

Analysis of Man-made Disasters and creating Resilience in the Pakistani Society

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ABSTRACT

Pakistan has been in danger of disasters with various hazards, including floods, epidemics, earthquakes, avalanches, droughts, pest attacks and landslides. However, humanly induced hazards like transportation, industries, oil spilling, civil conflicts, and internally displaced people due to multiple factors also threaten the country. In addition, after 9/11, Pakistan remained much exposed to man-made disasters like attacks through Improvised Explosive Devices, suicidal attacks, including personal and vehicle-borne. Pakistan is amongst the countries which have suffered enormously due to natural calamities and man-made disasters as well. This research aimed to discuss disasters, preparedness and creating resilience within society during evaluation. The researchers used content analysis technique and evaluated the national and provincial level documents and policies dealing with the disasters in Pakistan. The most of such documents were found reactive in nature rather than proactive. Whereas, creating resilience in the society seems negligible. Therefore; the focus should rather be on Disaster Risk Reduction and developing resilience instead of mere Disaster Management. Above all, there is always a need felt for strengthened coordination among the institutions so as to reduce the effects of disasters, creating resilience among masses and then, building back the society.

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INTRODUCTION

Due to calamities and the failure to tackle disaster-related concerns, Pakistan's stability has deteriorated throughout the years despite the existence of organizations like the National Disaster Management Authority (NDMA) and Provincial Disaster Management Authority (PDMA) (Ainuddin & Routray, 2012). Pakistan suffers numerous catastrophic hazards, including floods, diseases, disasters, rock slides, floods, insect attacks, and collapses, but is also threatened defensively from the East (i.e., India), among others (Khan & Jan, 2015). Moreover, threats brought on by humans endanger society, including those related to industry, transportation, industrial pollution, civil conflicts, and internally displaced people for a variety of reasons (Khan & Jan, 2015). Among the nations of the world, Pakistan has experienced the greatest number of natural and manmade disasters overall, particularly since 9/11 (Zaheer, 2012).

The frequency of disasters, especially those caused by human activity, hinders economic progress, and destroyed bridges, buildings, and other infrastructure can shut down communications systems. Economic Resilience is the most important factor to be established when assessing economic deprivation (Cavallo, Galiani, Noy & Pantano, 2013). Hence, a country's ability to withstand disasters depends on its disaster management system (Khan & Jan, 2015).

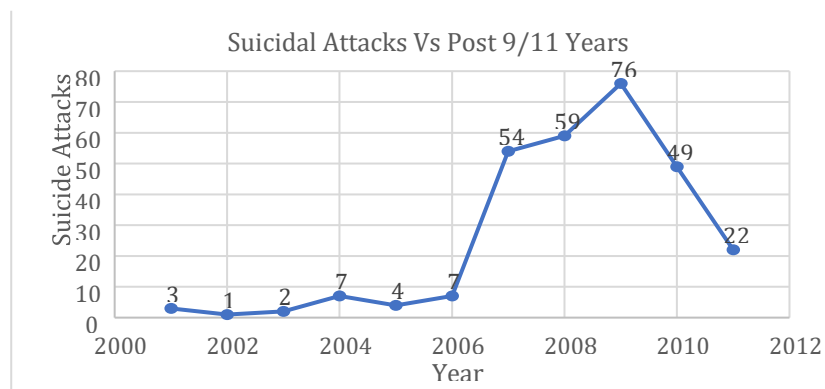


Figure 1: Trend of suicidal attacks in Pakistan from 2000 to 2011

From 2001 to 2006, about 2 to 6 attacks were conducted, but there were more than 50 suicidal attacks in Pakistan over the next five years.

