COMPARING THE AGENDA SETTING ROLE OF THE PAKISTANI AND INDIAN NEWSPAPERS IN DISASTERS: A CASE STUDY OF THE 2005 KASHMIR EARTHQUAKE

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Summary: In the aftermath of the 2005 Kashmir earthquake, the media played a central role in linking victims to the government apparatus and the national and international community and highlighting weaknesses in the disaster management process. This study was conducted to analyze and compare the 'agenda setting role' of the Pakistani newspapers with that of the Indian newspapers after the 2005 Kashmir earthquake with a magnitude of 7.6 and resulting in over 78,000 fatalities in Azad Jammu & Kashmir, Khyber Pakhtunkhwa province of Pakistan and the Indian part of Kashmir. Two Pakistani and two Indian newspapers each with high circulation were selected for qualitative and quantitative analysis. A total of 630 articles were downloaded for analysis out of which 120 front page articles were finally analyzed with the help of five selected themes including extent of damage, phases of disaster, responsibility issues, types of framing and focus on disaster policies. The study revealed that there was a strong agenda setting role of both Pakistani and Indian newspapers in post 2005 Kashmir earthquake. The newspapers focused on broad policy issues using thematic framing techniques with a strong emphasis on response phase, whereas the least attention has been given to preparedness and mitigation strategies. The analysis further revealed that in both the countries, federal government was considered to be responsible for disaster management system by both Pakistani and Indian newspapers and the Indian newspapers have also strongly criticized the Indian army for their unsatisfactory emergency response operations. Newspapers are still one of the most important sources of information in many developing countries including Pakistan and India and they can play a positive role in the management of natural disasters by focusing on mitigation and preparation to prepare communities for future disasters.

Zusammenfassung: Nach dem Erdbeben in Kaschmir im Jahr 2005 spielten die Medien eine zentrale Rolle, indem sie die Opfer mit dem Regierungsapparat sowie der nationalen und internationalen Gemeinschaft in Verbindung brachten und Schwachstellen im Katastrophenmanagementprozess aufzeigten. Diese Studie wurde durchgeführt, um die "Agenda-Setting-Rolle" der pakistanischen Zeitungen mit der der indischen Zeitungen nach dem Kaschmir-Erdbeben von 2005 mit einer Stärke von 7,6 und über 78.000 Todesopfern in Azad Jammu & Kaschmir, der pakistanischen Provinz Khyber Pakhtunkhwa und dem indischen Teil von Kaschmir zu analysieren und zu vergleichen. Je zwei weit verbreitete pakistanische und indische Zeitungen wurden für die qualitative und quantitative Analyse ausgewählt. Insgesamt wurden 630 Artikel zur Analyse heruntergeladen, von denen schließlich 120 Artikel von den Titelseiten mit Hilfe von fünf ausgewählten Themen analysiert wurden, darunter Schadensausmaß, Phasen der Katastrophe, Fragen der Verantwortung, Arten des Framing und Fokus auf Katastrophenpolitik. Die Studie ergab, dass sowohl pakistanische als auch indische Zeitungen nach dem Erdbeben 2005 eine starke Agenda-Setting-Rolle spielten. Die Zeitungen konzentrierten sich auch auf breit angelegte politische Themen unter Verwendung thematischer Framing-Techniken mit einer starken Betonung der Reaktionsphase, wohingegen die geringste Aufmerksamkeit den Vorbereitungs- und Abschwächungsstrategien geschenkt wurde. Die Analyse ergab ferner, dass sowohl die pakistanischen als auch die indischen Zeitungen die Regierung als verantwortlich für das Katastrophenmanagementsystem ansahen, während die indischen Zeitungen auch die indische Armee für ihre unbefriedigenden Notfallmaßnahmen stark kritisierten. Zeitungen sind immer noch eine der wichtigsten Informationsquellen in vielen Entwicklungsländern, einschließlich Pakistan und Indien, und sie können eine positive Rolle bei der Bewältigung von Naturkatastrophen spielen, indem sie sich auf Schadensbegrenzung und Vorbereitung konzentrieren, um die Gemeinden auf zukünftige Katastrophen vorzubereiten.

Keywords: Kashmir, earthquake, newspapers, agenda setting, natural disasters, Pakistan, India, disaster, disaster management

1 Introduction

Communication and dissemination of information is an important component of disaster risk management (ZAHEER 2016). Mass media, especially, print media is considered to be an effective tool for disaster risk communication because of its ability to rapidly disseminate information across diverse locations and large populations (YADAV and RANI 2011). The development and increasing popularity of new sources of information such as social media, and mobile phone communication has revolutionized disaster risk communication in the past two decades. Since the advent of the news websites in the 1990s, internet has dramatically changed the way news is produced, delivered and received (DIEL 2017). More people around the globe get their news online which has resulted in the shrinking of the legacy media including print newspapers and broadcast news organizations that are guided by traditional news values and practices (WESTLUND 2013; DIEL 2017). However, despite the ease of access and speed of delivery with which the new media provides news, the origins of information on some new media sites are not clear (DIEL 2017). There is a general belief among the general public as well as journalists that the news published by the traditional media organizations, such as newspapers are original and reliable while the new media recycle content that is created by the legacy media, mostly newspapers (DIEL 2017; MARTIN 2015). Therefore, despite the increasing use of social media, the mainstream media (including radio, television and newspapers) continue to "play a leading and performative role in the public constitution of disasters" (COTTLE 2014, 2). Due to the reliable content and originality of news, both journalists and the public turn to legacy media such as newspapers to get information about disasters as and when they happen (COTTLE 2014; VALENZUELA et al. 2017).

At the time of a disaster, the traditional media are generally the public's primary source of news, information and instructions and the public expects the media to offer accurate representations of reality (WEBERLING 2010). Especially, people living in remote communities and geographically diverse locations with no access to internet are solely dependent upon traditional media sources for information regarding disasters (LIU 2010). Media, such as newspapers connects the affected people with relief providing agencies and can help to save lives by accelerating the search and rescue operations and relief distribution. The media also helps advance the needs of vulnerable populations through policy-based messages (BARNES et al. 2008). In addition, media also acts as a 'watchdog' by highlighting weaknesses in the disaster management policies and creating awareness among the public about the risk of natural hazards which could improve disaster risk reduction measures (HOBERMAN 2011). In this way media plays a pivotal role in the periods before, during and after a disaster.

Media coverage has a significant impact on the publics' perception and response to natural disasters (COTTLE 2014; PASQUARE and POZZETTI 2007). Therefore, the importance of media is increasingly being recognized and evaluated in disaster management policies. When governmental agencies and other organizations with a social responsibility want to inform the public, and often change their attitudes and behaviour, they normally use the media to spread their message (WAHLBERG and SJÖBERG 2000). The media tends to emphasize different priorities according to the type of disaster or the individuals affected (BARNES et al. 2008). In their coverage of natural disasters, media may bring some issues to salience by highlighting them more as compared to others and this may sometimes lead to the avoidance of some very important issues. The ability of the mass media to set the agenda for public discussion is known as agenda setting (BARNES et al. 2008). The basic concept of media agenda setting was first introduced by LIPPMANN (1922) which was subsequently developed by LASSWELL (1948) and COHEN (1963), and later took the form of the formal agenda-setting theory through the work of MCCOMBS and SHAW (1972).

