

Climatic Changes and their impacts on population:

A case study of 2022 floods in Sindh, Pakistan



**This thesis is submitted in partial fulfillment for the award
of degree of Master of Philosophy in Pakistan Studies**

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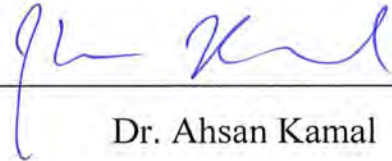
CERTIFICATE

This dissertation submitted by **MS. IRUM KAOSAR** entitled:

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Dedication

To my Superior, Dr Ahsan Kamal

And

My Family

Declaration

I hereby declare that this dissertation titled “Climatic Changes and their impacts on population: A case study of 2022 floods in Sindh, Pakistan” is presentation of my original research work. The information derived from the existing literature work has been duly acknowledged in this study and a list of references are provided. I have completed this study under the guidance of Dr. Ahsan Kamal, National Institute of Pakistan Studies, Quaid-e-Azam University. No part of this dissertation was previously presented for another degree or diploma at this or any other institution.

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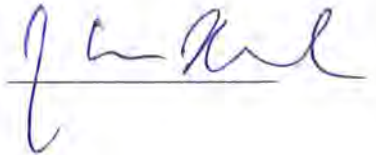
CERTIFICATE

I hereby recommend that this thesis prepared under my supervision by **Irum Koasar** entitled

“Climatic Changes and their impacts on population: A case study of 2022 floods in Sindh, Pakistan”

Be accepted in partial fulfillment of the requirements for the Degree of Master of Philosophy
in Pakistan Studies.

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DR. Ahsan Kamal

Acknowledgment

Sindh holds a deep connection to me through my birth, and I pursued my education there until I completed my graduation. It was this profound sense of attachment that inspired me to embark on research focused on Sindh, with the aim of gaining insight into the hardships and physical ordeals experienced by everyday Sindhis, particularly women. The year 2022 marked a devastating flood that wreaked havoc on displaced communities, with women being particularly susceptible to its impact as an integral part of society. Consequently, this research was conducted to explore the emotions and physical experiences of the vulnerable segments of our community.

First of all, I am grateful to my family, without their consistent support, I would not have been able to do this research. In addition, I am grateful to my benevolent teacher and supervisor, respected Dr. Ahsan Kamal, who not only motivated me constantly but also supported me financially to conduct field visits for the collection of primary data. Last but not the least, my friends and fellows, especially Munazza Batool and Mujeeb Ur Rehman, who till the submission of my research remained with me as my support.

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Abstract

The research project aims to investigate the social and psychological impacts on the affected families during the 2022 floods in Sindh, Pakistan. Though the available literature sheds light on the challenges faced by internally displaced families or communities however a crucial element is still missing. The existing literature doesn't take into account the firsthand and personal experience of the flood affected families and especially women, resulting in incomplete understanding of their perspective and magnitude of difficulties.

The research methodology is based on qualitative methods, using in-depth interviews and focused group discussions with 40 internally displaced families. The study also includes secondary data from books, articles, journals, and social media platforms to understand the impacts of climate change on the region. The research findings highlight the destructive impact of floods on the social and emotional being (bodily experiences)/distress of the community/ families caused by losing homes and all kinds of possessions. The study also slightly discusses the lack of adequate measures taken by the government to address the issues of sanitation and water management. The study found that women, who are often seen as socially marginalized after a disaster, faced significant psychological distress and needed psychological support, a perspective shared by aid workers and research often overlooked by people. This study highlights that women in climate change-affected areas need psychological counselling beyond material assistance, revealing their real needs. The paper further highlights the need for further research on the embodied experiences of individuals affected by natural disasters.

Keywords: *2022 floods, Sindh, Pakistan, Vulnerable community, Displacement, Emotional distress, Marginalized communities, Gendered recovery processes, Gender-responsive disaster response, Floods and Women, bodily experience*

Chapter 1

1.1 Thesis statement

The research aims to investigate the specific impacts of the 2022 floods in Sindh, Pakistan on vulnerable communities, with a particular focus on women, who often bear a disproportionate burden of the disaster's consequences due to pre-existing gender inequalities/ patriarchal system. Climate change has made Pakistan one of the top five countries most vulnerable to natural disasters like floods, which result in severe consequences for socio-economic activities and population well-being. The study explores the personal experiences, emotions, and perspectives of communities affected by climate change, particularly women, using the Social Psychological perspective. By shedding light on the gender-specific challenges faced by women during and after disasters, the research seeks to inform gender-responsive policies and interventions that can promote sustainable recovery and resilience, ensuring that the voices and needs of women are not overlooked in disaster management strategies.

1.2 Introduction

This study aims to explore the specific impacts of the 2022 floods in Sindh, Pakistan on vulnerable communities, with women in particular being disproportionately burdened by the impacts of the disaster due to existing gender inequalities. Sindh, the southern province of Pakistan is susceptible to floods due to its geographic location and the longer spans of monsoon starting from June and ending in September every year.

1.3 Main Points:

- Why is it important to study gender-specific impacts of natural disasters?
- Being caregivers, women are more vulnerable during the natural disasters.
- There is need of gender-responsive policies and appropriate intrusions

Sindh, the southern province of Pakistan is susceptible to floods due to its geographic location and the longer spans of monsoon starting from June and ending in September every year. The monsoon periods which last for almost four months result in swollen rivers and urban flooding. Additionally, the Sindh Province comprises plain lands, which once flooded, require months for flushing out the water. The 2022 floods have attracted a great deal of international attention due to their scale and impact, which greatly affected the different districts of the province Sindh. Widespread destruction, displacement of communities, and loss of life and property have captured the attention, shedding light on the urgent need to study the impact of natural disasters on women and address gender-specific issues. Numerous scholars and organizations have highlighted the importance of analyzing these aspects, emphasizing the unique vulnerabilities and challenges faced by women during and after such catastrophic events.

