

Barriers to Environmental Journalism in Pakistan: A Qualitative Study of Journalistic Practice and Media Constraints

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Abstract

Pakistan emits a very small percentage of the total carbon emissions in the world, but it is prone to climate change, with frequent floods, droughts, and an increase in temperature. Despite these threats, the level of environmental awareness among the citizens is low, partly because of poor communication through the media. This paper examines journalistic practice of environmental communication in Pakistan, structural and institutional constraints that inhibit effective reporting. The qualitative research design was adopted in study, relied on semi-structured interviews of five senior journalists working in print, television, and news agencies. Interview thematic analysis showed that the main issues that contribute to the undermining of environmental coverage include financial limitations, political interests, poor access to technology, poor journalist-scientist connections, and the absence of editorial interest. It is necessary to conduct specific institutional changes, financing, and the establishment of partnership networks of journalists and scientific communities.

Keywords: *Communication, Journalist, Pakistan, Climate Change, Media*

Introduction

The physical, chemical, ecological, biological, and other natural surroundings make up the environment in which we live (Singh, 2024). There are several ways that ecosystems and non-living objects communicate with one another in the environment (Gómez-Márque, 2024). Environmental journalism and communication have a huge role in covering environmental issues, and journalism practices on the environment and its effects on humans are vital since they have an impact on human life (Chhachhar et al., 2020). Nonetheless, systemic issues, including bad governance, economic volatility, and high illiteracy levels, tend to undermine this role in countries, especially in Pakistan (Government of Pakistan, 2021). Journalism has been used to observe scenarios and create awareness among people about environmental issues (Jain & Meena, 2024). The population is becoming increasingly aware of the impact that human activities have on the environment's health as a result of increased media exposure. In this sense, different journalists fulfill their roles in helping to raise public awareness of environmental issues. Journalism and the media have always been the primary means of disseminating awareness of environmental defense, shrouding public and environmental issues

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(Chhachhar et al., 2020). Furthermore, the past two decades have witnessed a growth in media scholarship on environmental issues, especially the way such issues are reported at the national and international levels using cross-sectional, longitudinal, national case studies, and comparative studies in print media, electronic media, and the internet. Despite this increase, Asian journalists conduct only 4.6 percent of all environmental communication research, which indicates a major research gap in the region (Schäfer & Schlichting, 2014).

From a methodological perspective, there are slightly more research articles that use quantitative methods (47.8%) than those of qualitative methods (44.85%), with mixed methods being used in the remaining 7.5% of research papers. Furthermore, most of these studies track changes in environmental news coverage over time, often indicating an upward trend in both domestic and international contexts (Sharif & Medvecky, 2018). When it comes to communicating about environmental issues and raising awareness of them, society's sensitivity is unstable, organizations continue to demonstrate a lack of interest in environmental journalism, and Pakistan ranks among the world's most vulnerable nations. Pakistan is dealing with several environmental problems, including depletion of natural resources, pollution of regenerative freshwater resources, use of toxic pesticides, solid waste, poisonous waste of all kinds, soil depletion, desertification, loss of diversity, industrial destruction, poor management, and others (Afridi, 2025). The effects of environmental problems are widespread and affect every aspect of existence, which is why journalists need to convey the problems of climate change to help the audience understand the danger they are in, which can help them find solutions as well.

Research Objectives

1. To investigate the way Pakistani journalists interpret and practice environmental communication.
2. To determine the political, economic, cultural, and technological issues that affect environmental journalism in Pakistan.
3. To understand the institutional hindrances and structural dilemmas influencing the environmental news.