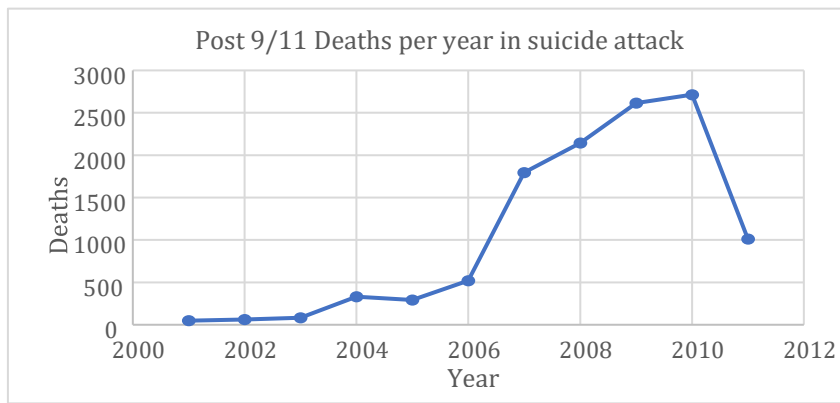


Figure 2: Trend of casualties in Pakistan from 2000 to 2011

From 2006 to 2011, more than 1000 casualties were reported; thus, human-induced activities took the lives of innocent Pakistanis.

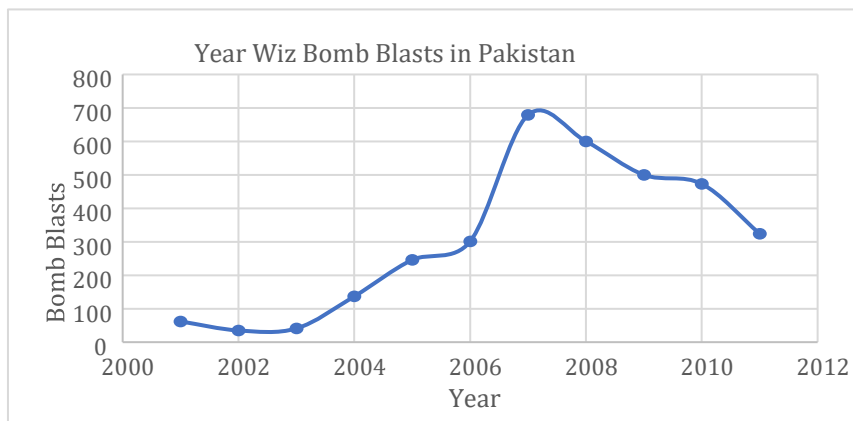


Figure 3: Trend of blasts in Pakistan from 2000 to 2011

From 2006 to 2011, Pakistan witnessed more than 300 bomb blasts; the humanly induced activities took the lives of innocent Pakistanis.

In order to conclude that is appropriate for our country, it was important to highlight the organizational structure (NDMA, PDMA, Local Bodies, and Rescue Departments), competency, level of training, and approach to providing early warnings and involving communities. Pakistan has suffered the most from man-made disasters after the 9/11 attack, which is still a major cause for concern (Yasuyuki, Bhattacharyay & Tomoaki, 2011). Manmade disasters have a catastrophic effect on peoples’ psychologically and result in material losses (Helton & Head, 2012; Thomas et al., 2013). To prevent man-made disasters, departments/ quarters should increase their capabilities/ capacity to do so, and we should be prepared to rebuild our country if such a disaster occurs (Hochrainer-Stigler, Mechler & Mochizuki, 2015; Mercer et al., 2014).

More importantly, it has been noticed over time that organizations like NDMA, PDMA, and local bodies at the Division/ District level have no defined roles in post-man-made disaster scenarios or disaster response efforts. These roles must be developed to bring all relevant echelons together and establish guiding principles for rehabilitating the victims. On the other hand, local law enforcement, intelligence services, and rescue organizations are mandated to work together at provincial management cells to respond to man-made disasters well-coordinated and well-thought-out manner. Although there are few studies on disaster management and the preparedness of various departments for man-made disasters in the Pakistani context, there is a dearth of literature on these topics. As a result, the current research study was done to examine Pakistan’s Disaster Management System with an emphasis on manmade disasters.