Media agenda setting refers to the deliberate coverage of topics or events with the goal of influencing public opinion and public policy (BARNES et al. 2008). According to the agenda setting theory, media stimulates the awareness of people regarding certain issues and this assumption is based on two main principles: (1) media shapes and filters reality before presenting it to people and (2) these channels determine the priority with which individuals regard salient issues (ALBALAWI 2015). This theory was further elaborated by ROGERS and DEARING (1988) who devised an agenda-setting model including three components: media agenda, public agenda, and policy agenda. All of these three components are interrelated and each of these agendas represent issues which are of primary importance for a particular stakeholder. According to the ROGERS and DEARING Model (1988), media agenda setting refers to the traditional decisions taken by media organizations regarding which issues to discuss through their channels (ALBALAWI 2015). Public agenda setting re-

fers to the issues that are considered important to the general public while policy agenda setting involves official organizations or government agencies that determine which issues are important and worthy of discussion (ALBALAWI 2015).

An important outcome of McCOMBS and SHAW's (1972) agenda-setting theory is the concept of media framing. Framing theory states that the way in which media highlights an issue influences how an audience understands it (MAMUJI and KCHOUK 2017). A media frame is the main theme or topic of a news story that contextualizes and highlights the important part of an issue through "selection, emphasis, exclusion and elaboration" (ALONZO et al.2014, 10). Mass media actively set the frames of reference that readers or viewers use to interpret and discuss public events, particularly, during disasters (ALONZO et al. 2014; MAMUJI and KCHOUK 2017). For the last several decades, developments in mass media has encouraged the public to turn to the media for news about natural disasters related to warnings, evacuation, damages, and recovery information. Since journalist are the first to arrive at a disaster zone and the first informers, mass media can play a vital role to aid or hinder response, recovery and preparedness efforts as well as rescue and relief activities (ALONZO et al. 2014; MAMUJI and KCHOUK 2017; ZAHEER 2016; ZAHEER 2015). Additionally, media coverage often influences agenda setting through public and political demands for disaster relief and reconstruction efforts (VAN BELLE 2000). The agenda- setting role of media may divert the attention of government and public to emergency response and relief distribution and may ignore the more important phases of preparedness and mitigation (ZAHEER 2016). This situation often results in a media-driven disaster policy that highlights deficiencies in the delivery of relief rather than local preparedness and national coordination efforts (BARNES et al. 2008). Therefore, scholars and students of disaster need to focus more on analyzing the role of media and communications in the public unfolding of disasters to better understand how disasters are communicated and "constituted" by media and with what consequences (COTTLE 2014, 1).

Disaster coverage is an important area of study because media content plays an important role in the public's immediate reaction to disasters, the shaping of disaster policies, and the efforts to prepare for and prevent future disasters (VAN BELLE 2000). There are an increasing number of studies conducted by researchers in various fields regarding the role, responsibilities and impact of media, including print media in natural disasters (see for example ASHLIN 2007; BARNES et al.

2008; FRIEDMAN et al 1987; GRIFFIN and DUNWOODY 1997; MILES and MORSE 2007; MOELLER 2006; VAN BELLE 1999 and 2000; WEBERLING 2010). However, studies analyzing the agenda setting role of print media with reference to disasters have been scarce. The few studies conducted so far include a study conducted by MAMUJI and KCHOUK (2017) who used a framing theory perspective to analyze Canadian news coverage including both television and print media in response to natural disasters that triggered the launch of Canada's Matching Fund policy. In another study, HOUSTON et al. (2012) examined how eleven of the most severe U.S. natural disasters occurring between 2000 and 2010 were framed in mass media news coverage (national newspapers and broadcast television news). BARNES et al. (2008) conducted a quantitative content analysis of four prominent newspapers to examine how the media gathered and distributed news to shape public policy priorities during Hurricane Katrina. In addition, TIERNEY et al. (2006) examined the framing techniques used by three US newspaper in reporting the Hurricane Katrina.

The characteristics of media vary from one country to another due to the difference in social and cultural values. Hence, the agenda setting techniques and their impact may also vary from one country to another. Recognizing the importance and uniqueness of this variability, researchers have compared the role of news media in different countries (see for example DUNWOODY and PETERS 1992; SJÖBERG et al. 1996). However, few studies are based on comparisons of news media coverage of natural hazards. Besides, most of these studies have been conducted in developed countries where people have access to a variety of information sources such as internet. Comparatively, few studies have been carried out in developing countries where the influence of conventional sources of media i.e. newspapers and television is still significant because a very low proportion of their population has access to internet. Particularly, research examining the agenda setting role of Pakistani and Indian newspapers in disaster coverage is almost non-existent (ZAHEER 2016; ZAHEER 2015). Only two studies have been conducted so far by Pakistani researchers including a study conducted by ZAHEER (2015) who examined the magnitude and patterns of print media coverage (both English and Urdu) of Tharparker Famine 2014 that occurred in the Sindh province of Pakistan. In another study, ALI (2014) examined the gender representation in the visual coverage of the 2010 floods in Pakistan in the most circulated mainstream English newspapers in Pakistan.

Earthquakes are one of the most recurrent disasters in Pakistan. The most devastating earthquake in the history of Pakistan and the Indian subcontinent was the Kashmir earthquake of October 8, 2005 with a magnitude of 7.6 resulting in over 70,000 deaths, more than 80,000 injuries and more than 2 million people made homeless (DURRANI et al. 2005). This earthquake incurred more than five billion dollars as the total cost of reconstruction of the damaged infrastructure and rehabilitation (WB-ADB 2005).

Jammu and Kashmir is a disputed territory between Pakistan and India (ROY-CHAUDHURY 2004). Presently, about two third of the state is under Indian control while the rest is under the control of Pakistan (AMIR et al. 2020). The 2005 Kashmir earthquake caused damage on both sides of the Line of Control (LoC; a truce line) separating the Indian and Pakistani Kashmir (cf. Fig. 1). However, the Pakistani Kashmir, Azad Jammu and Kashmir (AJK) suffered the most damage. Emergency response and early reconstruction began immediately after the earthquake. However, due to severe damage to the roads, electric supply lines and telephone lines, there was a lack of accessibility to remote areas. Therefore, search and rescue operations were performed very slowly and due to approaching winters, the reconstruction could not be started until April, 2006.