As mentioned above, it is evident that studying women and gender-specific issues in the aftermath of Pakistan's floods is crucial for a comprehensive understanding of the impacts and to develop targeted interventions. By integrating a gender perspective, policymakers, practitioners, and researchers can make sure that such an environment could be created in which the voices and needs of women are not overlooked and that inclusive and equitable strategies are implemented to promote sustainable recovery and resilience.

Based on my preliminary field visit observations and some studies, I explored women often face a disproportionate impact when disasters strike. This has become an urgent issue that requires examination to understand why women are more vulnerable and at a higher risk during disasters. Even though disasters can affect everyone, women's experiences are often different from men. In addition, as mentioned above, women suffer the most because they

are often the primary caregivers for children, the elderly, and the sick, which makes them more vulnerable during disasters.

Although women play a crucial role alongside men in various aspects of life, the global debate on gender remains unresolved. Women, especially are facing numerous obstacles in the realm of climate change, such as providing for their families, managing natural resources, and limited knowledge on the subject. Climate disasters like floods put immense pressure on them while they full fill their responsibilities. My research aimed to investigate perceptions of the vulnerable segment of the population on how they are affected by flooding. Women are particularly vulnerable due to climate change. The community's livelihoods are threatened by climate disasters in various ways, such as frequent flooding and sudden, long-term flooding, resulting in extreme poverty from loss of income and damaged crops, infrastructures, livestock, and their material belongings. These disasters increase marginalized groups' vulnerability day by day and the current flooding situation is imposing ramifications on these sectors directly or indirectly. My research results shed light on the diverse impacts of climate change on women's livelihoods and vulnerability.

The research aims to explore the specific impacts of disasters on vulnerable segments of the community, particularly women, within the framework of the Social psychological perspective. This study recognizes the need to shift the focus from high-level governmental perspectives to a deeper understanding of the human dimension of climate change. By centring on community-level experiences and narratives, the research aims to fill the existing gap in the literature. It seeks to comprehensively examine the personal experiences, emotions, and perspectives of communities directly affected by climate change. Driving in the direction of this approach, the study aspires to provide a more

refined understanding of the multifaceted impacts of climate change on individuals and their communities within the broader social psychological context.

Climate change does not affect genders or wealth equally. Recent research indicates that its negative effects vary between men and women, as well as between the wealthy and the poor. Various evidence suggests that women, due to their gender, face more significant inequalities during climate-related crises (Rahman, 2013). Women have been observed to experience and respond to disasters differently. For instance, in the 2004 tsunami (Dasgupta et al., 2010), the 2003 European heat waves, the 2007 Bangladesh cyclone, and the 2010 Pakistan mega-floods, women's fatalities outnumbered those of men (Rahman, 2013).

The available research tells that despite a significantly low quantity of Greenhouse Gases emissions, Pakistan is one of the top five countries which are most vulnerable to Climate Change. Climate change is a long-lasting alteration in temperature and weather patterns either regionally or globally, which is purely caused by uncontrolled human inventions in which deforestation and the use of fossil fuels are on top of the list, releasing significant amounts of greenhouse gases. These gases trap heat from the sun, leading to a rise in the planet's surface temperature, resulting in numerous impacts on both the environment and human populations. Flooding, a common impact of climate change, can have severe consequences for socio-economic activities depending on the population's and infrastructure's vulnerability. These consequences can include loss of life and property, destruction of crops and livestock, disruption of economic activities and infrastructure, loss of livelihoods, reduced purchasing power, and mass migration.

Furthermore, flooding can also have psychological impacts due to hindering economic growth and development. Climate change also has both direct and indirect effects on

populations. Direct impacts include heat-related deaths, changes in disease patterns, and destruction of infrastructure due to extreme weather events. Indirect impacts include alterations in food production, water availability, and economic activity.

Moreover, the climatic changes further exacerbate the existing socio-economic disparity among different populations, inordinately affecting the most vulnerable populations including communities with lower income, people with disabilities, and indigenous peoples, leading to forced migration and resource conflicts. It causes sea level rise, leading to coastal flooding and displacement of hundreds and millions of people living in plain or low-lying areas, ocean acidification, and changes in precipitation patterns, affecting freshwater resources and agriculture.

As per available records and data, in the Sindh province of Pakistan, floods have greatly impacted populations due to its low-lying terrain and heavy monsoon rains. Multiple major floods have caused widespread damage to homes and infrastructure, displacement of communities, and loss of crops and livestock. These floods have resulted in the loss of life and contaminated water sources, leading to various health issues for those affected. The economic impact has been significant, with many communities losing their livelihoods and facing difficulties accessing basic services.

Moreover, the adverse effects of extreme weather, such as mental, emotional, and physical stress, are being felt most keenly by the most vulnerable groups of society including women especially lactating mothers, persons with relatively low income, elderly or differently abled (formerly known as disable) individuals, children especially under the age of five years, prisoners, and drug addicts/substance abusers. The area of research to investigate the impacts of natural disasters on Mental and Physical health have been a point of concentration for different researchers from various fields including academia, social

sciences, public health, environmental sciences, and different national and international developmental organizations.

Further, the researchers also encompass identifying the key factors which contribute to further the degradation of susceptible populations as a result of disasters/ natural calamities. The research work conducted in the past 12 years related to natural disasters and their impacts on the most vulnerable population was brought to light to assess the physical and mental impacts of these disasters on human lives.

The different research studies' results shows that natural calamities like floods and drought have placed a significant impact on the already depressed population of the community, their situation was further worsened by the inadequate response to these natural calamities. The already depressed section of the community was further pushed into poverty, dragged away from basic life necessities like drainage and clean drinking water, access to basic health and education. The systematic review of the already conducted studies revealed that the impacts of natural calamities on human lives could have been limited if a timely and adequate response was adopted.

According to the study by Geoghegan and Leyson (2012), climate change encompasses multiple dimensions, serving as a tangible reality, an agenda, a problem, a contextual backdrop, a narrative, and a discourse. This broad perspective redirects scholarly inquiry from merely establishing the existence of climate change (its ontology) to exploring how knowledge about climate change is acquired, retained, lived, internalized, and enacted (epistemologies).