Globally, a man-made disaster is a sensitive and most harmful type of disaster as no one can apprehend an individual as to whether he/ she may blow himself/herself and cause disastrous damage in the gatherings. A suicide attack has a significant impact on both society and the individual. A man-made disaster that happened in Sri Lanka in July 1983 and affected the Sinhala and Tamil ethnic communities was seen by many local and international observers as the largest and most serious disturbance. It also affects a nation’s economic situation. It exceeded all other man-made calamities the nation has ever experienced. At the social, political, and economic levels, it had an impact on the nation as a considerable number of innocent people lost their lives while huge businesses and properties were destroyed. The Sri Lankan government then moved to address the problem. Quickly constructed multifunctional, efficient

systems for aid delivery, rapprochement, and rehabilitation were given access to the highest-ranking government authorities and were furnished with the flexibility to choose priorities and even alter directions with the least amount of delay. The government came up with new mechanisms for dealing with and managing the crisis to take into account all these different factors in the nation.

It was based on the country's earlier experiences dealing with smaller-scale natural and man-made disasters. Typically, the government would be in charge and assume responsibility for execution, depending on each individual's track record. An extraordinary gazette was used to establish and give authority to the new organization, which replaced previous legislation and practices.

Those who are psychologically influenced to disrupt daily life for their ulterior purposes, such as financial gain, religious extremism, or the objectives of hostile intelligence agencies, commit man-made catastrophes (Coppola, 2020). Such disasters occur at a predetermined location to maximize infrastructure damage and attrition, resulting in various negative effects, including panic, fear, economic collapse, suspension of development initiatives, etc. The Disaster Management Authorities' modus operandi emphasizes the use of necessary and available equipment in the relevant departments before and after a disaster (Khan, Shanmugaratnam & Nyborg, 2015). These measures, as indicated by Haimes (2012), are essentially related to how well the relevant agencies perform. This states that if a disaster cannot be managed, raising communities and the general public's knowledge will help prevent life and financial losses, methods and strategies will also help to prevent disasters or lessen their effects or impacts (Laframboise & Loko, 2012).

The local population is ready to respond to a crisis and take the necessary steps to get back on their feet (Baack & Alfred, 2013). The response component is regarded as a phase that comes after the crisis, although its expertise is obtained after taking the necessary precautions (Birkmann et al., 2010).

In 2016, a qualitative investigation was carried out into how the media covered the APS incident in Peshawar. University students from Rawalpindi and Islamabad, ages 18 to 29, made up the sample size. As part of this study, we looked at how the media covered the APS Peshawar case to analyze the function of the media during terrorism. Participants in the study claimed that the media significantly impacted accurately portraying the incident, which encouraged young people, particularly teenagers, to show courage. As they watched television, they noticed that good features overshadowed flaws. Furthermore, families of victims were able to share their stress. The study found that media coverage of terrorist attacks typically aids terrorist organizations in obtaining popularity and recognition among the public. However, the media's portrayal of the APS Peshawar incident did not heighten fear; rather, it rallied Pakistani society as a whole to support peace initiatives (Qureshi, Gulraiz & Shahzad, 2016).

The biggest city in Pakistan, Karachi, has seen a lot of terrorism recently. Even Karachi lacks an effective emergency response system. One of the three public hospitals in the entire city was outfitted with a trauma centre, which shows the city's susceptibility to natural disasters. In a developing nation with limited means to combat terrorism, researchers examined the management of two significant suicide bombing attacks. The first of these incidents, which left 36 casualties, was recorded in May 2002. Of these, 13 (36%) died right away, and 11 (30.5%) died after being taken to hospitals. The second incident occurred in May 2004 and was specifically directed toward the local populace. 14 (13.46%) of the 104 casualties from this explosion passed away immediately. The concepts of advanced trauma and life support were used to document each patient's initial assessment and care on a trauma form.

