



RESEARCH PAPER

Comparative Analysis of Climate Change Reporting Practices among Rural and Urban Journalists in Pakistan

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ABSTRACT

This systematic research investigates the comparison of approaches which used by the rural and urban journalists on covering the climate change issue. Climate change emerge as critical issue particularly in developing countries like Pakistan. Role of media is important, but difference in reporting practice influence the quality. In this Quantitative research study 150 working journalists selected from the across Pakistan especially from the Punjab province by using conveyance sampling. This study found the variations in reporting in terms if reporting method, themes, concentration of issue, reinforcement, and challenges encountered, the personal view point of journalists. The main reason behind that is the available of facilities, and resources and the established links references of journalists. If we want to reduce this gap the Capacity building workshops, sessions, seminars, and events are the compulsory to attend for all these journalists of rural and urban areas.

KEYWORDS

Climate Change, Climate Reporting, Environmental Journalism, Climate Journalist, Climate Reporting Ethics, Framing Climate Issues

Introduction

One of the most pressing global issues is climate change, which has a significant impact on many aspects of life, including public health, food security, and environmental stability. Pakistan ranks among the top nine nations with the highest risk from climate-related events, according to the 2019 Global Peace Index. According to projections made by the World Health Organization (WHO), climate change could lead to an increase of 250,000 annual deaths from malnutrition, malaria, diarrhea, and heat stress, as well as an increase in health-related costs of up to \$4 billion per year (WHO, 2022). The media assumes a urgent part in educating people in general about the effects regarding environmental change, including both quick debacles like floods and heatwaves and continuous issues connected with strategy and moderation methodologies. Recent reports, for instance, have focused on the devastation caused by climate events, such as the devastating floods in Pakistan, major hurricanes in Cuba and Florida, frequent heatwaves in Europe, and catastrophic crop failures in East Africa (Reuters, 2022). In Pakistan, the divergence among metropolitan and country regions with regards to foundation, assets, and media access presents exceptional difficulties for environmental change revealing (Smith, 2020). Metropolitan columnists work in conditions with more created framework and a more extensive exhibit of data sources, while rustic writers face constraints connected with foundation and admittance to data (Jones, 2019). This study plans to think about environmental change detailing rehearses among country and metropolitan writers in Punjab, zeroing in on their systems, challenges, and the elements impacting their

announcing (Patel and Ahmed, 2021). In Pakistan, the divergence among metropolitan and country regions with regards to foundation, assets, and media access presents exceptional difficulties for environmental change revealing (Smith, 2020).

Huge level of rapid information sources is available for urban journalists and rural journalists face issues related to infrastructure and the availability of accurate information (Jones, 2019). This study primary focus on the climate change reporting of urban and rural journalist that how they report on climate change, what are their strategies, what type of factors influencing their reporting (Patel & Ahmed, 2021).

Impact of Climate Change on Pakistan

In the context of Pakistan specifically climate change has deep effect on Pakistani environment as well as economy. According to the intergovernmental panel on climate change recent researches, Pakistan face different challenges for example increased frequency of weather events, changed rainfall patterns, and rising temperature issues (IPCC, 2018; IPCC. 2019). Pakistan is the important country due to its geographical location. Its diverse geographical landscape includes plains, deserts, coastal regions, experience these effects differently. For example, the glaciers of Himalayan are the cause for both water scarcity and floods also the Thar Desert of Punjab is affected by the changing rain patterns (Eckstein et al., 2020).

In 2020, when large scale flood come in Pakistan which caused mass level damage, and cause for severe impact of climate change. Basically, these are the floods which cause for glacial melt and intense rainfall, as resulted in economical loss and destroy thousands of lives (Guardian, 2020). The susceptibility of agriculture sector in Pakistan due to climate change is major concern, because risky weather patterns damage crop yields and aggravate food insecurity (Rehman et al., 2015).

Journalistic Practices in Climate Change Reporting

Journalists play significant role in changing and making perceptions of people about climate change through their reporting. In urban areas journalists face difficult landscape effected by the different social-economic factors majorly include infrastructure, population and pollution, and the urban heat issues. Urban journalists have their prime responsibility to find the solution of these problems for broader climate change discourse, after contacting with different type of stakeholders i.e. scientists, scholars, activists, and legislators (Reuters, 2022).

