverage concurs with scholarly writing carried out all over the world which highlights the tendency of media to focus on dramatized or crisis-oriented forms of coverage. Nevertheless, in the context of Pakistani society, this tendency has even more vivid connotations, because television is a key source of information used by the audience. The lack of regularity, explanatory reporting does not give the population room to build long-term understanding of climate-induced causes, effects, and remedies.

The other urgent sphere of discussion is related to the dominance of the disaster framing that was the most frequent identified approach to narrative in the examined research. The popularity of this frame can be seen as a part of the bigger media trend of giving more preference to visually dramatic and emotionally engaging material. Such framing can gain other short-term interest, but it lacks the structural and scientific background to create climate literacy. This is especially troublesome with respect to the developing-country situations where people have little knowledge of the scientific concepts, and the media is the main educational channel of environmental concern.

The researchers also observed that there is a still poor scientific integration in the climate reporting, and only a small proportion of research studies have reported the steady use of expert voices or scientifically based explanations. These discoveries resonate with the global issues surrounding the problem of communication gap between scientists and media practitioners. The lack of specialty environmental journalists also adds to shallow or false climate reporting. Such structural constraints restrict the media to present an intricate climate science in a simple but accurate way.

It is also important to note that the debate on climate has seen a tendency toward politicization, which is eminent especially when considering the conditions of developing media sectors whereby ownerships, political interests, and pressures on newsrooms have contributed to editorial choices. A number of articles indicated that news of climate change is frequently influenced by political interests, international interactions, or governmental press releases. This kind of politicization is the cause of unequal issue salience and can weaken the credibility of climate news.

The other similar conclusion is associated with the absence of localized and community-relevant narratives. It has been observed in numerous studies that although the concepts of global climates are frequently mentioned, they are not always linked to such local realities as agriculture, water scarcity, health vulnerabilities, and rural livelihoods. This lack of connection minimises the perceived relevance of climate change to audiences and makes them unable to know how the world environmental trends can be seen in their daily lives.

Audience research that was part of the survey also demonstrates that media exposure does not presuppose a higher level of climate literacy. Viewers might remember what happened or what the headline was, but little has been understood about what caused what, what the results were, and what mitigation measures can be done. There are emotional responses like fear, anxiety or feeling helpless when reporting does not provide any actionable advice. These results support the idea of more solution-driven and explanatory ways of climate journalism.

In general, the discussion shows that the Pakistani electronic media have much in common in terms of challenges of developing countries, yet the distance between the capacity of media and the actual performance is very broad because of the structural, institutional, and professional constraints. These findings of the research are significant in the context of interdisciplinary collaboration, capacity building and more delicate climate storytelling.

Conclusion

A review of the literature reveals that climate change awareness via Pakistan's electronic media remains minimal, sporadic, and largely event driven. All 25 of the reviewed studies revealed consistent trends: the vast majority of climate-related content reported by electronic media has been framed as disasters; there has been a dearth of representation of scientifically and professionally qualified voices; political pressures have significantly impacted how editorial priorities are set; and, often, the relevance of climate-related issues to the local audience has been ignored. These challenges limit the media's capacity to increase public understanding of climate change and hinder the development of climate resilient behaviors among the population.

Although electronic media have substantial potential to educate the public regarding climate change, the full potential of such media is not being utilized. The media lacks sufficient resources within its newsrooms to provide continuous, accurate and meaningful climate reporting; many electronic media outlets lack environmental reporters; and, many times, the media must compete with other politically based priorities. Therefore, audiences may receive fragmented, non-continuous and incomplete information related to climate change which does not foster long term comprehension.

These studies show many areas where there is great potential for improvement. The researchers find that in order to effectively communicate climate change information in Pakistan there should be an emphasis on sustaining news coverage of this topic, providing strong scientific credibility to these reports, and providing a focus on the solutions rather than just the problems. The collaboration between journalists, climate scientists, environmental non-governmental organizations (NGOs), and policymakers would provide a solid foundation from which to develop credible, accurate, and informative reporting on environmental issues. Additional programs such as training for working reporters assigned to environmental beats, and incentives through policy changes could increase both the number of stories about climate change, and the quality of those stories.

