

- Pakistan is one of the worst affectees of Flood.
Highlight the reasons and critically evaluate
the disaster management capabilities of the
country.

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Introduction


Pakistan is one of the worst affectees of flood. Thus Pakistan has gone through an unprecedented series of climate induced disasters in 2022 including the record breaking heatwaves in March-April, glacial lake outbursts in Gilgit-Baltistan, wildfires in forest of Balochistan and KPK in May, Urban flooding in Karachi in July. The early onset of monsoon, and the ensuing flash flood across the country. Such disaster of Flood is result of climate crisis that has been worsened and exacerbated by mismanagement, lack of resources, incompetence, unpreparedness, and negligence of bad governance and illegal construction. Therefore, such flooding can be mitigated by better disaster management capabilities of the country.


→ DEVASTATION FROM FLOODS


DEVASTATION FROM FLOODS IN PAKISTAN:-



Damages and Loses after a month of Record Rainfall & Flood



 • 63 Districts severely affected
120 districts affected -

 • 6.6 million severely affected
33 million affected -

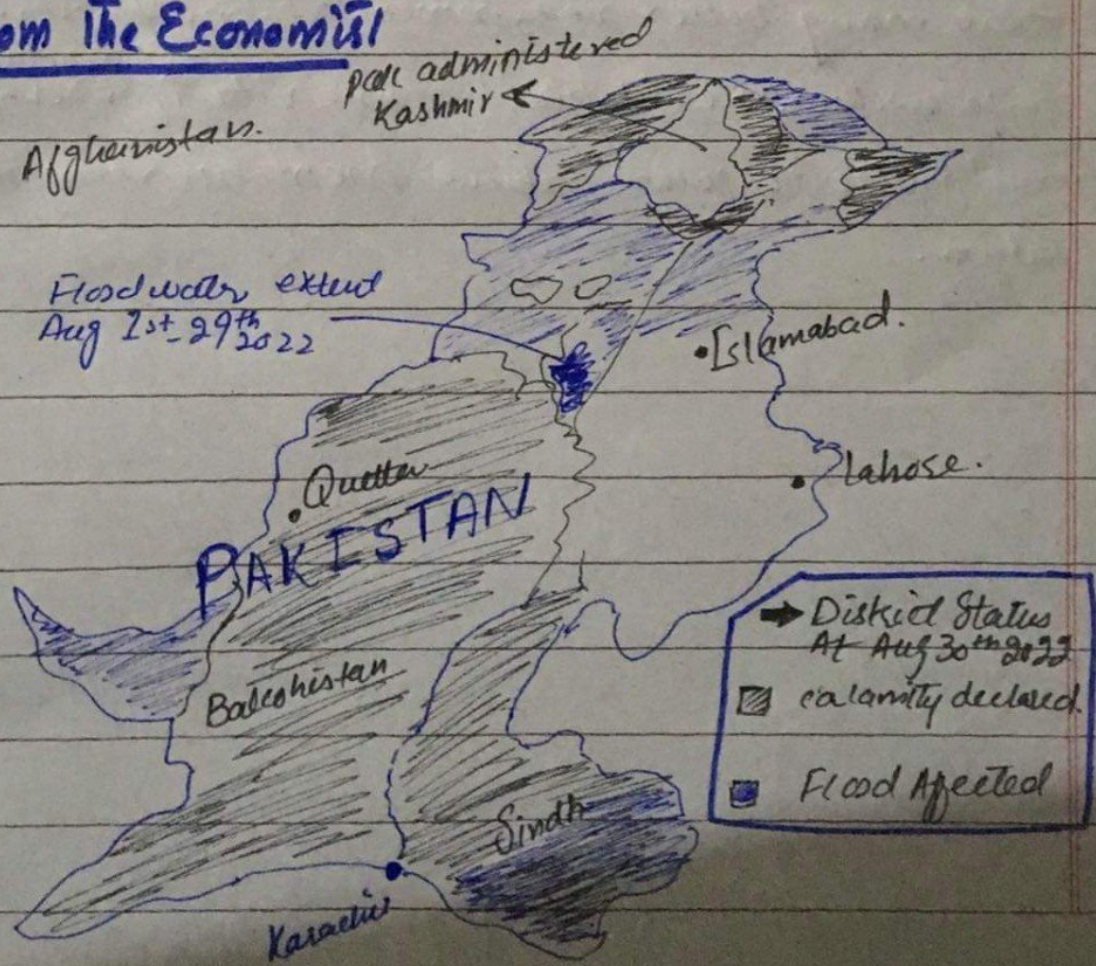
 • 3.6 million acres of crops affected

 • 719,000 Live stock perish

 • 910% Rainfall compared to 30 year average
 • 17566 schools damaged

 • 1527 injured people •  1033 Reported Deaths.

→ From The Economist



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Major Reasons Due to Which Pakistan is
Considered As a Worst Affected of Flood

There are following reason due to which
flash flood has occurred in Pakistan
Such as.

(a) Climate change - Induced Flooding

Pakistan has faced flash flood induced by crisis of climate change. Because climate changes occurred rapidly that resulted destruction of infrastructures; loss of heavy bridges, roads, buildings, houses and livestock etc in the country take place.

According to Global Climate Risk Index, Pakistan is the eighth most vulnerable country to climate crisis despite its very low carbon footprint. Pakistan has estimated, emitted only 0.4% of carbon dioxide, the primary greenhouse gas, since 1959, compared to 21.5% by the United States and 16.4% by China.

Thus, climate change induced flooding has occurred in Pakistan.

(b) Bad Governance Exacerbated the crisis