Review of the Literature

Pakistani media, which includes print, electronic, and web media, is a thriving information source for its wide range of readers. As an example, Boykoff (2011) examined how environmental issues are covered in Pakistani print media and discovered that it is minimal and insufficient. It may further be broken down into satellite channels such as Al-Jazeera, CNN, Fox, and BBC, cable channels such as Dawn, ARY, Express, Geo, Dunya, and Sama TV, and terrestrial channels such as Pakistan Television Corporation, which is owned by the state (Ricchiardi, 2012). Radio follows, with its use made easier by Pakistan's cellular networks' explosive expansion. Although there are 162 commercial radio stations, some of the more trustworthy sources of news and information are the state-owned Voice of America and BBC Urdu radio networks. Pakistan has 279

monthly publications, 139 weekly publications, and 252 daily newspapers in the print media environment. Dawn, Nawai-Wakat, Jang, and Express Tribune control the print media market in terms of circulation (European Journalism Centre, 2020; Pakistan Press Foundation, 2021). Importantly, news agencies are essential to the Pakistani media environment.

There is one state-owned agency (Associated Press of Pakistan), and two privately owned news agencies, namely 'Pakistan Press International' and 'Online News Network International'. These feed news and images to both national and international media outlets (Ricchiardi, 2012). Aside from this, Pakistan now has web TV and online news sources due to the telecommunications sector's explosive expansion and easier access to the Internet. Pakistani internet consumers frequently obtain their news from almost all media outlets with an online presence, including web channels like GEO, Dawn, Express, ARY, Dunya, AJ TV, BBC, and Voice of America. Compared to global trends, Pakistan's media contribution to environmental research remains minimal, on environmental communication, which includes those with an Asian perspective, such as those from India, Bangladesh, Nepal, Sri Lanka, etc (Pakistan Press Foundation, 2021; Reporters Without Borders, 2018). Despite a few studies that have been developed by both local and international scholars, they are mainly restricted to content analyses, which creates critical gaps in qualitative exploration. As an example, Boykoff (2011) examined how Pakistani print media covered environmental issues and concluded that it was scarce and insufficient.

Comparing Pakistani Urdu news to Pakistani English news, Fizzah's 2021 study discovered that the former rarely covers climate change-related topics. The National Council of Environment Journalists (NCEJ) gives a more detailed analysis of the coverage of environmental issues in electronic news media, and they report that 2.8 percent of all news coverage is dedicated to environmental news (Sharif, 2018). As has been mentioned above, the coverage of environmental issues in the Pakistani media is minimal and usually shallow in comparison with the international media. The same can be observed in the research environment, where the majority of studies are conducted on print media and utilize quantitative approaches, which do not provide much insight into the reasons why these patterns occur. There have been few or no scholarly empirical studies conducted on electronic or online media, and there has been no qualitative analysis that could shed light on why Pakistani media may be falling behind much of the rest of the world in terms of environmental coverage (Qaisar et al., 2021).

Thus, the research aims to investigate journalistic frameworks, practices, and difficulties associated with environmental reporting in Pakistan. The research aims to give a clear picture of the way environmental issues are reported in the Pakistani media and the challenges that hinder journalists from reporting on environmental issues effectively. This was achieved by interviewing journalists and analyzing the media environment in the country. The desire to shed attention on some of the problems facing a global south nation, one that is particularly susceptible to environmental

communication and has some of the least amount of environmental news coverage in its media, which is the driving force behind public action.

Theoretical Framework

The paper relies on two major theoretical frameworks, Development Journalism and Framing Theory, to understand how the journalists in Pakistan communicate environmental issues. These frameworks offer the analytical perspective through which the motivations, constraints, and representations in environmental journalism are analyzed. Development journalism focuses on the contribution of media to national development through informing the people, championing progressive change, and accountability of institutions accountable (Benson, 2008). Considering the environmental issues, particularly in the underdeveloped nations such as Pakistan, this model does not view journalists as impartial observers rather as those who are essential players in the awareness creation and policy participation. As Pakistan is becoming more vulnerable to climate-related disasters, floods, droughts, and the rise in temperatures, the role of the media in facilitating sustainable development and environmental protection is especially pressing (Government of Pakistan, 2021). This school of thought emphasizes the normative aspect of journalism in the service of the common good and the development of an informed debate about the environment.

