

## Green Journalism in Focus: Investigating Challenges and Perspectives in Climate Change Reporting within Pakistani Media



Rabia Noor \*

Kashan †

Huma Zafar ‡

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**Abstract:** *This comprehensive study explores the landscape of green journalism and climate change reporting among Pakistani journalists, employing a mixed-methods approach of 20 qualitative interviews and a survey involving 110 journalists. Anchored in Agenda-Setting Theory and Environmental Communication Theory, the research seeks to validate hypotheses concerning the impact of journalists' training on their perspectives, reporting quality, and the broader media agenda regarding climate change. By integrating insights from qualitative interviews with quantitative data from the survey, the research provides a holistic understanding of the intricate dynamics shaping green journalism and climate change reporting in Pakistan. The findings underscore the importance of structured training initiatives, increased awareness, and improved technological capacity to enhance journalists' effectiveness in addressing the multifaceted challenges posed by climate change. The study contributes valuable insights for media organizations, policymakers, and stakeholders aiming to improve environmental reporting and awareness in Pakistan.*

**Key Words:** Green Journalism, Environmental Reporting, Pakistan, Climate Change, Pakistani Journalists, In-depth Interviews, Survey, Mixed Method Research

### Introduction

The fact that the causes and impacts of climate change transcend national boundaries and involve several stakeholders makes it a global concern (Beck, 2009). This global risk has far-reaching environmental, social, and economic implications (IPCC, 2021). The media's role in influencing public opinion and creating awareness of this crucial subject has grown in importance as the world struggles with the effects of rising global temperatures, shifting weather patterns, and a rise in the frequency of extreme weather occurrences (Nisbet, 2009).

In recent years, Pakistan has experienced devastating floods, droughts, and cyclones that have claimed thousands of lives, ruined livelihoods, and devastated infrastructure. Pakistan is among the

nations that are most susceptible to the effects of climate change, as evidenced by the likelihood that these and other natural catastrophes will become more frequent and severe in the upcoming decades.

Over the past twenty years, there has been a dramatic increase in the amount of national and international news coverage of these issues in the media, across print, electronic, and online platforms. This coverage has taken the form of cross-sectional, longitudinal, national case studies, and comparative studies conducted globally (Hansen, 2015). In addition to endangering extensive ecological systems, climate scientists warn that there is a significant risk of accelerated extinctions, which will force people to migrate from low-lying areas and reduce food supplies for an expanding population. In the next 50 years,

\* Assistant Professor, School of Creative Arts, The University of Lahore, Lahore, Punjab, Pakistan.

† Research Scholar, School of Creative Arts, The University of Lahore, Lahore, Punjab, Pakistan.

‡ Research Scholar, Middlesex University, London, United Kingdom.



these effects will cost the global economy more than \$10 trillion (Ward, 2009).

Because of the tremendous effects of global warming, journalists need to do more than just inform readers about these effects or present them with starting statistics. This is especially true in Global South nations like Pakistan, where the suffering of people is increasing as a result of rising temperatures, frequent floods, and air pollution. Journalists covering health, science, technology, and the environment have an ethical duty to raise public awareness of the current and potential effects of global warming as well as to contribute to more responsible reporting of this information to draw attention to the suffering of their people. Additionally, "journalists should start educating people about climate change and the ways ahead by demonstrating how we can make a difference. (Verma, 2019).

However, Asian scholars make up only 4.6% of climate change communication media research, with 47.85% qualitative. Most studies show an upward trend in news coverage, both nationally and internationally. A study conducted by (Schmidt, 2013) revealed two overarching themes in research: (a) it was observed that most, if not all, of the countries under examination have seen a significant increase in the coverage of climate change in recent years typically peaking in 2007 (Nobel Peace Prize awarded to Al Gore and the IPCC) and/ or 2009 (COP15 in Copenhagen). At the same time, (b) there are observable variations between countries in terms of the actual coverage levels (Boykoff, 2007). While climate change has become breaking news in some countries, media coverage of this issue has remained relatively low in others.

The media's ability to reach a large audience and its status as a "definer of reality" makes it essential for communicating about climate change. (Evans, 2016). However, the way that the public views climate change is often influenced by how the media portrays the issue (Mahl, 2020). Thus, media coverage of the topic has traditionally been used by researchers to determine how the general population feels about climate change. A 2020 Reuters Institute study of the sources of climate change information in 40 countries on all continents, found that the majority of people got their climate change news from the media (Newman, 2020). Concerns have been raised, nevertheless, that "regardless of the source of information, recommendations for behavioral changes decreased

individuals' willingness to take personal actions to reduce greenhouse gases, decreased willingness to support pro-climate candidate, decreased belief in the accelerated speed of climate change, and decreased trust in climate scientists." (Palm, 2020).

This research holds theoretical importance by contributing to the evolving field of climate change communication and media studies, especially in the context of Pakistan. It improves our theoretical knowledge of how information about climate change is distributed and interpreted in the media landscape by methodically analyzing the volume of media coverage, quality of reporting, and influencing factors. The results could be used to improve upon current theoretical frameworks, investigate the relationships between media, society, and environmental issues, and enhance conversations about how the media shapes public attitudes toward climate change.

