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## Role of Print Media during Flood Disaster in Pakistan

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### Abstract

*Journals and newspapers played a crucial role during the floods in Pakistan in 2022. They provided people with updates and information by informing and guiding them about the consequences of the flood. Floods, droughts, and other exciting weather events are anticipated to increase as a result of climate change, which will have a profoundly negative impact on human and environmental systems. This study evaluates the role of print media with regard to social responsibility. The results of the study show that the media could have contributed more to the disaster of the floods in Pakistan by encouraging readiness and reconstruction. The media gives aiding those in need top priority regarding disaster response and policy-related messaging. Its multifaceted contributions include timely information dissemination, public awareness raising, coordination support, policy advocacy, and accountability throughout the disaster management process, from preparation to recovery.*

**Keywords:** Environment, Flood, Pakistan, Print Media, Content Analysis

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Cite Us



### Title

## Role of Print Media during Flood Disaster in Pakistan

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### Abstract

*Journals and newspapers played a crucial role during the floods in Pakistan in 2022. They provided people with updates and information by informing and guiding them about the consequences of the flood. Floods, droughts, and other exciting weather events are anticipated to increase as a result of climate change, which will have a profoundly negative impact on human and environmental systems. This study evaluates the role of print media with regard to social responsibility. The results of the study show that the media could have contributed more to the disaster of the floods in Pakistan by encouraging readiness and reconstruction. The media gives aiding those in need top priority regarding disaster response and policy-related messaging. Its multifaceted contributions include timely information dissemination, public awareness raising, coordination support, policy advocacy, and accountability throughout the disaster management process, from preparation to recovery.*

**Keywords:** [Environment](#), [Flood](#), [Pakistan](#), [Print Media](#), [Content Analysis](#)

### Introduction

Although climate change has always occurred on Earth, the current quick and significant changes are particularly worrisome owing to their possible effects on the planet's ecosystem, biodiversity, and human health. In addition, they are changing the physical environment, which is having an impact on life all over the world and Climate change is putting many plant and animal species, as well as human health, in danger by rapidly reducing the amount of unaltered ecosystems (Heshmati, [2021](#)).

Natural disasters are incredibly unpredictable and dangerous (Pew, [2005](#)). The global average temperature is rising gradually (Carter, 2018). The role of media becomes very important in this regard. In a survey, 65% of respondents rated the media favorably as a reliable source of information on the risk associated with Katrina during its coverage (Pew, 2005). Whether it refers to natural hazards planning, response, or recovery, good communication is universally regarded to be important in such disasters (Lee, [2008](#)).



As far as Pakistan is concerned, the mid-river basin is at risk for storms and flooding, whereas Sindh, Baluchistan, and other desert and semi-arid regions in the south are at risk for drought. Seismic activity is more likely to occur in the Northern regions and the province of Baluchistan, while flooding is a frequent occurrence in the Punjab and Sindh provinces (Said, [2014](#)).

According to (Handmer & Dovers, [2016](#)) Pakistan is gravely afflicted by natural and human-caused exposure that endangers the lives and way of life of its citizens.

Due to different resources, there has been an increase in migration and conflict in agriculture (Royal Society, 2010). As a result of climate change, South Asian regions are being greatly impacted by severe floods, droughts, and cyclones (Parry et al., 2007). In Bangladesh, 60% of the country is already underwater, while in India, flood-prone areas have doubled between 1953 and 2003, and in Pakistan, floods in 2010 affected 20 million people. Pakistan is among the top ten nations most vulnerable to the consequences of climate change despite not being a large contributor to it. Therefore, it is essential that Pakistani media enhance public knowledge of the effects of climate change. This may encourage more people to take part in the fight against climate change. People will be more equipped to combat climate change if they are aware of its implications.

The media, which is acknowledged as the fourth pillar of the state, is essential to advancing the Sustainable Development Goals (SDGs) because it informs the public about the harmful consequences of climate change and provides in-depth coverage of important issues. In order to promote media involvement in SDG-related reporting, the UN developed the SDG Media Compact, which is made up of more than 80 major news media organizations globally (Nishimura, [2020](#)). This has affected climate journalism all throughout the world, especially in Pakistan. Media coverage of climate change increased significantly in 2018 and 2019, with a 73% rise in coverage in 2019 compared to 2018 across 100 newspaper sources and a 74% increase in global radio coverage, according to the Media and Climate Change Observatory (MeCCO). These results suggest that both nationally and worldwide, media coverage of climate change has increased dramatically (NacuSchmidt, [2019](#)).

