



RESEARCH PAPER**The Aftermath of Floods in Pakistan: An Eco-Humanitarian Crisis**

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ABSTRACT

Pakistan's topography has unavoidable threats due to climate change; majorly to its landscape and inhabitants. Pakistan is drastically hit by floods in 2022. This paper is focused to analyze environmental hazards unveiled in the recent flooding, to evaluate humanitarian loss and at the same time, it aims to shed light upon what damages have been caused to the inhabitants of the country. Methodology used for this research is based on primary and secondary sources. In this regard, a detailed survey report of certain areas of Khyber Pakhtunkhwa (KPK) is incorporated which sheds lights upon the initial damages and long-term suffering of the flood victims. Major findings are that Pakistan suffered in humanitarian chaos and the survey statistics reflect that the survivors are critical towards an active role of the government and most of them believe that support has not been enough to tackle the sufferings themselves. Lastly, this paper reflects upon the urgency to envisage proper mechanism to tackle such disaster and also lays forth several recommendations.

KEYWORDS: Climate Change, Floods, Natural Calamity, Humanitarian Emergency

Introduction

Pakistan is drastically hit by floods this year. There have been unusually severe rainfalls owing to rapidly changing weather patterns and the country has suffered quite a blow as a consequence. Currently, most parts of the country are drowned under water. This has brought severe damages for Pakistan on innumerable fronts and the country is dealing with a mass level crisis through leaps and bounds. The most obvious reason behind such massive flooding is record-breaking rainfall. Pakistan has rarely witnessed such consistent cycle of monsoon rains as there have been almost 8 weeks of on-going torrents which has evidently made the country turn into a swamp (Carrington, 2022).

Pakistan is already struggling with economic disabilities owing to several factors i.e. the FATF Grey list vendetta, the halting sword of overburdening debt, the policy dictation of IMF and other monetary world agencies.

For the past many years, Pakistan is ranked amongst the top 10 countries extremely exposed to climatic changes, as per the Climate Risk Index. Pakistan is vulnerable towards extreme climatic conditions ranging from terrible heat-wave to heavy flooding etc. As of July-August 2022, almost one-third of the country drowned, causing a mass-level suffering alongside innumerable damages to the country on all fronts. Hence, Pakistan's upcoming disaster is may be not the coming year's monsoon but the crises of the previously passed floods and same will follow for years to come if the root cause,

consequences, loopholes in strategizing are not visualised and eminent future measures are not observed.

Since inception, Pakistan has been vulnerable to floods and heavy rainfalls wherein the country has been swamped around 68 times since then (Khan, 2022). However, from 2010 onwards, Pakistan has suffered from regular flooding so basically it is more of a norm now rather than an unforeseen catastrophe. According to reports issued by Federal Flood Commission (FFC), Pakistan has faced about 28 major floods all ranging from during the 90s and then almost every year from 2010 onwards (Carrington, 2022). These floods have affected 616,558 square kilometres of land, about 13,262 precious lives have been lost and overall damage to national economy ranges over 39 billion rupees. Other than that, each time innumerable outcomes of such drastic calamity are showcased in form of health crisis, internal displacement of the affected people, deficiency of food, damages to the infrastructure alongside increase in unemployment and poverty (Raza, 2022). Similarly, the 2022 floods, referred as 'Monster Monsoon' led to non-stop havoc throughout the country. Almost two months of hefty pours and resultant overflowing points towards the fact that flooding in Pakistan is now a crystal clear reality which has long been neglected. Pakistan has experienced unstoppable torrents and resultantly, vast swathes of the country are drowned.

Literature Review

Suranjana Tewari, in an article 'Pakistan Floods put Pressure on Faltering Economy' published by BBC news, reflects upon the economic degradation of Pakistan in the recent past i.e. rise in debt, declining currency, payment crisis and consequential inflation. Midst this fiasco, Pakistan got adversely hit by heavy flooding wherein the country's already dwindling economy can provide no support for managing the crisis and in curtailing adverse outcomes therefore, Pakistan is in need of dire help and support from international organisations to handle this crisis effectively (2022). Furthermore, with an on-going political instability and polarization in the country owing to ever more strengthened corruption accusations upon one another from all political parties, probable foreign intervention midst regime change of Former Prime Minister Imran Khan and the questionable role of establishment, the economic future of Pakistan remains uncertain (Janjua, 2022).

Pakistan is trying to a maximum extent to gain world attention with regards to current flooding and how such a mass-level crisis befalls as an opportunity for the world to recalculate all its misgivings towards the environment and also barge in to help Pakistan. Shehzad (2022) identifies that Pakistan is out of money for flood recovery and for that the UN has made requests for timely and durable amount of funding. In this regard, the EU has also scaled up flood relief to 30 Million Euros. The World Health Organisation (WHO) claims that it requires 115 million dollars to handle this emergency. Furthermore, the UN President and humanitarian coordinator laments that Pakistan's set target for 816 million dollars is not enough for handle such calamity.

Additionally, one UNICEF Report highlights the condition of almost 13 million children suffering through this catastrophe wherein issues related to their health, safety and survival are a major concern for the organisation. The schooling has discontinued and such might be the case for a while. Also, there are issues with water and sanitation resulting into outbreak of different water-borne diseases and shortage of clean drinking water etc. Lastly, the children are suffering from malnutrition due to shortage of food supply and are also vulnerable towards diseases as timely medical aid is hardly available. Therefore, it can be said that there is a visibly lingering impact of floods in Pakistan

wherein about one-third of the country is drowned which is a cause of concern as this environmental change has been an upcoming hazard for Pakistan since years owing to its geographical location (“Devastating Floods in Pakistan,” 2022).

