

## ANALYZING THE INSIGHTS OF CLIMATE CHANGE RESEARCHERS ON THE ROLE OF MEDIA IN SHAPING PUBLIC DISCOURSE ON ENVIRONMENTAL ISSUES IN PAKISTAN

Waqas Bin Ayaz<sup>\*1</sup>, Aqeel Ahmed<sup>2</sup>

<sup>\*1</sup>PhD Scholar, Department of Media & Communication Studies, National University of Modern Languages, Islamabad

<sup>2</sup>PhD, Lecturer, Department of Media & Communication Studies, National University of Modern Languages, Islamabad

<sup>\*1</sup>numl-s24-27366@numls.edu.pk, <sup>2</sup>aahmed@numl.edu.pk

<sup>\*1</sup><https://orcid.org/0009-0002-0413-7613>, <sup>2</sup><https://orcid.org/0009-0009-5407-560X>

Corresponding Author: \*

Received: November 09, 2024 Revised: December 09, 2024 Accepted: December 24, 2024 Published: December 31, 2024

### ABSTRACT

*This qualitative research explores the role of Pakistani media in shaping public discourse environmental issues in the country, drawing insights from the focus group discussion involving academic experts in environmental sciences, media and communication, governance and public policy, and economics. Through thematic analysis, the study discovered critical disparities in mass media practices, including episodic reporting that too influenced by the policy agenda with a limited focus on the systemic challenges like governance failures societal inequalities. Main themes emphasized the potential of solutions journalism to encourage community-based adaptation plans and localized mitigation initiatives, together with the strategies for context-specific narratives to bridge rural-urban divide. The study participants highlighted the importance of promoting climate literacy through reliable media coverage, addressing social disparities, and amplifying marginalized communities. The research also underlines the importance of systematic training of the journalist and establishment of the dedicated climate desks in Pakistani media organizations. By addressing such challenges, the media can ensure a transformative role and foster public engagement, equitable representation, and sustainable climate resilience in Pakistan.*

**Keywords:** Environmental Issues, Climate Change, Public Discourse, Pakistani Media, Climate Mitigation.

### INTRODUCTION

Climate change has emerged as the most pressing challenge faced by mankind in the modern times. Environmentalists have shown grave apprehensions, urging the global community to actively take corrective measures to counter climate change that otherwise could be irrevocable, and bring catastrophic consequences for the mankind (Santos et al., 2022). It has affected South Asian to such extent

that overall weather pattern, particularly the monsoon season, has been altered, having torrential rainfall periods and extreme drought simultaneously (Azeem et al., 2023). Pakistan has been ranked 5<sup>th</sup> among the worst-affected of climate change countries (Ahmed et al., 2024). Serious environmental degradation including melting of glaciers, rising sea levels, and extreme weather conditions including

simultaneous torrential rains and droughts have badly affected life in the country. According to a report by the Global Climate Risk Index, the 2022 flood caused Pakistan the financial losses of about US\$15.2 billion (UN-Habitat, 2023). Such negative environmental developments have resulted in looming danger of food insecurity, scarcity of fresh water reservoirs, destabilized healthcare and deterioration of agricultural produce, all of these having devastating effects for country's economic survival.

Climate change communication, as a field, attempted to understand and evaluate information flow from media and communication patterns among stakeholders including media (Evans et al., 2018). It also investigates the effectiveness of various communication strategies used by various campaigns and drives in raising awareness, promoting understanding, and persuading people to take action on issues pertaining to climate change. Role of media, being the agenda setter, in societal development is undeniable. Environmental journalism can play its role to raise awareness and call the communities to take action and be part of mitigation strategies to restore environment (Mabon, 2020). Pakistan has diverse media industries ranging from mature and stable print media to exponentially grown electronic and digital media, enjoying diverse audience reach and influence. Pakistani media has contributed effectively to information-dissemination in the society. Media has highlighted many issues of public interest and raised awareness among the masses in Pakistani society, mobilizing them to take actions. Climate change has been among the critical issues that seriously require media attention. Many research studies reflect that Pakistani media has not been effective and successful in shaping public discourse on environmental issues in Pakistan.

Ahmed et al. (2024) conducted a focus group study to explore narratives of the journalists on challenges they face while covering climate change issues. They found out that media in Pakistan carried out event-based coverage, have never prioritized covering environmental issues under the influence of policy agenda, and lacked professional training on climate journalism. Manzoor and Ali (2021) in their study also explored that old equipment, lack of resources, and below par skills resulted in defective capacity

issues and poor-quality information, leading to faulty reporting about climate change. Similarly, Hussain et al. (2024) discovered through in-depth interviews professional and economic interests of the media organizations hindered fruitful reporting of climate change issues. Moreover, Ejaz et al. (2024) also interviewed journalists to highlight challenges to climate journalists in Pakistan, citing corporate sector influence as barrier fair journalism and recommended Western journalism models and training as a way out to quality news reporting on environmental issues.

Bhatti et al. (2024), though, documented the role of media in developing understanding among the public about climate change, its causes and impact on them. Similarly, Bibi (2024) analyzed the public perception about media influence on developing public discourse of climate change in Pakistan by highlighting narrative building mechanisms of the traditional and digital media. However, there remains a research gap of understanding the role of media in shaping public discourse on issues related to climate change from the perspective of climate change communication researchers with academic insights into the crisis. This study has attempted to fill this research gap.

