# Media coverage of natural disasters in Pakistan: The case of Earthquake (2005), Flood (2010) and Famine (2014).

This study explores Pakistani media's social responsibility in times of natural calamities. For the study, three natural disasters of varying predictive nature (earthquake, flood and famine) have been selected in order to observe the coverage of Pakistani media, in both pre and post disaster phases. The study has been conducted within the theoretical framework of social responsibility theory. It was found that the media reported the natural disasters after their occurrence and the role of media was almost absent in the pre-disaster periods of even predictable disasters. In the post disaster times, media frequently overlooked highlighting policy-related issues as well as accountability of concerned disaster management authorities. The research suggests that Pakistani mass media should formulate a code of conduct regarding disaster reporting and should rationalize its reporting priorities in the times of disaster(s).

**Key words:** Natural disaster, Pakistani media, pre-disaster phase, post-disaster phase, earthquake, flood, and famine

## Introduction

With the growing frequency of natural disasters worldwide, the association between media and natural disasters has become stronger (Cottle, 2014). Across the globe, both media and general public are enormously concerned with natural disasters (Heeger, 2007). Mass media, in particular, are interested in stories having human impact; disasters are amongst such impactful events as they cause huge human and material loss (Ali, 2013). Due to its ability to rapidly disseminate information across sporadic locations and large populations, mass media is considered to be a very effective tool for disaster risk communication (Yadav & Rani, 2011). Distant communities in geographically diverse locations rely especially on mass media for the acquisition of disaster-related information (Liu, 2010). People in particular who have to deal with disasters first hand are very much dependent on the news media (Hoberman, 2011; Scanlon, 2011; Space, 2015).

One of the important components of disaster risk management is communication and/or dissemination of information (Space, 2015; Yadav & Rani, 2011), allowing risk mitigation via crisis communication (Mileti, 1999), which is why mass media is considered to be an essential player both before and after the occurrence of calamities (Herrmann, 2007; Khan & Khan, 2008; Vasilescu, Khan, & Khan, 2008). In times of natural calamities, media is in attendance to drive public awareness regarding relevant information (Bernarte, 2000). The public turns to the media for disaster-related information as well as instructions and

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expects the media to offer accurate representations of reality (Vevea, Littlefield, & Weber, 2011). It is undeniable that the media are and will remain an influential means of gathering and disseminating information to the masses, especially in the current era of globalization (Li & Rajaratnam, 2006).

In addition to providing information to the public regarding disasters, media also plays the role of a "watchdog" by highlighting deficiencies in disaster management by the government that could have been taken into consideration in order to reduce risks (Hoberman, 2011). In post-disaster periods, many initiatives have to be taken in response to a disaster for recovery and rehabilitation of affected communities (Khan & Khan, 2008), subsequently, there is a dire need of funds and donations for appropriate disaster management. Media coverage of destruction and suffering can be a compelling factor to potential donors, which influence global as well as local donors (Ali & Mahmood, 2013). Significant resources are allocated towards attaining media attention by charity organizations owing to its fundamental importance in charity campaigns (Heeger, 2007).

As a member of society, journalists are expected to maintain ethical codes of conduct while rendering their duties of informing the public in an objective and accurate manner (Ekeanyanwu & Obianigwe, 2012). For the provision of factual and fair coverage of events, social and moral responsibility of the media in their local and regional settings should also be taken into account (Dajani, 2012). The sensitivity of the role of media rises while reporting disasters (Iqbal, Ali, Khursheed, & Saleem, 2014). It is, therefore, particularly emphasized that media ethics, in terms of responsibility, should be observed while covering conflicting and sensitive situations (Muzamil, 2012).

Unfortunately, during times of disasters, it has been noticed that the media does not live up to the expectations of playing a responsible role. For instance, the frequent involvement of media in "blame games" (Littlefield & Quenette, 2007) and a focus on "accountability" of the government instead of focusing on "social concern" frame (Poudel et al., 2014). Besides this, the media is also involved in the propagation of wrong news/ information (Tierney, Bevc, & Kuligowsk, 2006) as well as spreading anxiety through its news reports (Lazic, 2013). Another issue that the media overlooks is addressing the prevention and mitigation aspect of disasters (Pasquare & Pozzetti, 2007), which are of utmost importance for the alleviation of potential disasters. At times, the media operates as a commercial enterprise during times of natural disasters; it gathers first hand and exclusive information and/or photos regarding disasters and sells them in the open market as a marketable product (Ali, 2013). This sort of behavior impedes rather than support disaster management.