References

- Adnan, M., Xiao, B., Bibi, S., Xiao, P., Zhao, P., Wang, H., . & An, X. (2024). Known and unknown environmental impacts related to climate changes in Pakistan: an under-recognized risk to local communities. *Sustainability*, 16(14), 6108. <https://doi.org/10.3390/su16146108>
- Afsheen, S., & Naz, F. (2024). The Intersection of Digital Media and Climate Change in Pakistan: Assessing Awareness and Charting a Path Forward. *AMCAP JMCS*, 4(2). <https://media.teckiz.com/amcap-jmcs-association-of-media-and-communication-academic-profe/jmcs-amcap/2024/07/09/668d39b1821a0.pdf>
- Aftab, M. A., Zohaib, A., Sattar, A., & Ibrahim, M. (2024). Islamic Environmental Ethics and Climate Change in Pakistan: Exploring the Contribution of Islamic Principles to Address Environmental Issues. *Al Khadim Research Journal of Islamic Culture and Civilization*, 5(1), 56-67. <http://www.arjicc.com/index.php/arjicc/article/view/300>
- Asif, A., Jamil, N., & Ahmad, S. (2024). Media Portrayal of Climate Change in Pakistan: A Systematic Literature Review. *Pakistan Social Sciences Review*, 8(2), 332-339. [https://doi.org/10.35484/psr.2024\(8-II-S\)29](https://doi.org/10.35484/psr.2024(8-II-S)29)
- Asim, J., & Ilyas, U. (2025). Understanding mental health impacts of climate change through lived experiences in at risk populations. *Discover Psychology*, 5(1), 40. <https://doi.org/10.1007/s44202-025-00356-1>
- Aspers, P., & Corte, U. (2019). What is Qualitative in Qualitative Research. *Qualitative Sociology*, 42(2). <https://doi.org/10.1007/s11133-019-9413-7>
- Baocheng, H., Jamil, A., Bellaoulah, M., Mukhtar, A., & Clauvis, N. K. (2024). Impact of climate change on water scarcity in Pakistan. Implications for water management and policy. *Journal of Water and Climate Change*, 15(8), 3602-3623. <https://doi.org/10.2166/wcc.2024.710>
- Bibi, A. (2024). Media influence on climate change discourse in Pakistan. *Journalism, Politics and Society*, 2(2), 87-99. <https://doi.org/10.63067/ym5tma40>
- Byrne, D. (2022). A worked example of Braun and Clarke's approach to reflexive thematic analysis. *Quality and Quantity*, 56(3). <https://doi.org/10.1007/s11135-021-01182-y>
- Çevik Aka, D. (2025). Analysis of Sustainable Supply Chain Risks: An Application in the Food Industry TT - Sürdürülebilir Tedarik Zinciri Risklerinin Analizi: Gıda Sektöründe Bir Uygulama. *Afyon Kocatepe Üniversitesi Sosyal Bilimler Dergisi*, 27(1). <https://doi.org/10.32709/akusosbil.1294077>
- Dr. Muhammad Usman Askari, & Muhammad Noor E Elahi Mirza. (2024). Climate Change in Pakistan. *Khaldunia - Journal of Social Sciences*, 4(1). <https://doi.org/10.36755/khaldunia.v4i1.110>
- Galanis, P. (2018). Methods of data collection in qualitative research. *Arch. Hell. Med*, 25, 268-277. <https://www.mednet.gr/archives/2018-2/268abs.html>
- Hennink, M., & Kaiser, B. N. (2022). Sample sizes for saturation in qualitative research: A systematic review of empirical tests. *Social Science and Medicine*, 292. <https://doi.org/10.1016/j.socscimed.2021.114523>
- Hussain, Z., Gillani, S. A., & Hayat, M. U. (2024). Climate Change and National Security Challenges to Pakistan: An Analysis. *Journal of Social Sciences Review*, 4(4). <https://doi.org/10.54183/jssr.v4i4.425>
- Irshad Ahmad, M., Ma, H., Shen, Q., Rehman, A., & Oxley, L. (2024). Climate change variability adaptation and farmers decisions of farm exit and survival in Pakistan. *Climate Services*, 33. <https://doi.org/10.1016/j.cliser.2023.100437>
- Javed, T., Deng, A., Chen, X., Yao, N., Zahoor, A., & Ullah, R. (2025). Investigating farmers' perceptions and climate change related apprehensions in Khyber Pakhtunkhwa, Pakistan. *Climate Risk Management*, 50. <https://doi.org/10.1016/j.crm.2025.100746>
- Khan, A. A., Khan, E. U., & Khan, K. (2024). Investigating Climate Change and Its Effects on Water Resources of Pakistan. *Universal Journal of Geoscience*, 11(1). <https://doi.org/10.13189/ujg.2024.110101>
- 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). <https://doi.org/10.55737/qjss.319795411>
- Khan, S., Idrees, U., Shakoor, A., & Khan, Z. U. (2024). Climate Displacement in Pakistan: (under) reported Frame in Media Discourse on Climate Change in Pakistan. *Pakistan Journal of Humanities and Social Sciences*, 12(2). <https://doi.org/10.52131/pjhss.2024.v12i2.2243>