Furthermore, Geoghegan and Leyson (2012) contend that examining the social aspects of climate change holds equal importance to scientific analysis. This acknowledgment

prompts crucial inquiries regarding our comprehension, communication, and response to climate change risks at the community level within the realm of climate risk management.

Several research studies have highlighted the need to study the impact of these floods on women and gender-specific issues in the context of disaster response and recovery. The study also highlights the gendered division of labor in disaster response and recovery, with women often taking on caretaking responsibilities and facing greater risks of violence, trauma, and exploitation.

Pakistan's 2022 floods have captured significant attention, shedding light on the urgent need to study the impact of natural disasters on women and address gender-specific issues. Numerous scholars and organizations have highlighted the importance of analyzing these aspects, emphasizing the unique vulnerabilities and challenges faced by women during and after such catastrophic events.

As per study conducted by Fitriani et al. (2019), examined the differential impacts of floods on women in rural areas of Pakistan. The research reveals that women often bear a disproportionate burden of the disaster's consequences due to pre-existing gender inequalities. Disrupted access to healthcare, increased risks of gender-based violence, and limited participation in decision-making processes are just a few of the challenges highlighted by the study. Such findings underscore the necessity of gender-responsive policies and interventions to make sure that gender-specific needs, especially of women are adequately addressed in disaster management strategies.

Moreover, incorporating gender-responsive strategies in disaster risk reduction has not been an area of interest only for national organizations. International organizations like United Nations Development Programme (UNDP) have also emphasized the significance

of incorporating a gender perspective in disaster risk reduction and recovery efforts. According to the Gender Equality Strategy of 2014-2017 by the UNDP, disasters further exacerbate existing gender inequalities, curtailing the chances of adopting an inclusive approach that could address and recognize the unique vulnerabilities and capacities of women. This includes promoting women's leadership, ensuring access to essential services and resources, and supporting the active participation of women in decision-making king processes of disaster preparedness and recovery.

A research analyst from Stimson Center's Energy, Farwa Aamer, further emphasizes the importance of considering gender-specific issues in the context of Pakistan's recent floods. She states, "Women are often primary caregivers and have specific needs that must be addressed in disaster response and recovery efforts. Ignoring these aspects can perpetuate gender disparities and hinder the overall effectiveness of relief measures."

1.4) Research gap

The available literature shows us the problems displaced community/ families face, but there's a missing piece. The existing literature falls short of encapsulating the direct testimonies and individual encounters of the impacted populace, resulting in an incomplete grasp of their standpoint and the genuine extent of their challenges. This study aims to fill this gap by conducting a comprehensive examination of the personal experiences and emotions of communities directly impacted by climate change. By focusing on community-level experiences and narratives, this study seeks to provide a more nuanced understanding of the impacts of climate change on people and their communities.

1.5) Counterargument

Gender-specific problems in disaster management aren't a sideshow. They're an important part of a disaster management strategy that considers a community's diverse needs. If we ignore these issues, we're just perpetuating inequality and making disaster relief less effective. Gender-responsive policies make sure that disaster management plans are inclusive, comprehensive, and really work for everyone.

1.6) Conclusion

In the field of disaster Management Gender-sensitive policies are very essential. Diverse communities are acknowledged by the gender-sensitive policies, they reduce inequalities, and help to prepare grow much stronger and all-inclusive approach to faster the recovery after natural disaster. To build real resilience, we need to adopt gender-sensitive policies and make sure no one gets left behind, creating a safer, more resilient future.

This literature review examines the multifaceted effects of floods on displaced communities, particularly women, by considering psychological, economic, and social aspects. The aim of the study is to gain insight into the individual experiences of women living in disaster-stricken areas, to identify areas of mental health that are often overlooked, and to create a comprehensive plan to address the mental health needs of women in Pakistan. The body of the paper emphasizes the significant effects of climate change on rural women, particularly the 2022 floods, in Pakistan. The purpose of the review was to gain an understanding of the multiple social and psychological implications of the 2022 floods, as well as to gain access to personal testimonies and experiences related to the cause of the disaster, in order to uncover the wider social and emotional implications of the disaster.

Chapter three discusses research issues, methodologies, and research limitations. The research methodology is based on qualitative methods, using in-depth interviews and focused

group discussions with internally displaced families. The study also includes secondary data from books, articles, journals, and social media platforms to understand the impacts of climate change on the region Chapter Four analyses the impact of floods. Chapter Five discusses the findings, concludes the research, makes policy recommendations and suggestions for further study, and summarizes the references.

Chapter 2

The literature review begins with a comprehensive investigation of the multiple impacts of flooding on the displaced community and women, addressing the complex interplay of psychological, economic, and social dimensions. This review is based on recognition of individual's vulnerability, especially in disaster scenarios, and the need to understand the complex dynamics that shape women's experiences.

This literature review focuses on different aspects of the impact of natural disasters, especially floods, on women in Pakistan. Controversy rages on the lasting psychological effects of disasters, coping strategies, and gender differences. Literature review highlights that disasters can have long-term psychological effects and examines the interplay of positive and negative coping mechanisms. Gender-sensitive aid and the social and economic impact of disasters are also addressed. Women, especially in marginalized communities, bear a disproportionate burden during disasters. Based on this informed discussion, the theoretical framework of this study is based on perceptions of women's vulnerability in disaster situations. We recognize the multiple impacts on psychological, economic and social dimensions. The framework includes discussions on gender gaps and specific challenges faced by marginalized women. Climate change will exacerbate these vulnerabilities. The purpose of this study is to explore the different experiences of women in disaster-stricken areas, highlight overlooked aspects of mental health, and develop comprehensive measures to meet their needs and build resilience to advocate.

The overall literature reviewed for the purpose of this research project, highlighted that the women in Pakistan especially those living in the far flung and rural areas of Pakistan are highly impacted by the natural disasters because of climate change. The situation is further worsened by the lack of policies to address their needs, the gaps in identifying their needs, the ignoring them in designing relief activities, an increase in gender-based violence and

lack of basic life services. The mental health of the women in post-disasters situations is also completely ignored not only by the local authorities but the developmental organizations as well. The relief activities should be designed in such a way that it should cover all the elements of the society.