Being meteorologically diverse, Pakistan is one of the most disaster-prone countries in the world, being vulnerable to multiple forms of calamities (Ahmad, Kazmi, & Pervez, 2011). As far as the Pakistani media is concerned, it has turned out to be free and active with the passage of time (International Media Support, 2009; Mezzera & Sial, 2010; Shoeb, 2008; Yousaf, 2012). In a country that is disaster-prone and retains vibrant media, it is important to examine natural disaster coverage given by the national media.

This research tries to explore and analyze the role of the Pakistani media during disaster event reporting. The study attempts to assess the extent to which media gives attention to disasters and related issues. Since the media has a moral obligation to be socially responsible, a responsibility that is imposed on the media (Dajani, 2012), the study attempts to examine how socially responsible Pakistani media has been while reporting natural disasters. For the purpose, three disasters of different predictive nature (earthquake, flood and famine) have been selected in order to study reporting patterns of Pakistani elite media in the times of these disasters.

## Rationale for selecting media

In the study, two English language dailies with a national footprint across Pakistan (daily Dawn and daily News) have been selected. The rationale behind the selection of these newspapers is their large circulation across Pakistan (ABC<sup>2</sup>report, 2015). Additionally, these newspapers are largely considered to be persuasive and influential (Kheeshadeh, 2012; Malik & Iqbal, 2011; Shoeb, 2008).

Moreover, English print media has impact upon opinion makers, politicians, business community and the upper strata of society in general (International Media Support, 2009). Particularly, the daily Dawn and daily The News are considered to be "watchdogs" (Lehman & Seletzky, 2012).

**Daily Dawn:** The daily Dawn is a prominent Pakistani newspaper that has wide readership amongst top bureaucrats, prominent policymakers along-with federal and provincial executives (Malik & Iqbal, 2011). It maintains a high level of professional norms (Riaz, 2008). The paper retains a blunt reporting style, which is critical most of the time (Shoeb, 2008). The daily Dawn is respected for being neutral, authentic and independent journalistically towards various issues (Mezzera & Sial, 2010).

**The News:** The News reports newsworthy issues with a balanced stance (Khan & Jabeen, 2012). It is an influential newspaper and particularly, its editorials influence policy makers and decision-makers alike (Khan, Shabir, Adnan, & Safdar, 2014).

# **Rationale for Selecting Disasters**

In order to examine media coverage in the wake of natural calamities, three different types of natural disasters have been selected for the study. While selecting the disasters two major points were taken into consideration:

- 1- Level of devastation
- 2- Level of predictability

# 1- Level of Devastation

Although Pakistan has faced a number of natural disasters in the last decade, the selected disasters were the deadliest in the country's history of

<sup>&</sup>lt;sup>2</sup>ABC stands for Audit Bureau of Circulation. This is the only authorized institution of Government of Pakistan that determines rating and circulation of all print media publications in Pakistan. The institution works under Federal ministry of Information and broadcasting.

disasters. The selected disasters (earthquake 2005, flood 2010 and famine 2014) caused large-scale human loss and material devastation. A brief profile of all the three disasters is given below:

**Earthquake 2005:** This earthquake is considered to be one of the most destructive earthquakes to have occurred in Pakistan. The reported death toll was about 75,000 (EM-DAT, 2010; Khan, 2010; Khan, 2006; Mahmood et al., 2011). Among the reported deaths, about 1/4<sup>th</sup> were of school going children (EERI, 2006). In addition to deaths, around 70,000 people were injured and 3.5 million became displaced (Quershi, Ahmad, Shah, & Khan, 2014).

**Flood 2010:** This flood was one of the worst floods in the history of Pakistan, causing huge damages (Hashmi et al., 2012; Khandekar, 2010) and flooding about 20 percent of the country's land. The flood claimed about 2,000 lives, displacing millions of people and affecting thousands of villages (Rahman & Shaw, 2015). It was reported that almost 14 million people were affected as a result of flood (ADB & WB, 2010; Rahman & Shaw, 2015; WFP, 2010) and it was estimated that a minimum cost of US\$ 8.74 billion would be required for restoration and rehabilitation of people (Ahmed, 2013).

**Famine 2014:** Famine is a frequently occurring calamity in Pakistan (Ahmad et al., 2004) and over time its frequency is rising in the country (Qureshi & Akhtar, 2004). The 2014 famine that hit Tharparkar in Sindh province was one of the worst in the history of Pakistan, affecting 306,063 families and causing about 248 deaths (EM-DAT, 2015). It is pertinent to mention that this famine was disclosed to public by media reports.