Another article entitled “Are Catastrophic Floods Pakistan’s New Normal?” identifies that the National Disaster Management Authority- NDMA states almost 72 districts out of a total 160 are adversely hit by recent flooding. The NDMA claims that almost 3,100 miles of roads are damaged, 10 million homes are destroyed and about 700,000 livestock is dead. The province of Sindh and Baluchistan are worse hit wherein the NDMA claims that about 377,000 and 9,000,000 people respectively are misplaced and are forced to live in camps for now (Hussain, 2022). All this is quite startling, as life in the aftermath of such heavy flooding is bound to suffer from several other factors related to shelter, livelihood, medical assistance and shortage of food etc. Most importantly, this entire fiasco calls for serious attention towards environmental threats and resultant human catastrophe.

Monsoon Floods 2022: An Overview

The Monsoon season in Pakistan typically lasts from June till August however during 2022, drastic rain was observed in the country. Merely in months of July-August, Pakistan received rainfall which was about three times more than the 30 years average rainfall of the country. According to the Monsoon 2022 Rainfall Report issued on website of Pakistan Meteorological Department, the Month of July and August observed above average rainfall of (+181%) and (+243%) respectively with all provinces getting adversely hit by it. There were three major spells in July starting from 4-12 July, 14-18 July and 21-31 July whereas the Month of August turned out more catastrophic than July as daily rain fall analysis shows that precipitations continued throughout the month with continual heavy rainfall from the 11-27 August (*Pakistan Monsoon 2022 Rainfall Report*, 2022).

Resultantly, a human catastrophe was bound to take place, wherein mass-level suffering was witnessed in the country. According to reports of the British Red Cross, a total of 33 million people became flood victims, which ratios to almost one out of every seven people whereas the deadly floods have reportedly killed over 1700 people and well over 7.9 million people got displaced. The reports by UNICEF claimed that 5.4 million people alongside 2.5 million children got exposed to diseases due to standing water and also because of contamination of drinking water. In the aftermath, it transformed into a health emergency with outbreaks of vector-borne and water-borne diseases, the survivors suffered from cholera, skin-eye infections, diarrhoea (134,000 cases) and respiratory infections, alongside malaria (44,832 cases), dengue and hepatitis etc. which created more troubles for the State and for the survivors too (Manzoor & Adesola, 2022).

According to World Bank Reports, the recent floods caused immense damages to the infrastructure of Pakistan leaving behind about 13,000 kilometres of damaged roads and more than 410 bridges totally destroyed. More than 900 medical health facilities were completely demolished. As of personal properties of the dwellers, about 2.1 million homes were reportedly damaged. The post-disaster assessment by the Centre of Disaster Philanthropy (CDP) highlighted that the recent monsoon flooding, resulted into \$14.9 billion of damages alongside the economic losses of around \$15.2 billion. Moreover, the estimated cost of restoration and reconstruction is said to be a minimum of \$16.3 billion (*2022 Pakistan Floods*, 2022).

The severe flooding of 2022 also instigated food scarcity and resultant inflation in the country as a majority of the affected people relied on livestock and agriculture to

manage their food and living prospects. As per reports, a minimum of 4m acres crops were destroyed country-wide. Furthermore, death of 1.2 million livestock was also recorded which worsened the crisis (Iqbal, Rabbani, Haq & Bhimani, 2022). A news report of World Bank discussed that a disturbing number of six million people in Pakistan are currently experiencing acute food insecurity as a result of devastating floods. According to World Bank's Food Security reports issued in January 2023, food inflation rate was 8.3 per cent in October 2021, which increased to 15.3 per cent in March 2022. Furthermore, later in September that year, it rose to 31.7 per cent and recently just in December 2022, it has trespassed to 35 per cent (The Economic Times, 2023). What needs to be understood is that all of this is inter-linked as when almost half the country is drowning in water, the trickledown effect will automatically transfer nation-wide wherein the governmental official estimates suggested that 80% of the country's crops got damaged. Also, State Bank of Pakistan conferred that foreign exchange reserves dropped to a critical low of \$4.3 million hence due to economic uncertainty, food and medicine is left lingering on the ports (Shah, 2023). Therefore, this entire scenario has resulted into an economic catastrophe and food emergency wherein people are struggling to make their ends meet and the government has less to offer with scathing economic situation in the country. With political uncertainty, two caretaker governments in two major provinces of Pakistan (Punjab and KPK) and delay in IMF Bailout package, the situation is not getting any better, not only with regards to financial prospects of the public but also with respect to economic downgrade of the State of Pakistan.