## **Responsibilities for Natural Disasters and the Media's Role**

Not only are newspapers beneficial to the broader public, but they are also essential for disaster management officials. As noted by MacDonald & Reid ([1987](#)), Franks ([2013](#)) asserts that the media substantially impacts the public's perception of disasters, and this effect also extends to those who manage them. For early decision-making and strategy formulation, the Disaster Management Authority mainly depends on timely information from the media (Shklovski et al., [2008](#)).

Government representatives may be persuaded to prioritize disaster management by reading newspaper articles (Scheufele, [1999](#)). Some say the media is the primary conduit between the people and the government (Vasterman et al., [2005](#)). It's important to note that there are situations when there is tension between the media and disaster management officials. This depends upon the level of trust between journalists and disaster managers during a crisis (McLean & Power, [2014](#)).

In this study, the researcher defined the crucial function of print media during a natural flood disaster. Two newspapers from Pakistan were chosen for a comparative study of English and Urdu newspapers. The newspapers selected for the content analysis are the Daily Dawn and the Daily Jang. All of these national dailies are well-known, mainstream, and widely read publications that make the claim to provide fair and unbiased reporting (Sharif & Medvecky, [2018](#)).

## **Objectives**

- To make a comparison of Urdu and English newspapers regarding the issue of natural flood disasters in Pakistan in 2022.
- To assess the quality of news related to flood disasters in national print media.
- To inquire which newspaper has been more socially responsible during flood disasters.
- To find out which newspaper has given more coverage regarding the floods.

## **Literature Review**

Patti et al., ([2015](#)) revealed that print media is commonly acknowledged as a crucial conduit for news during flood catastrophes, but it additionally faces difficulties in efficiently performing its function. Furthermore, newspapers may find it

difficult to contend with online media sites that provide interactive elements and immediate updates. Due to these difficulties, debates on the efficiency of newspapers in the light of fast-developing catastrophe networks have emerged.

Shanahan et al., (2014) explored that in catastrophes like floods, media coverage has a huge impact on the public's opinions, mindsets, and behavior. Murthy, D., & Longwell, S. A. (2013) investigated that in order to determine if individuals prefer to post or respond to links from outdated outlets instead of social networks, where these individuals are posting tweets from, and if there is a connection among the spot and the connection of conventional instead of social media, this study specifically examines how the well-known social networking site Twitter was used during the 2010 Pakistan floods. According to the report, links to conventional media are vastly preferred by European individuals, while links to social networking sites are slightly preferred by Pakistani people.

Liu, (2017) investigated that newspaper has the ability to be an agent for societal transformation and promote policy in catastrophes like floods, in addition to its significance for data transmission.

(Peacock et al., 2007) reported that in order to meet the new demands of populations at risk in flood catastrophes, press coverage is essential. Zaheer, L. (2016) demonstrated that most people agree that the press plays a significant part in reducing the impact of natural disasters. s is desperately needed.

Harte D. et al., (2018) said that the explosion of technology has had a tremendous impact on the print media environment. With electronic versions,

smartphone apps, and multimedia materials, conventional newspaper sources are adopting electronic formats.

### Hypothesis

1. H1. It is more likely that Urdu newspapers gave more coverage during a flood in Pakistan in 2022 than English newspapers.
2. H2. It is more likely that Urdu newspapers have been more socially responsible during flood coverage in Pakistan 2022 as compared to English newspapers.