#### **Problem Statement:**

Climate change has critically affected environment globally, with devastating impact on the South Asian region, particularly Pakistan. Main challenges for media in Pakistan in covering climate change comprise inadequate professional training, event-based coverage, limitation of resources, policy constraints, and influence of the corporate sector. These challenges hamper the ability of media to efficiently disseminate information and influence the masses to take action against climate change. Despite the substantial role media plays as the agenda setter to raise awareness and mobilize communities, the existing body of literature reflects that Pakistani media has been ineffective to foster eloquent public discourse on climate change. This study has attempted to address the gap and contribute to the existing body of literature by exploring the role of Pakistani media in shaping public discourse and narratives on environmental issues in Pakistan from the lens of research scholars working in the field of climate change communication.

**Research Objective:**

To explore the perspective of climate change communication researchers on the role of media in shaping public discourse on environmental issues in Pakistan

**Research Question:**

What is the perspective of climate change communication researchers on the role of media in shaping public discourse on environmental issues in Pakistan?

**Theoretical Framework:**

The theoretical framework of the study has been guided by the Agenda Setting Theory, Framing Theory, Social Responsibility Theory of Media, and the Public Sphere Theory. The Agenda Setting Theory suggests that media influences public perceptions by defining salience of issues for them. It supports the study in view of exploring the importance given to climate coverage by Pakistani media to understand development of public discourse. Similarly, the Framing theory, by focussing on the ways of presentation of issues by media to shape public perception, guides the research to analyze Pakistani media narratives on climate change and their level of influence on public attitudes. Moreover, the Social Responsibility Theory of Media with its propagation for ethical responsibilities of mass media to serve the public interest directs the research in evaluating Pakistani media's role of fulfilling its responsibility in covering issues related to environment and climate change. Furthermore, complementing the Social Responsibility Theory, the Public Sphere Theory opines on media's independent role in facilitating public discussions leading to informed democratic participation on issues of public concern. This theory supports the study in context of discovering whether and in which way Pakistani media facilitates meaningful discussions of a public sphere on environmental issues and climate change.

**Research Methodology:**

The researchers conducted focus group discussion, a widely used qualitative research method, to document the narratives of climate change communication scholars about the role of media in building public discourse in Pakistan. Focus

group discussion is a recognized approach to achieve an in-depth understanding on social issues. By deploying this method, the researchers collect data from purposefully-selected study participants to reach out a comprehensive understanding of the social phenomenon under investigation (Nyumba et al., 2018). Population for this study comprised Islamabad-based Pakistani researchers working on climate change. As the optimal foundation of any focus group ranges between eight to ten study participants, researchers initially approached twenty-two researchers working in the domain of climate change and having their backgrounds in environmental studies, media and communication, governance and public policy, and economics and finance. Twelve out of the approached scholars agreed to be part of the focus group discussion. However, only ten could make it convenient to participate in the discussion. In view of the nature of the research, the researchers used purposive sampling to document the narratives of climate change scholars. Engaging researchers from the diverse academic backgrounds keeping in view its multifaceted nature, the study yielded comprehensive understanding of how Pakistani climate change researchers view the role of Pakistani media in building public discourse on environmental issues. Potential biases were mitigated by ensuring that every participant be given equal opportunity to present their argument in relation to the phenomenon under consideration. There was a question-answer followed by probes on the questions, arguments and counter-arguments by the study participants which went on for four-and-half-hours of focus group discussion.

**Data Analysis (Thematic Analysis):**

The study employed thematic analysis in order to capture Pakistani climate change researchers' perceptions of the role of media construction of the environmental discourse within Pakistan. This type of analysis of data has received an enormous recognition and use by researchers conducting qualitative research studies to examine the themes from among the data gathered from the respondents (Dawadi, 2020; Lochmiller, 2021; Maguire & Delahunt, 2017). It enables the researchers to apply a systematic analysis of the patterns and connotations which exist in the data set available. (Nowell et al., 2017).

**Table 1: Demographic Characteristics of the Sample**

Participant	Age (Years)	Field of Specialization	Gender
P1	38	Governance & Public Policy	Male
P2	37	Environmental Sciences	Female
P3	35	Media & Communication	Female
P4	36	Economics	Male
P5	42	Economics	Male
P6	44	Media & Communication	Male
P7	41	Governance & Public Policy	Female
P8	38	Environmental Sciences	Female
P9	40	Media & Communication	Male
P10	42	Media & Communication	Male

Table 1 on demographic characteristics of the respondents above reflects that age of the respondents ranged between 35 to 44 years. It shows that four of the total ten participants of the study had academic specialization in Media and

Communication, followed by two each from Governance and Public Policy, Environmental Sciences, and Economics. Moreover, the study sample comprised of six male and four female respondents.