Climate change may have induced the flash-floods but the ensuing humanitarian crisis was worsened by bad governance and mismanagement. Because of bad governance Pakistan lacks long term planning, climate-resilient initiatives, adequate water infrastructure, flood-resilient construction plans, and an effective drainage

(c)

own interests, leading to the natural course of water to disperse elsewhere. Therefore, it is logical to see illegal construction playing a vital role in blocking the flow of water. Similarly, in Karachi, illegal construction and land encroachment practices have resulted urban flooding in the city. This can cause the water level or rainwater to rise in the surrounding areas as it finds no way to go. In this way, illegal construction and sewage disposal resulted huge flood in the country.

(d) Melting Glaciers causes Flash Flood in Pakistan

Pakistan is home to more glaciers than anywhere in the world outside the polar regions. but as climate warms, it's become more vulnerable to sudden outbreaks of melting glaciers. As a result, which exacerbated flash flood in Pakistan. According to country chief meteorologists, Pakistan has seen triple the usual amount of glacial lake outbreaks -- a sudden release of water from a lake fed by glacier melt -- that can cause the catastrophic flooding. Therefore, melting glaciers is one of the clearest, most visible signs

of the climate crisis that resulted flash flood in the country.

(e) Heatwaves are major cause of Flood.

Heatwaves have resulted unprecedented changes in the country. It resulted melting of glaciers. The mountainous portions of the country are home to more than 7000 glaciers. Thus, quickly melting glaciers can swell lakes, which then burst their bank and unleash torrent of ice, rock and water known as glacial lake outburst flood. Such flood become ^{source of} flash flooding in the country. According to meteorological Department, Temperature have been seen in Pakistan in daytime between 5°C and 8°C above normal in large swathes of country. Such unusual heatwaves accelerated snow and ice melting, due to flash flood occurred in the country.

3- Post-Flood Scenario in Pakistan

Post-flood scenario in Pakistan, is difficult to explain. Because flash flood of 2022 has great extent of the devastation in the country. Some consequences of the flash flood given below:

- Loss of ^{Public} Infrastructure -
- Loss of crops
- Loss of Livestocks
- Food insecurity
- Mass displacement
- Destruction of Shelters
- Rise in level of Poverty
- Loss of Education
- Severe impact on human health

a- Loss of Public Infrastructure.