On a particular level, the study provides insightful information to advocates for climate change, legislators, and media professionals. Planning focused tactics to raise the standards and volume of climate change reporting can be aided by having a thorough understanding of the unique opportunities and challenges faced by Pakistani media. This might then raise public awareness, aid in making sensible choices, and encourage a sense of urgency and accountability for taking action on climate change.

This study is significant not only in its immediate context but also in the larger global discourse on climate change communication and action, providing useful implications for media practitioners, policymakers, advocates, and academics. Refinement of editorial policies, efficient resource allocation, and significant public discourse on climate change are among the practical implications for media organizations.

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## Objectives

The primary objectives encompass an in-depth examination of journalists' perspectives on climate change, a comprehensive evaluation of variables influencing the quality of reporting, an exploration of hurdles encountered in climate-related news coverage, an investigation into the influence of institutional dynamics on reporting procedures, a scrutiny of the impact of technological advancements on climate change reporting, and an identification of suggestions from journalists to augment reporting in this critical area. By fulfilling these research objectives,

the study aspires to contribute significantly to the advancement of our understanding of the multifaceted challenges faced by journalists in effectively communicating climate change issues in the Pakistani media landscape.

### Evolution of Climate Change Terminology

Although the global climate issue is a terrible problem (Incorpera, 2016), few countries have acted quickly and decisively to lessen its effects. Global strikes and calls for action from corporations, governments, and older generations have resulted from this inactivity. Over time, there has been much discussion on when to use the terms "global warming" and "climate change." Others have contended that neither term fully expresses what's meant to be understood. For example, in 2003, 'Winning the global warming argument – an overview' was the title of a letter written by renowned US political strategist and George W. Bush administration advisor Frank Luntz. It's time for us to start discussing climate change rather than global warming. Compared to global warming 'climate change is less terrifying. Similarly, action media created a report titled "Naming Global Warming" in 2005, realizing the power of language. They proposed in an attempt to deftly manipulate perceptions that the issue be referred to as 'climate change', which is recognized as the historical, natural process that has altered the planet's climate. If the issue is caused by human activities, refer to it as 'global warming' (Action Media, 2005).

### Environmental Journalism: A Specialized Field

Environmental journalism is a specialized field that necessitates a high level of expertise and a profound comprehension of pertinent issues (Sharma, 2010). Intense discussions concerning the best approach to practice this kind of journalism-which frequently calls for journalists to make subjective decisions on controversial topics and increase public awareness of environmental issues sparked by this requirement of expertise in peer and professional circles. That may be the reason behind the removal of 'objectivity' from the code of ethics of the Society for Environmental Journalists, a professional association located in the United States, which says that its members should not be forced to hide their religious beliefs from the public eye. Because the common wisdom suggests that journalists, in their capacity as independent reporters, must protect their facts from values and other

entrenched interests, environmental journalism is problematic (Palen, 1999).

South Africa's media reporting on climate change has become a crucial communication tool in addressing the global climate crisis. (Vivian 2021). In contrast to nations in the global north, South Africa has seen comparatively little coverage of the issue in the media (Hase 2021). International conferences and unfavorable weather are the main topics of discussion when climate news is covered by the nation's media (Shimhanda 2021). On the other hand, international media networks were frequently the source of climate change reports in South Africa's mainstream media (Elia 2019), reporting about the climate crisis abroad. Tagbo (2010) and Batta (2013) found that South African and other African news outlets are criticized for their tendency to underreport climate change because of foreign influences. This approach has been criticized in that it creates the impression that the climate crisis is not an issue of concern in African countries.

According to many detractors, environmental reporting resembles advocacy journalism (Neuzil, 2008), in which reporters actively take part, provide context, and advocate on behalf of people denied access to media power and representation. The 'power imbalance' in society is the main focus of this kind of reporting (Waisbord, 2009). Journalists' active involvement in news-making contradicts the mainstream watchdog model, which values objective, fair, balanced, and detached reporting (Schudson, 2009). However, a vital component of journalism, environmental reporting is thought to be connected to the truth, justice, impartiality, and balance. (Lichtenberg, 1995). Journalism's unique attributes distinguish it from politics or literature and allow journalists to uncover and represent the social world. (Neveu, 2007). This makes journalism unique in society (Hallin, 2005) and gives journalists the power to negotiate with the representatives of other institutions in news production processes. Journalists verify facts from various sources, ensuring their authenticity in news content, making the relationship between journalists and sources crucial in news production. (Franklin, 2010). This relationship is maintained through the need for objectivity and balance ensuring a "web of facticity" (Tuchman, 1981), which requires journalists to validate facts from sources. The news media can endorse truth claims and suggest preferred meanings through adherence to norms of "facticity" (Nash, 2006). The process of validating and adhering to certain standards is

extremely important when it comes to reporting environmental issues. This can help bring attention to important environmental causes. However, this also raises concerns about who has control over the meaning of news and what message is being conveyed to the public. Support for governmental initiatives that help lessen the effects of climate change depends on public opinion, we will discuss how stakeholders have impacted Pakistan's climate as well as what the government and local media can do to address this serious issue.

The integration of Agenda Setting Theory and Environmental Communication serves as a lens to comprehend the interplay of media influences, environmental awareness, and journalistic practices.