Equating Domestic-Global Factors for Heavy Flooding

Although there are several contributing factors which lead towards the internal challenges of Pakistan with regards to environmental degradation, it is most important to understand that summing up all of it, still comprises of less than one percentage of threat to global climate (Ramirez & Dewan, 2022). Hence, one can regard that Pakistan is amongst lowest contributors to climate change nevertheless, there are certain problem areas that need to be addressed. NCCP; the National Climate Change Policy of Pakistan, recognizes various factors which have contributed to environmental degradation in the country i.e. urbanisation, lack of unplanned cities, slowly adapting pollution control program ranging from automobile pollution to the contamination of the environment made by business sector i.e. factory waste mechanism etc.(S Khan, 2022). Herein, it is most crucial for the country to understand that they need to end all means that lead towards such catastrophes and for this purpose, the government and all relevant departments need to make climate resiliency their primary goal. Pakistan has also failed to build sufficient dams to stock water, avoid flooding and in return use that water to produce more affordable electricity, enable easy access of water to agricultural lands and most of all maintain stability in the country (Abbasi, 2022). After excessive rainfall, because there is absence of sufficient water reservoirs so instead of excessive water becoming an aid for energy and agriculture sector, becomes more destructive when runs down unstopped. Moreover, every time, the country suffers through floods, the resultant destruction is not only through natural course of water but due to politicising on how and where water needs to be channelled. In this regard, political influence is reportedly used to avoid destruction of crops belonging to influential families in each region and those of the working class are left to be drowned by immense water pressure. So instead of proper management, this unfair use of force causes more damage that is quite avoidable. But on the contrary, fair and just policies remain unemployed and tendency of safeguarding the vested interest of a handful of people prevails i.e. The Sindh Chamber of Agriculture (SCA) alleged that certain influential people released floodwaters in Sindh by tampering its natural course towards Heerdain drain and cut it in the Saifullah Magzhi Branch instead (Kalhor, 2022).

When it comes to injurious contributions made by the world, recent floods have been an eye opener for Pakistan wherein the country seems to be paying for the miscalculations of the world. There is profound sense of inequality prevalent in the country as Pakistan contributes less than 1% of the total climatic damages for world i.e. global greenhouse gases. However, its geographical location makes the country extremely exposed to the consequence of those damages to which the world contributes collectively (Rannard, 2022). As per reports of the recent few years by World Resources Institute and European Union's Emissions Database for Global Atmospheric Research (EDGAR), China, United States and India are the topmost GHG emitters and Carbon Dioxide Emission which contribute a total 42.6 percentage and in total these countries contribute around two-third of world's total Greenhouse Gas and Carbon Dioxide Release (Crippa et al.,2022). Climate resiliency seems impossible if all industrial states refrain from understanding the core problem. It is generally blamed upon the Global South that their inefficiency in dealing with climatic hazards is owed to their lack of proper will and corruption, as much as this is one of the causes; this is quite not the only negligence henceforth, if such pretentious narratives do not cease to exist then Pakistan is up for a constant problem and this problem will eventually extend beyond borders. Therefore, only donor aid will not strictly tackle such catastrophe and its damages but active input would also count wherein each country will have to act responsible and must be put to punish for its actions. Crimes against climate must be dealt with an iron fist by international organisations because if proper policing and implementation is further avoided, the world is surely up for various other drastic episodes of climatic chaos and next time it may not even be Pakistan's turn to pay the penalty. Most importantly, the role of international agencies i.e. World Meteorological Organisation and UN Framework Convention on Climate UNFCCC is quite crucial as uniformity in policy towards each member state is required to pursue the goal of a more sustainable environment. Along with that, additional help and support to the developing world both in letter and spirit will denote the efficiency of its programmes which currently does not seem to be the case because there is still lack of evenness towards each state and politicizing the duties towards climate seems to be the norm of the day because even these international organisations have turned a blind eye towards climatic hazards when juxtaposed to the selfish benefits of the first world.

Post Floods Chaos - A Case Study of Khyber Pakhtunkhwa

As the 'monsoon on steroids' in 2022, almost swayed one-third of the country, the province of Khyber Pakhtunkhwa was also severely affected. According to the Provincial Disaster Management Authority PDMA, as much as seven districts of the province drowned in water. Cities that were adversely hit included Swabi, Nowshera, Mardan, Hangu, Lower Chitral, Karak and Haripur wherein immense flooding and heavy pours wrecked life and livelihood. Ever since June 15th, an acute number of casualties have been reported in the province whereas the number of injured people also spiked. Further, the reports highlight that innumerable houses were been completely demolished and a varied amount of homes were considered partially damaged. A detailed survey has been conducted in different cities of Khyber Pakhtunkhwa with an intention to get first-hand information from the locals with regards to the losses as well as the rehabilitation phase.

It is worthy to mention here that Khyber Pakhtunkhwa is second adversely hit province in the country. Herein, the demographics of the province also add more towards the turmoil of the flood victims. Residency here is generally by the streams and rivers wherein these water reservoirs aid as a lifeline to all inhabitants with respect to their personal use i.e. source of drinking water, fish consumption etc. and also a means of tourist attraction. However, with torrential rainfalls and water influx equal to ten years of

rain resulted into catastrophic floods in the history of the country and as an outcome, all rivers swelled up and swallowed the surrounding villages. With that and almost constant cold weather of this region, it has become drastically difficult for the survivors to manage their lives (Hussain, 2023). Initial estimates by the government denote that damages alongside compensation for the victims will cost around 68 billion rupees as life and livelihood have been damaged to the worse wherein the agriculture of the province and losses of the farmers are quite adverse. Furthermore, 2,248 water reservoirs and storage units have washed away. Along with that infrastructure i.e. roads, schools, hospitals and residency etc. is quite destroyed. Most importantly, life is at risk with around three-hundred plus casualties and 0.6 million people displaced (Ali, 2022).