## 2- Level of predictability

Predictability or probability of occurrence was one of the criteria of selecting these disasters. All three selected disasters are different in terms of their nature and level of predictability, for instance, earthquakes are an unpredictable calamity and warnings are not available in their case (Kagan, 1997; Rausch, 2011). On the contrary, famines are fore seeable and predictable incidents (Lankarani, 2011), which is why they are referred to as a creeping event (Szinell et al., 1998). As far as floods are concerned, warnings are obtainable in their case (Rausch, 2011) and due to metrological predictions, floods are considered semi-predictable. The rationale of selecting disasters with different predictable nature is to examine the role of media in varying probable situations.

It is relevant to mention here that normally, disaster management is consisted of pre and post disaster phases (Asghar, Alahakoon, & Churilove, 2006). Pre-disaster phase means the period before the occurrence of any calamity in which arrangements are made to tackle the forthcoming/ potential disaster (Herrmann, 2007; Vasilescu et al., 2008). Post-disaster phase initiates with the occurrence of a calamity and this phase is based on the execution of (any) pre-disaster plan(s) and /or other arrangements (Herrmann, 2007).

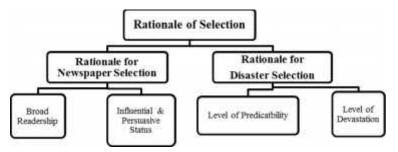


Figure 1. Rationale for selecting newspapers and disasters

# **Research Objectives**

The research objectives of the study are:

- 1- To examine which of the selected disasters received highest coverage;
- 2- To examine role of media in pre and post disaster phases;
- 3- To examine what issues were noticed and/or left unnoticed by media while reporting natural disasters.

# **Research Questions**

- 1- Which of the selected disasters was given the highest media coverage?
- 2- How selected media addressed pre and post phases of the selected disasters?
- 3- Which disaster-related issues were noticed and/or left unnoticed in the media during selected time period?

## Literature Review

In this part of the study, some recent research studies have been mentioned in order to observe as to how disasters have been discoursed in the worldwide media.

Iqbal et al. (2014) discussed the role of media in the wake of natural disasters in developing countries, especially Pakistan. He noted that, generally, while comparing destruction in developed vs. developing countries, natural calamities brought about more destruction in developing countries. He argued that the foremost duty of mass media is to provide information and awareness to potential victims as well as general masses. While discussing the role of the Pakistani media, the study points out while the role of media is very crucial in times of disasters, unfortunately, no code of conduct for disaster reporting is present in the country. It was also noted that almost all television channels exercise a self-regulated code of conduct when it comes to disaster coverage. The study suggested that a code of conduct for disaster-coverage must be introduced so that responsible reporting can be ensured during disasters.

In another research, the role of media during disasters in Nepal was studied, which is a developing country. Poudel et al. (2014) examined the content

of Nepalese media to learn how natural disasters were covered and/or portrayed in the media. They conducted a qualitative content analysis of disaster related news reports telecast by the state owned Nepal Television (NTV). It was observed that in most of the instances, the disaster news reports were published in the post-disaster phase. The news content was dominated by "human interest" and "responsibility" frames in the disaster response phase. Subsequently, the prevention phase was given considerable coverage. It was noticed that preparedness phase was given minor coverage, which came as no surprise.

It is often reasoned that mass media are frequently involved in the dissemination of superfluous and unnecessary information during times of disaster(s). Ewart and McLean (2014) examined the news reporting of two Australian newspapers in order to find how the "blame" frame was treated. It was noted that media content, especially editorials and columns, were focused upon "who was responsible" for the failure"; by doing so, other important aspects related to disaster management were overlooked. It was noted in the study that when the media is focused on questioning upon who to criticize or blame for the disaster, it has a tendency to limit its esteemed role of addressing prevention and pre-emption aspects in order to avoid future disasters.

It is largely held belief that the role of media is critical in the creation of awareness and preparation of people about a probable disaster. Romo-Murphy (2014) explored the role of radio in enlightening and educating masses living in earthquake-prone areas of Indonesia. In this regard, a triangulation method was employed and interviews, discussions, focus groups along with surveys were conducted of related community members. An obvious and significant role of radio was found and observed that the media played the role of a "participatory mediator" in order to educate people regarding disaster readiness and mitigation. Radio contents not only influenced potential victims but also the disaster management authorities in order to formulate a preparation program regarding the disaster. In this way, disaster-related awareness was reinforced which augmented the resilience within the community.