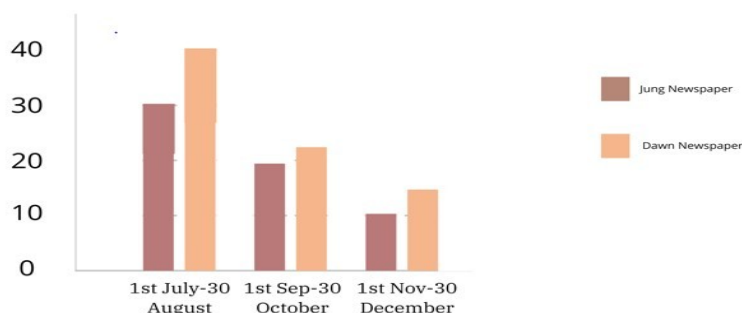
### Methodology

This study examines front-page coverage of Pakistan's flood disaster in 2022 using statistical and content analysis techniques. It concentrates on two newspapers, The Daily Dawn and The Daily Jang, published in Urdu and English. We are counting the flood-related news items on the front page of Daily Dawn and Daily Jang (the group focused on numbers). In the other group, we examined the news's placement, its tone (positive or negative), and its dramatic quality. This group is more concerned with the type or caliber of news those newspapers carried at a given period.

Analyzing the two newspapers (Daily Jang and Dawn), this study has focused only on news related to floods and visual representations that helped people a lot to understand the flood situation. The analysis is basically on what has been written by the media organ. News related to the flood found in the Daily Jang and Dawn Newspapers between June to December 2022 constituted the sample population.

**Figure 1**

*Number of news from July to December 2022 in Daily Jang and Daily Dawn newspaper*

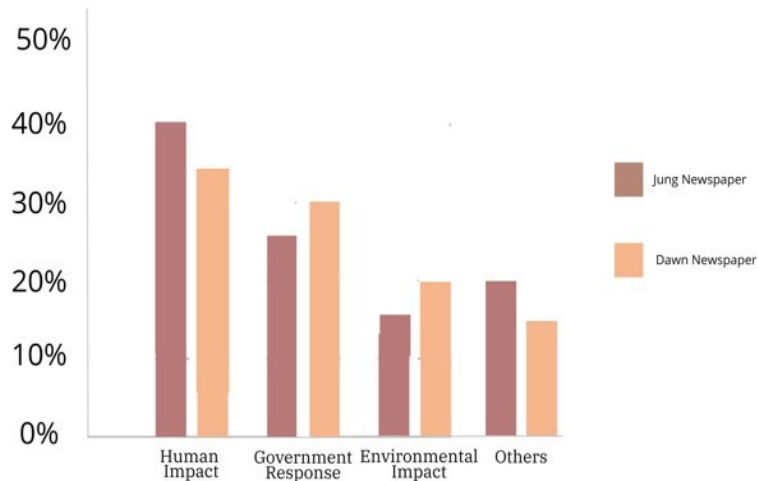


According to the research, in July 2022 most news related to floods was seen in newspapers. The second highest reported month of the flood was

August, after that June, then October, and September, and the last news was seen in December.

**Figure 2**

*Comparison of the topic distribution in the Daily Jang and Dawn newspapers*

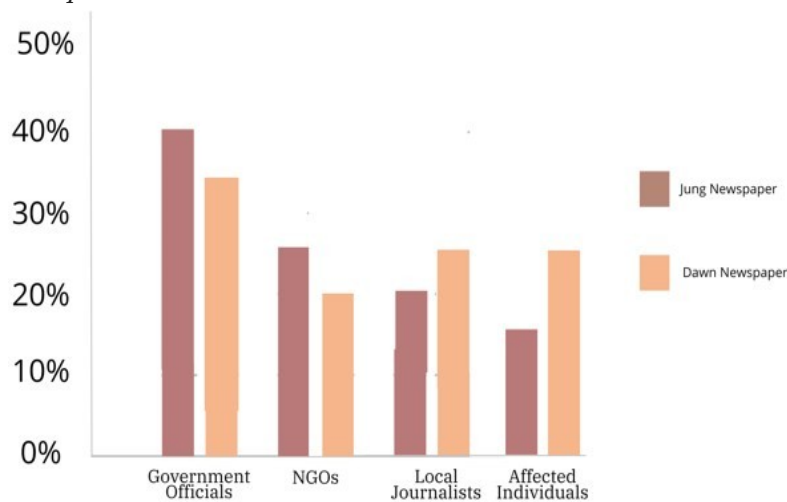


Overall, Daily Jang newspaper and Dawn newspaper both relied on a variety of sources to report on the flood disaster in Pakistan in 2022. However, there were some key differences in the sources that each newspaper cited. Daily Jang

newspaper was more likely to cite official government sources, while Dawn newspaper was more likely to cite NGOs and relief organizations, as well as local journalists.

