

Disaster management in Pakistan: Challenges and Way forward.

Thesis Statement

Pakistan is ranked among the top five most endangered countries due to the climate change making it vulnerable to major disasters. Country's lack disaster management to cope with said disasters, but it faces major challenges causing ineffectiveness to deal with said situations. However, a comprehensive strategy can improve disaster management.

Outline

I. Introduction

II. An overview of disasters and ~~its~~ their management in Pakistan

III. Challenges to the Disaster Management in Pakistan

- A. 18th Amendment devolved flood management to provinces, leaving no central authority to coordinate during disasters.
- B. No legal action against encroachments on riverbeds results in disasters difficult to manage.
- C. No implementation of environmental laws against deforestation leaving disaster management vulnerable.
- D. Difficulty in communicating with people of backward areas due to lack of environmental awareness.
- E. No clear step against unplanned urbanization results in urban flooding, difficult to manage.

F- No internet facility in backward areas results in lack of early warning system

G- Inadequate funds to deal with immense disasters

H- Unskilled human resource; incapable to rescue the stranded population

I- Corruption in relief funds and political shortsightedness

J- Lack of environmental awareness among the citizens

IV- Way forward for effective flood management in Pakistan -:

A- A proper central authority to coordinate with provinces during disasters

B- Strict action against encroachment on riverbeds

C- Effective implementation of Environmental laws

D- Communication with people of backward areas in their language and manner to make them understand the risk

E- Utilization of technology to spot the areas affected

F- Effective use of relief funds and strict watch over distribution

G- Training of human resource to deal with disasters

H- Provision of funds to disaster management Authority

V- Conclusion -

Essay

Due to the geographical location of Pakistan, it is vulnerable to natural disasters causing immense damage. The country perpetually faces floods, earthquakes, and other natural calamities, causing loss of precious lives, infrastructure damage and jolts the country's already fragile economy. To deal with such disasters, Pakistan has taken steps which includes the establishment of Disaster Management Authority. However, it has been noted that during the time of disasters, the said authority remains inefficient to prevent or reduce the damage. By examining the reasons behind the failure of disaster management authorities, it came into notice that there are many underlying challenges becoming hurdles for the said authority to perform their job efficiently. However, before moving towards these challenges and their solutions, it is pertinent to have understanding of these disasters and their management.

Global warming driven by climate change

Causes glaciers melting at an accelerated rate in Karakoram and Himalayan ranges, increasing the water flow into Indus River System. Moreover, country now experiences cloud bursts rather than gentle rain spread; which overwhelms its already weak drainage system. Both above given problems cause floods, which is currently the main natural calamity that has been causing serious damage to Pakistan.

Moreover, Pakistan has long mountain ranges ~~and~~ with tectonic plates collision points. ~~Since~~ Additionally, its neighbour i.e. Afghanistan also faces the similar situation. These vulnerabilities due to the geography cause earthquakes from time to time. For example, earthquake in 2005 resulted in loss of almost 80 thousand lives and it was also witnessed that whole towns were vanished. So, duly noting its geographical vulnerabilities, Pakistan founded National Disaster Management Authority to effectively deal with such disasters and reduce the

Damage it causes. Nevertheless, it was observed with serious concern that NDMA was inefficient to deal with these disasters, directly failing in its main responsibility.

Upon thorough examination, it became evident that there are some underlying challenges that need to be addressed to make it efficient, otherwise country will remain vulnerable to the

Natural disasters. To begin with, the

first and foremost challenge that the Disaster Management Authority faces is devolution of flood management to the provinces in the 18th

amendment. This simply means that federal is no more responsible ~~to~~ for the ~~floods or~~

disasters that provinces face, rather due to floods or earth quakes. Funds were also

provided to the provinces for the same. However, during the floods in 2010, it came into

observance that provincial authorities do not even have relevant equipment or human

resource to deal with disasters or provide any relief to the weaker community.

Moreover, there was no central communication system to coordinate with each other during the disaster. This resulted in complete failure to resist against the catastrophe caused by the floods and caused immense damage to the country leaving people helpless. For example, Punjab Disaster Management Authority wrote a letter to NDMA, requesting the provision of relevant machinery and additional funds to tackle the situation. This shows that devolution of flood management was not manifested accurately leaving the large population abandoned.

Furthermore, there is no proper action against the construction on riverbeds by the Government. Country has witnessed encroachments on riverbeds which is simply an open invitation to the disasters as witnessed by Pakistan. It is pertinent to highlight that no preemptive measures makes the disaster management reactive rather than proactive which means that

Disaster Management Authorities, who already are not efficient enough to tackle the disasters are left with more possibility of floods due to encroachments. Due to the cyclic monsoons & seasons, water flow increases in the rivers which needs to the appropriate passage to fall in the sea -

But, encroachments i.e roads, housing societies and markets divert the river towards cities causing damage to the infrastructure. NDMA or PDMA's can't manage @ such floods every year -

Similarly, Pakistan do have environmental laws against deforestation but implementation of these laws is ineffective resulting in rampant deforestation. Forests are natural sponges that absorb or slow rainfall and slow down the water flow giving enough time to the NDMA to take preemptive measures like evacuation of population through high risk areas. However, deforestation in Pakistan especially in the

watershed areas of AJK and KPK gives no time to the Authorities to take any measures in order to reduce the damage.

National level data as highlighted by Pakistan today shows that Pakistan's forest cover has dropped ^{from} about 3.78 million hectares in 1992 to about 3.09 million hectares in 2025 - an 18% decline. This event ~~causes~~ not only results in disastrous floods but also landslides and cloudbursts.