As a result of the widespread destruction caused by the Kashmir earthquake, most of the areas in KP (Khyber Pakhtunkhwa) and AJK were completely disconnected from the rest of the country due to road blockage because of land sliding, broken bridges and disruption of electric supply and telephone lines. At the time of the earthquake, there were no mobile networks functioning in the affected areas and internet was also not available. In this situation, the only possible way of connecting these areas with the rest of the world and conveying information about the needs of the affected population was through media, especially, newspapers and television. In the absence of other sources of information, it was only through newspapers and television coverage that the rest of Pakistan and the world learned about the extent of earthquake damage, relief needs and recovery priorities of the affected population. Pakistani and Indian media played an appreciable role during this disaster. Television and newspapers strongly focused on the disaster and gave full coverage to the disaster, highlighting the important needs and problems of the affected people, identifying flaws in the relief distribution and diverting the attention of the government and the volunteers to the ignored areas. Media provided the necessary link between the earthquake affected people and relief providing agencies. Media reports of the disasters affected the way people reacted and, ultimately, the information the media provided helped save lives (WEBERLING 2010).

Media coverage of the Kashmir earthquake, however, was not without its 'agenda setting' role emphasizing more on some issues while ignoring the others. Therefore, the aim of this study is to analyze the 'agenda setting role' of the Pakistani newspapers after the Kashmir earthquake and compare it with that of the Indian newspapers. Since the two parts of the state of Jammu and Kashmir are being administered by different governments, it is important and pertinent to analyze and compare how newspapers from both countries focused on difference phases of disasters, discussed responsibility issues, used positive or negative tones and different framing techniques to influence both public opinions and disaster related policies.

2 Methodology

Both Pakistani and Indian media gave immense coverage to the destruction caused by the Kashmir earthquake during the entire period of emergency response and relief. However, there was a gradual shift of attention from the disaster as the recovery phase approached. We were interested in studying the agenda setting role of both television and newspapers. However, it was not possible due to the absence of archival record for televised news coverage by major news channels. Therefore, only newspaper articles were used for analysis because newspapers are considered to play an influential and persuasive role in shaping the public opinion in disasters (ZAHEER 2016). Newspapers still play an important role in influencing disaster response, recovery and mitigation efforts in Pakistan which has encouraged Pakistani researchers to use newspapers for their media analyses (see for example ALI 2014; ZAHEER 2015). Many researchers have preferred the use of newspapers articles to television stories for research purposes particularly related to risk events because newspapers provide more accurate information as compared to television media, cover events with greater breadth and balance the description of events with commentary on process (see for example BROOKS 1999; COLLINS et al. 2006; DRIEDGER 2007). Moreover, if there is little televised coverage because the risk issue of interest is chronic (i.e. develops more slowly), or there is no database cataloguing and archiving televised stories of the risk issue beyond the national

Fig. 1: Location of the 2005 Kashmir earthquake. Data source: U.S. Geological Survey (USGS) http://usgs.gov.

level, then the print media may be a useful surrogate measure of televised coverage to ascertain how the public may understand the risk event at a community/local level (DRIEDGER 2007).

SEALE (2003) has described three types of approaches to media studies which include 1) Media production studies, aimed to deepen understanding of the commercial environment of media organizations, 2) Representation studies which involve analysis of media messages themselves and 3) Reception studies focusing on audiences, and the manner in which they take up media messages. This study ranks in the second category of representation studies as it is based on the analysis of the content of newspaper articles.

In order to achieve the objectives of this study, two Pakistani and two Indian English daily newspapers were selected. The Pakistani newspapers included Dawn and The Daily Times. Dawn is the country's oldest (founded in 1941) and one of the most widely published and read newspaper with a circulation of 100,000-200,000 (ALI 2014; ZAHEER 2016) while the Daily Times also has a circulation of 80,000-120,000. The basic reason for their selection however, was the fact that only these two Pakistani

newspapers had archival record of the Kashmir earthquake and no other English or Urdu (Pakistan's national language) newspaper had archival records available. The Indian newspapers included The Hindu, the second most circulated English newspaper in India with a circulation of 1,400,000 and The Telegraph with a circulation of over 300,000. Both of these newspapers were selected because their archival record for Kashmir earthquake was available for the Kashmir earthquake. We tried to retrieve news articles from the newspapers with the help of FACTIVA database. However, this database does not include any Pakistani newspaper archive and very few articles could be retrieved from the Indian newspapers either. For this reason, the archives available on the websites of the Dawn and The Daily Times, The Telegraph and The Hindu were used to retrieve data. Only those newspaper articles were analyzed which were published from October 9, 2005 to May 31, 2006. The reason for selecting this time period was the fact that government of Pakistan had decided to start the recovery process in April, 2006 and we were interested in studying how the coverage and agenda of newspapers changed as the recovery stage approached. This method of using 'snapshots'

in time has also been used by other researchers in media studies (see for example Washer 2005; Boyd et al. 2009; Driedger 2007).

Qualitative analysis and quantitative content analysis techniques were used to identify different categories for the study. Content analysis can be used to study media coverage of any event or issue and is often used to study non-routine news, including natural disasters (Weberling 2010). Only news articles printed on front page were included in the analysis because they attract the greatest number of readers and even the non-subscribers are likely to see the newspapers' front page stories while carrying out their everyday routine activities (Slakoff and Brennan 2019). Front-page stories are the most important stories of the day that reflect editor's "news judgment" (Riffe et al. 2019, 10) that these stories deserve or will attract readers' attention (Slakoff and Brennan 2019). Despite the increasing popularity of the online news among news consumers, front-page newspaper stories are still important and are often used by researchers to examine the agenda-setting role of media (see for example Slakoff and Brennan 2019). A total of 630 articles were downloaded for analysis from all the four newspaper which were then read and sorted for relevance. Articles that only contained a reference to the Kashmir earthquake but no details about this disaster were excluded; Indian newspapers in particular contained a surprisingly large number of articles of this kind. In the final stage, 120 articles were selected, thirty (30) articles from every newspaper for the final analysis.

2.1 Categories

For this study, both qualitative and quantitative methods were used for data analysis. Qualitative techniques were used to identify themes and name codes as well as the framing techniques and tones that were used by the newspapers. As a method, content analysis allows a researcher to systematically analyze/code a body of texts; typically, though not exclusively, using a predetermined list of thematic or content categories (Driedger 2007). Initially, in order to analyze the content of the news articles five themes were selected. These included disaster phase, human or economic losses, responsibility or accountability issues, framing and disaster policy issues. These themes were then divided into further categories in order to cover the full range of article contents. Articles were coded as having a 'primary focus' if they discussed a single subject category (e.g.

relief) while those articles discussing more than one category were coded as having a 'secondary focus'. Each category was included only once even if it was discussed many times in the article. Articles were also analyzed for their tone as either having a negative or positive tone while discussing responsibility issues.