To begin with, the city of Dera Ismail Khan has been taken into account in order to investigate the devastating effects of floods i.e. Bigwani Janubi, Haji Mora and Nasir Bagh. A variety of surveys were conducted in the respective areas, aiming to highlight the woes and suffering of the masses with targeted questions. Furthermore, an investigation has also been made with regards to the opinion of survivors towards their aid, assistance and rehabilitation prospects. A bar-graph and two pie-charts are added below, highlighting primary collection of data in order to better understand the aftermath of floods.

Firstly, a survey is conducted to understand the pangs of the masses at the time of the flood. Questioning was directed towards the victims i.e. whether they expected such worse flooding to occur, how they handled the situation, whether or not they were able to rescue any of their possessions and what trickle down effects do floods have upon them. In the aftermath, what are their expectations from the government, their earnings prospects, and food facility alongside rehabilitation of their lives, livelihood, assets and infrastructure around them?

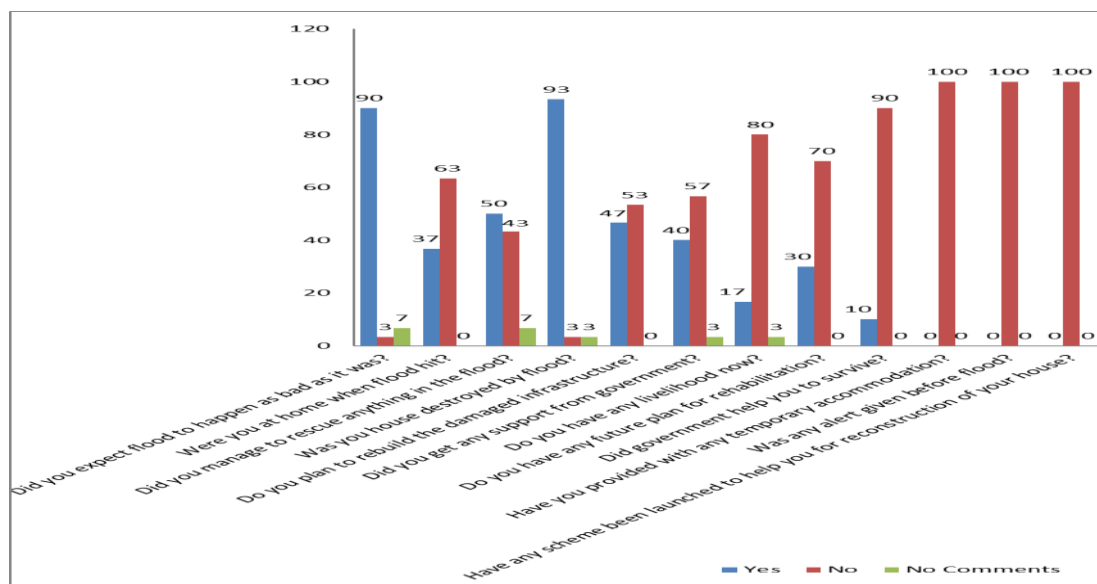


Figure 1 Flood Survey: Villages of Dera Ismail Khan (Bigwani Janubi, Haji Mora, Nasir Bagh)
 Note: Number of respondents (as stated above each bar) and their opinion i.e. Blue Bar=Yes. Red Bar=No and Green Bar= No Comments.

Furthermore, the survivors were inquired regarding level of help provided to them by each institution i.e. Government, NGOs and Volunteer Organisation. A pie-chart (Figure 2) has been attached below which gives an overview of the survivor narrative in

Dera Ismail Khan. Herein, the overall response reflects that around 62 per cent of the help and assistance was extended towards them by the government. Next in the list were volunteer organisations which enabled the sufferers to survive in an amiable way i.e. the data highlights that around 31 per cent of volunteer organisation aided residents of the flood affected areas in Dera Ismail Khan. As for NGOs, the survey denotes that they had zero presence in the affected areas as none seem to be facilitated by them. It is worth mentioning that around 7 per cent of the people chose not to respond to this survey and had no comments to give in this regard.

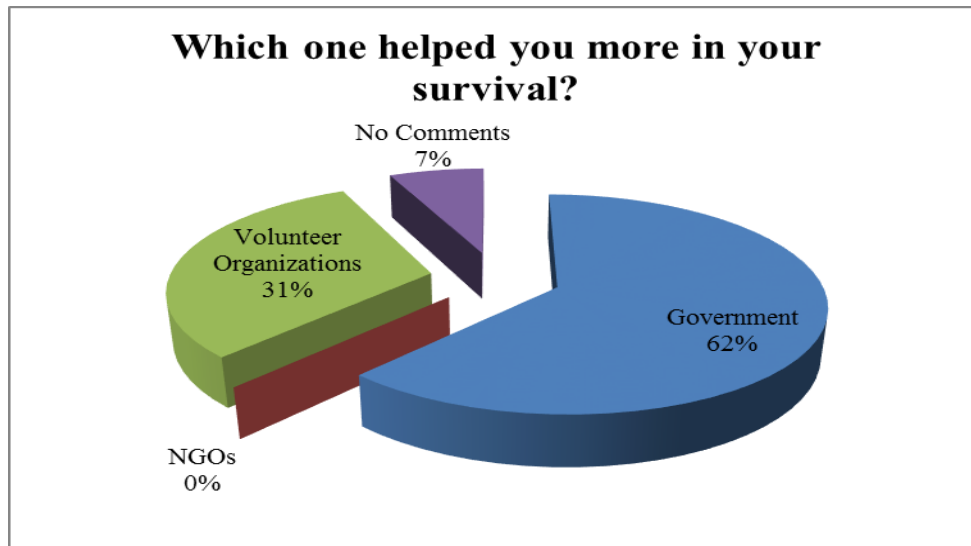


Figure 2 Chart Highlighting Relief provided by Different Sectors in Bigwani Janubi, Haji Mora & Nasir Bagh