Framing theory is founded on the contribution by Erving Goffman and further developed by other researchers, such as De Vreese (2005), who focus on how media accounts can be used to persuade audiences by emphasizing some features of an event and downplaying others. The way stories are presented about scientific warnings, political struggles, economic hazards, or humanitarian disasters can have a significant influence on the degree of awareness and interest among the audience in the field of environmental communication. Environmental issues in the Pakistani media are also covered in a one-sided manner, and this is because of a few isolated incidents of floods or heatwaves instead of structural causes such as climate change (Qaiser et al., 2021). This adds to poor public awareness and policy discourse. In combination, the two frameworks enable a more subtle interpretation of the role that journalists are supposed to perform as well as the tactics they employ in presenting environmental stories. They also assist in determining the larger political, institutional, and cultural processes that shape the reporting or neglect of environmental issues in Pakistan.

Research Design and Methodology

The research design was qualitative with semi-structured, in-depth interviews that were used to investigate the journalistic views on environmental communication in Pakistan. Five senior media professionals in the print, television, and news agencies were recruited using a purposive sampling method to provide a wide scope of perspectives on the media types and language outlets. Since the research was exploratory, a semi-structured interview guide was created to enable flexibility in exploring the important themes and consistency among the participants (Ruslin et al., 2024). The questions were

based on the frequency and framing of environmental reporting, institutional issues, resource limitations, and professional incentives. Before the start of fieldwork, subject-matter experts reviewed these questions in terms of clarity and relevance. Thematic analysis of data was conducted by identifying the common patterns and categories of the political, economic, cultural, technological, and scientific obstacles to environmental journalism. Manual thematic analysis was performed, and iterative coding and constant comparison were applied to the refinement of the emerging themes. The study was conducted with ethical considerations. Before the interviews started, the participants were informed about the purpose of the research and provided verbal consent. To maintain anonymity, personal and organizational identifiable information was not stated, and interviewees had the right to review and make an additional statement to clarify it. In-person and virtual interviews were used, and the choice of the type depended on the availability and preferences of participants.

Table 1: Participants in In-depth Interviews

Interview no	Media Type	Gender	Designation	Experience
1	English Newspaper	Male	Reporter	10 years
2	TV	Male	Bureau chief	8 years
3	Urdu Newspaper	Female	Editor	8 years
4	News agency	Female	Reporter	6 years
5	Urdu Newspaper	Male	Reporter	9 years

Research Findings

All interviewed journalists emphasized that environmental issues receive limited, irregular attention in Pakistani mainstream media. The following themes were generated based on the findings from the interviews conducted by the researchers.

Event-Driven Coverage

Reporting is mostly event-based, and the media usually react to catastrophes like floods, droughts, or heatwaves, but not to constant or thematic coverage of climate change and ecological issues. A television journalist explained: "You know, in Pakistan, we usually focus on events rather than the topic of climate change and other environmental problems. For example, when there are large floods or other events like famine, drought, or other similar calamities, we tend to cover the events rather than the phenomenon of climate change."

Journalists noted that environmental stories are not usually considered editorial priorities unless they coincide with breaking news events. Routine weather forecasts or environmental news are frequently trimmed or pushed aside when other news is on top of the news cycle. An electronic media reporter remarked: "The national media does not cover environmental issues at all because, as I have previously mentioned, whenever a significant incident or disaster occurs, we drop the weather report from our 9:00 p.m. bulletin in favor of the current breaking news. This is specifically related to electronic media." A number of participants also noted a lack of correspondence between local and global environmental coverage. Unless they are reported in major Western media,

international climate change news is hardly tracked. Journalists stated that most stories on global environmental developments are picked up only when reported by international broadcasters like CNN or the BBC. As the same reporter continued: "Print media also publishes occasional one-liner stories or straightforward columns. In case of a story, it is found in the first five columns or four columns of English newspapers such as the Daily Times or Dawn. Urdu media does not discuss climate change or other environmental issues as often as English media does. Only when it is reported by CNN or the BBC do we cover it." Such responses indicate that environmental journalism is a marginal concern in both Urdu and English media, more responsive than proactive, and frequently dependent on the external news streams.