Agenda Setting Theory, developed by Maxwell McCombs and Donald Shaw in [1972](#), posits that media outlets have the power to influence public perceptions and priorities by selecting and emphasizing specific topics. In the context of this research, the Agenda Setting Theory offers a theoretical framework to analyze how news organizations and media associations shape the agenda regarding climate change reporting and training initiatives. The theory allows for an examination of the salience and prominence given to environmental issues, reflecting the media's role in framing public discourse.

Environmental Communication, from a theoretical perspective, explores the dynamic interactions between human societies and the environment, emphasizing the role of media in disseminating information, shaping attitudes, and influencing behaviors related to environmental issues. This theoretical framework helps in understanding how journalists, news organizations, and media associations communicate climate change-related information. It encompasses the analysis of communication strategies, the effectiveness of training programs, and the barriers faced by journalists in conveying environmental messages.

The integration of Agenda Setting Theory and Environmental Communication allows for a comprehensive examination of the complex relationships between media, environmental awareness, and journalistic practices. Agenda Setting Theory helps identify the prominence of climate change in media agendas, while Environmental Communication provides insights into the effectiveness of communication strategies and the

challenges faced by journalists in conveying environmental messages. The conceptual framework derived from the integration of Agenda Setting Theory and Environmental Communication will guide the formulation of hypotheses, design of research methodologies, and interpretation of findings. This framework positions media entities as key actors influencing climate change narratives, training initiatives, and environmental awareness. It also considers the reciprocal nature of the relationship, acknowledging that public awareness and media priorities can influence each other.

This research employed a mixed-method approach, incorporating both survey and semi-structured in-depth interviews, to comprehensively investigate the challenges and perspectives of Pakistani journalists/reporters covering environmental issues. Snowball and Purposive sampling techniques were utilized to select participants, ensuring a diverse and representative sample. The study targeted journalists from all the provinces of Pakistan. Snowball sampling was employed to identify and recruit participants. This method involves selecting initial participants who, in turn, refer the researcher to other potential participants. This approach facilitated the inclusion of journalists with expertise in environmental reporting and those covering related beats. Purposive sampling was used to select participants deliberately chosen based on specific criteria, ensuring a balance in terms of geographic representation and beat coverage. This approach allowed for the inclusion of journalists covering not only environmental beats but also other relevant areas, reflecting the reality of journalistic assignments in Pakistan. A survey was conducted with 110 journalists to test hypotheses and gather quantitative data. The survey instrument included a combination of closed-ended and Likert scale questions, providing numerical insights into journalists' perceptions and experiences related to environmental reporting.

Twenty journalists were selected for in-depth interviews to explore nuanced perspectives. Semi-structured interviews were chosen as they allowed flexibility in questioning and encouraged participants to express their views openly. The interviews were conducted through WhatsApp, a widely used social media application, ensuring convenience and accessibility for participants. The survey and interview questions were designed to cover a range of topics, including challenges faced by journalists, perspectives on climate change reporting, the role of media

organizations, and potential improvements in reporting practices. The combination of surveys and in-depth interviews enabled a comprehensive exploration of the research questions, allowing for both quantitative analysis and qualitative insights. This mixed-method approach aimed to provide a holistic understanding of the issues surrounding environmental reporting in Pakistani media. Ethical guidelines were followed throughout the research process, ensuring confidentiality, informed consent, and respect for participants' privacy. Participants were informed about the research objectives, and their voluntary participation was emphasized.

## Findings and Analysis

### Quantitative Analysis through Surveys

Before delving into the analysis of surveys, it's crucial to recognize that survey data serves as a lens into the perspectives and experiences of respondents. Through meticulous examination, patterns and insights emerge, guiding us to understand the intricate interplay of variables and providing a foundation for informed conclusions about climate change reporting and the impact of training and education on this phenomenon.

**Table 1**

*Frequencies of News Organization Initiative on Climate Change Reporting*

News Organization Initiative	Counts	% Of Total	Cumulative %
No	54	49.1 %	49.1 %
Maybe	23	20.9 %	70.0 %
Yes	33	30.0 %	100.0 %

*Role of News Organizations in Training Journalists*

### Interpretation

Approximately half of the respondents (49.1%) reported that their news organizations do not have specific initiatives for training in environmental reporting. An additional 20.9% expressed uncertainty or neutrality ("Maybe"). Collectively, 70.0% of the respondents either indicated a lack of initiatives or

uncertainty, highlighting potential areas for improvement or exploration in news organizations' environmental reporting training programs. The remaining 30.0% affirmed that their news organizations do have specific initiatives, indicating a noteworthy proportion actively engaged in training programs related to environmental reporting.