2.1 Theoretical Framework

This research project is aimed to analyze the dynamics of key impacts of the devastating floods of 2022 which hit the southern part of the country, especially the Sindh Province of Pakistan. Key attention was given to assessing the impacts of these floods on the most vulnerable communities including internally displaced families and especially women. Understanding the impacts of the 2022 floods on vulnerable communities isn't a straightforward phenomenon, and that's the reason that the theoretical framework can be built on intersectionality and resilience theory.

The intersectionality theory emphasizes that the intersection of multiple social identities including gender, class, income, and displacement status formulate an individual's experience. The intersectionality theory also highlights the needs which influence the vulnerability of a person\community, access of a person/community to resources, and distribution of power in the events of natural calamities or disasters as a result of climate changes. By placing the intersectionality theory in use for this research work, we can identify the consequences of 2022 floods, especially on women, who are internally displaced as a result of these floods. By applying the intersectionality theory in this research project, we can identify the compounding effects of gender and displacement in the best possible way.

Resilience theory provides valued perceptions of how people and communities react and adjust to problematic conditions as a result of natural disasters or calamities. By explicitly investigating the psychological and social aspects of women's experiences, this research

work is aimed to understand the aspects that either brace or impede their resilience in the context of displacement due to floods as a result of climate change. This research project explores the coping strategies which the affected community employ, the support systems they rely on, and the community networks that play a crucial role in their capacity to recover, reconstruct, and effectively navigate the challenges brought about by the disaster.

The compounding use of intersectionality and resilience theory in the theoretical framework will provide a brief understanding into the impacts of floods on the vulnerable community of Sindh Province of Pakistan, especially the women community who are internally displaced as a result of 2022 floods. It will also explore the gender associated issues as a result of displacement, the role of social identities in situations of floods and natural disasters and the resilience efforts they make in the event of natural disasters with a new perspective. This approach will attempt to address the existing gaps in policy making and will help to develop such policies which are gender-responsive in the events of natural calamities in the light of climate adaptation. This approach will be also used to address the structural and conceptual barriers which limits the women's adaptive capacities.

This specific area has been placed under research by various scholars and research institutes, but still there's sufficient potential of exploring the new dynamics associated with the research project. Sufficient amount of literature was studied to gather the idea before commencing the research project in Sindh Province of Pakistan. The literature review was used to assess the impacts of natural disasters and calamities on individuals and community in Pakistan, keeping the vulnerabilities faced by women under special eye. The literature review revealed that the floods and natural disasters can have a long-lasting psychological impact on individuals which mainly includes depression, anxiety and PTSD (Post-Traumatic Stress Disorder). The situation can be further worsened by the wrong handling of the situation like distrust in the community or lack of social support or opting

the wrong situation handling strategies might lead to further aggravation of the psychological situation of the affected communities. Contrarily, opting the communities' friendly strategies including social and moral support to the affected communities can have long-lasting positive psychological impacts on the affected communities and can lead to better resilience in the events of natural disasters.

The natural disasters like floods and earthquakes not only affect the psychological and mental health of the affected community but also deprive them of livelihood opportunities by damaging the local infrastructure, roads, bridges, markets, local businesses which ultimately leads to unemployment and food insecurity which in turn leads to demand-pull inflation in the affected community. On the other hand, the disastrous situation can also lead to an increase in business, temporary employment and food availability as a result of response and recovery efforts made by different NGOs/INGOs and government institutions. Similarly, the natural calamities might sometimes lead to gaps in the social bonding which was observed in Buffalo Creek Community while on the other hand, it might lead to creating a strong bond in the community by bringing them together.

The literature review also accentuates the multiple impacts of these disasters on the women living in disaster hit areas. The women community mostly in developing countries are vulnerable due to limited access to resources, cultural and social taboos, gender-based violence and limited access to basic life services like health and education. The women living in disaster hit areas mostly faces an increased workload which not only led to further deterioration of their physical health but also leads to psychological issues of complex nature. The literature review focused on identifying and addressing the needs of women in planning and executing the response and recovery efforts mainly including reproductive health, mental health and access to basic life services like health and education in the events of natural disasters and calamities.

The reviewed literature indicated the needs for gender inclusive policies and programs that could address the needs of all genders with special focus on women's physical and psychological health, education, livelihoods and access to basic life services. By adopting the gender responsive policies and procedures, the disasters can be managed more effectively.

2.2 Literature Review

The effects of disasters range from infrastructure destruction to destruction of mental health. Various studies have been conducted to assess the impacts of natural disasters on mental health. This has been an area of interest for researchers like (Green et al., 1990) discusses in his research. He writes that disasters not only have profound psychological effects on individuals immediately after a disaster, but disasters can also have long-term psychological effects on individuals as well. He conducted a follow-up study on the survivors of Buffalo Creek, West Virginia fourteen years after the collapse of a dam, which found that although there was a gradual decrease in psychological symptoms among residents, depression, anxiety, and post-traumatic stress disorder were still common.

Moreover, the prevalence of these problems was greater in comparison to communities that had not experienced a disaster. The result of the research is that the psychological impact of a disaster can be prevalent for several years (Green et al., 1990). Because of the negative psychological impact disasters have on some individuals, researchers have examined mediating factors such as coping strategies to determine whether certain strategies provide more protection against negative psychological outcomes than others (Haley, Stein, Olsen, Roberts, Lutgendorf, & Ho, 1995; Smith, 1996).

Harvey and associates (1995) in their study have mentioned about how individuals coped with loss after a disaster. They discovered the two different types of coping strategies were used. The first strategy was positive coping. Positive coping included spending time on

private reflection, confiding in others, and relying on social support after the disaster. Negative coping, the second strategy, included being pessimistic, not using private reflection, and not having or relying on social support after the disaster. Results showed that 25 of 45 (56%) of the respondents reported using negative coping strategies while 20 of 45 (44%) of the respondents reported using positive coping strategies. Those individuals who used negative coping strategies were more likely to report interpersonal problems and substance abuse problems following the disaster.