On the other side, rural journalists in Punjab mostly work in the agrarian communities where climate change directly linked with the seasons and agricultural practices. Rural journalist face a lot of issues related to the delivery of scientific concepts, less availability of information, problems related to the infrastructure (Gorst et al., 2018). When the farmers and the rural communities face the issues related to the changing precipitation patterns and agricultural disruptions, then they drive the focus of rural journalists reporting on climate change (Nargis Iqbal, 2019).

Challenges and Misinformation in Climate Change Communication

Media industries are the perception making industries. Media content is highly effected on the thoughts of the people because in Pakistan mostly people watch media content and accept it as it is. Mostly people have no critical thinking skills for checking that content or source of the content (Gotst et al., 2018). It is the prime responsibility of the user

who consume the information about the climate change that they must check and recheck the facts, if reading news in newspaper then check the authors expertise, if reading news in online website then must check the date of publication and that source credibility etc. (Mertz et al., 2007). Time by time the spread of the conspiracy theories and disinformation for example claims about the HAARP technology which effect on the weather patterns further make climate communication complex (Yusuf, 2011)

Regional Perspectives and Adaptation Strategies

Local perspective should give coverage of news about climate change issue which is effective for developing better strategies. Some recent research suggested we must adopt that strategies which directly affect the small level farmer's crops and which directly influence the individual level of people. Its mean that local perspective must the incorporate when making the policies and planning about climate change (Oakes, 2019). Different studies explored country like Pakistan climate change highly impacts ion psychological and social well-being with forced displacement and environmental damage effecting communities' resilience and adaptation efforts (IPCC, 2019).

Literature Review

According to recent studies, Punjab's rural and urban journalists encounter both possibilities and difficulties while covering climate change. These issues include information access, training requirements, and community involvement tactics (e.g., Kumar & Singh, 2023). Examine current attempts to improve climate change reporting and communication in Punjab by looking into projects that encourage networking and collaboration between journalists, scientists, policymakers, and community stakeholders (e.g., Ali et al., 2010).

Talk about current instances of Punjabi rural and urban journalists advocating for policies and doing investigative reporting, emphasizing their impact on public policy agendas, discourse, and community resilience to climate change (e.g., Singh & Gupta, 2023). Examine current research on how Punjabi journalists' perspectives, priorities, and reporting techniques are shaped by cultural and contextual factors, and consider the consequences for successful communication tactics (e.g., Malhotra & Sharma, 2023). McComas (2004) asserts that the media affects public opinion, spreads knowledge about climate change, and even has an impact on policy choices. Public understanding and participation in climate change concerns might be greatly impacted by how the media presents these topics. To explore the differences between urban and rural journalists, it is vital to take into account the literature that already exists on journalism in these situations. While rural media usually has a closer connection to local communities, urban journalism may be more impacted by ideas from the city (Pavlik, 2000). Academics such as Singh (2018) and Gupta (2016) could be able to provide further insight into the economic, cultural, and historical aspects of environmental reporting in Punjabi culture.

Limited study may directly address the comparative examination of climate change reporting by journalists in rural and urban areas. However, by analyzing the dynamics of journalism in many contexts, scholars like Shoemaker and Reese (2014) have offered a framework for understanding variances in reporting techniques. analyzing the impact of technology on journalism (see, e.g., Lewis & Usher, 2013).

Entman.R. M. (2012) investigate how rural and urban media frame climate change differently. Take into consideration how framing affects public perceptions and policy debate. O'Neill, S., and Boykoff, M. (2011) Research how social variables in provincial and

metropolitan regions might impact the manner in which writers report on environmental change. Examine the influence that cultural perceptions have on communication tactics. Entman, R. M. (2012) examined the differences in rural and urban media coverage of climate change. A comparative study of Punjabi climate change reporting by urban and rural journalists was done in 2011 by O'Neill, S., and Boykoff, M. They investigated the potential effects of cultural variables on climate change reporting in both urban and rural settings. They also drew attention to any shortcomings or holes in the body of previous research. Give an outline of the broader framework in which journalism on climate change is conducted, emphasizing the ways in which the media shapes public attitudes and views. The talk emphasizes how important environmental newscasting is in shaping public perception and influencing strategies related to environmental change. It is emphasized how important the conventional press is in disseminating information about environmental change to various audiences.