**Figure 3**

*A variety of sources to report on the flood disaster*



Graph showing the percentage of a variety of sources to report on the flood disaster. The distribution of voices in the news articles of Daily Jang and Dawn reflects the different political biases

of these two newspapers. Daily Jang newspaper is more likely to give a platform to government officials, while Dawn newspaper is more likely to give a platform to affected individuals and NGOs.

**Table 1**

*Most frequently used words in the news articles*

Words	Newspaper		Total
	Daily Jang	Dawn	
Flood	45	50	95
Disaster	39	36	75
Damage	41	32	73
Death	32	28	60
Displaced	20	15	35
Relief	15	10	25
Government	32	25	57
NGO	12	17	29
Affected	20	26	46
Total	256	239	495

As table shows some of the most frequently used words by both newspapers in the news of flood in Pakistan 2022:

- Flood: This is the most frequently used word, as it is the main topic of the news articles.
- Disaster: This word is used to describe the severity of the flood.
- Damage is the term used to characterize how the flood affected people, infrastructure, and property.
- Death: This word is used to describe the loss of life caused by the flood.
- Displaced: This word is used to describe people who have been forced to leave their homes due to the flood.
- Relief: This word is used to describe the efforts to help people affected by the flood.
- Government: This word is used to describe the government's response to the flood.
- NGO: This abbreviation is used to refer to non-governmental organizations, which are involved in relief efforts.
- Affected: Those who have been impacted by the flood are referred to as affected by this word.

Numerous articles discussing the flood scenario were written in various newspapers. Those articles were quite helpful in informing people about the most recent state of affairs in the country regarding the disaster. The following were the subjects covered in flood-related articles in both publications.

- Effects of floods on people: This category includes articles on deaths, forced displacement, and damage to infrastructure and property.
- Government Response to Floods: Articles on the government's response to the floods cover their efforts to provide relief to the affected population, the challenges they faced during the response, and criticism of the government's conduct.
- Effects of floods on the environment: This category includes articles that describe how floods have damaged agriculture, polluted water supplies, and reduced biodiversity. It also covers the impact of floods on ecosystems.
- Long-term effects of flooding: Articles in this category address the long-term effects of flooding, including population displacement, loss of



livelihoods, and increased risk of additional flooding.

The articles regarding the flood crisis in Pakistan in 2022 that appeared in the Daily Jang and Dawn newspapers include the following examples:

**Daily Jang**

- "Flood Death Toll Surpasses 1,000, Millions Affected" o "Government Response to Floods Criticized" o "Environmentalists Warn of Long-Term Impact of Floods"

**Daily Dawn**

"Flood Survivors Struggle to Rebuild Their Lives" o "Government's Flood Relief Efforts Inadequate" o "Floods Could Lead to Food Crisis in Pakistan" These are just a few examples of the many articles that were published in Daily Jang and Dawn newspapers about the flood disaster in Pakistan in 2022. These articles provide a glimpse into the different ways that these two newspapers covered the disaster.

**Table 2**

*Breakdown of the length of story distribution as short, medium, and long in both papers.*

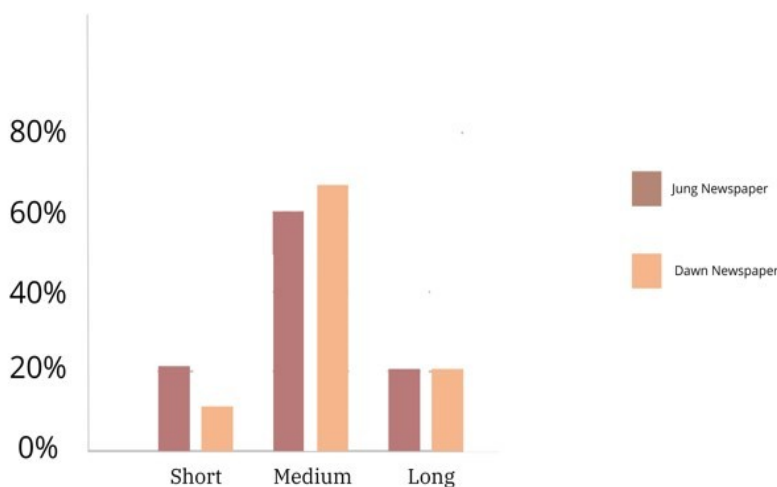
Newspaper	Short	Medium	Long
Daily Jang	20%	60%	20%
Daily Dawn	15%	65%	20%