**Table 2: Themes and Sub-themes Explored through Focus Group Discussion**

Sr.	Theme	Sub-theme 1	Sub-theme 2	Sub-theme 3
1	Media Narratives Building	Crisis-oriented Language	Humanitarian framing	Socio-environmental crisis
2	Visual Emotional Engagement	Visual Storytelling Impact	Emotional Narrative Connection	Media Sensationalism Risks
3	Local Community Representation	Local Communities as Victims	Community Impact Prominence	Need for Inclusivity in Narratives
4	Political Economy of Climate Journalism	Under-representation of Climate Change	Strengthening Voices on Climate Change	Accountability of Climate Resilience Programs
5	Audience Engagement in Climate Resilience Programs	Socio-cultural context on Message Reception	Urban-rural divide in climate change perceptions	Localized Narrative Development
6	Climate Change Awareness Campaigns & Education	Climate Literacy through Scientific Representation of Data	Informed Discourse through Credible Climate Journalism	Climate & Education in Academic Institutions
7	Bridging Climate-oriented Social Inequalities through Media	Identification of Unequal Media Representation of Vulnerable	Focus Limitation on Systemic Issues	Climate Narratives and Gender Disparities
8	Policy Agenda VS Media Narratives	Policy Agenda Influence on Media Narratives climate action	Media’s Balanced Discourse on Climate Change Communication	Influence of Media on Policy and Public Agenda
9	Solutions Journalism & Climate Change	Community-oriented Adaptation Strategies	Promotion of Local Mitigation Initiatives	Systematic Training & Climate Desks

**Theme 1—Media Narrative Building:**

Media narratives are critical in determining public discourse on any issue and the climate change is no exception, particularly amidst Pakistan’s dire environmental challenges. However, the media coverage on environmental issues is event-based,

limited by insufficient resources, and predominantly dictated by the policy agenda, failing to contribute to the sustained climate change awareness. Crisis-oriented language in media reporting amplifies urgency, whereas humanitarian framing of climate-induced disasters

underscores the humanoid cost of environmental calamities including floods and heatwaves. The environmental crisis of Pakistan highlights the worsened air quality index, biodiversity loss, and the socio-economic vulnerabilities associated with environmental degradation. By developing a rational counter-mechanism to address such challenges through its portrayals, Pakistani media can develop and impact public understanding, policy reformation, and communal action to mitigate the devastating impact of climate change.

**Sub-theme 1.1—Crisis-oriented Language:**

The Pakistani media is not language sensitive on environmental issues and gravity of the situation in the country. The language used in Pakistani media portrayals evokes urgency and sensationalism but lacks depth, and fails to sustain post-crisis public and policy engagement. However, it can employ relevant terms to frame the severity of environmental deterioration in the country, especially during floods, smog and heatwaves to raise awareness.

**Sub-theme 1.2—Humanitarian Framing:**

Humanitarian framing centres around the toll of environmental crisis on calamity-hit communities in Pakistan. Portraying victims' displacement, health crisis, and livelihood commotions. By focusing on vulnerability and identification, media narratives garner public support for rescue and aid but seldom advocate for proactive strategies, leaving the systematic environmental problems and challenges underexplored.

**Sub-theme 1.3—Socio-environmental Crisis:**

There exists an interconnection of climate dilapidation and societal inequalities. Pakistan's meagre air quality, loss of biodiversity, and insufficient climate action have exacerbated displacement and poverty. Media coverage has failed to highlight such aspects. Pakistani media is required to move beyond episodic coverage to help society mitigate tenacious socio-environmental issues, urging reformations to ensure climate sustainability and societal justice.

**Theme 2—Visual Emotional Engagement:**

Engaging audience through visual emotional appeals stands pivotal to media influencing the public perception of environmental crisis. By leveraging visuals to arouse emotional responses,

Pakistani media can develop compelling narratives that excavate audience connections to climate change. However, media needs to avoid sensationalism that may undermine its credibility and also lead to misinformation. A balanced approach may create responsible journalism and impactful storytelling to ensure that the audiences are aware and inspired to act, rather than misled and desensitized.

**Sub-theme 2.1—Visual Storytelling Impact:**

With compelling portrayals of environmental degradation, heatwaves, and floods, Pakistani media can magnify the perseverance of the environmental crisis. It may resonate emotionally with the target audience, and create memorable impressions. However, the episodic nature of climate coverage by Pakistani media has been a limitation to active public engagement. There is dire need to develop sustained media narratives to retain climate change on the policy and public agenda.

**Sub-theme 2.2—Emotional Narrative Connection:**

The media builds emotional connectedness through its visual portrayals, humanizing the crisis with images of vulnerable groups struggling for survival. It is unfortunate that Pakistani media lacks projecting such issues to build emotion-oriented narratives. But it could take this approach to develop empathy and advocacy. Pakistani media should build capacities to create easily digestible representations of complex issues, emphasising balanced representations scientific data and emotional applications to drive awareness and comprehension on the subject.

**Sub-theme 2.3—Media Sensationalism Risks:**

Sensationalizing news content on environmental issues, and using dramatized imagery can lead to hypnotize the audiences. While such stories generate immediate awareness, such tactics risk reinforcing the media know-no-boundaries portrayal of climate action and detracts from the nuanced understanding necessary to foster sustained policy and public response to the climate change crisis. In a situation in which Pakistani media already reports on environmental issues on an event-to-event basis, sensationalistic media presentations can undermine efforts

towards long-term climate mitigation as well. Combination of fact-checked reporting and awareness strategy.