Additionally, People living in rural areas of Pakistan are uneducated and most of them can only speak their own native languages.

This makes it difficult for Disaster Management Authorities to make them understand the risk they are about to face. Moreover, ~~their own believes~~ having no awareness regarding the natural calamities and the damage it could cause to their lives, they resist against the Authorities asking them to evacuate timely. In this regard, lack of communication is also a

hurdle and huge challenge for disaster management Authorities.

NDMA reported that people living in South Punjab and interior Sindh were unable to understand the early warning for evacuation due to less understanding of language and unawareness regarding the natural calamities. These people were forced to evacuate; however, numerous people resisted to stay in their homes. This resulted in loss of lives and livestock. ~~lack~~ Communication Problems are also a challenge for DMAs to deal with disasters.

Besides, Pakistan has witnessed highest urbanization rate in South Asia in 21st century. However, the ongoing urbanization is completely unplanned and mismanaged turning the permeable soil into solid concrete. During the earth quakes and floods, the unplanned and weak urban infrastructure is ineffective to resist. Building Control Authority of Sindh reported that thousands of buildings in Karachi are ~~made from~~ constructed with weak material, making them vulnerable to collapse during floods and earth quakes.

Moreover, it also leads to flash floods and urban flooding causing immense problems for DMAs to address or cope with.

Also, there is no internet facility in the backward areas ~~as~~ neither any other news spreading mechanism due to lack of electricity.

Due to which, people are completely unaware of the ongoing situation in the country and

~~do not~~ ~~do~~ don't know ^{about} the early warnings issued by DMAs. In this regard, NDMA

reported that due to unavailability of above given facilities, Authority is visit door to door and have to use loud speakers of mosques to warn them causing wastage of

time and inability to reduce damage. So,

this concludes that lack of internet facility is also a challenge for NDMA to mitigate these disasters.

Besides, it is evident that above given disasters need adequate funding to cope with. However, floods or natural disasters are rarely a political

Priority, until the disaster hits - furthermore funds are distributed not according to the need base; rather, on the bases of Political Considerations - NDMA provided the report of 2022 floods, in which it was intimated that 8 billion ~~Rs~~ rupees were provided to manage the disaster and reduce risk; however; it was estimated that there was need of almost 45 billion rupees, just to provide adequate facilities to the needs and save ~~life~~ lives of livestock and humans. At last, ~~it is~~ also as per the reports after the disasters, it has been observed that lack of environmental awareness and environmental degradation also becomes hurdle for disaster management - @ Gallup Survey pointed out that majority of Population in rural areas don't even accept the climate change threats or global warming - Due to which, construction on river beds, draining of ~~the~~ flood plains through agriculture, deforestation, and other events took place

decisively causing the weakness for DMAs
to cope with -

To tackle these disasters and reduce the damage, there is need of such steps that can make DMAs efficient and effective during the time of disaster. In this context given below are the major steps that merit attention for robust disaster management. First and the most important step that should be taken to make DMA efficient is a proper coordination system through central authority which overlooks all provinces. The said authority can spot the weakness of an area and provide the machinery and equipment on the basis of needs. Moreover, it will reduce the national integration and provincial disputes over funds distribution. Pakistan should take a look over the 18th amendment's flood or disaster management fund distribution and create a centralized mechanism to cope with such disasters. Furthermore, Government should take legal actions against

the construction of encroachments and powerful timber mafias who operate in these areas. By doing so, Government can reduce the threat of floods or provide necessary time to the DMAs to take preemptive measures or precautions to deal with such events before the happening - for example if NDMA is given enough time to take precautionary steps, it can easily save the lives of human and their livestock - Moreover, they can divert water to save the agricultural crops and urban infrastructure - In this regard, action against encroachment should be taken to effectively manage the disaster.

Furthermore, Pakistan should implement environmental laws i.e. against deforestation. Powerful timber mafias and land grabbers are desertifying the land which not only cause rapid water flow but also huge land sliding in the areas of Gilgit Baltistan. It was reported in Pakistan today that, GB has witnessed perpetual land sliding due to the deforestation not only causing infrastructure loss and human lives, but also severing connectivity and economic activities. This means that Afforestation can help in managing landslides and floods.

Additionally, DMAs should learn to communicate with the people of rural areas in their language and manner and make them understand the risk of the climate. In this regard, people should be hired from local areas who can communicate easily with people to let them know that it's for their betterment to follow the instructions given to them.

Furthermore, tribal chiefs and prominent personalities of these areas should be taken on board to effectively communicate with the lay men. This step will increase efficiency of disaster management.

Similarly, NDMA should hire skill full workers who are trained to work during the time of disasters. These include the rescue workers and managers who are responsible to coordinate and give necessary direction to the people. This will help them to act efficiently in the high risk areas and will reduce flood risk.

At last, the ~~most~~ one of most important step that merits attention is provision of adequate funds to the ~~people~~ DMAs to act effectively. If the funds that are necessary to act are not provided, it will leave the Disaster management helpless and can effectively reduce the risk and damage of the disasters.

Above in view, it is evident to conclude that Pakistan's disaster management is facing numerous challenges becoming hurdle in its way and making it inefficient. However, counter measures and priority steps can improve the disaster management in Pakistan and will reduce the damage these disasters cause to our already fragile economy. Furthermore, precious lives can be saved by making the disaster management effective and efficient.