Financial factors

Environmental issues in the Pakistani media are greatly limited by financial constraints. Reporters in various media outlets pointed out that news media depend mostly on advertisements and subscriptions by public and private sectors, and thus there is a tendency to focus on commercially profitable news and to ignore issues of public concern like climate change. An electronic media journalist described this funding gap plainly: "The question is: Who will provide funding to news organizations so they can do environmental communication, investigative journalism, and produce quality news articles about environmental issues like climate change? This type of reporting requires funding." This view supports the higher issue of structure: environmental journalism is not a profitable entity, and as such, it is a low priority in terms of editorial interests. Environmental stories do not have a dedicated sponsor, or are often advert-tied, as with politics or crime beats, or have ratings appeal. This leads to the newsrooms investing less in climate coverage, travel to do field reporting, or investigative follow-ups. Other journalists observed that international bodies do support climate-related awareness campaigns, but in most cases, the funds end up being used in short-term advertisements by NGOs, bypassing media houses. "There is funding, but it goes to NGOs for awareness ads, not to us. So the media doesn't benefit, and neither do the stories."

The above observations are consistent with Development Journalism, which focuses on the role of media in the promotion of social development, especially in low-resource settings. However, when they lack institutional backing, journalists are limited players and not active agents of awareness. According to Framing Theory, such financial neglect enables only a limited range of frames that reporters can use and therefore leads to event-driven stories that are episodic and lack enduring stories about environmental degradation or policy failure. To conclude, financial constraints not only influence the editorial priorities but also undermine the capacity of the media to perform its developmental and educational functions in the context of environmental sustainability.

Political factors

The most prevalent issue that was expressed by the interviewed journalists was the excessive politicization of the Pakistani media. Political content is dominating the air and editorial attention, with environmental issues barely making the headlines. One of the editors of an Urdu newspaper wrote: "The media needs to take a closer look at its

programming, which devotes 80–90% of the time and length to politics. We solely talk about politics with everyone we meet, in all the interviews, talks, discussions, and agreements." A number of journalists noted that political reporters get more recognition, including fellowships or international assignments. One noted: "We keep the best reporter for politics."

The participants also indicated that the owners of media houses and editors are usually politically affiliated, and this may affect the editorial policy. The stories that fit the partisan narratives are far more likely to be covered, and the environmental issues, especially those that need to be investigated critically, become sidelined.

Cultural factors

One of the common themes that came out in the interviews was the lack of a specific culture of environmental journalism in newsrooms in Pakistan. The respondents of the Urdu media and English media said that environmental reporting is not considered a specialized beat and is hardly given to experienced or trained reporters. As one of the editors of the news agencies put it: "In our national media, there is a regular news branch of reporting for its individuals, for every issue, there is a branch for every reporter. For example, one who does politics does only politics most of the time. In the traditional print media, we do not keep a separate reporter for the environment beat."

Some of the journalists explained that the environmental stories are often considered as secondary or filler materials that are usually associated with NGO activities rather than with investigative journalism. "Environmental stories mostly come from NGOs. The reporter just notes what the NGO did: a tree plantation, a walk, and that's it. We don't talk about what's happening in the environment."

The respondents also highlighted that editorial priorities are based on being sensational and ratings, with dramatic stories being given preference, like political wrangles, violence, or natural disasters. One of the reporters said: "The media, especially Pakistani TV, is essentially sensationalist. Therefore, the majority of the time, people are looking for news that is controversial and includes political disputes. They believe people will find this enjoyable. This is how their rating rises: more people are watching it."

The other participant cited the absence of continuity in coverage, especially following major environmental disasters: "If there's a big flood, we'll cover it. But no one goes back and says: Why did this happen? Is climate change a reason? That part is missing." These reactions are a reflection of the culture of media, where the environment is rarely given a priority, and it is reported in an episodic fashion as opposed to a systematic approach.