**Theme 3—Local Community Representation:**

An effective and meaningful climate change discourse in Pakistan is impossible without media representation of local communities, especially the victims of environmental crisis. Although it reports on communities as victims at the time of climate change yet the scale of such reports is about their losses and highlighting their short term survival efforts, which leads to the oversimplification of their rights and roles in society. Climate journalism must be more holistic about the environmental crises and narrative focus more on the victims lived realities and resilience. Media should address the challenges to inclusivity for reflection of diverse perspectives. Amplification of local voices, experiences and knowledge, Pakistani media can foster an in-depth understanding of the impacts of climate change and promote community-driven equitable and sustainable solutions.

**Sub-theme 3.1—Local Communities as Victims:**

Media coverage on environmental crises in Pakistan often frames the local communities as destitute victims of the crises, concentrating on financial losses, displacement, and health emergencies. Although it garners empathy, it can lead to reinforcement of stereotypical passivity. Balanced narratives by Pakistani media may highlight victims' resilience and proactive approaches for to adaptability of environmental challenges.

**Sub-theme 3.2—Community Impact Prominence:**

Although not the case in Pakistan, media's emphasis should be visible and measurable in terms of impact of environmental deterioration on local communities. Accurate and fact-checked statistics on bio-diversity loss, obliteration of livelihoods, and physical displacement can determine the impact of media discourse for public. By highlighting such impacts, the solutions journalism can effectively foster public awareness with a deeper focus on engagement and empowerment of the local communities.

**Sub-theme 3.3—Need for Inclusivity in Narratives:**

Inclusive media narratives safeguard that diverse community voices, predominantly from the underrepresented and marginalized segments, are heard in environmental resilience debates. Pakistani media should go beyond typical event-based coverage and policy-induced portrayals to address the unique climate change challenges by including diverse community insights, and enabling more effective and equitable climate action framework.

**Theme 4—Political Economy of Environmental Journalism:**

Climate change coverage and perceptions in Pakistan are significantly shaped by the political economy of environmental journalism. Media coverage on environment and climate change has been restricted by policy agenda, financial constraints, lack of professional training and facilities, and insufficient prioritization of environmental issues. This under-representation of climate change undermines public awareness and advocacy. Strengthening diverse voices is essential to ensure a comprehensive understanding of the crisis. Furthermore, journalism must hold policymakers accountable for the effectiveness and equity of climate resilience programs, fostering a culture of transparency and responsibility. By addressing these challenges, climate journalism can play a pivotal role in driving informed discourse and systemic action.

**Sub-theme 4.1—Under-representation of Climate Change:**

Environmental issues, particularly the climate change receives negligible and episodic coverage in Pakistani media, habitually overshadowed by many other policy-driven priorities. Such under-representation stems from funding limitations, lack of skills and expertise among the journalisms, and inadequate public interest. This perpetuates ignorance and hinderance in sustained public engagement on environmental issues. Pakistani media organizations require to redefine their policies and priorities based on public interest, particularly on climate change.

**Sub-theme 4.2—Strengthening Voices on Climate Change:**

dedicated amplification of informed and diverse voices on environmental issues, particularly the climate change including affected communities, activists can ensure a nuanced public discourse, transcending policy agenda, promoting public awareness and advocacy to initiate a comprehensive climate action.

#### **Sub-theme 4.3—Accountability of Climate Resilience Programs:**

Pakistani Media should censoriously evaluate and report on climate resilience initiatives, and highlight their equity gaps, success, and/or failure. By holding the institutions and policymakers accountable, climate journalism can guide the stakeholders to improve and implement inclusive and effective climate change mitigation strategies.

#### **Theme 5—Audience Engagement in Climate Resilience Programs:**

Due to media's role in determining public understanding and participation, engaging media audience is vital to the accomplishment of climate resilience initiatives in Pakistan. With a consideration of the local socio-cultural context, media messages must resonate with diverse audiences. The demographic split in awareness about environmental issues underlines the problem for the diverse approaches to take care of the lack of knowledge and conflicting priorities. Thus, it is highly useful to employ localized communication strategies and initiate the process of building discursively sustainable discourse on environmental challenges that would minimize possible discrepancies to increase inclusivity. Sharing context-specific interventions, media can change the perception, encourage the public to act, and modify climate change resilience initiatives.

#### **Sub-theme 5.1—Socio-cultural Context on Message Reception:**

The diverse socio-cultural background of the Pakistani society reveal how the communication on climate change is taken and perceived. Socio-cultural beliefs and ideologies, education, and language have a variable effect on the reception and appreciation of programs. The Pakistani media outlets are supposed to develop suitable messages as well as culturally appropriate communication in order to enhance trust level and communication about climate resilience programs.

#### **Sub-theme 5.2—Urban-Rural Divide in Climate Change Perceptions:**

Environmental concerns and climate change might be perceived in Pakistan's urban and rural communities differently due to discrepancies access to information, environmental education and climate literacy, and experiences. Whereas, the residents of the urban centers may pay attention to industrial influence and air borne pollution, the residents in the rural areas may ballot on agricultural related disasters such as heavy rains and flooded floods, severe droughts, water shortages, and low crop yields. To tackle such issues, intricate and culture-sensitive approaches must be adopted to develop communication strategies on climate change resilience.

#### **Sub-theme 5.3—Localized Narrative Development:**

Constructing narratives, representing the context-oriented practices and challenges, for diverse Pakistani communities is important to effectively mitigate environmental crises including climate change. Localized media coverage, empowering communities, and promoting relevance can yield fruitful results to effectively engage in broader climate resilience initiatives, provide crucial insights into grassroots interventions and stimulate collaborative action.