A study by Smith (1996) also examined coping strategies used by victims following a disaster. Smith again identified two types of coping strategies. The strategies that emerged this time were categorized as active or avoidant. Active coping is problem-focused because it involves confronting the problem directly and attempting to change the problem. Avoidant coping is considered passive and emotion-focused because it involves attempting to deal with the problem by not thinking about or avoiding it and its implications. Active coping was associated with less psychological distress and more positive affect in this study. In comparison, those who used avoidant coping had greater psychological distress, more negative affect, and more physical symptoms. As the above research indicates, disasters can have profound psychological consequences for individuals. More specifically, research suggests that disasters are more likely to lead to greater psychological difficulties in individuals who had psychological problems before a disaster individual with low income, individuals who lost employment as a result of a disaster, and women are particularly at risk.

The social science literature on disasters has focused on the effects disasters have on communities, organizations, and individuals since the 1900s (Bolin, 1976). For instance, studies have shown that individuals and communities are affected psychologically (Green, Linay, Grace, Gleser, Leonard, Korol, & Winget, 1990; Tobin & Ollenburger,

1996), economically (Hall & Landreth, 1975; Hewings & Mahidhara, 1995; Tierney, 1997) and socially (Erikson, 1976; Harvey, Stein, Olsen, Roberts, Lutgendorf, & Ho, 1995) by disasters.

Disasters and natural calamities especially floods have a wide range of effects which have been studied by researchers across all parts of the world for several years. These disasters have far reached effects on the affected communities for decades. For this research project, a vast literature was studied.

i) Economic Impact

Hall and Landreth (1975) found that during the year after a flood in Rapid City, South Dakota the city budget of Rapid City had risen substantially. Additionally, the unemployment rate rose for a time immediately after the flood but stabilized one year following the flood (Hall & Landreth, 1975). Other research also indicates that the economic sector of a community suffers following a disaster (Tierney, 1997). This can be due to damage to local businesses, the inability of customers to be able to travel to open businesses, the lack of available employees to work, and business owners and managers repairing the damage that occurred to their homes (Tierney, 1997).

However, some research suggests that the profit of the local business sector may rise following a disaster after businesses reopen and residents begin purchasing replacement items (Hewings & Mahidhara, 1995).

ii) Social Impact

Not only do disasters affect communities economically, but they also impact communities socially. Erikson's classic and award-winning study (1976) examined the impact a flash flood in Buffalo Creek, West Virginia had on the community. The flash flood, caused by a dam collapse, happened suddenly and unexpectedly resulting in the death of 125 people and leaving 5,000 residents homeless. This disaster brought both individual trauma and

collective trauma to the residents of Buffalo Creek. Individual trauma, according to Erikson, is a "blow to the psyche that breaks through one's defenses so suddenly and with such force that one cannot respond effectively" (p. 110). Collective trauma, in comparison, is a "blow to the tissues of social life that damages the bonds attaching people" (p. 110).

The community of Buffalo Creek was unique because it experienced this latter type of trauma. This once close-knit community had turned into a place where the sense of community closeness once present was destroyed by the flood. Before the dam collapse, Buffalo Creek was a place where community and family bonds were extremely strong and where the family provided a place of warmth and security for members of this community. More specifically, people in Buffalo Creek gained their identity from their family and community rather than from the work they did or the way they lived (Erikson, 1976).

However, following the flash flood this sense of community and family closeness was lost. This, in turn, led to the loss of identity for many residents. Families in Buffalo Creek began to fall apart as family members could not cope with the death of loved ones. At least one person from each family in Buffalo Creek died as a result of the flash flood and this increased the community trauma. Marriages also began to have problems as couples struggled with intimacy. Erikson stated: Human relations along Buffalo Creek took their shape from the expectations pressing in on them from all sides like a firm but invisible mold; they had been governed by the customs of the neighborhood, the traditions of the family, and the ways of the community. And when the mold was stripped away by the disaster, something began to happen to those relationships. This was true of everyday acquaintances; it was double true of marriages. (p. 218)

Moreover, the long-term social disruption experienced in Buffalo Creek is atypical. Most research suggests that communities pull together during and after disasters (Harvey et al. 1995). Following the 1993 Midwestern floods, residents of Hull, Illinois reported that

the community came together to help each other during and after the flooding (Harvey et al 1995). The community of Hull was also different than the Buffalo Creek community because the residents spoke with more optimism and hope about the disaster than did the residents of Buffalo Creek. Strong community bonds, combined with a sense of optimism and hope, may help people with the healing process after a natural disaster. Not only have the economic and social consequences of disasters been examined but how communities can recover following disasters has also been studied.

One route to recovery is with the help of involuntary and voluntary organizations. For example, the role and function of the Federal Emergency Management Agency (FEMA) has been extensively researched to document methods to improve the aid offered by governmental assistance to individuals and communities (Forrest, 1986; Abernathy & Weiner, 1995; Neal, 1995). Additionally, studies conducted on voluntary organizations suggest that the use of volunteer resources such as The Red Cross, Salvation Army, and church organizations helps both individuals and communities to recover quicker after a disaster (Rosse, 1993). The primary function of the Red Cross has been to assist victims of disasters since the organization was founded in 1861 (Brown, 1979).

iii) Psychological Impacts

According to research studies traumatic events, such as disasters, can have profound psychological impacts on individuals. Psychological problems such as depression, anxiety, and post-traumatic stress disorder have all been examined by researchers (Green et al., 1990; Tobin & Ollenburger, 1996). For example, research showed that following the 1993 Midwestern floods, individuals who had problems with depression and anxiety before the floods were more likely to experience higher levels of depression and anxiety after the floods. Depression and anxiety were also more prevalent after the disaster in individuals with low income, health problems, and less education than their higher-income, healthier,

more educated counterparts. Post-traumatic stress disorder was also more prevalent in these individuals as well as individuals who were married, divorced, or separated, women, and individuals who had lost employment as a result of the flood (Tobin & Ollenburger, 1996).

iv) Women and Disasters

In addition to examining how social variables such as race, socioeconomic status, and age affect families after- disasters, it is important to address the effect of gender on disaster outcomes. Women's experiences have often been ignored in disaster research (Bolin, Jackson, & Crist, 1996; Morrow & Enarson, 1996). The data that have been obtained about women's experiences with disasters suggest that men and women respond to and react to disasters differently. For example, research suggests that women more often consult with friends and relatives before evacuating than men (Drabek & Boggs, 1968), may be more likely to believe the disaster warning than men (Turner, Nigg, Paz, & Shaw-Young, 1981), and may be more likely to respond to the disaster warning than men (Neal, Perry, & Hawkins, 1982).