The flash flood in Pakistan has worsen the humanitarian situation. It ^{has} caused significant damage to road, bridges and telecommunication across the country. According to disaster philanthropy organization, the flood damaged more than 8000 miles of roads and 400 bridges, hampering people's ability to seek safety and reach markets. In this way, flash flood had worsen the humanitarian situation by due to huge to public infrastructure.

b- Loss of crops

In flash flood, there occurred great loss of crops in Pakistan. Such climate induced disaster has enchainced food insecurity, poverty, famine, and malnutrition

across the country. According to disaster philanthropy organization, the flood affected nearly 15% of Pakistan's rice crop and 40% of its cotton crops due to this, country could face severe food shortage. Thus, it is estimated that flash flood of 2022 has resulted damage to crops in Pakistan.

C- Loss of Livestocks.

There is occurred great loss of livestock in flood affected areas of Pakistan. The catastrophic floods have submerged huge swathes of Pakistan and damaged crops that were used as feed for cattle. Therefore, loss of cattle has worsened the situation. This resulted in a surge in the price of milk, meat, chicken and eggs. According to the Food and Agriculture Organization of United Nation, more than 1-2 million live stock have been killed since mid-June with severe repercussion on the livelihoods of affected household and the supply of animals products including milk and meat. In summation, great loss of cattle occurred in Pakistan due to flood.

d-

Food insecurity due to Flood

In post-flood scenario, there is a worse situation of food insecurity in Pakistan. Pakistan is one of the most populous countries in the world. Feeding Pakistan's growing population is a formidable challenge. In Pakistan, agriculture is a major contributor to food needs and rural employment. However, its performance remains dependent on climatic conditions. According to WFP, 43% of Pakistanis are food insecure, 18% of whom are facing acute food shortage. In nutshell, flash flood is a major contributor of food insecurity in Pakistan.

e-

Mass displacement in Pakistan

The climate induced flash flood resulted mass displacement in Pakistan. Because the worst floods have devastated the country's healthcare, education, shelters and agricultural infrastructure. According to inside climate news org, In Pakistan 33 million people have been displaced by climate intensified floods. Therefore, the southwestern province of Balochistan and the southern province of Sindh have been the

worst hit. Thus, great mass displacement occurred in such provinces of Pakistan.

f. Destruction of Shelter

Pakistan has been inundated by floods, causing widespread destruction of shelter. Many people who have lost their homes have setup makeshift shelters along or near the roadways, while others are now living on river banks. According to disasterphilanthropy.org in Pakistan, flash flood of 2022 has been damaged or destroyed more than 2.2 million homes, thus the catastrophic flood has resulted huge destruction of shelter.

g. Rise in level of Poverty

The catastrophic flood has raised the level of poverty in Pakistan. Because it has resulted the destruction of all assets of people. Thus, it has resulted huge social and economic crisis in the country. Due to flash flood million of people in Pakistan are living below the poverty line. According to disasterphilanthropy.org about 5.9% poverty level increased in Pakistan. In nutshell, it is estimated flash flood have raised the level of poverty in country.

h-

Flash-flood and loss of Education

The flash-flood has resulted huge loss of education in country. Due to loss of schools, colleges and universities across the country, especially, in most ^{flood} affected areas of Sindh and Balochistan. According to the Pakistan Education Sector working group, the large scale destruction of school facilities has interrupted the education of 3.8 million children. Therefore, It is estimated that the disaster has seriously disturbed the reading, writing and learning skills of the children while they remained away from their books. In this way, flash flood has caused big loss of education in the country.

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Severe impact on human health.

About 33 million people have been affected by the recent floods in Pakistan. There are increased risks of waterborne diseases and disrupted access to health. Due to standing water many ^{intestinal} ~~infectious~~ diseases became common such as diarrhoea with blood, fevers, abdominal cramps and life-threatening dehydration. The bacteria and parasites E.coli and amebiasis thrive in poorly sanitised water.

Moreover; malaria, dengue fever and skin diseases ^{has} become common in the flood affected areas. According to World Health Organization (WHO) that more than 1400 health facilities had been fully or partially damaged and that access to health facilities, health workers, and essential medicines and medical supplies" remained the main health-care challenge. In nutshell, flash flood had resulted severe health crisis in the country.