According to Boykoff & Boykoff (2007), previous research emphasizes the significance of the media in promoting climate change awareness and influencing public discourse. Metropolitan columnists frequently approach a more extensive scope of assets and stages for environmental change revealing contrasted with their rustic partners (Hansen, 2013). Urban journalists frequently concentrate more on global climate change issues and policy debates, whereas rural journalists may prioritize local impacts and adaptation strategies, according to studies (Hamilton et al., 2015).

According to research, rural authors have a crucial role in establishing connections with local communities and amplifying their voices while disclosing environmental change, making their narratives even more vital and topical (Lester, 2018). Research has shown that setting limits and organizing initiatives to improve provincial writers' skills and resources for documenting environmental change are necessary. These training programs include about the understanding of the environmental science, techniques of storytelling and techniques of information translation (Mukherjee et al., 2019).

Audience study explored that there is a significant gap between rural and urban area people access of information. Those who live in rural areas have less available sources so they have less knowledge about the climate change issue as compare to urban area where people have large scale available of media information. Other factors may include the media exposure, socioeconomic position, and level of education (Leiserowitz et al., 2013). Understanding about the importance of collaboration and consensus among the decision makers, local partners, authors and scholars, enhance the decision making process about climate change issue at local and international level (Nisbet & Fahy, 2015). Journalists reporting about the climate change and especially their views and priorities are highly effected by cultural values and norms of the local area, i.e. content must be made according to the target audience need (Painter, 2016). Rural journalists can focus on the effect of climate change policies on local communities, while urban journalists can play important role of watchdog on government policies about climate change (Bolter & Alhakami, 2017).

Material and Methods

In this study quantitative approach is used, numerical data which was collected through the survey method and analyzed with the statistical techniques. Major focus on the study is the Punjab province of Pakistan, majorly for those who involve directly in climate change reporting. Target population of this study are news reports across Punjab, sample size of 150 journalists, 50 from rural and 100 from urban areas. Sample majorly took from the urban cities like Lahore, Multan and Sargodha and from the rural districts like Sahiwal and Pakpattan. Sampling technique which is used in this study is convenience

sampling due to its accessibility and costs effectiveness. Data was collected through a well-structured questionnaire, for capture demographic details and climate change reporting. The primary data was analyzed using IBM SPSS Statistics 21. The questionnaire, consisting of ten questions on a four-point Likert scale, aimed to gather respondents' views and was administered through Google Forms.

Results and Discussion

Prioritize local perspectives in their climate change reporting

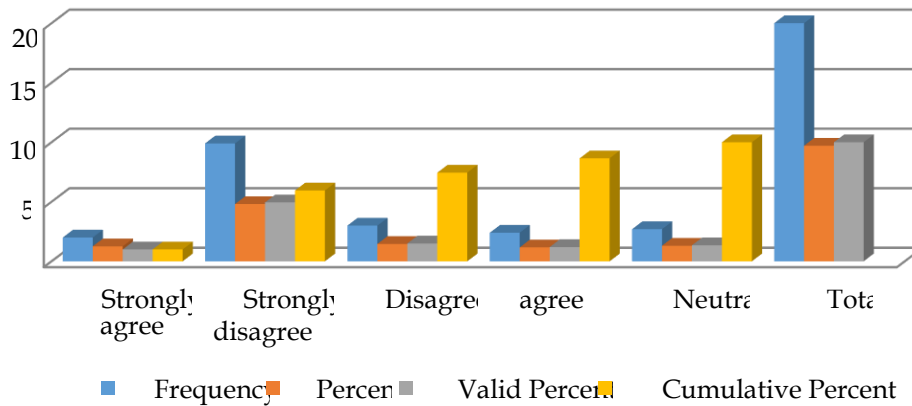


Figure 1 Rural Journalists are more likely to prioritize local perspectives in their climate change reporting?

The data on whether rural journalists are more likely to prioritize local perspectives in their climate change reporting reveals a significant trend. The majority of respondents, representing 48.1% of the total, strongly disagree with the notion that rural journalists emphasize local perspectives, while an additional 14.6% simply disagree. Conversely, a smaller proportion of respondents, 12.6%, strongly agree with the statement, and 11.7% agree, suggesting that while some believe rural journalists do prioritize local perspectives, they are in the minority. In conclusion the data explored that the rural journalists not majorly include the local community perspective in their climate change reporting, indicate the need for more investigation of the actual reporting practices of rural journalists.