The decrease in both the frequency and the number of terrorist attacks during 2018 is evidence of the significant improvement in the security situation. As a result of proactive counterterrorism policies and the ongoing hybridization of kinetic operations and non-kinetic state responses, terrorist organizations now have less operational space, which limits their ability to carry out attacks. Pakistan's internal and external challenges are complex, and consistent efforts are necessary to deal with them. Concurrent security dynamics are further complicated by several complications, necessitating gradual, comprehensive responses at both the operational and policy levels.

Significance of the study

The categories listed below will continue to be crucial when assessing Pakistan's Disaster Management System to foster a stable, forward-thinking, and stronger environment. Quick reaction and recovery efforts combined with proactive departmental behavior can help foster individual and societal resilience (Zafar, Yousaf & Ahmed, 2016; Lucini, 2013). Throughout the conference, disasters will be highlighted, with a particular focus on man-made disasters. Weak areas of departmental preparedness for disasters (of any nature) and response and recovery efforts will be identified, as well as ways to protect the public from man-made disasters and how law enforcement agencies can be better trained.

The research findings mentioned above can be summarized to support the claim that researchers should pay close attention to the disasters in Pakistan, especially those that are man-made. To the best of the researcher's knowledge, the evaluated literature indicated little written on such tragedies, particularly in a local setting. However, the current

study focusses on examining the approaches and preparedness towards man-made Disaster Management structures in Pakistan, and secondly, to evaluate the resilience capacity of concerned departments to meet man-made disasters

METHODOLOGY

From the broader domain of natural calamities and disasters, this study has focused on man-made disasters. The study was conducted using a content analysis approach. For the purpose, the policies of the concerned departments, data of the relevant institutions, ministries and authorities were collected and analyzed. The departments directly dealing with the phenomena were short-listed, that include NDMA, PDMA, Rescue 1122, Counter Terrorism Department and concerned ministries.

ANALYSIS AND DISCUSSION

All national plans to combat disasters, particularly natural disasters, were approved by the NDMA. The NDMA is authorized to establish guidelines and create plans for disaster management. Furthermore, it establishes policies for provincial governments that support them during natural disasters and funds both provincial and district governments.

With the 18th Constitution Amendment, the PDMA must assess each province's susceptibility to various crises and specify preventative strategies. It was created to deal with the natural disaster management plans put in place in Pakistani regions. The PDMA has a variety of roles and authorities, and it uses these resources to build disaster relief plans for the province. After doing so, the PDMA implements the NDMA's policy at the provincial level. Also, the departmental plans are created by the province management authority to support the ill weaker people. It also discusses the funding options and how they ought to be used for early planning and mitigation. The PDMA is assigned to undertake following tasks:

1. Establish coordination to assist inter-related institutions/ departments and people during a natural disaster.
2. To assess the likelihood of disasters occurring before enhancing departmental and individual capacity to create recovery plans to lessen the effects of disasters.
3. Promotes community awareness, general education, and community training among its constituents.
4. To offer technical assistance to the local governments affiliated with PDMA, including the district authority.

The National Disaster Management Authority Act created a disaster management structure, including the District Disaster Management Authority (DDMA). Also, DDMA has a variety of responsibilities and assists the vulnerable person both before and after the crisis. The district disaster management authority creates a district-level disaster management plan. It is also in charge of carrying out district plans, provincial plans, national plans, and national policies issued by NDMA. In addition to allowing people to return to disaster-prone areas, DMA also lessens the effects of disasters. Additionally, it gives the local government guidelines for disaster mitigation and prevention in the area. It creates a plan to raise community awareness of the disease.

The opposition leader in the Senate as well as the National Assembly, is a member of the panel, and the PM of Pakistan serves as its Chairman. As members of the NDMC, the Ministers of Defense, Health, Foreign Affairs, Interior, and Finance are also included. Moreover, the Chief Executive of Gilgit Baltistan, who is the Council, and the Prime Minister of AJ&K both joined the National Department Management Council (NDMC). The NDMC established national policies for disaster management and adopted a disaster management-based national action plan as well as an action plan made by the federal government and its departments or ministries. The Commission is also in charge of creating and preparing strategies for both federal and provincial authorities. Also, the Commission would contribute money for early preparation, response, and mitigation actions.