Technological and scientific factors

All the interviewed journalists cited technological shortcomings as a significant barrier to proper environmental reporting. Respondents observed that most newsrooms do not have the relevant tools, digital infrastructure, and technical training to report on complex issues like climate change, natural disasters, and environmental degradation. One of the reporters of an Urdu daily said: "We don't have enough computers, software,

or tape recorders, among other tools and equipment. We lack knowledge of information and technology, as well as computer software and Internet browsing skills.”

Journalists described difficulties in accessing international environmental databases, official climate portals, and real-time information due to limited internet access and outdated hardware. Many indicated that even when they were willing to pursue in-depth environmental stories, technical constraints prevented them from doing so effectively. In addition to technological barriers, participants consistently reported limited access to scientific expertise. Over half of the journalists said they faced challenges in locating climatologists or environmental scientists who could serve as credible sources. This lack of expert voices in reporting was seen as a significant gap in environmental coverage. As one editor at a news agency remarked: “You can’t even locate an expert to quote here. Look around and you’ll notice that there aren’t many books or articles written about this subject.”

Others noted that scientists employed by government departments or research institutions were often difficult to contact, partly because of institutional policies requiring higher-level approval for media engagement. A bureau chief explained: “The issue is that neither environmental scientists nor newspaper representatives make an effort to approach the scientists after they have finished their research and would like it published.” This disconnect between journalists and scientists limits the depth and accuracy of environmental stories and restricts the inclusion of scientific evidence in climate-related news.

Table 2: Summary of Key Findings

Theme	Key Findings
Financial Constraints	Environmental journalism is underfunded, with limited support from government or non-governmental sources. Media houses prioritize topics with greater commercial value.
Political Prioritization	News agendas are dominated by political content. Environmental issues are rarely linked to political discourse and are considered low-priority editorially.
Cultural Norms	There is no established culture of assigning dedicated reporters to cover environmental issues. Environmental journalism lacks professional prestige.
Technological Barriers	Many journalists lack the tools, training, and internet access required for effective environmental reporting, especially when accessing scientific data.

Scientific Access	Limited collaboration exists between journalists and environmental scientists. Expert sources are scarce or difficult to access due to institutional restrictions.
Event-Based Reporting	Environmental coverage is largely reactive, focused on extreme weather events or disasters, rather than proactive reporting on climate change and sustainability.
Language and Media Type	English-language media covers environmental issues more frequently than Urdu media. Television channels favor sensational stories over educational content.

Discussion

The research validates the findings that environmental concerns in Pakistani mainstream media are marginalized, in terms of quantity and quality, as other studies imply that structural, political, and cultural forces affect coverage (Hansen, 2015). But to be able to comprehend this in a more holistic manner, the results obtained should be viewed in terms of Framing Theory and Development Journalism.

Framing Theory assists in explaining the content of what is reported as well as the manner of presentation. The statistics indicate that event-based dominant framing prevailed, as environmental narratives are being built around natural disasters (e.g., floods, heatwaves) as opposed to structural or policy-oriented interventions, such as climate change. This is a crisis frame, which enhances temporary coverage but does not help in long-term comprehension. There were no responsibility frames, which are a crucial absence that undermines the involvement of the population and hinders the pressure on policy, attributing accountability to institutions or political actors. Similarly, journalists also seldom referred to economic frames, which attribute finances to environmental degradation (e.g., loss of agriculture, health costs), although they are the most relevant frames in a country where the economic frame is present in the dominant discussion. The absence of such frames indicates the lack of strategic editorial thinking and potentially the lack of journalist independence. Environmental coverage is usually based on international news prompts with very little proactive reporting on local environmental matters.