4- Disaster management Capabilities of the country.

The disaster management capabilities of the country are given below.

"There is infinite amount of hope in this universe... but not for us," - Franz Kafka told us years ago -

a) No Specialized Planning Institute

There is no specialized planning institute in the country that work properly for pre-disaster management system. It is due to the negligence of our government authorities. The country was terribly affected in 2010 and again in 2011. There

Lessons, But there has now been a decade since the last devastation, and many expert opinions, such as Arifa Noor as one of Journalist, suggest that no lessons have been learnt now either. This is the first failure of governance. Therefore, our government do not build specialized planning institutes. Due to this our country faces major disasters.

b- Lacking Master Plans of cities

Lacking of master plans of cities is one of major ^{resulted} failure of our government. Because our government authorities do not pay attention towards development of unnecessary infrastructure and household in major cities of country, such as Karachi. Therefore, unregulated constructions of building due to land encroachment has become a major reason. Which results urban flooding in city. In nutshell, it is estimated that lacking master plan of cities due to negligence of government result floods in the country.

c- Political Polarization and lack of Leadership

Vision
Underlying the failure of governance that is rarely connected to disasters or climate change is that of political polarisation and accountability. The links are easily drawn. Pakistan is a deeply polarised country with populist leaders. In April of last year, ex-prime Minister Imran Khan was removed through a vote of no-confidence. Both the new coalition government of Shehbaz Sharif and the opposition now led by Imran Khan have since focused on each other through corruption and terrorism charges rather

than on the fact that there have been signs of an impending disaster. Due to this political polarization and lack of leadership vision, our country faces major disasters.

d

Limitations of NDMA

The national disaster management system in Pakistan is facing multiple challenges and gaps. To begin with, a government's response to a disaster can be classified under three heads: Relief, rehabilitation, and reform. When it comes to relief, NDMA does not possess the capacity to serve the length and breadth of the country. When it comes to rehabilitation, NDMA lacks a mandate for rehabilitation works such as constructing homes post-earthquake or repairing dykes post a devastating flood. The third leg of disaster response known as reform involves taking measures to ensure that subsequent disasters of a similar nature do not cause as much damage. Another challenge is the financial constraints. While each district has formulated a District Disaster Risk management plan, putting the plan into action is hampered by a lack of resources. Due to limitations of NDMA Pakistan is facing multiple challenges of disasters.

c-

Poor Drainage and Sanitation System

In case of assessment of infrastructural capabilities, of government, poor drainage and sanitation system has led to the epic flooding because

believe that rapid urbanisation without corresponding infrastructure, as the available drainage channels cannot sustain the volume of stormwater. All Karachi Tajir Ittehad chairman Atiq Mir said ^{that} there is no effective drainage network to flush out rainwater during monsoon rains. 80% of Karachi's commercial areas go under water that causes urban flooding. Therefore, it is estimated that poor drainage and sanitation system has become major failure of our government.

5- Recommendation for Addressing Challenges

There are following recommendations for

- (A) Better planning such as
- (a) National Disaster management policy
 - (b) Revisiting of Disaster management framework
 - (c) Revitalizing International Donors.
- (B) The Administrative Capacity Building includes.
- (a) Better Urban Town Planning
 - (b) Fighting Encroachment
 - (c) Actions against Land mafias
 - (d) GIS Based Land Mapping Issues
- (C) The Financial capacity Building includes.
- (a) Foreign Debt Reduction
 - (b) Ecological Restoration fund
 - (c) Climate justice global campaigns

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Conclusion

In summation, Pakistan has been one of the worst affected of major disasters of flood since 1973, 1976, 2002 and 2022. Because of poor planning capabilities, administrative capabilities, financial and infrastructural capabilities of our government. It also includes some natural causes. Such major disaster of flood has result bleak picture of country in post flood scenario which exacerbated social, economic and political crisis and instability within the country. This is due to poor disaster management capabilities of the country. In order to overcome such huge disaster there many better recommendations of government to follow. Therefore, it has become vital ^{and mandatory} for government and public to follow above mentioned recommendation.