A survey was also conducted in order to understand the aspirations of the flood affected in the aftermath. They were questioned about what possible solution they feel would enable them to restore their lives in the respective areas. The inhabitants were asked what seems to be a better option for them i.e. financial aid or rehabilitation project by the government. To which, a sweeping number of 97 per cent aimed for financial aid and only 3 per cent urged to initiate rehabilitation project as shown in the figure 3 below.

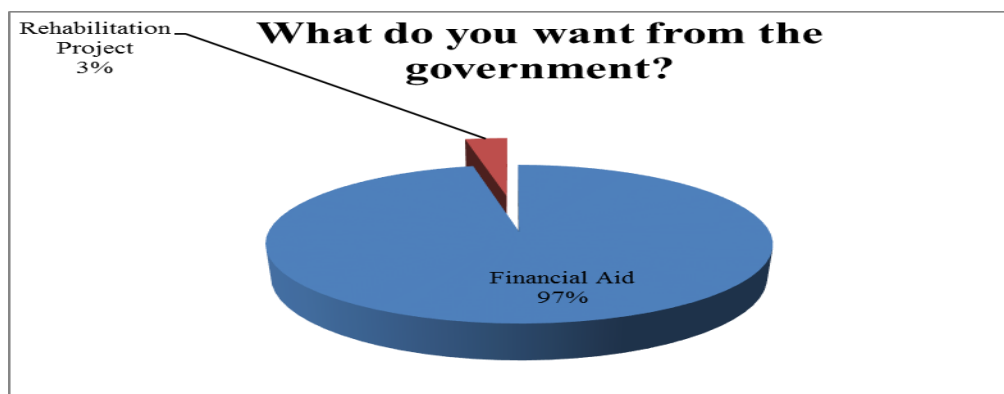


Figure 3 Preference of Survivors from Bigwani Janubi, Haji Mora & Nasir Bagh - Dera Ismail Khan

Other cities that were taken into account during this survey include the highly affected cities of Noshehra, Charsada and Mangora. Herein, detailed investigation is made by focussing towards different aspects of destruction. The survey also reflects upon the opinion and aspirations of the flood victims which is as follows

Firstly, the overall damages recorded by heavy flooding have been stated in Table 1 as below. It shows death-toll, number of school destroyed, infrastructure destruction, loss of assets, total of homes damaged, harms to health prospects as well as crops and livestock.

Table 1
Damage Record of Interviewees of Noshehra, Charsada, Mangora

Deaths	292	House	3,203
Schools	298	Health	Extremely Affected
Infrastructure	184+	Crops and Live Stock	151
House Assets	40.7 M		

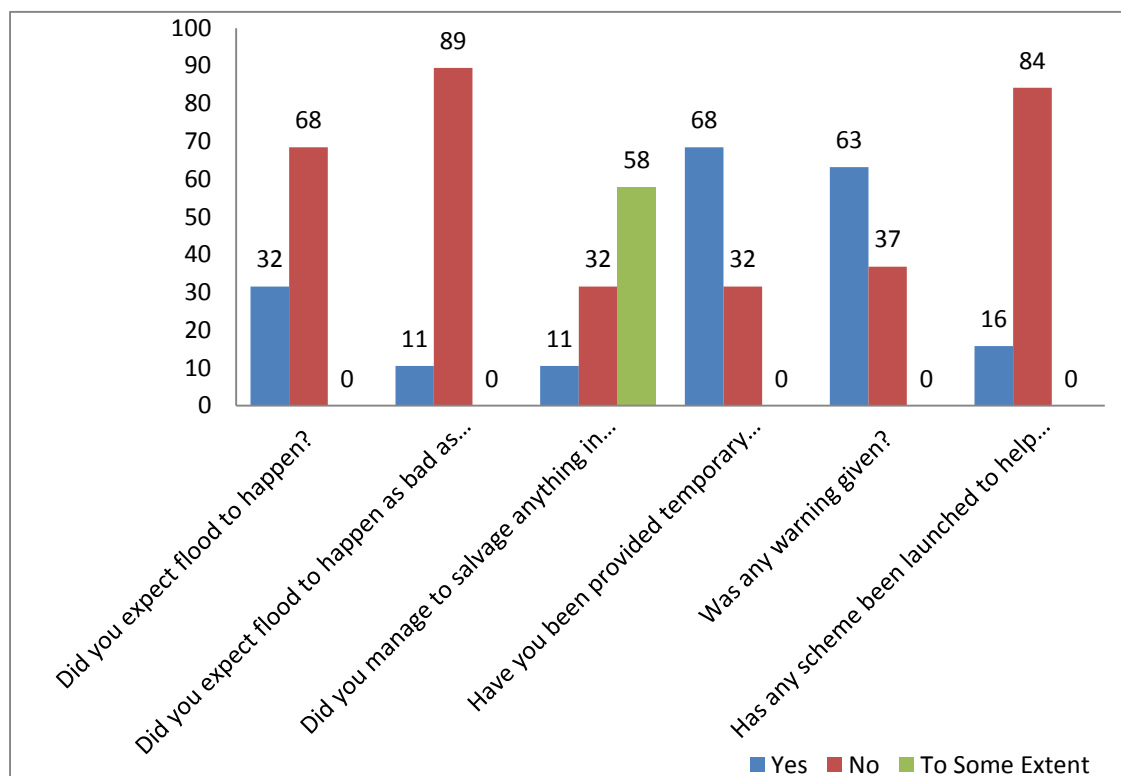


Figure 4 Flood Survey: Noshehra, Charsada and Mangora

Note: Number of respondents (as stated above each bar) and their opinion i.e. Blue Bar=Yes. Red Bar=No and Green Bar= to some extent.