The length of news stories in Daily Jang and Dawn newspapers varied significantly. Daily Jang newspaper had a higher percentage of short articles, while Dawn newspaper had a higher percentage of long articles. This difference in length may be due to the different target audiences of the two

newspapers. Daily Jang newspaper is a more popular newspaper, and its articles are likely to be shorter in order to appeal to a wider audience. Dawn newspaper is a more serious newspaper, and its articles are likely to be longer in order to provide more detailed information.

**Figure 4**

*Breakdown of the length of story distribution as short, medium, and long in Daily Jang and Dawn newspaper.*



**Table 3**

*Analysis of the proportion of favorable, unfavorable, and neutral news.*

Newspaper	Favorable	Unfavorable	Neutral
Daily Jang	30%	40%	30%

Newspaper	Favorable	Unfavorable	Neutral
Daily Dawn	25%	45%	30%

According to Table 6, there was a marginal increase in the proportion of favorable news in Daily Jung newspaper as compared to Dawn which had a somewhat greater proportion of unfavorable news. However, both newspapers news coverage was largely neutral.

It is significant to note that a limited sample of news stories is used to calculate these percentages. A more comprehensive study would be needed to determine the overall tone of the news coverage of the flood.

Following are some specific examples of favorable, unfavorable, and neutral news articles:

### Favorable

- Daily Jang: "Flood Relief Efforts Praised" • Dawn: "Government Responds Swiftly to Floods"

### Unfavorable:

- Daily Jang: "Government's Flood Response Criticized" • Dawn: "Flood Survivors Struggle to Rebuild Their Lives"

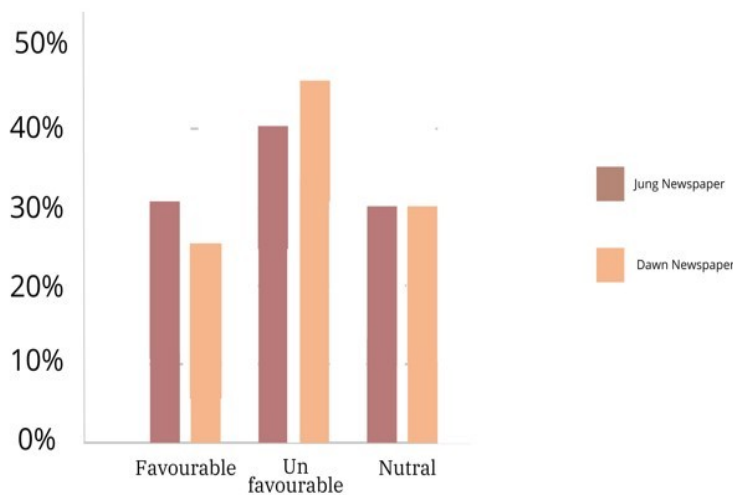
### Neutral

- Daily Jang: "Flood Death Toll Surpasses 1,000"
- Dawn: "Floods Cause Billions in Damage"

It is important to note that the tone of a news article can change depending on the specific details of the story. For example, an article that is initially favorable may become unfavorable if new information comes to light. Ultimately, it is up to the reader to decide whether they believe the news coverage of the flood was favorable, unfavorable, or neutral.

**Figure 5**

*Breakdown of the number of favorable, unfavorable, and neutral news in both Daily Jang and Dawn newspapers.*



**Table 4**

*Many graphics depictions are used to report on flooding.*

Newspapers	Dramatic	Official	Other	No Pictures	Total
Daily Jang	22	33	9	5	69
Daily Dawn	20	31	6	10	67
Total	42	64	15	15	136

Newspapers Dawn and Daily Jung reported on Pakistan's 2022 flood using a range of visual representations. Information about a tragedy can be effectively communicated in news reports by graphic aids. People can better comprehend the scope of calamity and its effects on afflicted populations with the use of these visual representations.