**Table 2**

*Frequencies of News Organizations Initiatives and its Effectiveness*

News Organization Initiative	Effectiveness of the training by News Organization	Counts	% Of Total	Cumulative %
No	Moderately effective	4	15.9 %	5.8 %
	Highly effective	5	15.9 %	13.0 %
	Not effective	11	5.8 %	29.0 %
Maybe	Moderately effective	11	1.4 %	44.9 %
	Highly effective	4	20.3 %	50.7 %
	Not effective	1	27.5 %	52.2 %
Yes	Moderately effective	14	0.0 %	72.5 %
	Highly effective	19	15.9 %	100.0 %
	Not effective	0	15.9 %	100.0 %

*Frequencies of News Organization Initiative*

### Interpretation

For respondents whose news organizations do not have specific initiatives (49.1% of total respondents),

29.0% found the training to be at least moderately effective. This suggests that even without formal initiatives, a considerable portion of respondents

perceive some effectiveness in their training, while 5.8% found it highly effective. In the "Maybe" category (20.9% of total respondents), half of the respondents (50.7%) found the training to be at least moderately effective. This indicates a substantial positive perception of training effectiveness among those who are uncertain about the existence of specific initiatives in their news organizations. Among respondents whose news organizations have initiatives (30.0% of total respondents), a significant majority (72.5%) found the training to be at least moderately effective, with 27.5% indicating it as highly effective. This emphasizes a strong positive association between the presence of initiatives and perceived effectiveness.

The cumulative percentages illustrate a progressive increase in the perceived effectiveness of training initiatives. This suggests that, overall,

respondents tend to view training more positively when their news organizations have specific initiatives for environmental reporting.

The findings imply that having structured initiatives or programs in news organizations positively influences journalists' perceptions of the effectiveness of training in environmental reporting. The absence of formal initiatives does not necessarily mean a lack of perceived effectiveness, as a notable portion of respondents without such initiatives still find the training beneficial to some extent. These insights offer valuable considerations for news organizations aiming to enhance their environmental reporting training programs, emphasizing the potential benefits of structured initiatives on journalists' perceptions of training effectiveness.

**Table 3**

*Frequencies of Media Associations' Initiatives on Climate Change Reporting*

Media Associations Initiative	Counts	% of Total	Cumulative %
No	50	45.5 %	45.5 %
Maybe	24	21.8 %	67.3 %
Yes	36	32.7 %	100.0 %

*Role of Media Associations in Training Journalists*

## Interpretation

The majority of respondents (45.5%) indicated that their media associations do not have specific initiatives for training in environmental reporting. A substantial portion of respondents (21.8%) were uncertain or provided a neutral response regarding whether their media associations have specific initiatives. Approximately one-third of respondents (32.7%) confirmed that their media associations have specific initiatives for training in environmental reporting. The

data suggests a diverse range of responses regarding the presence of initiatives by media associations, with a sizable portion indicating uncertainty or neutrality. The results indicate potential variations in the level of engagement or awareness among journalists regarding media associations' initiatives for environmental reporting training. This investigation has directed this study into qualitative exploration to understand the factors influencing the presence or absence of initiatives and how they impact journalists' perspectives and practices in environmental reporting

**Table 4**

*Frequencies of Media Associations Initiative and its Effectiveness*

Media Associations Initiative	Effectiveness of the Training by Media Associations	Counts	% Of Total	Cumulative %
No	Moderately effective	5	6.5 %	6.5 %
	Not effective	17	22.1 %	28.6 %
	Highly effective	4	5.2 %	33.8 %
Maybe	Moderately effective	9	11.7 %	45.5 %
	Not effective	2	2.6 %	48.1 %
	Highly effective	4	5.2 %	53.2 %
Yes	Moderately effective	18	23.4 %	76.6 %



Media Associations Initiative	Effectiveness of the Training by Media Associations	Counts	% Of Total	Cumulative %
	Not effective	0	0.0 %	76.6 %
	Highly effective	18	23.4 %	100.0 %

*Frequencies of Media Associations Initiative*

### Interpretation

Among respondents whose Media Associations do not have specific initiatives (34.4% of total respondents), 33.8% found the training to be at least moderately effective, with 22.1% indicating it as not effective. In the "Maybe" category (19.9% of total respondents), 53.2% found the training to be at least moderately effective, but 2.6% considered it not effective. For respondents whose Media Associations have initiatives (45.7% of total respondents), a substantial majority (76.6%) found the training to be at least moderately effective, with 23.4% indicating it as highly effective. Respondents generally perceive training initiatives by Media Associations as moderately to highly effective, with a higher cumulative percentage in the "Yes" category. The absence of formal initiatives does not necessarily mean a lack of perceived effectiveness, as

a notable portion of respondents without such initiatives still find the training beneficial to some extent. The findings suggest a positive association between the presence of initiatives by Media Associations and journalists' perceptions of the effectiveness of training in environmental reporting. Media Associations with structured initiatives may contribute significantly to enhancing journalists' skills and effectiveness in reporting on environmental issues.

To test Hypothesis 1, Journalists in news organizations with specific initiatives or programs for training in environmental reporting are more likely to perceive a positive impact on the quality of their reporting on climate change compared to journalists in organizations without such initiatives, chi-square test is applied.