As they must conduct the response actions inside the province and support the DDMA, PDMA; is considered a crucial component of the disaster management cycle, which should be able to take the lead in managing disasters. The DDMA is in charge of creating disaster management plans for their particular districts and serve as the first responders in times of crisis. The authority that engages with stakeholders like NGOs and the community is most involved in the DDMA. The DDMA must guarantee that the communication system in their region is functional to respond effectively. The nation's territorial authority, NACTA, and Rescue 1122 have their procedures for responding to a particular circumstance, such as a man-made disaster, but their procedures remain limited to response only.

In terms of developing resilience, NACTA was created to combat terrorism within the nation and create policies and try to deal with terrorism-related activities. Terrorism is regarded as one of the most damaging types of disaster, which requires deliberate and well-thought-out rescue policies and execution plans while enhancing the capacity among the society to build back. Rescue Departments of Pakistan and NACTA are significant and sensitive institutions, which once work hands in glove can manage challenges in a befitting manner. However, the Counter Terrorism Department (CTD) also does the same work as, in line with NACTA and has the same responsibilities to identify

terrorism as a disaster. Yet whether a crisis is caused by a natural disaster or a man-made disaster, Rescue 1122 offers services in any circumstances in Punjab, while a few other provinces are also trying to work on the same lines.

Other types of man-made disasters covered by international disaster management policies include industrial and occupational hazards, domestic or civil terrorism (including gas and fuel attacks), transportation accidents, racial conflicts, nuclear disasters, disasters linked to terrorism, and weapons of mass destruction. Still, the range of possible human-induced disasters is missing at the policy level. This is in contrasting approach with the idea that the ability of a country to withstand in disaster times depends on its disaster management system (Khan & Jan, 2015).

Regarding the approach, the main departments and authorities to deal with this have remained reactive rather than proactive. This is the main flaw in the policy and planning of the departments to deal with it. Overall, the findings are in consistent with the findings (Sayed & González, 2014), who concluded that despite being vulnerable to both natural and man-made disasters due to several factors, such as topography, high population, and unemployment, Pakistan's disaster management has traditionally been proactive rather than reactive (Sayed & González, 2014).

CONCLUSION

Overall, Disaster Management Structure's Authority still lacks behind the importance of manmade disasters. NDMA, PDMA, and local bodies at the Division/ District level defined roles in post-man-made disaster scenarios or disaster response efforts are missing. Man-made calamities also impact the authority's existing plans and programs. Only natural disasters are the sole focus of the national and provincial programs and strategies that completely disregard the effects of man-made disasters. Resilience towards man-made disasters still needs a lot of work to be undertaken. A range of possible human-induced disasters is still missing. A concentrated effort is required to evaluate and add the possibilities to the planning level. It would also shift the reactive approach to the proactive one if the planning and policy are acted upon timely.

RECOMMENDATIONS

The analysis and experiences have given way to identify the areas, which are required to be re-emphasized time and again to enhance the capacity and improve the undertakings. In this regard, a few recommendations are as under:

1. Establishing the organization with qualified/trained individuals who can benefit the organization and society.
2. Equip the Departments with the latest equipment/instruments so as to handle the disasters in a classical fashion while identifying the basis of disaster as well.
3. Conducting/launching awareness programs, i.e. courses/cadres for the society through lectures and practical experiences to fight back the disasters and taking appropriate measures. This can also be arranged through online classes on social media and various broadcasting channels.
4. Sharing the information in advance of any disaster (if identified) vertically and laterally as a proactive approach.
5. Medical care facilities should be enhanced while ensuring these reach the lowest level, irrespective of the disaster area.
6. Developing the capacity to build back in society remains foremost, including therapy to counter the psychological effects, health/medical care, reconstructing the buildings and bringing back the people to their home places.
7. Ensuring the distribution of money at the right place.
8. Above all, enhancing the sense of accountability within the departments is also considered an important facet of improving the working environment.

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