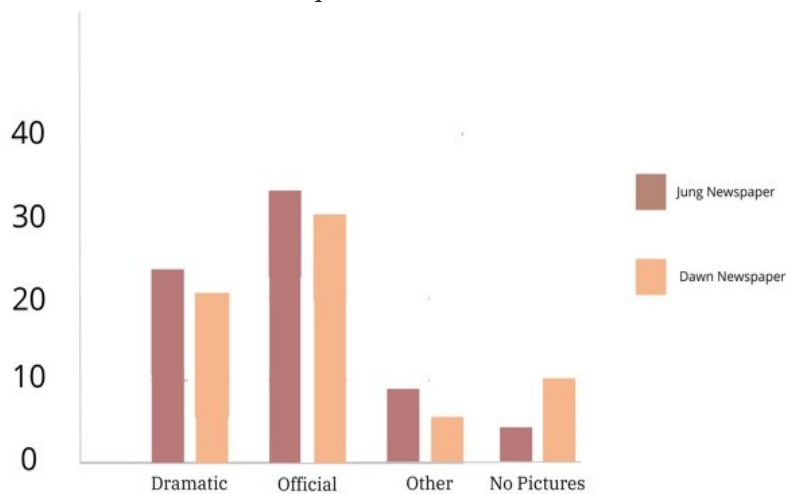
A content examination of news stories published in Dawn and Daily Jung newspapers between June and December 2022 revealed a considerable variation in the visual representations. The

newspaper Daily Jung featured more images than Dawn.

Because of its greater readership, the newspaper's stories probably have better graphics aid. The articles in the Dawn newspaper are perhaps more data-driven because it's more somber. A content analysis of news stories published in Daily Jung and Dawn newspaper between June and December 2022 revealed that Daily Jung newspaper utilized an average of 3.5 visual representations per piece, compared to the Dawn newspaper's average of 2.5.

### Figure 6

*Both newspapers used 6 different visuals to report on the disaster.*



Daily Jung newspaper published the people of disaster's destruction, including ruined houses, displaced families, and flooded streets. To draw readers in, these pictures were frequently included on the newspaper's front page. Information concerning the flood was effectively conveyed to a large audience through the use of visual representations in news articles published in the Daily Jang newspaper. The photographs made it easier for people to comprehend the scope of the calamity and its effects on the impacted population.

The economic impact of the 2022 Pakistani floods is still being assessed, but it is expected that businesses, agriculture, and infrastructure will have sustained billion-dollar losses.

The World Bank estimates that the floods resulted in \$14.9 billion in property destruction and \$15.2 in lost economic production. The \$4.8 billion

in damages done by the agriculture industry shows how badly it was impacted. There's a loss of \$2.5 billion in the infrastructure industry, which is also a big impact.

The country's economy was affected by floods. The floods would reduce

Pakistan's GDP growth by 0.5 percentage points in 2022, according to the International Monetary Fund. The IMF has additionally cautioned that the floods may cause inflation to increase and the nation's fiscal imbalance to deepen.

Following are some specific examples of the economic impact of the floods

- The agricultural industry: The floods damaged irrigation infrastructure in addition to destroying crops and cattle. As a result, agricultural production, a significant source of earnings for many Pakistanis, has decreased.

- The infrastructure sector: Power lines, bridges, and roads have all been harmed by the floods. This has complicated company operations and hampered communication and mobility.
- The tourism industry: The floods have harmed tourist attractions and made it challenging for visitors to visit Pakistan. The tourism sector, which is a significant source of foreign cash for Pakistan, has suffered as a result.

The floods' financial effects will probably be seen for a long time to come. The administration is striving to put its rehabilitation plan into action, but it will take time and a substantial amount of money to rebuild the country's financial system and infrastructure.

Dawn newspaper published more news articles about the flood disaster than Daily Jang newspaper. Dawn newspaper also focused on a wider range of aspects of the disaster, including the human impact, the government's response, and the environmental impact. The tone of Dawn newspaper's articles was

also more objective than Daily Jang newspaper's articles.