The bar-chart (Figure 4) above is a crux of questioning towards respondents during a survey i.e. whether or not such worse floods were expected by them, any possible salvage at time of floods, if a warning was issued beforehand and also a probe about rehabilitation and expectation of the flood victims with regards to it. It is important to understand that not many people anticipated such heavy flooding and a majority could barely safeguard their possessions during the flood. As viewed, temporary accommodation is provided to a majority of the victims, and a large number of respondents claim that an early warning was given by the authorities. However, a majority of them do feel that no steps are taken to reconstruct their homes.

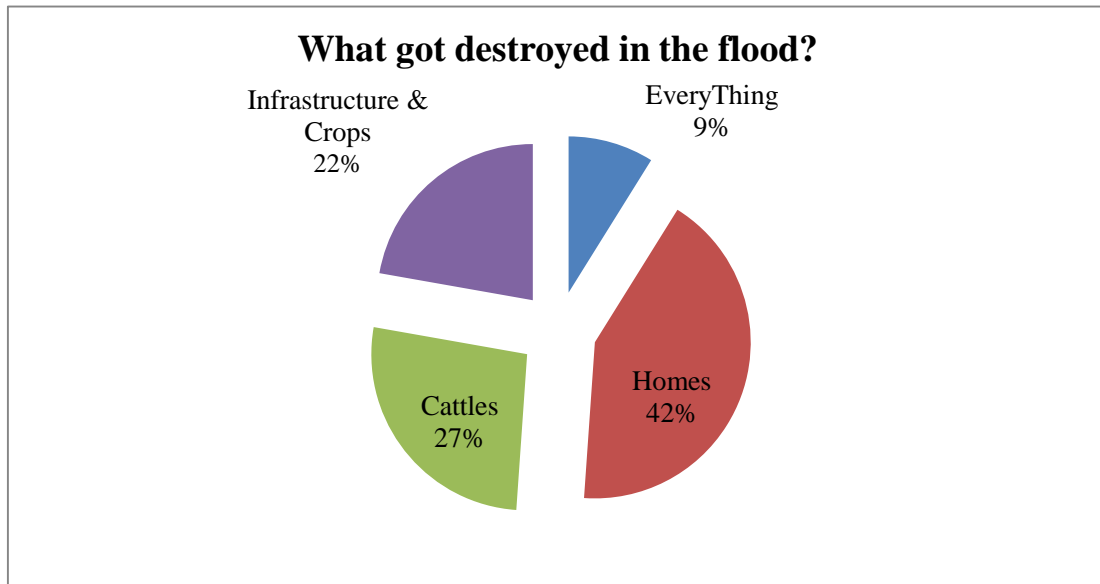


Figure 5 Overview of the Affected Entities during Floods

The above mentioned statistics in Figure 5 denote that no less than a havoc occurred during floods wherein about 9 per cent of everything is ruined, average 42 per cent homes are destructed, cattle that died are nearly 27 per cent and lastly damages to the infrastructure and Crops is 22 per cent.

Additionally, a survey was directed towards the emotional dilemma which the victims faced under circumstance of such heavy flooding. The Figure 6 as below highlights the opinion of people when they suffered through this catastrophe. Herein, around 42 per cent of the respondents felt hopeless, devastated and quite dreadful whereas around 26 per cent of them regarded this as wrath of God. Whilst foreseeing the future, about 11 per cent of respondents claim that all efforts made for development remain unfruitful and 21 per cent of them believe that no recovery is going to be made in the coming years.