**Table 5**

*Contingency Tables to test H1*

News Organization Initiative	Question Not Applicable	Yes	Maybe	No	Total
No	18	22	9	5	54
Maybe	2	12	8	1	23
Yes	2	23	2	6	33
Total	22	57	19	12	110

*Impact of the Training on Climate Change Reporting*

**Table 6**

*Chi-Square Test*

	Value	df	p
$\chi^2$	21.9	6	0.001
N	110		

$\chi^2$  Tests

### Interpretation

The chi-square value of 21.9 indicates a substantial difference between the observed and expected frequencies in the contingency table. With 6 degrees of freedom, it suggests that there are multiple categories being compared in the chi-square test. The low p-value of 0.001 is below the commonly used significance level of 0.05, indicating statistical

significance. Since the p-value (0.001) is less than the significance level of 0.05, the hypothesis is accepted. There is strong evidence to support the alternative hypothesis. Journalists in news organizations with specific initiatives or programs for training in environmental reporting are more likely to perceive a positive impact on the quality of their reporting on climate change compared to journalists in organizations without such initiatives.

### Qualitative Analysis through In-depth Interviews

Building upon quantitative survey results, the subsequent in-depth interviews with Pakistani journalists unveil nuanced insights into climate change journalism, providing a comprehensive blend of structured data and qualitative exploration. This qualitative investigation with 20 journalists in Pakistan through interviews has helped this research to develop these themes including environmental awareness, media coverage limitations, technological impact, barriers, and recommendations shaping the journalistic landscape in Pakistan.

### Awareness of Climate Change Impact:

Journalists demonstrate an acute awareness of the observable impacts of climate change on weather patterns, seasons, and natural resources like water sources. They highlight changes like the extended summer season, reduced winter duration, and the shrinking of essential water sources as indicators of climate change. There's a consensus among the interviewees on the significant role of human activities in contributing to climate change. Human actions such as deforestation, population growth, and pollution are repeatedly mentioned as factors accelerating climate change in Pakistan. This perspective underscores the need for collective responsibility in addressing environmental challenges. A respondent highlights how climate change directly impacts daily life, agriculture, and livelihoods in regions like Baluchistan. The shrinking water sources and altered weather patterns are seen as substantial threats to communities dependent on agriculture and traditional water systems. The interviewees critique the media's role in addressing climate change. They express dissatisfaction with the media's focus on sensational news over climate change reporting. There's a call for increased attention to environmental issues to raise public awareness. One of the respondents emphasized the role of technology in enhancing understanding and reporting on climate change, "Technological advancements, such as satellite systems and online data, are valuable tools for journalists to provide accurate information, visuals, and data-driven reports on climate-related issues." Journalists express concern about the long-term consequences of climate change, particularly for future generations. The interviews highlight a shared sentiment that addressing climate

change is crucial not only for the present but also for the well-being of upcoming generations. Respondents 7, 8, 13, 16, and 20 suggest that addressing climate change requires increased attention from governmental organizations. There's a call for better-equipped government departments and collaboration with NGOs to tackle climate-related challenges effectively. The respondents collectively portray climate change as a tangible and urgent issue in Pakistan. The insights underscore the need for heightened media coverage, increased public awareness, technological utilization, and governmental action to address the multifaceted challenges posed by climate change. The journalists' perspectives provide a nuanced understanding of the complex interplay between human activities, environmental changes, and the broader societal impact.

### Limited Media Attention to Climate Change

The journalists interviewed present a mixed assessment of how the Pakistani media addresses the issue of climate change in their news coverage. The responses reflect a general consensus that climate change is not receiving adequate attention in the media compared to other topics. A female reporter with nine years of experience critiques the media for not differentiating between weather and climate, emphasizing that climate-related issues are often overlooked. Similarly, an outstation reporter with 15 years of experience, is critical of the media's minimal focus on climate change. He suggests that the media's primary concern is viewership, and climate change-related stories are not considered serious assignments. This sentiment implies a prioritization of more sensational or politically charged content over environmental issues. A bureau-chief, with 15-17 years of reporting experience, echoes the sentiment that Pakistani media does not adequately cover climate change. He notes a lack of packages or reports on the issue and emphasizes that climate change-related stories do not receive enough attention, comparing it to event coverage. Another correspondent for 17 years, takes a slightly different perspective. She acknowledges that while there may not be specific segments dedicated to climate change, reporters often find relevant information and make reports. She suggests that the media's approach to climate change is more reactive, covering environmental issues when they become newsworthy due to extreme weather events. The recurring theme is a collective perception that climate change is not given the attention it



deserves in the Pakistani media. Whether due to a focus on viewership, lack of serious assignments, or a reactive rather than proactive approach, the consensus is that climate change-related stories are not receiving adequate coverage. This finding highlights a potential gap in media priorities, where urgent environmental concerns take a back seat to other, perhaps more sensational, news topics.