While analyzing the agenda setting role of newspapers, it is essential to study framing techniques used in news articles due to the fact that how an issue is characterized in news reports may have an influence on how it is understood by readers (Scheufele and Tewksbury 2007). Three categories were used to study framing which included episodic, thematic and both episodic and thematic framing (Boyd et al. 2009). Episodic news framing highlight an issue with the help of specific cases or instances, typically generating large amounts of coverage over short time-frames, while thematic news framing places political issues and events in some general context (Boyd et al. 2009; Gandy and Li 2005).

2.2 Coding

Firstly, four categories based on disaster management principles were used i.e. preparedness, mitigation, response and recovery on the assumptions that these categories are mutually inclusive, multi-dimensional and reflect social rather than objective time (Neal 1997). In addition, two categories for death and damage were used to capture the range of content in the article. The study of hazard and risk communication naturally invites our attention to the assignment of blame and responsibility (Gandy and Li 2005). Therefore, three categories were used to analyze responsibility issues. These included taking responsibility; need to take responsibility and focus of responsibility. Articles were coded according to media's asserted level of responsibility (or accountability) for action on the part of federal governments, local governments, individuals, Non-Governmental Organizations (NGOs), international community (including international organizations such as UN, NATO, Red Cross and foreign countries), national agencies (including Earthquake Reconstruction and Rehabilitation Authority (ERRA), disaster management authorities etc.) and army. These categories were chosen after pretesting the initially selected themes and elimination due to infrequent usage. A code of not applicable was assigned if the articles did not specify a responsible party. If the article discussed more than one actor (e.g. federal government

and local government) it was coded in both categories. Articles were coded in the taking responsibility category if they discussed how an actor (e.g. federal government) had taken responsibility of relief or recovery process in the earthquake area and whether it was performing this responsibility well or not. If, on the other hand, an article emphasized that there is a need for an actor to take responsibility of helping people in the earthquake area it was coded in the category 'need to take responsibility'. If the article mentioned both themes of "taking responsibility and "need to take responsibility", it was coded in both categories. In the context of responsibility themes, articles were also coded for tone (i.e. negative, positive or neutral). For example, an article was coded as having a negative tone if it criticized the role of the actor whose responsibility issue was being discussed. If there was an appreciation for the role played by an actor, it was coded as having a positive tone and if it was difficult to identify the tone of the article, then it was coded as neutral.

Articles were coded as having a disaster policy focus if they discussed the creation or passage of or changes in disaster policy. Those articles which discussed the disaster policies but did not suggest any changes in the current policies or emphasized the need to create new policies were coded in the category 'passage of policies'. Articles suggesting any changes in the current disaster policies were coded in the 'changes in the current policies' category while those articles which identified the need to create new disaster policies were coded in the 'creation of policies' category.

These categories were then coded by newspaper name, date, phase of disaster focused, responsibility issues, framing, and disaster policy using a Microsoft Excel database. The coded categories were then processed using quantitative techniques to compare the agenda setting role of the two types of newspapers and the results are discussed in Section 3.

3   Analysis and results

There was a significant difference in the coverage of Pakistani and Indian newspapers with respect to focus on loss of life and economic losses since Pakistani newspapers gave almost equal coverage to both human (61% and 56% for Dawn and Daily Times respectively) and economic losses (39% and 44% for Dawn and Daily Times respectively) while Indian newspapers gave more emphasis to human losses (89% and 90% for the Telegraph and the

Hindu respectively) as compared to economic losses (11% and 10% for the Telegraph and the Hindu respectively) (Fig. 2). For instance, one Pakistani newspaper article highlighted both loss of human life and economic losses due to the destruction of buildings in these words:

"Azad Kashmir Prime Minister Sardar Sikandar Hayat said over 20,000 people had died in his territory alone as he told a private television channel how his administration was overwhelmed by the massive disaster. 'This was beyond our capacity but the army gave us support,' he said in Muzaffarabad which has become a city of death after the killer earthquake razed houses, bazars, hotels and government buildings ranging from the territory's main university and colleges to the local jail." (Dawn; October 11, 2005).

However, two news articles on the front page of the Hindu newspaper of the same day only focused on human loss:

"Over 200 people were killed and more than 700 injured in Jammu and Kashmir due to the quake. More than 2000 houses were damaged and thousands became shelter less in minutes." (The Hindu; October 9, 2005).

Similarly, another news article referred to high death toll:

"Hundreds of people were feared dead and several injured as a powerful earthquake measuring 7.6 on hit parts of Pakistan and Pak-occupied Kashmir on Saturday, October 8." (The Hindu; October 9, 2005).

Regarding the emphasis on the different phases of the disaster in four newspapers, in the Pakistani newspaper Dawn, 76% of the reports mentioned or discussed the response and relief distribution phase. Recovery phase was also given good coverage in 71% of the total 60 stories. Daily Times covered the response and relief distribution phase intensively and all the articles (100%) discussed the response phase. Again, the recovery was also given considerable coverage and 56% of the articles mentioned recovery as well (see Fig. 3). As reported by one Pakistani newspaper:
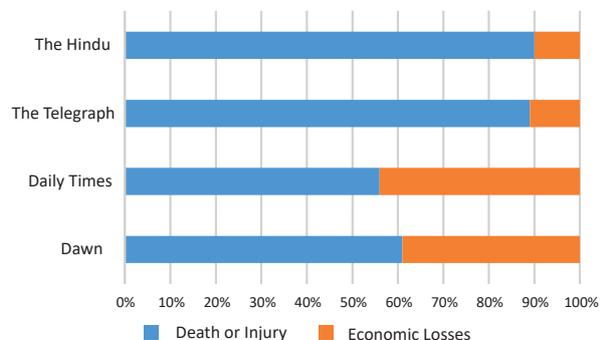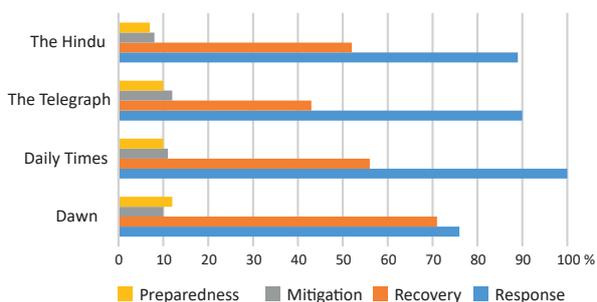

Fig. 2: Primary focus of the Pakistani and Indian newspaper articles on 2005 Kashmir earthquake. (October 9, 2005 - May 31, 2006)

Fig. 3: Focus on different phases of disaster management in articles on the 2005 Kashmir earthquake in two Pakistani and two Indian newspapers. (October 9, 2005 - May 31, 2006). Note: Since some individual articles were assigned to more than one categories, sums of more than 100 per cent may result in some cases.