#### **Theme 6—Climate Change Awareness Campaigns & Education:**

Large-scale systematic environmental and climate awareness campaigns and education initiatives are the most essential strategies while carving out Pakistan's public discourse on climate change. In this regard, it is crucial to foster climate literacy based on scientific data representation to support the argument and persuade the communities to grasp the grassroots problem and the understand discourse. Climate journalism based on scientific evidence can be a determinant factor for making the society have adequate and correct information about climate change. Incorporation of climate education in the curriculum of learning from the primary learning institutions to the university levels may enhance long term change and development of preparedness among the future generations. Knowledge gap can be closed with the help of a large-scale scientific approach

supported by media outlet and education to keep people rational to stand up against climate change.

**Sub-theme 6.1—Climate Literacy through Scientific Representation:**

To increase the level of climate literacy, it is imperative to inform people and educate them on environmental issues using scientifically and scientifically sound data. Clear images and simplified messages facilitate the understanding of severe problems, create favorable attitudes, and make proper choices. Aggregation of such representations in Pakistani media can help reduce the divergence of scientific and community knowledge gaps concerning climate-related issues and boost program uptake in resilience.

**Sub-theme 6.2—Informed Discourse through Credible Climate Journalism:**

Accurate climate journalism ensures an honest conveyance and delivery of all extant climate facts to the alibi of environment. In this way, the climate journalists in Pakistan require the necessary background information that would let them debunk common myths and misconceptions while contributing to the informed discourse. It can also equip the audiences to demand for accurate information on possible climate catastrophes, the prevention measures and strategies in countering climate change that can enhance the quality of life of the society.

**Sub-theme 6.3—Climate & Education in Academic Institutions:**

Mainstreaming of climate education in academic curriculum of educational institution of Pakistan from primary to tertiary level might guarantee enduring training and sensitization on environmental issues. It shall prepare society's generation able to meet climate challenges with the required information and knowledge. This framework has to be implemented through a cooperation of policymakers, academicians and media.

**Theme 7—Bridging Climate-oriented Social Inequalities through Media:**

Media plays an important and transformational role to overcome climate-related inequalities in different segments of society in Pakistan. Pakistani media can help amplify the voices of the

vulnerable population. However, the current media narratives are overwhelmingly episodic, they pay very little attention to systematic elements such as rural-urban divide, and poverty. Also, developing climate narratives have raised the question of narrative inclusion of minoritized voices and even gender. Pakistani media can enrich individuals' knowledge, support and mobilization, and policy change to address emerging social inequalities arising from climate change.

**Sub-theme 7.1—Identification of Unequal Media Representation of Vulnerable:**

In Pakistan, majority of the media narratives on climate change are policy driven; hence the it often fails to project voices of the marginalized and impoverished communities that worsens the deepening climate change crisis. It is important to raise such inequalities to develop an inclusive approach to the forms of climate change experienced in Pakistan.

**Sub-theme 7.2—Focus Limitation on Systemic Issues:**

The media in Pakistan has often failed to cover the systemic factors and challenges to environmental crises such as governance failure, poverty and lack of access to resources that have precipitated climate vulnerability. In its place, the continued focus is on the reporting of individual climate change events and specific occurrences. There is dire need to address critical structural challenges and pave way to sustained investigative and scientific news reporting.

**Sub-theme 7.3—Climate Narratives and Gender Disparities:**

Media narratives on environmental crises often fail in addressing the disproportionate impact of climate change on women, particularly in the disaster-hit areas in Pakistan. There is dire need to amplify women voices in media to showcase the unique challenges they face as a result of climate change and the contributions they make or can make to climate resilience. Gender-sensitive media coverage to advocate inclusive climate resilience policies is essential.



**Theme 8—Policy Agenda VS Media Narratives:**

The interplay between policy agenda and media narratives is crucial to build public discourse on climate action in Pakistan. Media in the country predominantly mirrors the policy priorities that limits its independence to frame climate change as a life-threatening challenge. A balanced discourse is required to bridge the disparities between policy-driven narratives and wide-ranging climate communication. Equally, the media has the potential to impact both policy agenda and public discourse, urging the stakeholders to address ignored climate concerns. Having strengthened these aspects, climate communication can serve as a catalyst to raise awareness, advocacy, and sustained reformation.

**Sub-theme 8.1—Policy Agenda Influence on Media Narratives:**

Unfortunately, the existing storytelling narratives from Pakistani media on environmental issues are fraught with bias from the policy emphasis. Such a high degree of reliance on media leads to cases where only fewer events and subjects are presented that too influenced by the policy agenda while the real issues driving people's action lack proper coverage. The media in the context of Pakistan requires more editorial freedom to contribute meaningfully to reasoned, moderated, and inclusive multiperspectival public discussions on environment and climate change.

**Sub-theme 8.2—Media's Balanced Discourse on Climate Change Communication:**

A balanced media portrayal of environmental issues may guarantee that communication concerning climate change receives adequate coverage in media by addressing the multifaceted nature embracing issues such as; policies as well as societal impacts. This strategy can be beneficial in instructing factual accuracy in the climate change mitigation, minimizing biases and providing average citizens with tools to engage the climate issue more effectively. They can help it promote understanding and active and reasoned discussion.