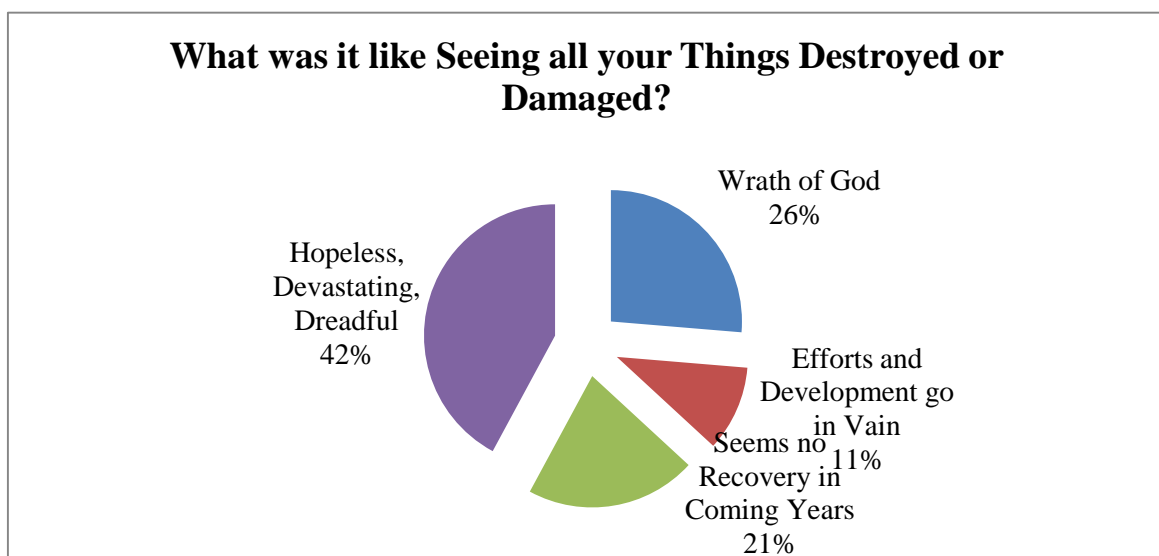


Figure 6 Response of Flood victims upon destruction and damages

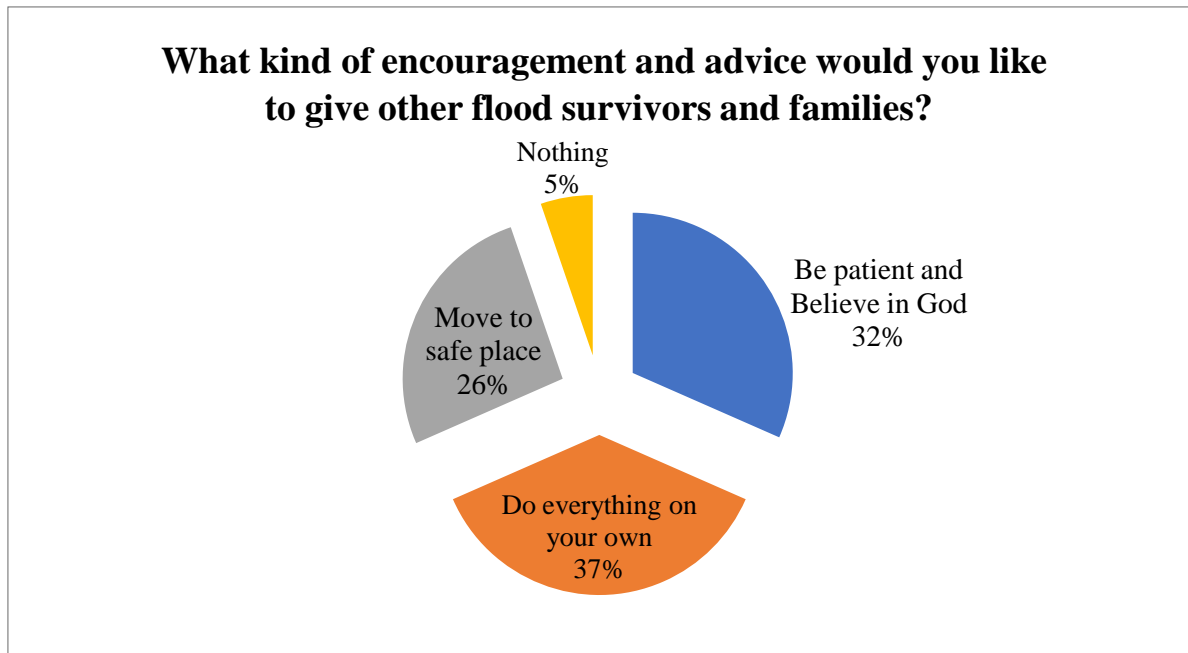


Figure 7 Encouragement and advice by respondents towards flood survivors and their families

The figure 7 presented above entails the overall viewpoint of survivors as they have shown sheer encouragement and extended levels of advice towards those who suffer in the same way as them. In this regard, a reassuring percentage of 37 per cent people encourage other flood survivors to depend on themselves in order to gain back their life, livelihood and means of surviving. Further, around 32 per cent survivors advice other victims to stay patient and believe in God. About 27 per cent people recommend moving to safe places to avoid such unfavorable circumstances next time and lastly, 2 per cent of them had no advice to share.

It is worth mentioning here that all surveys conducted shed light upon the suffering and pangs of the flood victims wherein people suffered through leaps and bounds. Not only the flood was fatal for quite many, it also left the survivors to struggle for months or even years to come. From livestock to livelihood and all prospects of life were immensely affected. Hence, now the mammoth of a task is not only their rehabilitation but also some guaranteed measures to ensure such destruction does not happen in the forthcoming, at least due to human negligence. Lastly and most importantly, the performance of the government under this stressful time is quite well analyzed through all the surveys conducted in the specific regions of Khyber Pakhtunkhwa. There seems to be mixed response by the flood victims, some believe the government is doing its bit but at the same time quite many of them believe that they need to dependent upon themselves for rehabilitation.

Results and Discussion

The repercussion of the floods will be long-felt by the survivors and all those in ruins today are the genuine narrators of their own stories. Hence, upon drawing a calculative analysis about shackles of the recent flooding in Pakistan, public opinion carries a lot of weightage. When respondents were asked about their feeling upon witnessing such chaos and destruction, a majority percentage i.e. 42% claimed to be hopeless, devastated and dreadful. As for livelihood means around 47 per cent of the

respondent claimed to have adapted some sort of working means to manage their affairs. The victims from these areas were also questioned about their nucleus for strength in such troubled times to which a major number of 48 per cent affirmed their faith in God to strengthen them up. Henceforth, it can be deduced from above that a majority are still optimistic to recover from their sufferings and losses wherein even though the current struggles are irreparable but their passion to survive is laudable and their convict is something to be praised.