Ali (2013) examined the influence of media coverage on public in the time of disaster. It was noted that long lasting impressions are left on the behavior of people owing to the impact of media reporting. He asserted that media encourages disaster-victims to fight against catastrophes and also persuades general masses to help victims. However, it was noted in some instances that disaster victims were portrayed looters and plunderers – a wrongful propagation at the hands of the media. Additionally, in the haste and hurry of coverage, media frequently becomes the cause of trouble instead of providing support in disaster management.

In another study, Moges (2013) examined coverage of Ethiopian media in the times of famine and scarcity. He studied qualitative data to gauge the role played by the media in creating disaster mitigation awareness. Data disclosed that the Ethiopian media gave a lower priority to disaster related issues versus other issues, which got plentiful coverage. While addressing the famine, the aspect of risk alleviation was badly ignored. Keeping in view the prevalent calamitous situation at that time, media should have acted responsibly and disseminated awareness amongst the public. However, this important feature was overlooked.

In general, the association between media and disaster managers does impact the process of disaster-management. In his research study, Veil (2012) explored the relationship that exists between disaster managers and media persons. He expressed that factors such as communication tasks, traditional beliefs and mistrusts were the elements that impact relationships between disaster management officials and media persons. It was recommended that interpersonal communication and information about one another's ways of working does strengthen the liaison that exists between both. Moreover, good terms between both make the provision of credible information possible and smoother. The study also noted that in times of disasters, often mass media is the sole bond that exists between the community and disaster management executives. Most of the time, media is the only source of acquiring disaster related information, which is why the role of media cannot be ignored.

Muzamil (2012) examined coverage of two Pakistani newspapers (daily Dawn and daily News) during the earthquake in 2005 and the flood in 2010. An analysis of the news items was done in the study in order to examine the coverage patterns of the selected newspapers. It was investigated as to how responsibly the Pakistani media behaved during these disasters. Observations were made as to the coverage patters across all phases of the two different disasters reported in the two different newspapers. Results showed that most of the times, media remained focused on "civic engagement" and "social utility" during the calamitous events, and disaster-related awareness was given more importance. The government bore the brunt of critique for its mismanagement and the weak response of the disaster management authorities. Data revealed that daily The News violated ethical standards more frequently versus the daily Dawn. Whereas, news contents regarding need assessment, donations and armed forces were reported differently in both newspapers.

In a similar study, Liu (2010) encompassed media coverage given to the Sichuan earthquake in China. This earthquake received massive local and international coverage owing to the fact that it was one of the most destructive earthquakes in the world. He conducted content analysis of two Chinese dailies (the West China City News and the People's Daily) and two American dailies (the New York Times and the Washington Post). Findings revealed that Chinese print media gave more attention to "rebuilding and reconstruction" aspects, while on the other hand, the American print media remained focused on human and material loss; rebuilding and reconstruction related news reports were evidently put aside.

Houston, Pfefferbaum, and Rosenholtz (2012) examined the coverage of major natural disasters in America spanning across a decade from 2000 to 2010. In this regard, they conducted content analysis of three American newspapers (The New York Times, USA Today, and The Wall Street Journal) and two American TV channels (ABC World News and CBS Evening). It was found that less coverage was given to natural disasters compared to other issues. Furthermore, while reporting disasters, news media remained focused on covering apparent happenings such as human and material loss. It was also noted that in the post-disaster phase, media coverage declined swiftly contrary to the political news, which remained dominant throughout.

In another study, the role of Indian media towards rehab of women in a post disaster phase, Jothi and Neelamalar (2011) examined the media coverage given to the Tsunami that hit India. The subsequent impact of the given media coverage on the affected women was noted. It was observed that the media's role was pretty constructive during the tsunami, which is why a positive impact on the women was sighted. Media, quite responsibly, highlighted the problems and issues of tsunami-hit women and resultantly motivated the general masses to provide financial support in order to alleviate their hardships. Consequently, the affected women recovered quickly from their adversities and started their lives with more gender liberty.

During calamitous times, people tend to rely on news sources compatible to convenience, comfort level and experience. In order to examine the information pursuing sources of public during disasters, Ryan (2011) conducted in-depth interviews of people belonging to three different regions of Australia who had undergone hurricane, flood and forest-fire. It was found that people depended and relied upon different media sources according to the nature of the disaster. Study concluded that the radio was largely considered to be the most reliable source in the times of forest-fire and hurricane. However, people also used other sources of getting information parallel to that. For instance, bushfire information was also received from families and with the help of cell phones. Likewise, flood information was taken from metrological bureaus.