### **Impact of Technological Advancements on Climate Change Reporting**

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Journalists have shared their opinions on how advanced technologies have impacted their field and the benefits they have gained from it. Respondents 1, 2, and 3 have emphasized the importance of technology, particularly when covering climate-related stories. "But now technology has made every citizen a journalist who makes videos/or footage available to the other world, which means the digital one, due to which journalists get an opportunity to pick it as a base and report. Through this technology, journalists can easily prepare a report with the help of other people. So, this way technology soothes the lives of journalists" (respondent 1). The 3rd respondent, who has a minimum of 20 years of working experience, stated that technology has made things much easier for journalists. The advent of drones and mobile phones means that they no longer need to carry bulky cameras, and these gadgets offer better picture quality, resulting in clearer images for viewers. All of the participants, except for respondent 4, who have worked for different national newspapers and TV channels for at least 16 years believe that Pakistan has fewer media coverage facilities compared to foreign countries. Even though there is technological advancement the capacity of our journalists is not enough to work with it. "Though technological advancement is there the capacity of our journalist is not enough to work with it. They think if their stories are about crime or political stories presented will be catchy and soon, they will get space on TV, newspapers, or social media." (Interview: 04)

Also, a female correspondent of 46 years surmises technology is a great tool that provides useful information and data, including satellite systems that can detect crop burning in India. This helps researchers to better comprehend the minutest details and makes reporting more effortless. Recently, a satellite system was installed in Lahore, which gives a clear view of crop burning. This technology aids

audiences in comprehending complex issues and simplifies the reporting process, making it more efficient. An outstation reporter who has worked in the field of reporting for 15 years addressed the effectiveness of technology "Technology has supported overall reporting and made it easy, through the use of technology you can present stories from different angles." However, he further highlights the impact of technology on climate change which is not as effective as it needs to be. No stories related to climate change are shown, and no deforestation activity or any activities are shown in the media despite the presence of technological advancement."

Technology has made the field of reporting way easier than before, a respondent who has been working for a renowned news channel for 14-15 years emphasized the advantages of technology, "Technological advancements have introduced drones which benefited us. In early times there were many places where we could face difficulty because of excessive water or fires. So, if a human is not able to go anywhere in the modern era drones can help you to cover as they can reach where humans can't."

The journalists' perspectives collectively portray that technological advancement has made fieldwork feasible and assists in certain spaces.

### **Adequacy of Climate Change Coverage**

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Journalists believe that climate change is a serious issue that needs more coverage than it is currently getting. According to a male reporter who has been in the media industry for fifteen years, the media is not taking climate change seriously enough. Rather than covering it on a daily basis, mainstream channels only focus on it when a disaster occurs. Another male journalist, who is a bureau chief, also believes that climate change needs to be taken more seriously by the media. He thinks that the negative impacts of climate change on people's lives need to be highlighted so that we can better manage disasters that are common in Pakistan. "Pakistani media unfortunately on this topic named climate change is not giving as serious coverage as needed. Climate change has an impact on people's lives and situations especially in Pakistan it has negative impacts but, in some places, it has left some positive signs like the places with extreme weather are now normal." (Interview: 09)

Three male reporters assessed the coverage of climate change in Pakistani media and found that it is not being covered at all. They believe that the media

should be arranging programs to raise awareness about the hazards and risks posed by climate change on a daily basis, rather than just reporting on disasters that have already occurred. "Pakistani media has no coverage regarding climate change. When there is a flood or any disaster or when a change takes place, only at that time does the media focus on it after that neither they focus on it anyway not it is their priority." (Respondent: 08). Some journalists, however, think that climate change is being covered enough. They believe that the incident-based coverage is sufficient and that other aspects of news should be given more space.

One female correspondent who has been in the media industry for 17 years believes that climate change is being covered sufficiently and that people are updated with information on weather, environment, and climate on a daily basis. She thinks that daily-based coverage or space for climate change alone is not necessary. "Anything related to climate change like environment, weather, and pollution is all covered from time to time. If we are doing any story, we do not ignore climate change, whenever we get a chance, a good story we cover it." (Interview 15)

### **Barriers Faced by Pakistani Journalists in Environmental Reporting**

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Journalism in Pakistan may lead a person to experience almost every kind of hurdle/barrier. Pakistani journalists go through plenty of stumbling blocks while they are bringing news to the people. Journalists may face physical barriers, they can be threatened to uncover some situations, feudalism can be a big challenge in some places, and even the weather can act as a barrier in addition lack of equipment causes hindrance for journalists, people at some places may be a big challenge and organizations whether governmental or non-governmental when deny to provide authentic data can cause problems for journalists and everywhere in Pakistan freedom of speech is not practical. A bureau chief who has been working in the field of journalism since 1999. In his 24 years of career he, being a Baluch citizen and a journalist by profession has to struggle to maintain peace in an area considered to be a conflict zone. Every reporter in Baluchistan no matter what his beat is, has to face difficulties. Covering a campaign or any incident in Baluchistan can cost them their life. They can be threatened to cover the situations and many of them are murdered. A female reporter associated