On the other hand, rehabilitation is still a dire concern and in this scenario, the survey focused upon opinion based questions wherein respondents were inquired about the relief they have gotten from the government and in response to that, the survivors lamented for no optimum support as an alarming number of 79 per cent people believed that the support from government was just not enough. Upon that, the victims were also questioned about their future plans to recover from this loss. Herein, a sweeping percentage of 63 per cent individuals showed self-determination to rebuild the loss that they suffered from. Furthermore, victims were also asked about their expectations from the government to which around 74 per cent of them wanted the government to focus upon rehabilitation and construction of houses. The above mentioned statistics reflect that the survivors are critical towards an active role of the government and most of them believe that support has not been enough to tackle the suffering in an effective manner. Furthermore, it can be deduced that people possess the will to handle their sufferings themselves while still expecting from the government to ensure help in rehabilitation.

Conclusion

The crude reality of drastic climate change is surely undeniable and Pakistan is most adversely hit by it in the recent past. However, even after such non-stop monsoon spells in summers' 2022, its ongoing penalties are a genuine cause of worry for Pakistan. The country is struggling to combat with the aftereffects of this natural cum man-made disaster. This paper has adequately shed light upon how the recent flooding has affected Pakistan in terms of climate hazards and led towards mass level suffering. Recent flooding in Pakistan denotes that the country is a primary prey to climate change which is a grave reality in today's world. As an outcome of floods, Pakistan has faced problems in different realms but most importantly there is noticeable environmental degradation and humanitarian chaos, emerging as a vital concern. Pakistan can no longer sit back and watch itself suffer therefore tangible steps need to be taken in order to well-manage all shortcomings so all future predicaments can be minimized. In this regard, all stakeholders within the country must play a pivotal role and international community must also rise to the occasion in order to manage, both the ongoing suffering of Pakistan and at the same time, envisage proper mechanism to utmost avoid or at least minimize the aftermath of such appalling occurrence of floods.

Recommendations

Nevertheless, Pakistan, a country of 220 million people, is devoid of prioritizing its disaster management which is not a responsibility on part of the government alone but also the civil society and all segments of public welfare, let alone each man for himself and for those around him. Primarily, it should be made part of the curriculum wherein this aptitude must be developed from when a child becomes sensible. Further, there should be exercises conducted in each community area, ranging from city to city keeping in view its demographics which are directly proportional to what the after effects might be. Veniality and ignorance of this country's disaster management has been long overlooked, what is most important is to ensure that proper planning is done in the

forthcomings which includes; rebuilding and restructuring phase too, not only of the infrastructure but also of awareness and of effective public education. The role of NDMA is quite critical in this regard wherein recruitment of disaster management experts should be ensured rather than filling up the positions as per personal biases or for political motives. A hierarchy of responsible experts must manage the country's pre-disaster strategy wherein prompt action plan needs to be devised in order to foresee all expected calamities and take timely actions to minimize the aftereffects. Herein, the NGOs can also play a critical role, which even though are quite many on paper but at ground level, their presence is still insufficient. Hence, NGOs need to be more transparent and viable in their approach to assist Pakistan in managing the havocs of climate change in the forthcoming.

Furthermore, Pakistan needs to take up on the UNDP Climate Promise wherein, adapting resilience against climate should be our key goal. In this regard, climate financing has to be ensured and made a top priority. Each successive government must continue with projects critical towards building climate resilience as uniformity in policy is crucial to this. Also, the responsibility of managing waste material and creating renewable energy revolution is a must for Pakistan. Lastly but most importantly, creating more and more man-made forests, managing greenery in our cities and also curbing deforestation is a burden that lies upon our shoulders. Hence, in this realm we must give our best to ensure a better future of our country whilst constantly rising climatic hazards.

As for the responsibility towards international world, more effective steps need to be taken to tackle the sheer side-effects of climate change. Only rhetoric but dual policy on ground will not work anymore as this fire is bound to spread beyond boundaries. All countries polluting the environment through their blind industrial surge need to ascertain measures to minimize harms towards climate. In this regard, the UN needs to take full responsibility and ensure practical measures viable and binding to all states. The UN Framework Convention on Climate UNFCCC needs to play a pivotal role to battle the hazardous human interference with the climate system and curb greenhouse concentrations towards the atmosphere. The countries most responsible for damages towards the climate must be given ample warning and even penalties in order to ensure that each country realizes to play its role in fighting back against gravely increasing climate changes. Also, the organizations like World Meteorological Organization need to provide more effective environmental services by ensuring uniformity in coordination by each state and at the same time, giving viable warnings to troubled countries and assist them in disaster risk reduction etc. Herein, it is most critical for international community to understand that if efficient measures are not adopted to equip and help the vulnerable countries, there will soon be a time that this climatic destruction would spread beyond borders. Not only this, if their selfish approach and visionless rush is unbothered by how critical their role towards climate it, then they are basically digging up a hole for themselves too, which sooner or later will cause a havoc for them so it is better to take effective measures timely than to suffer in the forthcoming.

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