The importance of donations and charities cannot be overlooked in the process of disaster management and media coverage is considered as one of the important factors to influence donors, usually in a positive manner. Ferris (2010) examined the media coverage given to Pakistani flood (2010) and Haitian earthquake (2010). He examined the impact of media coverage on the emergency response activities, especially on donation collections. It is relevant to state that the Haitian earthquake was given much more media coverage while the Pakistani flood received minor coverage in comparison. The study found the obvious impact of media coverage on gathering of charities. It was noticed that tenfold more financial support was collected for the victims of Haitian earthquake as compared to the Pakistani flood sufferers. The research argued that there was a strong correlation between the extent of media coverage and collection of donations.

Generally, coverage patterns and priorities of different media remain different; one of the possible reasons could be the span of control. Barnes et al., (2008) compared the coverage of local, state, and national media of United States to observe how news reports are selected and published during natural disasters. In this regard, a content analysis of print media news reports published during Hurricane Katrina was conducted. It was noted that the media remained focused to give coverage as to how the government was handling and managing disaster. Public responsibilities in the preparedness phase were marginally reported. It was found that local print media dominantly covered emergency response period however, national media concentrated on recovery phase mostly, perhaps driven by the fact that its national audience would simply be interested in how the recovery was progressing.

## Theoretical framework

This study has been conducted within the theoretical structure of Social responsibility theory (Siebert, Peterson, & Schramm, 1956). The theory imposes an obligation upon media to be socially responsible towards the public (Ravi, 2012). It means that on one hand the media must be given freedom to work without any external pressures and control, however, parallel to that, it must provide fair, neutral and truthful news reports (Baran & Davis, 2010). Dominick (1996 as cited in Owolabi & Ekechi, 2014), states that the freedom conferred on media by society and the constitution stresses equivalent responsibilities of the press. Especially in the case of the people, the media must play the role of a watchdog and should become the voice of the voiceless. In the same context, Dajani (2012) argues that the press can be as free as it proves itself to be socially responsible.

Social responsibility and natural disasters: In the wake of crisis, whether natural or man-made, it is the utter responsibility of media to inform and make the public aware about the critical things. However, elements like accuracy, objectivity, and truthfulness are always attached with reporting in this regard (Bernarte, 2000). As the media holds the power to influence people of all age groups, it is extremely important for them to act and report in a socially responsible manner. However utopian it may seem but the basic concept being that the media need to behave in order to benefit the people (Yadav, 2011). For instance in the times of crisis media plays an important role in terms of collecting donations, conveying appeals and facilitating relief operations. It was observed in the Philippine earthquake, when the socially responsible role of media not only provided information to the public but also proved to be a vehicle for charities and other social services (Bernarte, 2000). This sort of constructive behavior of the media always proves to be helpful in disaster management.

## Methodology

In this study, a content analysis of news reports, published in daily Dawn and daily The News, has been conducted. For each disaster, eight-month consistent coverage of each selected newspaper was chosen through purposive sampling. The media coverage has been divided into two parts i.e. pre-disaster period and post disaster period. Four months before the exposure/occurrence of the disasters have been viewed as the pre-disaster time and four months after exposure/occurrence are regarded as the post-disaster period.

In this regard, the entire issue of newspapers was taken into consideration so that no news report regarding selected disasters would be ignored. Thus, a total of 1,440 issues of both dailies have been examined, in which 3,973 news reports were analyzed in the study. The news reports are classified into following categories: (1) Warnings and preventive actions (2) Rescue and relief activities (3) Human and material loss (4) Statements, visits and meetings (5) Responsibility and accountability (6) Information and advice (7) Rehabilitation and reconstruction activities (8) Policies and reforms (9) Others

In order to ensure inter-coder reliability, a pilot study was conducted. In this regard, Holsti's (1969) formula was exercised and due to skilled coders, .98

inter-coder reliability count was gained. Statistical package for the social sciences (SPSS version 21) was utilized to analyze the data and its validity.

# Findings and Discussion:

Data revealed that among the selected disasters, Pakistani media gave more coverage to earthquake (2005) and flood (2010) as compared to the famine (2014), which received minor coverage comparatively (see Table 1).

It means Pakistani elite media devoted plentiful attention to earthquake and flood in selected time-periods; however famine was given minor attention comparatively. It may be construed that media remained watchful in the times of earthquake and flood but neglectful while reporting famine.