**Sub-theme 8.3—Influence of Media on Policy and Public Agenda:**

It is impossible to deny media's influence over the policy agenda and over topical perceptions

regarding environmental issues and climate change. Although challenging, it can provide Pakistani media an opportunity to address the ignored perspectives, point out leadership failures, and amplify community concerns to encourage policymakers to pursue efficient and fair climate action for sustainable climate change.

**Theme 9—Solutions Journalism & Climate Change:**

Solutions journalism focuses on responses to environmental concerns including climate change and transforms the problem-solution patterns of journalism into problem-solution strategies. Pakistani media can focus on the localized adaptation frameworks and mitigation strategies thus enhancing climate change resilience. Subsequently, it may advocate for systematic training, and climate desks in Pakistani media organizations that can prepare climate journalists for the required equity plans, tools for reporting on climate mitigation, and resilience. With this framework, Pakistani media can encourage informed action, enhance the public interest, and invite policy-based climate resilience.

**Sub-theme 9.1—Community-oriented Adaptation Strategies:**

Reporting on the already implemented climate interventions proves that communities have already decided to focus on solutions to the climate odds through modernized strategies like water preservation and farming techniques, increasing forest cover and energy-efficient models. Media in Pakistan can also portray success stories in the society, and persuade communities for the same, from the policy making and community collaboration to develop resilience to the harsh effects of climate change.

**Sub-theme 9.2—Promotion of Local Mitigation Initiatives:**

Disseminating information on the local mitigation measures including afforestation exercises and exploration of renewable resources bear evidence of local responses to climate change. Such efforts should be supported by Pakistani media as it can help to facilitate elimination of policy-practice divide which in its turn will demonstrate that community based climate action is feasible and has positive impact on climate mitigation policies

to enhance the general acceptance of sustainable practices.

### **Sub-theme 9.3—Systematic Training & Climate Desks:**

The deficiency of specialized training in environmental science, technical equipment, and reporting gadgets and data interpretations skills, and absence of climate desks in Pakistani media organizations hinders effective reporting on environmental issues in Pakistan. By launching training programs to and establishing dedicated climate desks, climate journalists in Pakistani media organizations can develop skills to report scientifically, discover logical solutions, and produce impactful narratives to promote sustained awareness and actionable change.

### **Discussion:**

Media is a critical interface between the scientific knowledge, policy agenda, and public discourse of environmental issues and climate change. The existing literature consistently highlights the dual role of media both as a mediator of the policy agenda and a potential catalyst for public awareness and action. Boykoff and Boykoff (2007) opine that media coverage, predominantly, mirrors policy (government) agenda, clearly reflecting the political economy of mass media. It is evident from the findings of this study that the limited and episodic climate reporting by Pakistani media, is determined by policy agenda and restricted by the lack of expertise and resources. Such dependency hinders the ability of media to critically report systemic issues, perpetuating gaps in public understanding and discourse on sustainable climate resilience. Ahmed et al. (2024) explored similar findings while exploring journalists' narratives on challenges to climate journalism in Pakistan.

Solutions journalism fosters community engagement and empowers individuals by shifting focus from mere reporting of problems to audience-response-backed practical solutions (Gifford et al., 2011; McIntyre-tamwoy, 2008; McIntyre, 2017). This approach may also be applied in the Pakistani context, where promoting community-based adaptation strategies and grassroot-level mitigation plans may contest the adverse vulnerabilities of climate-induced disasters. Since metropolises face industrial

emissions and air quality problems and the rural communities grieve over water scarcity and agricultural impact (Habib-ur-rahman et al., 2022; Ulpiani et al., 2024), adapting community-based climate narratives by Pakistani media can help improve the situation. It may consist of solutions-based storytelling, highlighting communal initiatives such as renewable energy plans and advanced farming practices that can inspire sustainable strategies to overcome the rural-urban divide in climate perceptions and priorities.

Climate literacy is a pivotal support to effectiveness of climate change communication. Accessible, and scientifically-supported media narratives can eloquently improve public understanding of environmental crises (Khan et al., 2024). Since the lack of expertise and undertrained media workforce results in below par reporting in Pakistan, analytically crafted scientific training initiatives, and establishment of climate desks can expand the scope and standard of climate journalism in the country.

Societal disparities in the country worsen the already complicated climate discourse, as marginalized and underprivileged communities often suffer disproportionate climate impacts as well as media coverage. Prasetyo (2017) found out that fair and impartial storytelling is crucial to portray the real-life experiences of the vulnerable communities. Likewise, AbdelGhaffar (2023) also explored that dramatized media portrayals exacerbate further marginalization of the deprived communities. Comprehensive media narratives that address societal vulnerabilities, are required to promote equitable climate action.

Finally, media's responsibility of keeping an extra-legal check on the policymakers and ensuring accountability in climate change resilience programs is vital. Credible climate journalism can pave way to transparency and underscore room for improvement, aligning policy agenda with scientific data and society needs (Nwokolo et al., 2023). In Pakistan, where the systemic governance failures hinder climate resilience, media may develop a discourse by critically evaluating policies to ensure sustainable climate action.