"Following a massive earthquake in Pakistan that affected Afghanistan and India also, the United Nations is working with the governments of these countries on an emergency response, a UN spokesperson said on Saturday. […] The UN Office for the Coordination of Humanitarian Affairs is exploring ways in which the UN could assist in the efforts required to support relief and rescue operations and in subsequent recovery and reconstruction, the spokesman for UN Secretary General Kofi Annan said. The spokesman said Mr. Annan was deeply saddened by the loss of life and destruction." (Daily Times; October 9, 2005).

The coverage of Indian newspapers, i.e. The Telegraph and The Hindu was similar to that of Pakistani newspapers in the sense that they also give considerable coverage to the response phase. Around 90% of the articles in both the newspapers discussed the response phase. However, Indian newspapers put little emphasis on the recovery phase with 43% of the articles in The Telegraph and 52% in The Hindu discussing the recovery phase. This emphasis of Indian newspapers on relief and rescue efforts is evident in the following article:

"The death toll in the October 8 earthquake in Pakistan is believed to have crossed 33,000 even as hopes of finding survivors buried under debris have receded. The government has received $350 million in international assistance but reports of inadequate help continue to pour in from the worst affected areas particularly Pakistan-occupied Kashmir." (The Telegraph India, October 13, 2005).

When compared for the coverage of disaster mitigation and preparation phases however, there was no significant difference in the coverage of Pakistani and Indian newspapers. Their coverage ranged from 10-12% for both of Pakistani newspapers to 7-9% for the Indian newspapers. Hence, collectively, more coverage was given to the disaster response (90%) and recovery phase (50%) as compared to mitigation (9%) and preparedness phases (9%).

The analysis of articles also included the issues of taking responsibility and need to take responsibility. Data reveals that there has been an almost equal amount of news articles discussing the taking responsibility and need to take responsibility issues. 47% of the articles in all the four newspapers discussed the taking responsibility theme while 45.5% of the articles mentioned the need to take responsibility theme. To compare the focus of Pakistani and Indian newspapers, 65% of the Dawn articles focused on the taking responsibility issues while only 32% of the articles in Daily Times mentioned it. With regard to the need to take responsibility theme, 35% of the Dawn articles and 58% of the Daily Times focused on it. Similar mixed trends were also observed in the Indian newspapers where 52% of the articles in The Hindu and 39% articles in The Telegraph discussed taking responsibility. The theme 'need to take responsibility' was discussed by 38% articles in The Hindu and 51% of articles in The Telegraph (cf. Tab. 1). For example, a Pakistani newspaper article discussed how the federal government had taken the responsibility of rescue and relief activities in the earthquake affected areas:

"The federal government has set up a federal relief commission for coordination of rescue and relief operation in the quake-affected areas of the NWFP and Azad Kashmir […] Prime Minister Aziz said that five base camps were being set up in the worst affected areas. Relief goods would be sent to these base camps and would be distributed from there to different areas, he said. The prime minister said Pakistan Railways (PR) and Pakistan International Airlines (PIA) had been directed to expedite their services to carry relief goods from different parts of the country to the base camps or other accessible areas." (Dawn, October 11, 2005)

Tab. 1. Focus on responsibility issues of the articles from two Pakistani and two Indian newspapers on the 2005 Kashmir earthquake. (October 9, 2005 - May 31, 2006).

Responsibility focus	Dawn [%]	Daily Times [%]	The Telegraph [%]	The Hindu [%]	Total [%]
Taking responsibility	65.0	32.0	39.0	52.0	47.0
Need to take responsibility	35.0	58.0	51.0	38.0	45.5

In an article of the Indian newspaper, however, the absence of NGOs in the disaster affected areas has been discussed and the need for NGOs to take responsibility of disaster relief and recovery efforts in the earthquake affected areas has been underscored:

"People are wondering as to where all the non-governmental organizations (NGOs) have vanished after the earthquake disaster that hit the country on October 8. In different gatherings here in the capital city, people are talking about the missing NGOs which, they say, have been seen very active until a day before the earthquake disaster in holding seminars and workshops in five-star luxury hotels on various issues." (The Hindu, October 12, 2005)

As this example also shows, it is also interesting to analyze the tones of the news articles which were either negative, positive or neutral. The results reveal that 59% of Dawn articles emphasized the role of federal government in taking responsibility during the disaster. The tone of these articles was mostly neutral (50%) while 10% had a negative tone. Articles had an equal emphasis (19-21%) on International community, national agencies and the army (see Fig. 4). The tone of 50% of these articles was positive while those of 50% was negative. An example of the negative tone used by the news articles to criticize the rescue and relief efforts of the government and Pakistan army is give below:

"There is no government machinery available as people buried their dead or struggled to extricate their belongings from the debris of their fallen houses. There is no relief available in villages in the whole district. Similar situation was reported from some quake-stricken areas of the NWFP like Balakot and Garhi Habibullah where residents said many people were still lying under the debris of the fallen buildings. People are dying as there is no food available in the villages," [...]. 'They are not (coming) for us', one Balakot resident said angrily about helicopters flying over the areas, adding that the aircraft were
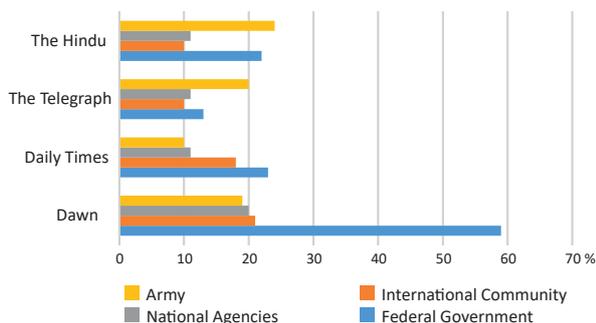
only flying officials to assess the situation rather than bring aid." (Dawn, October 11, 2005).

In Daily Times, 23% of the news articles emphasized on taking responsibility of federal government and international community (e.g. international organizations such as UN, NATO, Red Cross and foreign countries). The tone of 50% of articles discussing federal government was positive while for the remaining 50% it was neutral. Articles discussing the international community had a positive tone for 50% of the articles while the other 50% had a negative tone. For example, one article in the Daily Times appreciated the role of a government organization in recovery and rehabilitation using a positive tone:

"The Ministry of Population Welfare has decided to form a plan of action for the rehabilitation of women and children affected in the quake, a ministry official told Daily Times on Wednesday. It is appreciable that the ministry has realized that women and children were worst affected by the quake, and it plans to work in coordination with other ministries for the welfare and rehabilitation of women and children. According to the plan, the ministry will provide psychological consultation to the traumatized people in addition to convincing donors to fund long-term rehabilitation projects." (Daily Times, November 10, 2005)

As far as the Indian newspapers are concerned, 20% of news articles from The Telegraph discussed responsibility taken by the army with a strongly negative tone (100%). The following article is an example of the negative tone used by the Indian newspapers against the Indian army and its activities which were hampering relief and rescue activities in the earthquake affected areas of the Indian occupied Kashmir:

"There has been much talk of making the line of control soft and allowing relief to move across it. However, even Kashmiris who want to go and help on the Indian side of the LoC are not being allowed by the army without proper border passes. They are being forced to give all the relief material to the army or the state machinery for distribution. If ordinary Kashmiris from the Indian side are not allowed to go to the villages on the LoC, what chance is there of softening it? [...] Here is the chance to convert the Line of Control drawn in blood into a Line of Friendship drawn through compassion and cooperation. The question is whether the competitive cussedness of the two sides will allow our leaders to rise to the occasion." (The Telegraph; October 24, 2005).