In contrast, Development Journalism has placed more focus on the role of the journalist in information, education, and mobilization of the citizenry towards national development. The findings, however, point to the fact that this normative role is not being achieved in practice. The majority of the journalists did not consider themselves as active agents of change; instead, they defined themselves as passive agents of change due to the institutional priorities, lack of incentives, and indifference of the editors. Rather than making environmental concerns part of a development agenda, most reporters admitted that they lacked specialization, resources, and visibility. The marginality of environmental stories is reinforced by their assignment to junior staff or as NGO public

relations, not serious reporting. This is the contradiction between the principles of Development Journalism and the ground realities that define the degree to which structural constraints, such as financial reliance on political content and commercial motives, influence journalistic priorities in Pakistan.

In addition, the low prestige of environmental reporting reveals a mismatch between development-focused communication and the journalistic reward system. Political reporters are provided with travel, exposure, and influence, whereas reporters who would like to cover environmental issues are marginalized. The nuanced environmental stories are also pushed aside by sensationalist preferences for political conflict or drama. This structural discouragement does not encourage journalists to embrace the developmental spirit they are supposed to have. In addition to that, technological constraints and limited access to scientific materials decrease the capability of journalists to create data-based or expert-based reports.

Although both theoretical frameworks can be used as effective interpretive tools, they are not applicable in practice, hence, there is lack of connection between theory and practice. The lack of strategic framing and inability to adopt development-oriented journalism indicate that environmental communication in Pakistan has been stuck in a reactive, under-resourced, and peripheral corner of the overall media landscape. It seems that all insights suggest the necessity of instituting changes, professional training, and editorial determination to reinvent the area of environmental journalism as a powerful and legitimate field of public interest reporting.

Conclusion

The results of the present study indicate that environmental journalism in Pakistan is limited by a variety of interconnected political, economic, cultural, technological, and scientific issues. Although the country is highly vulnerable to environmental risks like climate change, extreme weather events, and resource degradation, the problem is not given much consistent coverage in mainstream media. The news content is more likely to focus on politically or commercially lucrative issues, and environmental reporting remains peripheral and responsive, and it is often restricted to disaster-related issues instead of thematic coverage. The study supports relevance of development journalism as a model, applicable in low and middle income countries where the media is central in the promotion of social and environmental agendas. It also demonstrates the applicability of the framing theory, which explains how news discourse influences the level of participation and policy concern on environmental matters. The enhancement of journalistic activities with the backing of institutions and interdisciplinary cooperation is paramount to the development of an informed discussion of climate change and sustainability in Pakistan.

Although the study has valuable exploratory findings, it was conducted on a small sample of five senior journalists, who were purposively selected. This is in line with the qualitative research traditions that focus on depth rather than breadth. The findings are however not supposed to be statistically generalizable. Instead, they provide

context-sensitive explanations of journalistic experiences and issues of environmental communication in Pakistan. This study may be developed further by future researchers as they can use ethnography in newsrooms, content analysis, or surveys that include more journalists to triangulate and confirm the themes that were found in this study.

In order to enhance environmental communication, media houses are advised to create special environmental reporting departments and have special reporters who report on climate and environmental matters on a regular basis. Moreover, capacity-building activities, including training sessions and workshops, may enhance the knowledge of journalists about scientific phenomena and their skills to convert complicated information into understandable stories told to the general population. Formal partnerships between media organizations and environmental scientists can also increase the quality and thoroughness of reporting, so that scientific information is not only accessible but also understandable to reporters.