Results from a study after Hurricane Andrew showed that women and men are more likely to assume gender stereotypical roles during every phase of a disaster. For instance, women were more likely to prepare their family and homes for the hurricane, they were more likely to reestablish their families into new homes and communities following the hurricane, were more likely to wait in long lines for assistance, and were responsible for the majority of the chores in the domestic sphere (especially child care duties) during every phase of the disaster.

However, in contrast, men were responsible for preparing the outside of the home for the disaster as well as repairing the structural damages to their homes and the community after the hurricane. Not only do men and women tend to play gender-stereotypical roles during and after a disaster, but research has shown that there are other differences in how men and

women behave during times of disaster. For example, because women are more likely to be in lower-paying jobs with less security than men, women who lose work as a result of disasters are less likely to find new employment (Morrow & Enarson, 1996).

Pakistan, a country with a very minimal contribution of 0.9% only to the emission of greenhouse gases is one of the top five countries most vulnerable to climate change. Climate change has adversely affected the seasonal patterns, resulting in severe floods as well as severe droughts in different parts of the country.

The Climate has become a major area of research for different sectors of the country including development-oriented organizations, atmosphere conservators, academia, and United Nation Agencies. A lot of research has been conducted in the last two decades to put under lens the rise in temperature in Pakistan. Nawaz et al. conducted a study in 2019 to assess the average increase in Pakistan's temperature over the last century. The results of the study revealed that there has been an increase of 1.0 – 1.5 °C increase in temperature over the last century. A similar kind of study conducted by Cheema, S. B. revealed that there has been a 0.5 – 1.5°C increase in Pakistan's temperature over the last century. The highest increase was observed in the northern areas of Pakistan.

Moreover, the climatic changes have not only resulted in an increase in the temperature but have also changed the precipitation patterns in the country. To observe the changes in precipitation patterns, a study was conducted by Tabari, H. in 2020. The results of the study revealed that as a result of climate changes the precipitation patterns have become more unpredictable, resulting in extreme weather events in the form of severe floods and droughts.

A similar kind of study conducted by Otto et al., in 2023 found that the climatic changes have resulted in water scarcity in different parts of Pakistan, especially in northern areas and western regions. The agricultural sector is one of the top sectors which are prone to

changes in precipitation patterns as a result of climate changes. The agricultural sector is adversely affected by both unpredictable rains and droughts, resulting in low productivity, crop failures, and an increased food insecurity in the country. Zhao et al conducted a study in 2017 to assess the impacts of climate changes on the agricultural sector and found that the climatic changes have resulted in a significant decrease of 10% - 20% in crop productivity across different parts of the country.

The climatic changes in Pakistan have been targeting almost all sectors of the economy and the elements contributing to the economy. Water scarcity, a nightmare for life's existence has been observed throughout Pakistan as a result of changes in precipitation patterns. The impact of climate changes on water scarcity was studied by Syed et al., in 2022. The findings of the study concluded that the changes in precipitation patterns have resulted in water scarcity in Pakistan. The study further revealed that the underground water resources in Pakistan are depleting at a significant rate resulting in a higher increase in demand for irrigation water as well as drinking water. A study conducted by Ishaque, W., Tanvir, R. & Mukhtar, M. in 2022 found that the climatic changes have resulted in water availability resulting in increased water stress. The study further stated that there has been a significant decrease in the underground water level as a result of climate changes in Pakistan.

The Sindh Province, located on the Southern side of Pakistan flanking with the Indus River and Arabian Sea is one of the top regions with the highest vulnerability to adverse effects of climate changes. The uneven droughts and rainfalls have adversely affected the agricultural sector in Sindh Province. The impacts of climate change on the agricultural sector in Sindh province was studied by Deen, S. in his study conducted in 2015. The results of the study were shocking to observe 30% - 40% decline in crop productivity as a result of climate changes.

Further, the floods in Sindh have not only affected the agricultural sector in the province

but have also created significant problems for the local community. The findings of the study conducted by Ramakrishna, G., Gaddam, S. R., and Daisy in 2014 concluded that the 2010 floods had drastically affected the local communities as a result of increasing food insecurity, internal displacement, curtailed livelihood opportunities, and increased gender inequality. The same nature of the study was conducted by Shah et al., in 2022, which showed that the recent flood has placed a highly negative impacts on communities' health and wellbeing as a result of damaged houses and infrastructure.

The disasters as a result of climate changes in Pakistan have had a profound impact on the marginalized community of the country especially women. Women in Pakistan are already one of the most vulnerable elements of society in Pakistan due to lack of resources, exclusion from decision-making processes, social exclusion, limited or no education, and social taboos. Though marginalized communities like women are prone to the climate change, still a very limited number of studies have been conducted in Pakistan to assess the impacts of climate changes on the marginalized community like women.

To assess the impacts of natural disasters on marginalized communities like indigenous peoples, Afro-descendants, woman and rural population in Latin America and Caribbean, a study was conducted by CEPAL, n.d. in 2021. The findings of the study concluded that the marginalized communities in comparison to the non-marginalized communities suffer great losses as a result of natural disasters. The study further revealed that the natural disasters adversely affect the livelihoods, housing, food security and access to basic services like health and education far more in marginalized communities as compared to non-marginalized communities.

"The marginalized communities especially women in developing countries are more vulnerable to impacts of disasters and natural calamities as a result of climate changes", reported by Women, Gender Equality and Climate Change in their study. The study further

added that due to limited holdings of land and assets, limited access to resources, limited access to education, exclusion from decision making process makes the women most vulnerable to gender-based violence during and after disasters.