Responsibility taken by the federal government, international community and national agencies was discussed by 11-13% of the articles with either positive or neutral tone. 22% and 24% of articles from The Hindu discussed the role of federal government and army respectively in taking responsibility with a

Fig. 4: Focus on different actors in taking responsibility issues of the articles from two Pakistani and two Indian newspapers on the Kashmir earthquake, 2005 (October 9, 2005 - May 31, 2006). Note: Since some individual articles were assigned to more than one categories, sums of more than 100 per cent may result in some cases.

predominantly positive tone (50% and 100% respectively). 20% of the articles mentioned federal government taking responsibility with a positive tone while 10% articles discussed responsibility taken by the national agencies and the international community with either positive or negative tone (50% each).

News articles also discussed the issues based on the need to take responsibility or accountability during the disaster (Fig. 5). These included 29% articles from Dawn emphasizing the need for federal government to take responsibility, 21% articles pointing to national agencies and 12% and 10% for local government and army respectively. The tone of all these articles discussing the need to take responsibility issues was strongly negative (100% for each category). Articles in the Daily Times provided an almost equal emphasis to federal government and local government (20% and 23% respectively) and less emphasis to army which was mentioned in only 10% of the articles. Again the tone of all these articles was always negative while discussing the need to take responsibility issues. For example, one news article presses the need for the federal and local government and army to take responsibility of relief and rescue activities in the earthquake affected areas:

"While quake sufferers and politicians complained of absence of any government help in villages and its slow arrival in cities, the only thing the federal cabinet did was to set up four committees to supervise relief, rescue and rehabilitation of the quake victims. Because of widespread destruction of houses, many among an estimated stricken population of four million were destined to spend their third night after the quake in the open or under make-shift shelters because no tents had arrived and a rainfall and hailstorm in villages near Muzaffarabad had made the weather chilly. Residents said there was a total breakdown of government machinery that allowed most prisoners to escape as the jail building disintegrated. Due to the major landslides triggered by the earthquake, all the major
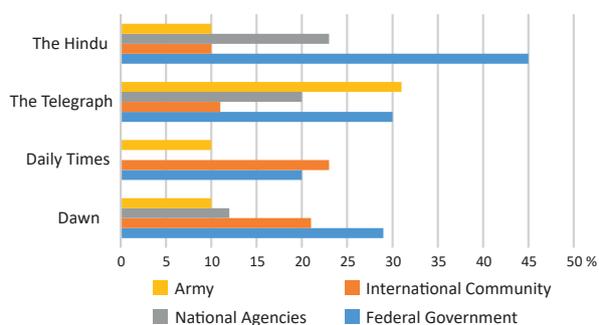
Fig. 5: Focus on actors in need to take responsibility issues of the articles from two Pakistani and two Indian newspapers on the 2005 Kashmir earthquake (October 9, 2005 - May 31, 2006)

roads of AJK have been blocked and there was no official word about the fate of the key Neelum Valley road to the northeast of the Azad Kashmir capital. The residents of the affected areas are also desperately waiting for army helicopters to drop relief goods and provide first aid which is not presently available to the injured stuck in villages. People burying their dead looked expectantly at helicopters often flying over villages but there was no sign of any relief coming from the skies." (Dawn, October 15, 2005)

The Indian newspapers did not differ much in their focus on the actors of need to take responsibility issues. Both the federal government and army were focused for the need to take responsibility by 30-31% of articles in The Telegraph. Local government and national agencies were covered by 20% while international community was mentioned in 11% of the articles. The tone of all of these articles was also strongly negative (100%).

The Hindu emphasized on the need for federal government to take responsibility in 45% articles, for local government and national agencies in 23% of the articles and for international community and army in 10% of the articles. Again the tone of all of these articles was highly negative (90%). Generally, most of the news articles (25%) discussed the role of federal government in taking responsibility with a neutral tone (60%). Army and the international community were discussed by 17.5% of the articles each with a combination of different tones. Articles stating the need to take responsibility in all the four newspapers focused strongly on Federal government (30%), local government (17.5%), international community (12.5%) and army (12.5%). The tone in all these discussions was predominantly negative. The need for Indian government and army to take responsibility of relief and rescue operations in the Indian-occupied Kashmir is discussed in a negative tone in a news article in these words:

"The political sensitiveness of the region hinders speed: there can be no relaxing of security procedures, even if it means holding up vehicles with wounded people in order to do routine searches. Misery induces desperation. The slow rate of relief is angering people, and they are willing to loot vehicles carrying food packets to other destinations." (The Telegraph; October 14, 2005)

News articles were also analyzed for the three types of framing namely episodic, thematic and both episodic and thematic framing to examine the policy agendas of both Pakistani and Indian newspapers. It was observed that Pakistani newspapers used thematic framing more as compared to episodic framing or using a combination of both framing types. 76% of the articles in Dawn while 81% of articles

in Daily Times used thematic framing. Only a small percentage of the articles ranging from 10-24% used episodic framing or a combination of both framing types (Fig. 6). Framing technique were used mainly to discuss the creation, passage or change in the disaster policies It is evident from the analysis that most of the articles discussed the passage of disaster policy which was mentioned in 20-53% of the articles in all newspapers (Fig. 7). Pakistani newspapers including the Dawn and Daily Times, on the other hand, also discussed the creation of new disaster policies in 22% and 23 % of their articles respectively.

For example, one Pakistani newspaper article used thematic framing to describe the creation of new policies to enhance the relief and rehabilitation activities through the establishment of a new authority and other measures:

"An extraordinary meeting of the National Security Council (NSC) held here on Wednesday decided to put into use 'all national resources' to carry out the mammoth task of rescue and relief in areas affected by Saturday's deadly earthquake. The meeting also decided to set up an 'Earthquake Rehabilitation Authority' to work as a dedicated organization to oversee rehabilitation of the affected areas on modern lines and to enable the affected people to stand up on their own feet. The meeting presided over by President Pervez Musharraf approved short- and long-term strategies for reconstruction and rehabilitation work. The short-term strategy includes stepping up relief operations, establishing relief camps, epidemic control, infrastructure rehabilitation and life support measures and restoration of roads and communication links." (Dawn, October 12, 2005)