Usually, famines are considered less news worthy (Eisensee & Stromberg, 2007) and given lowest media coverage amongst other disasters worldwide (Eisensee & Stromberg, 2007; Mathews, 2009). Another opinion is that the level of deaths also impacts the extent of coverage any calamity receives in the media (Singer, Endreny, & Glassman, 1991). Among selected disasters, famine caused little human loss compared to the other selected disasters. In this regard, about 248 casualties were reported during famine (EM-DAT, 2015). Contrarily, the earthquake triggered 75,000 fatalities (EERI, 2006) and the flood caused a loss of almost 2,000 lives (Rahman & Shaw, 2015). This aspect (level of human loss) might have been a reason of earning minor attention for famine comparatively.

Table 1. News reports published in selected media during disasters

Disasters	News reports
Earthquake	1996(100.0%)
Flood	1926(100.0%)
Famine	51(100.0%)

**Phase-wise coverage:** This study examined the patterns of media coverage in pre and post disaster phases. It was found that the pre-disaster period of all selected disasters, was left unheeded and media remained focused on post-disaster periods, leaving much to be desired in the role of the watchdog. In this regard, overall 3,968 (99.9%) news reports were published in post-disaster periods and only 5(0.1%) news reports were published in pre-disaster period (see Table 2).

Table 2. Phase-wise coverage of selected disasters

Phases	News reports
Pre-phase	5(0.1%)
Post-Phase	3,968 (99.9%)
Total	3,973(100.0%)

In the times of earthquake and famine, not a single news report was published in the pre-phase while 100% coverage was given in post-phase. However, in the times of flood, 5(0.3%) news reports were published during pre-phase of the flood and 1,921(99.7%) news reports were published in post-flood times (see Table 3).

In the disaster management cycle both pre and post-disaster phases are equally important. For instance, pre-disaster phase is a period before the occurrence of any calamity in which planning is made to respond to any potential disaster (Herrmann, 2007; Vasilescu et al., 2008). It is considered the responsibility of the media to disseminate warnings amongst the public in pre-disaster period (Faulkner, 2001; Nayak, 2012; Rattien, 1990) so that the public may adopt preventive measures to confront potential disasters well in advance. However, it was found that Pakistani elite media reported natural disasters after their occurrence (in post-phase) and did not report when disasters were in their pre-phases.

It is pertinent to mention here that some natural disasters can't be predicted while several disasters are predictable and can be forecasted. In this study, three disasters of different predictable natures have been selected in which earthquake is an unpredictable disaster (Kagan, 1997; Rausch, 2011) but flood is predictable (Rausch, 2011). Being a creeping phenomenon (Szinell et al., 1998) famine is also predictable and a pretty foreseeable occurrence (Lankarani, 2011). Thus, being unpredictable, it was quite justified in case of earthquake if the media did not or was unable to report the pre-earthquake period. But flood and famine were predictable calamities and they could have been reported in their pre-phases. It is habitual for the Pakistani media to overlook the pre-phase of even predictable and foreseeable disasters (Zaheer, 2015), a factor rising from a set of priorities that are driven by other forces.

In the pre-flood coverage, there is evidence of some level of awareness about the impending disaster which can be observed with the five news reports published during four months selected period, which shows that there were predictions or threats of imminent flood. Media could have addressed the pre-flood phase more rapidly and in a responsible manner to facilitate evacuation plans and other preparedness activities in order to mitigate the damaging impact of the upcoming flood. However, media did not focus on it and only five news items were published, which was obviously insufficient.

As far as the famine is concerned, it is rightly called a creeping event, but also this event was not reported in its pre-phase. Although the Pakistani media disclosed this famine event after the deaths of many children and media's role was highly appreciated, but media remained negligent when the famine was growing and started discoursing it after the deaths of many children.

Ideally, its status as a watchdog would have been reinforced had they spread awareness in the masses, or driven the masses towards preparation/ action. It may be interpreted that the Pakistani media did not play a responsible role in the pre-flood and pre-famine periods and remained focused only on post-disaster periods.

Table 3. Disaster-wise reporting of pre and post phases

Disaster	Pre-phase	Post-Phase
Earthquake	0(0.0%)	1,996(100.0%)
Flood	5(0.3%)	1,921(99.7%)
Famine	0(0.0%)	51(100.0%)

**Overall coverage of content-categories:** As far as content-wise coverage is concerned, data depicts that only 5(.1%) news reports were published regarding "warnings and preventive actions". These five reports were printed in the pre-flood period. However, no news item was reported in the pre-earthquake and pre-famine periods.