Furthermore, the physiological and psychological health of women are not taken into consideration while designing the relief activities as a result of natural disasters. The post-event impacts are far worse for women as compared to men, especially in developing countries by allocating a very limited or negligible resources to address the women needs.

A study conducted by Thapa and Acharya in 2017 exhibited that the pregnant women care was not taken into consideration while designing the relief activities in response to 2015 earthquake in Nepal. The local authorities as well as development-oriented organizations failed to recognize the pregnancy of women as a natural condition, resulting in lack of resources in times of emergency. As a consequence, numerous pregnant women experienced heightened levels of anxiety and depression. An unfortunate example of this occurred in 2013 during the devastating impact of super Typhoon Haiyan in the Philippines, where over 270,338 pregnant women were deprived of skilled birth attendants during childbirth and received insufficient treatment for obstetric complications such as pre-eclampsia, eclampsia, and sepsis. (Valerio 2014).

Furthermore, during and after disasters, women from marginalized groups often bear the brunt of adverse consequences. Pongponrat and Ishii (2018) focused on a minority group of Thai women living in Ishinomaki, Japan, the challenges they faced during the 2011 tsunami were exacerbated by their exclusion from pre-disaster tsunami evacuation drills. Moreover, they received insufficient support in comparison to Japanese citizens, further intensifying their difficulties.

During the phase of post-tsunami recovery in Tamil Nadu, India, the recovery policies predominantly overlooked women belonging to the lower-caste Hindu Dalit community,

who are widely recognized as the most disadvantaged group in the country. Unfortunately, these women did not receive any compensation or financial aid as part of the recovery efforts. (Pincha 2008b).

Enarson (2012) highlighted that the available literature highlights the existence of racial disparities in the United States, particularly concerning women of color, which place them at a heightened risk during disasters. During the study it was observed that the African American Women in several states have found to receive much lesser assistance in comparison to their white counterparts. The study further revealed that such deprivation leads to a systematic exacerbation of the pre-existing challenges faced by the African American women. The study further added that the African American women, who consistently encounter violence, has a very limited access to health care, increased burden of household responsibilities during natural calamities or disastrous events significantly affect the well-being of women regardless of their ethnicity and socio-cultural background. *"This is not the case only in United States, but can be observed globally"*, further added by the study.

According to a study by UN Women (2017), women are often disproportionately affected by natural disasters due to their limited access to resources, social and cultural restrictions, and gender-based violence. The results of the study concluded that the women are placed at higher risk of sexual and gender-based violence, food insecurity, lack of basic services like shelter and healthcare and access to WASH services as a result of disasters or natural calamities.

Saleem et al. conducted a study in 2015 to examine the challenges faced by women in rural areas of Pakistan during and post natural calamities and disasters. The results of the study concluded that women in the rural areas of Pakistan are usually ignored in the post disaster relief activities and are isolated from support networks which curtail their access to

resources, resulting in difficulties to recover from the disasters. The hurdles in reaching out to support networks and resources further worsen their socio-economic challenges including poverty, illiteracy and exclusion from economic activities.

The same nature of study was conducted by Akhtar et al., in 2017. The results of the study point out an increase in vulnerability of women living in urban slums of Pakistan, as a result of natural disasters and calamities. The study also found that the women living in the urban slums of Pakistan are more likely to experience internal displacement, loss of livelihoods, exclusion from economic activities, lack to basic life services, gender-based violence and an increased food security in post disasters. The study suggested that special consideration should be given to women while designing the relief and recovery activities after natural disasters. *"Special attention should be given to the needs of women and women should be consulted for their needs before commencing any relief activities in the disaster hit vicinities"*, further added by the study.

The core reason for the severity and intensity of natural disasters in Pakistan is Climate change. In 2016 alone, approximately 24.2 million displacements were documented (Cerna-Turoff et al., 2019). When disasters occur, the breakdown of families and community structures increases the risk of violence, particularly targeting women and young girls (Kolbe et al., 2010). The vulnerability of women is central to understanding the various inequalities they face. Limited access to resources, information, education, and preparedness campaigns places women at a higher risk compared to men in similar circumstances. Additionally, the subordinate role of women in Pakistani society further exacerbates their vulnerability. Moreover, women's primary responsibilities as caregivers for the injured, ill, elderly, and children intensify their workload, leading to emotional stress (Dasgupta et al., 2010).

Moreover, Climate change holds a profound sociological dimension (Myers, 1996).

According to the World Health Organization (WHO, 2015), women face heightened vulnerability and an increased risk of sexual and domestic violence during any form of disaster, be it natural or otherwise. This dire situation has severe repercussions on their reproductive and sexual health. In times of disaster or its aftermath, women, who already endure high levels of abuse and subjugation, become further victimized by physical and emotional violence within their households and in relief-settlement camps (Rahman, 2013). It is crucial to recognize that the impacts of climate change do not affect genders or socioeconomic statuses equally. Recent research indicates that the adverse consequences of climate change differ in their effects on men and women, just as they do between the wealthy and the poor. Evidence demonstrates that women, due to their gender, encounter greater inequalities in any climate-stressed scenario (Rahman, 2013). During disasters, the breakdown of familial and societal structures heightens the risks of violence against women and young girls, especially (Kolbe et al., 2010). The notion of women's vulnerability lies at the core of all the disparities they face.

Cerna-Turoff et al. (2019) provided an explanation of violence against women, specifically referring to physical and sexual violence. However, emotional or psychological violence is often overlooked and inadequately documented (Sriskandarajah et al., 2015). Nonetheless, researchers agree that emotional violence has long-lasting effects similar to other forms of violence and can cause significant trauma (Madkour et al., 2011).