### **Conclusion:**

This study examined the role of Pakistani media in shaping public discourse on environmental

issues in the country using focus group discussion with climate change specialists from environmental science, media and communication, governance and policy, and economics. The analysis of the documented responses reflected that media coverage is primarily driven by the policy agenda, and is sporadic in nature. It does not deal with the grassroots problem and its underlying causes. The respondents emphatically underlined the need for solutions journalism, community involvement, local level interventions, and action-based inclusive approach to counter climate impacts. It is necessary that localized climate stories are utilized in explaining discrepancies in climate change perceptions in the urban and rural areas. Eradicating societal divide is important to mitigate the adverse effects of environmental crisis on marginalized segments. The study participants pointed out that there is a lack of climate journalism based on accurate information and scientific data to create climate literacy. To mitigate such challenges, it is necessary to design and implement the systematic journalist training programs and establishment of climate desks in Pakistani media organizations. Media in Pakistan needs to be empowered and given editorial independence. In turn, it should empower the disadvantaged, advocate for solutions that can answer the existing problems, and ensure that the policymakers accept responsibility of their decisions. It has the potential of bringing a positive change in the society by encouraging people to actively participate in the change process.

### **Policy Recommendations:**

The following policy recommendations can help improve the role of media in building positive public discourse on environmental issues in Pakistan:

1. Draft policies following adequate and sustainable environmental reporting rather than encouraging mere episodic coverage to prepare a workforce that works to highlight systematic challenges, such as bio-diversity loss, governance failures, and ways to mitigate them.
2. Provide training to media professionals on advanced storytelling techniques, and equip them on emotive imagery and data visualizations, to produce scientifically-accurate and compelling climate stories.

3. Involve diverse local voices, especially the marginalized communities, in media coverage of climate crises. Prioritize equitable media representation to counter community-specific vulnerabilities.

4. Establish accountable and independent media collaborations and funds to reduce dependence policy-driven agenda. This may ensure independent and balanced coverage of environmental crises, and also promote investigative reporting on climate resilience programs.

5. Tailor communication plans to address the socio-cultural differences and urban-rural discrepancies in climate perceptions. Encourage localized narratives to increase public engagement in climate resilience initiatives.

6. Integrate climate education into academic curricula from school to university level, focussing environmental stewardship and scientific data literacy. Media-academic collaboration to launch awareness and advocacy campaigns can yield fruitful results.

7. Formulate strategies that bind media organizations to highlight gender disparities and social inequalities in climate narratives. Ensure unbiased representation of the marginalized communities to foster comprehensive climate discourse.

8. Promote collaboration among policymakers, journalists, academia, and scientists to ensure authentic reporting on environmental crises without unwarranted influence from political agenda.

9. Encourage media organizations to implement solutions journalism frameworks. Government policies should incentivize programs that promote community-led adaptation and mitigation strategies, signifying sustainable solutions to climate challenges.

### **Study Limitations:**

Since the study relied on the insights from a limited number of experts from environmental sciences, media and communication, governance and public policy, and economics, besides of getting in-depth understanding on the topic, it does not represent the full range of stakeholders such as policymakers, media professionals, climate disaster victims, and grassroots activists,

who all are involved in the process climate change communication.

This research study was focused on Pakistan, that represents unique socio-political, cultural, communication and environmental contexts. The findings may not be generalizable to other part of the world that have different governance structures, media landscapes, and climate challenges.

Moreover, the research employed a qualitative method. Hence, its findings stem from subjective interpretations of the participants. Although, the researchers were reflexive, the study may still introduce individual biases influenced by respondents' professional backgrounds or priorities. Given the nature of the focus group methodology, the research was constrained by logistical and timing challenges, which might have limited the depth of discussion and investigation of certain themes.

The research involved expert discussions. Mixed-method research involving a systematic content analysis on the subject could complement the study findings by discovering the existing media practices and trends.

## REFERENCES

- AbdelGhaffar, N. M. N. E. A. (2023). Solutions Journalism and Climate Change Journalistic Narratives: Comparative Insights from Egypt and the United Arab Emirates. American University in Cairo.
- Ahmed, A., Kashif, M., & Mansoor, S. (2024). Exploring Journalists' Narratives on Challenges to Climate Journalism in Pakistan. *Human Nature Journal of Social Sciences*, 5(1), 286–294.
- Azeem, S., Cheema, H. A., Shahid, A., Al-mamun, F., Rackimuthu, S., Ebad, M., Rehman, U., Essar, M. Y., & Lee, K. Y. (2023). Devastating floods in South Asia: The inequitable repercussions of climate change and an urgent appeal for action. *Public Health in Practice*, 5, 100365. <https://doi.org/10.1016/j.puhip.2023.100365>
- Bhatti, O. S., Mujahid, S., & Mughal, N. I. (2024). Unveiling Climate Consciousness: Assessing Perceptions based on Social Media and Mass Communication Strategies among Balochistan University Students. *Journal of Development and Social Sciences*, 5(2), 33–44. [https://doi.org/10.47205/jdss.2024\(5-II\)04 Apr-June](https://doi.org/10.47205/jdss.2024(5-II)04 Apr-June)
- 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>
- Boykoff, M. T., & Boykoff, J. M. (2007). Climate change and journalistic norms: A case-study of US mass-media coverage. *Geoforum*, 1–15. <https://doi.org/10.1016/j.geoforum.2007.01.008>
- Dawadi, S. (2020). Thematic Analysis Approach: A Step by Step Guide for ELT Research Practitioners. *Journal of NELTA*, 25(1--2), 62--71.
- Ejaz, W., Ittefaq, M., & Arif, M. (2024). Understanding Influences, Misinformation, and Fact-Checking Concerning Climate-Change Journalism in Pakistan. In J. Gutsche, Robert E. & J. Pinto (Eds.), *Journalism and Reporting Synergistic Effects of Climate Change* (1st ed., p. 21). Routledge. <https://doi.org/10.4324/9781032627526>
- Evans, H., Dyll, L., & Teer-Tomaselli, R. (2018). Communicating Climate Change: Theories and Perspectives. In W. L. Filho, E. Manolas, A. M. Azul, U. M. Azeiteiro, & H. McGhie (Eds.), *Handbook of Climate Change Communication: Vol. 1 Theory of Climate Change Communication* (pp. 107–122). Springer. <https://doi.org/10.1007/978-3-319-69838-0>
- Gifford, R., Kormos, C., & McIntyre, A. (2011). Behavioral dimensions of climate change: drivers, responses, barriers, and interventions. *WIREs Climate Change*. <https://doi.org/10.1002/wcc.143>
- Habib-ur-rahman, M., Ahmad, A., Raza, A., Hasnain, M. U., Alharby, H. F., Alzahrani, Y. M., Bamagoos, A. A., Hakeem, K. R., Ahmad, S., & Nasim, W. (2022). Impact of climate change on agricultural production: Issues, challenges, and opportunities in. *Frontiers in Plant Science*, 13, 925548. <https://doi.org/10.3389/fpls.2022.925548>
- Hussain, S., Khan, A., & Iqbal, M. Z. (2024). Media reporting of climate change crisis in Pakistan: Identifying corrective strategies.