The highest coverage was given to "rescue and relief activities" and 27.1% reports were published in this regard. Subsequently, highly published news items were regarding "statements, visits, and meetings" and "rehabilitation and reconstruction activities". Lowest coverage was given to "responsibility and accountability" and only 3.2% news reports were published in this regard. Sequentially, news related to "Policies and reforms" and "information and advice" were also given minor coverage (see Table 4).

Table 4. Content category-wise overall coverage of selected disasters

Content categories	News reports	
Warnings and Preventive Actions	5(.1%)	
Rescue and Relief Activities	1077 (27.1%)	
Human and Material Loss	620 (15.6%)	
Statements, Visits, and Meetings	842 (21.2%)	
Responsibility and Accountability	129 (3.2%)	
Information and Advice	300 (7.6%)	
Rehabilitation and Reconstruction Activities	807 (20.3%)	
Policies and Reforms	179 (4.5%)	
Others	14 (.4%)	
Total	3973 (100.0%)	

**Disaster-wise coverage of content categories:** In the post-phase of the earthquake, media prominently paid attention to "rescue and relief activities" and highest amount of news reports 724(36.3%) was published under this category. The second most widely published news category was "statements, visits and meetings" about which 408(20.4%) news reports were published in the selected media. Lowest coverage was given to "responsibility and accountability" and "policies and reforms". In this regard, 51(2.6%) and 81(4.1%) reports were published respectively.

In the post-flood phase, the highest coverage was given to "rehabilitation and reconstruction activities" and "statements, visits and meetings". Under these categories, a sum of 503(26.2%) and 418(21.7%) news reports were published respectively. Contrarily, lowest coverage was given to "responsibility and accountability" and "policies and reforms". In this regard, 66(3.4%) and 98(5.1%) reports were published accordingly.

In the times of famine, Pakistani media gave highest coverage to "statements, visits and meetings" and "responsibility and accountability". In this regard, 16(31.4%) and 12(23.5%) news items were reported in post-famine phase. Lowest number of news items was published regarding "rehabilitation and reconstruction activities" and "information and advice". In this regard, 3(5.9%) and 4(7.8%) news reports were published respectively. No news reports were published about "policies and reforms" in the post-famine period.

It may be interpreted that in the post-disaster period, media played its role in a responsible manner to a high extent by discoursing issues related to "rescue and relief activities", "rehabilitation and reconstruction activities" and "human and material loss". However, there are certain issues that should have been treated more responsibly and perhaps if they were highlighted earlier or given a critical status leading to a high level of awareness in the pre-disaster phase, disaster mitigation might have been better. It is considered a general behavior of Pakistani mass media that it is focused on political issues most of the time (Sabir, 2010). It was noted that in all the selected disasters, Pakistani media gave prominent coverage to statements of political and other important personalities. While prioritizing statements of personalities, other important aspects like "information and advice", "rehabilitation and reconstruction activities" and "human and material loss", were ignored and comparatively less news reports were published under these categories, reflecting a leaning inclination towards political sensation.

Likewise, holding people accountable for their areas of responsibility is one of the primary duties of mass media (Leoni, Radford, & Schulman, 2007). In the times of disasters, it is the function of mass media to identify and point out "what went wrong".

Besides, to hold government(s) accountable for the actions, which could have been taken to prevent and mitigate the impact of disasters (Hoberman, 2011). Particularly, during earthquake and flood, Pakistani elite media paid marginal attention towards "responsibility and accountability" and in this way, ignored its responsibility of highlighting the negligence on the part of government(s) and relevant disaster management authorities, a factor that could allow future planning towards mitigation and better preparation to receive such a calamity in the future.

Contrarily, in the times of famine, the aspect of accountability was given highest coverage.

Another important thing is that general masses don't have capacity to influence the decision-making and policy-making process without the help of mass media (Pasquare & Pozzetti, 2007). Therefore it is the responsibility of mass media to discourse disaster related policy matters. Media is so influential that it has the obvious inclination to sway the decision-making process regarding disaster management (Tierney et al., 2006) in a positive direction. In the current study, it was found that mass media gave lowest coverage to "policies and reforms" and in this way it overlooked its expected role. Although media reporting is also helpful in bringing (Scheufele, 1999) and influencing (Soroka, et al., 2013) disaster-related issues on policy agenda, yet, during earthquake and flood, media gave lowest coverage to "policies and reforms". Particularly in the times of famine, no news coverage was given in this regard.