References

- Afridi, M. K. (2025). Environmental challenges in Pakistan: Assessing impacts and exploring solutions. *Contemporary Journal of Social Science Review*, 3(1), 2079-2092. <https://contemporaryjournal.com/index.php/14/article/view/545>
- Benson, R. (2008). Journalism: Normative theories. In *The international encyclopedia of communication* (Vol. 6, pp. 2591–2597). https://www.researchgate.net/publication/281192631_Normative_Theories_of_Journalism_The_Blackwell_International_Encyclopedia_of_Communication_Wolfgang_Donsbach_ed_2591-2597
- Boykoff, M. T. (2011). *Who speaks for the climate? Making sense of media reporting on climate change*. Cambridge University Press. <https://doi.org/10.1017/CBO9780511978586>
- Chhachhar, A. R., Arain, G. S., & Chandio, D. A. (2020). Assessing print media coverage on environmental issues in Pakistan: A study of major newspapers in Pakistan. *Progressive Research Journal of Arts & Humanities (PRJAH)*, 2(2), 92–103. <https://nja.pastic.gov.pk/PRJAH/index.php/PRJAH/article/view/201>
- De Vreese, C. H. (2005). News framing: Theory and typology. *Information Design Journal + Document Design*, 13(1), 51–62. https://www.researchgate.net/publication/250888488_News_Framing_Theory_and_Typology
- European Journalism Centre. (2020). *Pakistan: Radio. media landscapes*. <https://medialandscapes.org/country/pakistan/media/radio>
- Fizzah, S. Z. E. H. (2021). *Print media coverage of climate change: Comparative study of opinion pages of Pakistan's Urdu and English language press*. SSRN. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4365880
- Gómez-Márquez, J. (2021). What is life? *Molecular Biology Reports*, 48(8), 6223–6230. <https://link.springer.com/article/10.1007/s11033-021-06594-5>

- Government of Pakistan. (2021). *Pakistan updated nationally determined contributions 2021*. United Nations Framework Convention on Climate Change. <https://unfccc.int/sites/default/files/NDC/2022-06/Pakistan%20Updated%20NDC%202021.pdf>
- Hansen, A. (2015). Promising directions for environmental communication research. *Environmental Communication*, 9(3), 384–391.
- Jain, A., & Meena, A. K. (2024). The role of journalism in promoting environmental awareness: A content and comparative analysis of media platforms. *Journal of Communication and Management*, 3(3), 248–253.
- Pakistan Press Foundation. (2021). *Radio's grim prospects*. <https://pakistanpressfoundation.org/radios-grim-prospects/>
- Qaisar, A. R., Razzaq, U. A., & Akash, M. (2021). Print media coverage to environmental issues of Pakistan: A case study of media's priorities in highlighting different issues. *Human Nature Journal of Social Sciences*, 2(2), 20–28. <https://doi.org/10.71016/hnjss/a4cq9v40>
- Reporters Without Borders. (2018). *Pakistan: Media ownership monitor – Online*. Retrieved July 14, 2025, from <https://pakistan.mom-gmr.org/en/media/online/>
- Ricchiardi, S. (2012). Challenges for independent news media in Pakistan. *Center for International Media Assistance*. <https://www.cima.ned.org/publications/challenges-for-independent-news-media-in-pakistan/>
- Ruslin, R., Mashuri, S., Rasak, M. S. A., Alhabsyi, F., & Syam, H. (2022). Semi-structured interview: A methodological reflection on the development of a qualitative research instrument in educational studies. *IOSR Journal of Research & Method in Education (IOSR-JRME)*, 12(1), 22–29. <http://repository.iaainpalu.ac.id/id/eprint/1247/1/Saepudin%20Mashuri.%20Artkel%20inter..pdf>
- Schäfer, M. S., & Schlichting, I. (2018). Media representations of climate change: A meta-analysis of the research field. In *Media research on climate change* (pp. 14–32). Routledge. <https://doi.org/10.1080/17524032.2014.914050>
- Sharif, A., & Medvecky, F. (2018). Climate change news reporting in Pakistan: A qualitative analysis of environmental journalists and the barriers they face. *Journal of Science Communication*, 17(1), A03. https://jcom.sissa.it/article/pubid/JCOM_1701_2018_A03/
- Sharif, K. (2018). Climate change news reporting in Pakistan: A qualitative analysis of environmental journalists and the barriers they face. *Journal of Science Communication*. https://jcom.sissa.it/article/pubid/JCOM_1701_2018_A03/
- Singh, V. (2024). The environment and its components. In *Textbook of environment and ecology* (pp. 1–13). Springer Nature Singapore. https://link.springer.com/chapter/10.1007/978-981-99-8846-4_