Comparatively, the Indian newspapers preferred a combination of both types of framing by 45-54% followed by thematic framing (36%-42%) and then episodic framing (10%-13%). The Indian newspapers used frames to emphasize the passage of policy more than its change or creation. One news article combined both episodic and thematic framing to il-
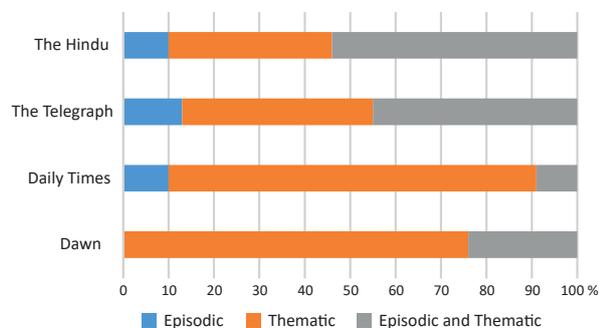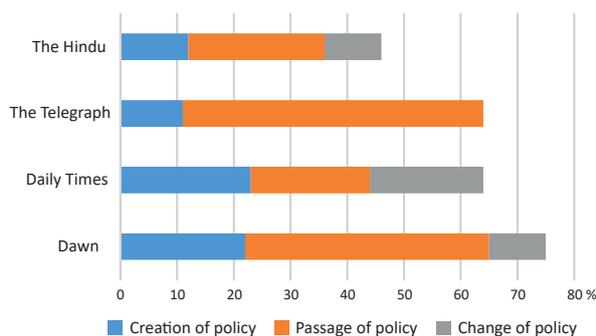
Fig. 7: Policy focus of two Pakistani and two Newspapers articles on the 2005 Kashmir earthquake (October 9, 2005 - May 31, 2006)

lustrate the hardships of the local people due to restrictions on their mobility because of the politically controversial nature of the Kashmir state using the case of a local man who struggled to take his injured mother to hospital due to army checkpoints:

"Humiliated and outraged, Anwar Hussain's voice cracks and his words are barely audible as he shouts at the young army captain, waves his fist and urges the driver of his taxi to push on. In the seat behind him, his frail mother, her head and her left hand bandaged but bleeding, stares with eyes that look unseeing. 'Can't you see,' a tearful Hussain is yelling at and pleading with the army officer at the same time, 'she may die; I must get her to the hospital in Baramulla (Indian Kashmir).' People from his village on the outskirts of Uri have gathered around the car and the restive mob, many of them with red, flaring eyes from two sleepless and shelter less nights, is on the verge of getting violent. But the young captain from Bangalore has his orders and his INSAS rifle. The orders stipulate that all cars and people passing through his checkpoint must be frisked. This is Kashmir today. Kashmir is a word for disaster relief in a war zone." (The Telegraph; October 12, 2005).

4   Discussion

The results of the study revealed that there has been a strong agenda setting role of the newspapers in the selected time period with respect to the selected issues. It is necessary to analyze the news frames from the perspective of policy and issue agendas because these frames have an impact on our attributions of responsibility for social problems (GANDY and LI 2005). Episodic frames tend to focus our attention on events in the lives of individuals using either positive or negative tones or responsibility issues to appreciate or criticize the role of individuals. Episodic framing often "shields public officials and institutions from responsibility," and thereby perpetuates

Fig. 6: Types of framing used in two Pakistani and two Indian newspapers articles on the 2005 Kashmir earthquake (October 9, 2005 - May 31, 2006)

the status quo (Iyengar 1991). Journalists also use thematic frames to call our attention to a more general problem or concern with the help of examples or statistics (Gandy and Li 2005). Thematic framing promotes societal attributions of responsibility that challenge the status quo (Boyd et al. 2009). The agenda of news articles is shaped with the help of framing techniques and the use of positive or negative tones (Barnes et al. 2008). An analysis of framing techniques used by the newspapers reveal that both Pakistani and Indian newspapers had a strong objective of challenging the status quo by criticizing the existing policy approach to disaster management in their respective countries. Therefore, in Pakistani newspapers, more articles were written with thematic framing as compared to episodic framing. The approach of the Indian newspapers, however, was different in the sense that they preferred to use both thematic and episodic framing and questioned the political situation in Kashmir more than other aspects of the disaster. The use of thematic framing in Pakistani newspapers was evident from the focus of Pakistani newspapers both on human and economic losses. Indian newspapers, on the other hand, had a strong focus on human losses. The reason for different focus of Pakistani newspapers can be that they had an agenda of encouraging the international community to send funds for compensation and reconstruction. Since, the extent of damage was limited to the Indian side of Kashmir, there was little hope of getting funds for reconstruction and the Indian newspapers, therefore, focused more on human losses to highlight the severity of the disaster.

Another important agenda of both Pakistani and Indian newspapers revealed by the analysis of results was to challenge and try to change the present political status of Kashmir. Since the State of Jammu and Kashmir is a controversial area, it is being administered by the federal governments and army on both sides of the LoC. However, the Indian-occupied Kashmir is directly controlled by the Indian army and thousands of Indian troops were present there at the time of the earthquake. The Pakistani side of Kashmir is called the State of AJK which is treated as an administrative unit of Pakistan with the obligations of a province having its own legislative assembly, Supreme Court and High Court (Shahzad et al. 2016). The Indian newspapers used both episodic and thematic frames to utilize this opportunity to highlight the political aspects of the problem as well as to emphasize the need to solve this longstanding issue. This was done with the help of examples of individuals to illustrate the hardships of affected people in taking their patients to the hospitals and getting relief goods in the Indian Kashmir due to restrictions on movement across the LoC. In Pakistani newspapers also, the problems of people living on both sides of the LoC were discussed and the need to soften restrictions on movement across this truce line was pressed using both thematic and episodic frames.

The large scale devastation of the Kashmir earthquake increased the demand for a large scale and well managed relief and recovery process and newspapers coverage was used to influence the policy makers to expedite the process. In this context, both Pakistani and Indian newspapers criticized their respective federal government for not managing the response and recovery processes in the earthquake affected areas in their jurisdictions effectively. With the help of thematic frames or a combination of thematic and episodic frames and an explicitly negative tone, the Indian newspapers criticized the Indian federal government for not taking immediate and effective measures to relieve the sufferings of earthquake affected people in the Indian Kashmir. With the help of thematic and episodic frames and a strong negative tone, the Indian newspapers also strongly criticized the Indian army for their weak and late response to the disaster affected people due to the fact that the Indian Kashmir is largely under the control of army.

Pakistani news articles criticized the role of federal government for their belated and insufficient rescue and relief activities with a predominantly negative tone. Pakistani newspapers discussed army more positively as compared to the Indian newspapers. Most Pakistani news articles appreciated the role of army but in some cases, they were also blamed for irregularities in relief distribution and rescue operations. A number of international organizations such as NATO, Red Cross, UNHABITAT and teams sent by other countries such as U.S. were also working in the Pakistani Kashmir. The Pakistani newspapers also criticized the international community and underscored the need for the international organizations to participate more actively in the relief and recovery process. Similarly Pakistani newspapers also criticized the national agencies such as Earthquake Reconstruction and Rehabilitation Authority (ERRA) for not taking responsibility of the relief and reconstruction efforts in the area. Hence, there was a strong role of newspapers in both Pakistan and India in highlighting problems faced by the affected people and identifying weaknesses in the performance of managing authorities. The role of local govern-

ment was not discussed in both Pakistani and Indian newspapers due to destruction of government buildings and disruption of the communication systems which rendered local government almost non-functional in the first few weeks after the earthquake.