- Information Development, 40(1), 158–169. <https://doi.org/10.1177/02666669221104612>
- 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>
- Lochmiller, C. R. (2021). Conducting Thematic Analysis with Qualitative Data. *The Qualitative Report*, 26(6), 2029–2044.
- Mabon, L. (2020). Making climate information services accessible to communities: What can we learn from environmental risk communication research? *Urban Climate*, 31, 100537. <https://doi.org/10.1016/j.uclim.2019.100537>
- Maguire, M., & Delahunt, B. (2017). Doing a Thematic Analysis: A Practical, Step-by-Step Guide for Learning and Teaching Scholars. *All Ireland Journal of Teaching and Learning in Higher Education (AISHE-J)*, 8(3). <http://ojs.aishe.org/index.php/aishe-j/article/view/335>
- Manzoor, S., & Ali, A. (2021). Media and Climate Change in Pakistan: Perception of the Journalists in Mainstream Media. *Annals of Social Sciences and Perspective*, 2(2), 145–155. <https://doi.org/10.52700/assap.v2i2.82>
- Mcintyre-tamwoy, S. (2008). The impact of global climate change and cultural heritage: Grasping the issues and defining the problem. *Historic Environment*, 21(1), 2–9.
- McIntyre, K. (2017). Solutions Journalism: The effects of including solution information in news stories about social problems. *Journalism Practice*, 13(1), 1–19. <https://doi.org/10.1080/17512786.2017.1409647>
- Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic Analysis: Striving to Meet the Trustworthiness Criteria. *International Journal of Qualitative Methods*, 16, 1–13. <https://doi.org/10.1177/1609406917733847>
- Nwokolo, S. C., Meyer, E. L., & Ahia, C. C. (2023). Credible Pathways to Catching Up with Climate Goals in Nigeria. *Climate*, 11(196), 1–32. <https://doi.org/10.3390/cli11090196>
- Nyumba, T. O., Wilson, K., Derrick, C. J., & Mukherjee, N. (2018). The use of focus group discussion methodology: Insights from two decades of application in conservation. *Methods in Ecology and Evolution*, 9, 20–32. <https://doi.org/10.1111/2041-210X.12860>
- Otto, F. E. L., Zachariah, M., Saeed, F., Siddiqi, A., Kamil, S., Mushtaq, H., Arulalan, T., Rao, K. A., Chaithra, S. T., Barnes, C., Philip, S., Kew, S., Vautard, R., Koren, G., Pinto, I., Wolski, P., Vahlberg, M., Singh, R., Arrighi, J., ... Clarke, B. (2023). Climate change increased extreme monsoon rainfall, flooding highly vulnerable communities in Pakistan. *Environmental Research: Climate*, 2, 025001. <https://doi.org/10.1088/2752-5295/acbfd5>
- Prasetyo, Y. E. (2017). From Storytelling to Social Change: The Power of Story in the Community Building. *SSRN Electronic Journal*, 1–11. <https://doi.org/10.2139/ssrn.3094947>
- Santos, F. D., Ferreira, P. L., & Pedersen, J. S. T. (2022). The Climate Change Challenge: A Review of the Barriers and Solutions to Deliver a Paris Solution. *Climate*, 10(75), 1–32. <https://doi.org/10.3390/cli10050075>
- Ulpiani, G., Pisoni, E., Bastos, J., & Vetter, N. (2024). Are cities ready to synergise climate neutrality and air quality efforts? *Sustainable Cities and Society*, 106059. <https://doi.org/10.1016/j.scs.2024.106059>
- UN-Habitat. (2023). UN Habitat Country Report 2023. <https://www.unhabitat.org/pakistan-country-report-2023>.