with journalism for fifteen years says the weather itself has made it difficult for her to report climate-related news. Fog/smog early in the morning and asking people to convince them to stay in such weather itself has proved to be a difficulty. A female correspondent with 17 years of work experience in journalism claims that organizations in Pakistan do not have up-to-date equipment or technological advancement for the collection of data. "The environment department does not provide good equipment for us and if they do so, that equipment sometimes works and won't work sometimes," (Respondent: 15). Due to this verifying or presenting plenty of effort. A male journalist for the last 5 years also talks about the lack of equipment in addition he highlighted the issue of reporting from a rural area mostly from northern areas of Pakistan. They face difficulties in connecting with the reporters there due to bad internet connection and lack of equipment. Another male journalist in this field for the previous 16 years states that the biggest barrier is journalists having no ability to present their reports appropriately. Journalists are unable to make the report presentable enough or in other words, reports have less news sense which can be considered the biggest barrier. A full-time male journalist for the past 20 years thinks that journalists from north Pakistan face more barriers. People may face difficulties in carrying necessary equipment like a Mic, camera, stand, etc in the north but journalists living in urban areas find it difficult to get correct data/ accurate index and not hiring an expert and particular reporter for climate change is also adding to barriers as we need to cover it. A male Reporter in the field of journalism for the last 13 to 14 years has to say that journalists are unaware of using the technical stuff, training is not held on how to tackle a difficult situation and coverage makes it tough for reporting in North Pakistan. "Journalists of Pakistan have no grip on technical stuff, specifically when it comes to climate change reporting, lack of training/ no technical grip leads us to face problems." (Respondent: 01) Another barrier is the non-cooperative governmental organizations denying to give the reports accurate data needed. Next was an assignment editor from a national news channel who believes institutions not showing interest in solving climate change issues is a barrier. in conventional media reporters anchors are not getting enough training and no programs are organized for their learning purpose is another barrier. A male journalist with fifteen years of work in journalism has talked about many barriers. Generally, people are not easily ready to talk on

camera, and for news regarding climate change, we have to find experts and talk to them. "There are many other issues like people not facing the camera and not wanting to talk on camera there we get access hardly, mountainous areas, deserts, and seas that need to be crossed." (Interview: 10). A bureau chief associated with media for the last 22 years says that there is no freedom of speech in Pakistan rather people are unaware of this concept, unlike other countries in the world. This is the barrier in the environment. An out-station reporter associated with media since 2000 also talks about freedom of speech and the kind of hurdles when it's practiced. When reporters raise issues, certain people threaten them and even case files against them with various allegations. Feudal lords are also making it difficult for them to bring the Truth out. There are few other journalists, and according to them, there are no barriers for people who are covering climate change. A senior journalist associated with the field of journalism for the last fourteen years says that journalists who intend to cover climate change can easily do so but it should be interesting enough to be the talk of the table, if not there will be space for political and other news daily and climate change will not get into the limelight. "Journalist needs to make it interesting; this is generally called news sense. So, if you are working on climate change make it as interesting that it would automatically get into the news" (Interview: 04)

The majority of the journalists talked about the barriers related to not having good equipment and some suggested that the reporters should have a good news sense and he/she should know about this global issue.

### **Suggestions and Recommendations**

The interviewed journalists provide different suggestions regarding the problem how it should be addressed and what are the responsibilities of a reporter when he/she is addressing the problem. Respondents 1, 8, and 9 highlight the laziness of the organization and that they don't take possible actions regarding this specific issue, they suggest organizations should educate journalists on proper storytelling and potential. "Organizations should hire reporters who are educated and have a better understanding but the problem now is that blackmailers and uneducated people offer money to organizations and represent themselves." (Interviewee: 08). Also, the first respondent suggests that organizations remain vigilant

and collect reports on a daily and weekly basis to address potential hazards promptly. Government agencies also have a crucial role to play by adopting a proactive pre-disaster management approach. Departments should take responsibility for maintaining awareness of hazardous areas and mentally preparing for potential consequences, especially in regions impacted by climate change. "People must be given awareness about the hazardous areas and educating them, mentally preparing them for consequences" (Respondent: 01)

2nd respondent who has 7 years of working experience in the same field emphasizes that Pakistani media lacks proper climate change reporters. Further, he suggests there should be climate journalists in every TV channel, newspaper, and digital media outlet. These journalists should be properly trained to cover global climate changes, even if that means traveling abroad. "There should be trained journalists, in every TV channel, newspaper and digital media there should be a proper climate journalist and their training should be according to climatic changes worldwide" (Interview: 02) The UN is working on this issue at a higher level, so the government of Pakistan should approach the UN, TV networks should sign memorandums of understanding and send journalists abroad, and they should be exposed to Europe and shown how journalists operate there. It is imperative for a journalist covering health or politics to work full-time on climate change issues, as opposed to doing so part-time. Further, the statement says there are no safety measures neither for life protection nor for the equipment, as they risk their lives and the safety of their families.

The respondents collectively agree on the lack of personal training "Climate change training should be provided to journalists and metrological and ecological departments to raise awareness about its effects on health and the need for action. Bulletins should include segments on overcoming issues, especially during smog-affected periods." Reporters should undergo training sessions to understand the significance of climate change, its various perspectives, and its impact on our lives and future. "Training sessions must be held. In the first place, reporters should be aware of the importance of climate change, the angles on which needs to be covered, and its impact on our lives and future" (Interview: 03)

Another respondent who has worked for international media highlights the absence of fast

technology, insufficient data, and irresponsible management "Our departments lack new equipment and technology. The environment department is so backward and they do not have sufficient data or equipment" (Respondent: 15) rather he suggests to encourage journalists in their work and these journalists should be properly trained to cover global climate changes. It is imperative for a journalist covering health or politics to work full-time on climate change issues, as opposed to doing so part-time. Respondent 14 requests a proper check and balance on organizations that misuse the funds for their personal use and related stuff. "Organizations who have been utilizing climate funds in other activities instead of climate change itself, so that we may find it easy to cope with climate change issues" (Interview: 14)

A unique suggestion made by a 15 years-experienced reporter is to educate not only journalists but also this teaching should be implemented to the youth as well. "Schools, colleges, and universities to make the students learn about climate change, they should be aware and educated to keep their environment and homes clean, and not produce waste." (Interview: 10) adding to the suggestions he encourages to plant trees so that it could be helpful for the environment. "We should do afforestation and reforestation, create parks, and lessen the use of cement and concrete. There is hope, but it will take time because the people of Pakistan understand things slowly. So, government and private organizations should from now and parents should also tell their children to stop using plastic and we should properly do plantation" (Respondent: 10)

The interviewees critique the media organizations for not properly addressing climate change issues and not providing workable equipment for journalists.