The results of this study are compatible with those of other researchers (BARNES et al. 2008; DRIEDGER 2007) with regard to the emphasis of newspapers on producing detailed commentary, analysis and process. The findings of the study also coincide with those of COLLINS et al. (2006) where the newspapers were expected to use a greater proportion of thematic framing given their practices of publishing more in-depth analyses (e.g., editorials, op-ed pieces, columns). These findings are generally consistent with the results obtained by BARNES et al. (2008) with more articles using thematic framing by reflecting on broad problems relying on institutional or government accountability as compared to episodic framing. Pakistani newspapers emphasized more on policies issues and pressed the need to create new policies and institutions for effective disaster management in the country. This was proved with the coverage of Pakistani newspapers which not only discussed the relief and rescue activities but also referred to recovery phases. The Indian newspapers, on the contrary, only discussed the passage of policies and no new policies for disaster management were suggested in their articles. This was evident with the focus of the Indian newspapers on relief phase only. Again, it can be in part due to the agenda of Pakistani newspapers to highlight the shortage of funds for reconstruction. However, both Pakistani and Indian newspapers gave the least attention to mitigation and preparation for the future disasters. These results confirm the argument that agenda setting tends to promote disaster relief policies by reflecting on social problems retrospectively while rarely, if ever, dealing prospectively with future disasters (BARNES et al. 2008). Hence, newspapers tried to influence the policy makers in Pakistan by only referring to the problems in relief operations and recovery while completely ignoring the more important phases of disaster mitigation and preparation.

This analysis of the agenda setting role of Pakistani and Indian newspapers after the 2005 Kashmir earthquake revealed that media, particularly newspapers, played an influential role in shaping both public agenda as well as policy agendas in the wake of the earthquake. This argument can be supported with the fact that after the Kashmir earthquake, fundamental changes were made in the field of disaster management in Pakistan. Two institutions,

the National Disaster Management Commission and the National Disaster Management Authority (NDMA), were created to implement, coordinate and monitor disaster management activities (HAMILTON and HALVORSON 2007). In addition, an Earthquake Relief and Rehabilitation Authority (ERRA) was set up with branches called Provincial Earthquake relief and Rehabilitation Authority (PERRA) in all four provinces and the State Earthquake Relief and Rehabilitation Authority (SERRA) in AJK (TAHIR 2007). ERRA helped affected people to recover from the impacts of the Kashmir earthquake by offering compensation for damaged houses and training for earthquake-safe reconstruction (HAMILTON and HALVORSON 2007). These changes brought about by the media agenda setting at the policy level in Pakistan underscore the important role of media in the creation and changing of disaster management policies and also call for more extensive and deep analysis of media agenda setting role in disasters.

The findings of this study were limited by the fact that due to the unavailability of data archives for majority of the Pakistani and Indian newspapers, only articles published between October 9, 2005 and May 31, 2006 were analyzed in the selected four newspapers. It is possible that if all articles were analyzed in all the important newspapers of Pakistan and India, more clear and reliable results would have been obtained. Similarly only front page articles were included in the study which might have given different findings than if all articles published on all pages were included. Similarly coding could not be done for photographs accompanying the news articles due to less time and resources available. There is a need for more detailed studies on the agenda setting role of newspapers in natural disasters with particular reference to developing countries due to the immense power of newspapers to influence the perception and response of the people to natural disasters.

5   Conclusion

The study revealed that there was a strong agenda setting role of both Pakistani and Indian newspapers during the Kashmir earthquake. Newspapers focused on broad policy issues using thematic framing techniques with a strong emphasis on response phase. Least attention was given to preparation and mitigation phases. The focus of Pakistani and Indian newspaper was different with respect to human deaths and economic losses, responsibility issues, framing and disaster policy. Federal government was considered

to be responsible for disaster management process by both Pakistani and Indian newspapers. Indian newspapers also strongly criticized the Indian army for their unsatisfactory response and relief operations in the earthquake hit areas of Indian Kashmir.

During the Kashmir earthquake disaster, newspaper played a key role by connecting the affected people to the rest of country and highlighting their problems and sufferings. However, newspapers emphasized the immediate needs and responsibilities more than the long term needs of the people in the earthquake affected area. There is need for newspapers to focus equally on the recovery, preparation and mitigation process along with response and relief process. The most alarming fact is that although the Kashmir earthquake resulted in wide spread devastation, theoretical considerations suggest, it may not have released more than one tenth of the accumulative elastic energy that has developed since the previous great earthquake in the region in 1555 or earlier (Bilham et al. 2005). Many large population centers throughout northern Pakistan and India are therefore potentially exposed to serious seismic risks. Therefore, the reconstruction process has to be carried out with careful planning, monitoring and evaluation to avoid future disasters in the same area. In this context, the role of news media and particularly newspapers is vital since these are the most easily accessible and relied upon sources of information for the people living in the remote areas of northern and western Pakistan and northern India.

News reports of natural catastrophic events have large public appeal, are often treated as the biggest stories, attract the largest audiences, and are remembered the longest (Pasquare and Pozzetti 2007). Due to their ability to provide more detail and focus on policy issues related to natural disasters, newspapers have an important role to play before, during and after the disasters. The agenda setting role of newspapers often has a significant influence on the decisions of the policy makers and is therefore, increasingly being studied for its impact. It is based on the assumption that how an issue is characterized in news reports may have an influence in how it is understood by audiences (Scheufele and Tewksbury 2007). Newspapers are still one of the most important sources of information in many developing countries including Pakistan and India and they can play a positive role in the management of natural disasters by focusing on mitigation and preparation to prepare communities for future disasters. Therefore, the media's coverage of disasters should equally emphasize disaster mitigation and preparation (Barnes et al. 2008).

Without the media's involvement, citizens might not easily have access to environmental, hazard-related issues, and might not be able to bring those issues to the attention of national and local decision makers and administrators (Pasquare and Pozzetti 2007). The media promote change by informing, enabling, motivating and guiding the audience (Weberling 2010). Indeed, the information media provide often contributes to individual action and even large-scale social change (Weberling 2010). News media can bring about a positive change in the perceptions and priorities of the public as well as government with regard to disaster policies by focussing on key policy issues to influence the policy makers in making correct and timely decisions. These measures can help to bring improvements in disaster management systems by highlighting the most important phases of disaster, suggesting suitable policy changes and criticizing negative practices to ensure effective and efficient disaster management practices.

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