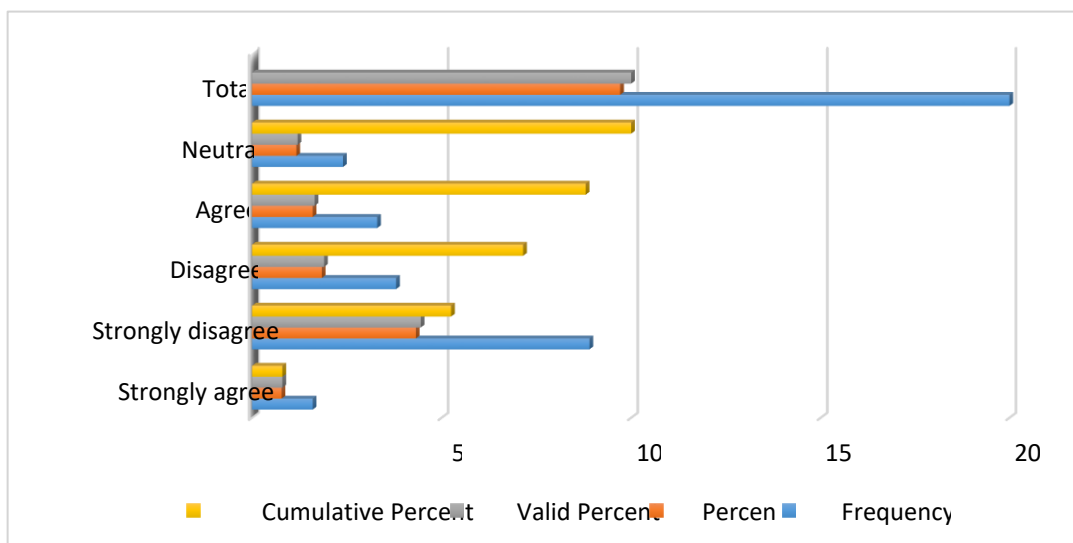


Figure 2 Rural Journalists Face Greater Challenges in Covering Climate Change Due to The Limited Resources?

According to the (figure 2) data respondents' opinions on the difficulties that rural journalists face when covering climate change due to limited resources are vastly different. 43.2 percent of respondents strongly disagreed with the idea that rural journalists face more obstacles, and 18.4 percent disagreed. Composed, these reactions represent 61.6% of the members, proposing a larger part accept that rustic writers don't encounter critical challenges around here. Notwithstanding, a more modest fragment of the example communicated the contrary view with 7.8% firmly concurring and 16% concurring that rustic columnists for sure face significant difficulties. Additionally, 11.7% of respondents stayed impartial, showing a degree of vulnerability or inner conflict about the issue.

Table 1
Descriptive Analysis of the Responses of Rural Journalists

Sr. No	Statements	Mean	Std. Deviation	Std. Error Mean
1	Rural journalists are more likely to prioritize local perspectives in their climate change reporting?	2.70	1.212	.086
2	Urban journalists have better access to scientific experts	2.61	1.070	.076
3	Rural journalists face greater challenges	2.80	1.173	.083
4	Urban journalists tend to focus more on the global implication	2.65	1.185	.084
5	Rural journalists play crucial role in highlighting the impact of climate change on agriculture or rural communities?	2.48	1.165	.082
6	Rural journalists have a deeper understanding of the local context and its connection to climate change	2.48	1.129	.080
7	Rural journalists actively engage with local communities to gather stories on climate change	2.78	1.161	.082

Note: (Table 1) reflects that there are 150 journalists in total, with an equal gender distribution (assuming 1 = male, 2 = female, or any other coding). Regarding area, there seems to be an equal number of journalists categorized as urban (Mean = 0.50) and rural (Mean = 1.41). Rural journalists are more likely to prioritize local perspectives in their reporting (Mean = 2.70). Urban journalists have better access to scientific experts (Mean = 2.61). However, Rural journalists face greater challenges due to limited resources (Mean = 2.80). Urban journalists tend to focus more on the global implications (Mean = 2.65). Similarly, Rural journalists have a deeper understanding of the local context (Mean = 2.48).