## **Conclusion and Recommendations**

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The study provides a comprehensive understanding of the perspectives and experiences of Pakistani journalists regarding green journalism and climate change reporting, and the impact of training and education on this phenomenon. The findings are organized around several key themes, including the role of news organizations and media associations in training journalists, the effectiveness of such training initiatives, the awareness of climate change impacts, the limited media attention to climate change, the

impact of technological advancements, the adequacy of climate change coverage, barriers faced by Pakistani journalists, and the suggestions and recommendations for addressing these issues. The survey results highlight that approximately half of the respondents reported that their news organizations do not have specific initiatives for training in green journalism and environmental reporting. This lack of formal initiatives, however, does not necessarily translate to a perceived lack of effectiveness, as a significant portion of respondents without such initiatives still found the training beneficial to some extent. The presence of structured initiatives in news organizations is positively associated with journalists' perceptions of the effectiveness of training in green journalism. Similarly, regarding the role of media associations, a diverse range of responses was observed, with a sizable portion indicating uncertainty or neutrality about the presence of initiatives. The findings suggest a positive association between the presence of initiatives by media associations and journalists' perceptions of the effectiveness of training in green journalism.

Moving to the qualitative analysis through in-depth interviews, nuanced insights emerge. Journalists demonstrate an acute awareness of the observable impacts of climate change on weather patterns, seasons, and natural resources. They emphasize the role of human activities in contributing to climate change and highlight the direct impact on daily life, agriculture, and livelihoods, especially in regions like Baluchistan. Journalists express dissatisfaction with the media's focus on sensational news over climate change reporting. There is a consensus that climate change is not receiving adequate attention in the media compared to other topics. This prioritization of more sensational or politically charged content over environmental issues underscores a potential gap in media priorities. The impact of technological advancements on green journalism and climate change reporting is acknowledged positively by journalists, emphasizing the ease of fieldwork and the use of technology to cover climate-related stories. However, concerns are raised about the insufficient capacity of journalists to fully utilize technological advancements and the need for improved training in this regard.

Barriers faced by Pakistani journalists in green journalism and environmental reporting are multifaceted, including physical barriers, threats, lack of equipment, difficulties in accessing rural areas, and challenges related to freedom of speech. These barriers highlight the complex landscape journalists

navigate while reporting on climate change in Pakistan. The recommendations provided by journalists include the need for organizations to hire educated and trained reporters, the establishment of climate journalists in every media outlet, training sessions for reporters to understand the significance of climate change and the promotion of awareness and education at the institutional and societal levels. Agenda-setting theory suggests that media have the ability to influence the public agenda by highlighting certain issues and downplaying others. In the context of this research, the findings indicate that green journalism and climate change reporting in the Pakistani media are not receiving adequate attention compared to other topics. This aligns with the Agenda-Setting Theory, as the media's choices in coverage impact the public's perception of the issue's importance. The theory is reflected in the qualitative findings that highlight the limited media attention to climate change despite journalists expressing the significance of the issue. The prioritization of more sensational or politically charged content over environmental topics indicates a certain agenda being set by the media, influencing what gets covered and, consequently, what the public pays attention to. By grounding this study in Agenda-Setting Theory, the research contributes to the broader discourse on environmental communication, showcasing how media agendas can impact the visibility and urgency assigned to climate change issues.

To sum up, the study sheds light on the intricate dynamics of green journalism and climate change

reporting in the Pakistani media landscape. The findings underscore the importance of structured training initiatives, increased awareness, and improved technological capacity to enhance journalists' effectiveness in addressing the multifaceted challenges posed by climate change. The study contributes valuable insights for media organizations, policymakers, and stakeholders aiming to improve environmental reporting and awareness in Pakistan. Building on the insights gained from this research, future studies could delve deeper into the dynamics of green journalism and environmental communication within diverse cultural and media landscapes. Exploring the role of emerging technologies, such as social media platforms and immersive storytelling tools, in shaping public perceptions of climate change could provide a nuanced understanding of evolving communication channels. Also, investigating the impact of climate change reporting on policy formulation and public behavior, considering factors like geographical variations and socio-economic contexts, would contribute to a more comprehensive understanding of the efficacy of media initiatives. Further research could also examine the potential synergies between different stakeholders, including governmental bodies, non-governmental organizations, and media entities, in fostering a collaborative approach toward addressing climate change challenges. Lastly, longitudinal studies tracking the evolution of climate change narratives over time could provide valuable insights into the sustainability and adaptability of environmental communication strategies.

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