### **Conclusion**

The study focuses on disaster response and recovery and highlights the media's social responsibility in disaster management. On the other hand, the media could have contributed more to the disaster of the floods in Pakistan by encouraging readiness and reconstruction. The media gives aiding those in need top priority regarding disaster response and policy-related messaging. In this particular context, social responsibility entails analyzing social issues in order to facilitate the creation of efficient disaster relief policies. The media is an essential conduit between the general public, the affected communities, and the authorities. As such, it plays a big part in developing policy and responding to disasters. Its multifaceted contributions include timely information dissemination, public awareness raising, coordination support, policy advocacy, and accountability throughout the disaster management process, from preparation to recovery

## References

- Shklovski, I., Palen, L., & Sutton, J. (2008). Finding community through information and communication technology in disaster response. . <https://doi.org/10.1145/1460563.1460584>  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Nacu-Schmidt, A. (2019). A review of media coverage of climate change and global warming 2019 *media and climate change observatory*.  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Franks, S. (2013). *Reporting disasters: Famine, Aid, Politics and the Media*. Hurst Publishers.  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Handmer, J., & Dovers, S. (2016). *The Handbook of Disaster and Emergency Policies and Institutions*.  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Harte, D. S. (2018). Constructing audiences in a digital world: The dynamics of audience engagement in news brand communication. *Digital Journalism*, 6(6), 686-705.  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Heshmati, H. M. (2021b). Impact of climate change on life. In *IntechOpen eBooks*.  
<https://doi.org/10.5772/intechopen.94538>  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Lee, M. (2008). *Media relations and external communications during a disaster*. CRC Press.  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Liu, B. F. (2017). Media effects on individual and community-level resilience: The case of Superstorm Sandy. In S. C. H. Ng, R. L. Heath, & J. F. Liao (Eds.), *The Routledge handbook of health communication* (pp. 199-212). Routledge.  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- MacDougall, C. D., & Reid, R. D. (1987). *Interpretative reporting*. Simon & Schuster Books For Young Readers.  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- McLean, H., & Power, M. R. (2013). When minutes count: Tension and trust in the relationship between emergency managers and the media. *Journalism*, 15(3), 307-325.  
<https://doi.org/10.1177/1464884913480873>  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Sharif, A., & Medvecky, F. (2018). Climate change news reporting in Pakistan: a qualitative analysis of environmental journalists and the barriers they face. *JCOM, Journal of Science Communication*, 17(01), A03. <https://doi.org/10.22323/2.17010203>  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Nishimura, Y. (2020, January 20). How the media can be meaningful stakeholders in the quest to meet SDGs. *World Economic Forum*.  
<https://www.weforum.org/agenda/2020/01/sdgs-sustainabledevelopment-news-media-coverage>  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Pantti, M. W.-J. (2015). Disasters and the media. In R. Mansell & P. H. Ang (Eds.), *The International Encyclopedia of Digital Communication and Society* (pp. 1-8). Wiley-Blackwell.  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Peacock, W. G., Dash, N., & Zhang, Y. (2007). Sheltering and housing recovery following disaster\*. In *Handbooks of sociology and Social Research* (pp. 258-274). [https://doi.org/10.1007/978-0-387-32353-4\\_15](https://doi.org/10.1007/978-0-387-32353-4_15)  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Pew. (2005). The Pew research centre for the people and press.  
[Google Scholar](#) [WorldCat](#) [Fulltext](#)
- Sayed, S. A. (2014). Flood Disaster Profile of Pakistan: A review. *Science Journal of Public Health*, 2(3), 144. <https://doi.org/10.11648/j.sjph.20140203.11>  
[Google Scholar](#) [WorldCat](#) [Fulltext](#)
- Scheufele, D. A. (1999). Framing as a theory of media effects. *Journal of Communication*, 49(1), 103-122. <https://doi.org/10.1111/j.1460-2466.1999.tb02784.x>  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Shanahan, E. A. (2014). The effects of news frames on public policy preferences. *Journal of Health Politics, Policy and Law*, 39(3), 459-485.  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Vasterman, P., Yzermans, C. J., & Dirkzwager, A. J. E. (2005). The role of the media and media hypes in the aftermath of disasters. *Epidemiologic Reviews*, 27(1), 107-114. <https://doi.org/10.1093/epirev/mxi002>  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Zaheer, L. (2016). Natural catastrophes and the role of Pakistani mass media. *Journal of Political Studies*, 23(1).  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)