Table 2
Descriptive Analysis of the Responses of Urban Journalists

Sr. No	Statements	Mean	Std. Deviation	Std. Error Mean
1	Urban journalists are more likely to collaborate with international media outlets	2.57	2.57	2.57
2	Urban journalists are more effective in communicating complex climate science to their audiences	2.58	2.58	2.58
3	Urban journalists have a greater emphasis on policy and government involvement in their climate change reporting	2.71	2.71	2.71

Table 2, the number of respondents in the sample, which is 150 journalists. Mean: The average response on a scale measuring the likelihood of urban journalists to collaborate with international media outlets is 2.57. The standard deviation, a measure of the

dispersion or variability of responses around the mean, is 1.163. Std. Error Mean: The standard error of the mean, an estimate of the variability of sample means from multiple samples of the same size, is 0.082. However, Urban journalists are more effective in communicating complex climate science (Mean = 2.58). However, Urban journalists have a greater emphasis on policy and government involvement (Mean = 2.71). Rural journalists actively engage with local communities to gather stories (Mean = 2.78).

Discussion

This study majorly focusses on the comparison of climate change reporting between urban and rural journalist of Punjab. This research study highlights the focus of their reporting on framing of climate issues and prioritization of local perspective. Findings of this study shows the significant difference between these two groups approach on climate change reporting (Entman, 2012).

The overall data shows the distrust about rural journalists that they emphasize on local perspective in their reporting. Small no of respondents (12.6%) strongly agree and the small no of participants (11.7%) agree that rural journalists keep the local perspective in their reporting. While the majority (48.1%) strongly disagree and the respondents (14.6%) disagree with this statement (Mukherjee et al., 2019). So the findings show the clear viewpoint that as per the expectations rural journalists not more focused on the issues of the local communities. But it is the fact that the rural journalists are more close links with the local communities.

In distinction, urban journalists frame the issues related to climate change in broader perspective major focus on emphasizing the policy suggestions and global concerns relatively than local effects (Hamilton et al., 2015). This may be happening due to the access of facilities between rural and urban journalists especially in term of information. Urban journalists reporting within more advance infrastructure and with large scale available access to scientific experts, so they have access to address the climate change issue in a more comprehensive and policy oriented manner (Lester, 2018). The study also emphasizes on the issues which are faced by the rural journalists when they report on climate change issue, these issues mainly includes less available of information and technology, less training session, seminars, event, and conferences, and no encourage and appreciation of their work from the designated bodies (Leiserowitz., 2013).

According to (Borkoff, 2007) rural journalists face hard obstacles as compare to their urban counterparts. These obstacles include not proper technological support, a few professional development skill abilities and limited access to the scientific data. These all issues effect on the rural journalist's efforts of climate change reporting. This comparative analysis between the urban and rural journalists shows the different reporting priorities in their areas. Urban journalists more focus on climate change narrative at international level and suggest policy makers according to the large scale available of information (Sharma et al., 2022).

On the contrary rural journalists having the close links with the local communities and they have understanding of the local contexts, but they struggle with reporting due to resource limitations. Further low mean score suggests that there is need for rural journalists to equip them with advanced knowledge especially of scientific field, and organize different sessions, seminars for their training (Nisbet & Fahy, 2015). The difference in reporting of news about climate change between rural and urban journalists suggests that policy makers must took some policy initiatives to bridge this gap. Encourage and appreciate the local journalist and their work, and provide them advanced facilities help

local journalists to improve their capacity to prioritize local perspectives and address the specific climate challenges faced by the local communities (Painter, 2016). collaboration between the rural and urban journalists, certain type of meetups, gatherings, events also reduce the gap of information between them (Ali et al., 2010).

Conclusion

This research study highlights the coverage of reporting news about climate change between urban and rural journalists. After the empirical analysis it disclosed that urban journalist have large scale available of information, they have more awareness about the global level and strong reporting capabilities, while rural journalists lack in these all facilities but they strong connection with local communities, so they can engage the local communities at large level and amplify their voices to the government authorities.

Recommendations

If we want to fill this gap or want to reduce this gap then capacity building workshops, sessions, seminars, events are the compulsory to attend for all these journalists of rural and urban. And effective and transformative communication across diverse context of climate change reporting is much needed.

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