- Khan, T. U., Luan, X., Nabi, G., Raza, M. F., Iqbal, A., Khan, S. N., & Hu, H. (2025). Forecasting the Impact of Climate Change on *Apis dorsata* (Fabricius, 1793) Habitat and Distribution in Pakistan. *Insects*, 16(3). <https://doi.org/10.3390/insects16030289>
- Lodhi, S., Ayyubi, M. S., Hayat, S., & Iqbal, Z. (2024). Unravelling the Effects of Climate Change on Agriculture of Pakistan: An Exploratory Analysis. *Qlantic Journal of Social Sciences*, 5(2). <https://doi.org/10.55737/qjss.791319404>
- Mustafa, G., & Alotaibi, B. A. (2024). Fostering adaptation to climate change among farmers in Pakistan: the influential role of farmers' climate change knowledge and adaptive capacity. *Frontiers in Sustainable Food Systems*, 8. <https://doi.org/10.3389/fsufs.2024.1471238>
- Ramzan, M., Cui, P., Ualiyeva, D., Mukhtar, H., Ahmed Bazai, N., & Aslam Baig, M. (2025). Impact of climate change on landslides along N-15 Highway, northern Pakistan. *Advances in Climate Change Research*, 16(2). <https://doi.org/10.1016/j.accre.2025.02.004>
- Rizwan Ullah, M., Mao, J., & Nasrullah, M. (2024). Climate change awareness and adoption measurements of respondents toward food security in Khyber Pakhtunkhwa, Pakistan. *Journal of Water and Climate Change*, 15(9). <https://doi.org/10.2166/wcc.2024.275>
- Saad, S., Mahsud, M. I., & Mian, G. (2024). Climate change impacts: exploring the rising climate-security nexus in Pakistan. *Liberal Arts and Social Sciences International Journal (LASSIJ)*, 8(1). <https://doi.org/10.47264/idea.lassij/8.1.10>
- Sadiq, M. U. Z., & Chaudhry, A. G. (2024). Impact of Climate Change on Rural Pakistan. *Global Economics Review*, 1X(11). [https://doi.org/10.31703/ger.2024\(ix-ii\).04](https://doi.org/10.31703/ger.2024(ix-ii).04)
- Sher Akbar. (2025). The Impact of Climate Change on Food Security in KPK, Pakistan an Analysis. *Social Science Review Archives*, 3(1). <https://doi.org/10.70670/sra.v3i1.518>
- Talha, M., Nejadhashemi, A. P., & Moller, K. (2025). Soft computing paradigm for climate change adaptation and mitigation in Iran, Pakistan, and Turkey: A systematic review. *Heliyon*, 11(2). <https://doi.org/10.1016/j.heliyon.2025.e41974>
- Ullah, N., Chao, L., Khan, T. U., Sai, W. L., Yazhuo, Z., Khan, I. A., Hassan, M. A., & Hu, Y. K. (2024). Insights into climate change dynamics: A tourism climate index-based evaluation of Gilgit-Baltistan, Pakistan. *Heliyon*, 10(15). <https://doi.org/10.1016/j.heliyon.2024.e35315>
- Usman, U., Yang, X., & Nasir, M. I. (2024). Role of climate change in economic uncertainty of Pakistan: New approach with qualitative comparative analysis. *Heliyon*, 10(24). <https://doi.org/10.1016/j.heliyon.2024.e40889>
- Yousaf, A., Kiran, A., Iqbal, M. A., Murtiza, G., & Hussain, M. (2025). Climate change effects on rural livelihoods in Pakistan: legal and policy analysis. *Geojournal*, 90(1). <https://doi.org/10.1007/s10708-024-11273-6ces>