Since governments are slow to implement disaster risk reduction policies and they continue to react to disaster emergencies, rather than look for ways to prevent them, it's the responsibility of the media to raise policy related issues, spark debate about how situations should be tackled. According to the findings of this study, it may be said that coverage of natural disasters did not trigger the changes in policy and legislation that are needed for sustainable disaster management.

Additionally, it is the responsibility of media to provide information and relevant advice to people after the occurrence of disasters. But in times of disasters, Pakistani media ignored this important aspect and little coverage was provided under "information and advice" category and in this way media did not play its role towards informing and advising people in a responsible manner.

Table 5.Disaster-wise coverage of content categories

Content categories	Earthquake	Flood	Famine
Warnings and Preventive actions	0(0.0%)	5(.3%)	0(0.0%)
Rescue and Relief Activities	724 (36.3%)	345(17.9)	8(15.7%)
Human and Material Loss	252(12.6%)	360(18.6%)	8(15.7%)
Statements, Visits, and Meetings	408(20.4%)	418(21.7%)	16(31.4%)
Responsibility and Accountability	51(2.6%)	66(3.4%)	12(23.5%)
Information and advice	169(8.4%)	127(6.6%)	4(7.8%)
Rehabilitation and Reconstruction activities	301(15.1%)	503(26.2%)	3(5.9%)
Policies and Reforms	81(4.1%)	98(5.1%)	0(0.0%)
Others	10(.5%)	4(0.2%)	0(0.0%)
Total	1996(100.0%)	1926(100.0%)	51 (100.0%)

## **Conclusion and Recommendations:**

The study concludes that Pakistani media remained negligent in the predisaster phases of selected disasters. Especially, in pre-earthquake and pre-famine periods, not a single news item was published. Since earthquakes happen suddenly and are unpredictable (Kagan, 1997; Rausch, 2011), absence of media coverage before the occurrence was pretty justified, however, a famine is quite predictable (Lankarani, 2011), media should have been watchful in the pre-famine time and it was the responsibility of media to publish reports so that damages of the budding threat may have been mitigated.

However, the media overlooked this role and did not fulfill its social responsibility in the pre-famine period. Similarly in the pre-flood period, the media remained almost negligible and only 5 news reports were published in the three months selected period. It may be interpreted that the Pakistani elite media's role was not responsible in the pre-disaster phases of selected disasters. Media should have given due coverage to both predictable calamities i.e. flood and famine.

Although, Pakistani media gave comparatively sufficient coverage to post-disaster period yet certain important disaster related aspects were not covered in an appropriate way. For instance, media gave the highest coverage to statements of political and other important personalities but provided lowest attention towards accountability of government(s) and relevant institutions for their negligence in disaster management. The most important aspect, of policy related deliberations, was discussed very little, despite the fact that disaster management institutions are weak in Pakistan (Sayed & González, 2014) and policy needs to be improved; however, the media did not discuss these aspects and prioritized mere statements. Similarly the media's behavior towards "information and advices" was the same and this aspect was severely overlooked and left to be discoursed.

Since Pakistan is a disaster-prone country and it has to confront disasters quite frequently (Ahmad, Kazmi, & Pervez, 2011), it is recommended that Pakistani media should overhaul its role in the times of disasters. Instead of being active after the occurrence of the natural disasters, it must be vigilant and watchful before the occurrence of disasters especially predictable ones. Armed with the experience of previous disasters, how they were managed and what could have been done better, if the media remains active in pre-disaster periods, the human and material losses caused by the disasters can be mitigated and reduced by a huge margin.

It is also recommended that Pakistani media must rearrange its priorities while reporting disasters. Instead of prioritizing mere statements of politicians and other important personalities, it must also be focused on restoration of victims, accountability of relevant government and disaster management institution, informing and advising public during disasters. Especially, it must discourse the policy related issues and should highlight the weaknesses and lacunas in disaster management policies.

Last but not the least, it is often considered that journalists are not watchful and prepared in the times of disasters (Lowrey et al., 2007). Similar is the case of Pakistani media that is often criticized for not playing an appropriate role

in the times of disasters (Naeem, 2013). Regrettably, no media policy and code of ethics are available in Pakistan for disaster reporting. This absence of reporting code may be held as a major reason for weak or negligent media coverage in the times of disasters. Thus it is emphasized that some media code and/or policy regarding disaster reporting may be formulated and implemented so that responsible media coverage of disasters may be ensured.

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