Given their role in caregiving, women bear the physical and mental burden of meeting the needs of others in climate-stressed situations. Tasks such as obtaining drinking water, cooking meals, and waste disposal become their top priorities, often leading girls to leave school to assist their mothers. This situation can be characterized as psychological violence (Rahman, 2013). Domestic and partner violence during times of stress can lead to family breakdown, and the loss of a child or loved one further intensifies psychological distress,

negatively impacting the mental well-being of the victim (McLeod et al., 2018). A study conducted by Molyneaux et al. (2019) highlighted that high levels of post-disaster stress within a family contribute to an increase in violence against women. The study, conducted in Australia, revealed that such violence is also associated with changes in income status. In countries like Pakistan, Bangladesh, or India, women's mobility is severely restricted. Gender norms prevent women from leaving their homes during times of need to seek refuge in shelter homes or access other rescue facilities, as they fear being blamed for disobeying their husbands, fathers, brothers, or even sons. Their inability to ensure their own safety and their lack of knowledge regarding self-protection methods further heighten their vulnerability, exposing them to both domestic and community-based violence. Women often avoid using public toilets due to shame or the stigma associated with being seen by men without proper attire or while being wet, which further limits their access to essential community facilities and hampers their quality of life (Rashid & Michaud, 2000). Women's limited access to resources, information, education, and preparedness campaigns renders them more susceptible compared to men in similar contexts. Furthermore, the subordinate role of women in Pakistani society amplifies their vulnerability. Koziol-McLain et al., in their study conducted in 2011 found that the women who are working as healthcare givers for the injured, elderly people, infants and ill people faces additional workload as a result of natural disasters, which ultimately leads to emotional stress in the female healthcare workers.

Cited by majority of the literature available on Impacts of Climate Change on women in Pakistan, that in Pakistan women faces significant impacts of natural disasters as a result of climate changes on their physical health, mental health, education, livelihood, social inclusion, resources availability and access to basic life services. Women are more prone to the impact of these disasters due to their cultural roles, social taboos, customs and cultural

expectations. The available literature also suggests that special attention should be given to the needs of the women, their needs related to WASH, their needs in reproductive health and mental health in the designing phase of activities, way before implementation.

Natural disasters and floods have a substantial influence on the lives and livelihoods of people in Pakistan, with the women being particularly vulnerable amongst all elements of the society. Over the past few years, an increase has been observed by the researchers to assess the impacts of natural disasters as a result of climate change on women in Pakistan. A sufficient amount of research was reviewed to understand the potential research areas in evaluating the impacts of natural disasters on women in Pakistan. During the literature review it was found that though some of the literature covered the economic aspects, educational aspects, health aspects but when it comes to child and mother health, reproductive health and mental health of women living in disaster hit areas, very less attention was given.

The study conducted by Gani et al., in 2019 to assess the impacts of natural disasters and floods on women in Pakistan. The findings of the study showed that the women in Pakistan are potentially at larger risk of increased exposure to waterborne diseases, vector borne diseases, lack of access to mental health care, lack of access to reproductive health and inadequate mother and child health care. The study further added that a significant increase has been observed in gender-based violence and domestic violence in the flood affected areas. The increase in domestic violence and gender-based violence was seconded by a study conducted by Aslam and Bano in 2013. The results of their study showed that the domestic violence rate has significantly increased in the 2010 flood affected areas of Pakistan.

“The women in flood affected areas of Pakistan have been reporting physical abuse, sexual abuse and mental abuse”, further added by the study.

The natural disasters resulting from climate change also adversely affect women's education in Pakistan. Gani et al., reported in their study conducted in 2019 that access to education during and after floods in Pakistan has been significantly reduced for women. As a result of natural disasters and calamities, a huge dropout from school has been observed in girls to take on additional household responsibilities. The dropout of girls from schools has both short-run and long-run impacts on society and also curtail the number of employment opportunities for females in the future (Aslam & Bano, 2013).

Natural disasters and floods can have a substantial impact on women's pecuniary standing in Pakistan. Women are often the primary caregivers in households, and the loss of livelihoods can have a significant impact on their ability to provide food and assistance for their families (Gani et al., 2019). Women are also more likely to be employed in the informal sector, which can be particularly vulnerable to the economic impacts of disasters (Aslam & Bano, 2013). In addition, women may face challenges accessing relief and recovery resources due to social and cultural norms that limit their mobility and access to resources (Iqbal et al., 2016).

Conclusion/ Brief Summary

This literature review provides an in-depth analysis of the long-term effects of natural and climate disasters on women, particularly those living in rural and remote parts of Pakistan. The review highlights a range of issues that women face, such as a lack of policies designed to meet their needs, an inability to identify their needs, a lack of design for rescue programs, an increase in gender-based violence, and a lack of access to basic services. Furthermore, the review reveals a lack of attention to the mental health of women in the aftermath of disasters, which is not addressed by local authorities or development organizations. The review concludes that it is essential for relief activities to encompass the entire spectrum of society in order to promote psychological, economic, and social

resilience.

Based on these findings in the literature review, Chapter Three of the research addresses underlying research questions and additional/ supplementary questions. This research challenge specifically explores the impact of 2022 floods on a woman in Sindh, Pakistan, with the aim of revealing women's specific challenges and vulnerabilities. In addition, this chapter explores sub-questions dealing with the coping mechanisms employed by women in response to these disasters. In addition, this chapter provides a detailed overview of the research methods used in the study and details the methods used for data collection and analysis. This methodology reveals the complex dynamics that shape women's experiences in the midst of natural disasters and climate change, ultimately contributing to a holistic understanding of women's needs and fostering resilience.

Chapter 3

Introduction

This research project attempted to thoroughly investigate the experiences of individuals and families who are internally displaced in Sindh Province, due to the 2022 floods in Pakistan. The research was conducted mostly by collecting data in a friendly environment, by getting into the shoes of the affected population. Hours-long discussions were conducted with the affected communities in their temporary residence i.e., shelter camps arranged by different NGOs and INGOs and focused group discussions with the communities. The secondary data obtained from different resources were also analyzed to assess the effects of climate change on women of Sindh Province. This research project was not only limited to assessing the impacts of internal displacement but also attempted to assess the effects of damaged infrastructure, loss of assets, and loss of cattle on the mental health of marginalized communities like women.

3.1 Research Question

What are the impacts of floods 2022 due to climate change on the social and psychological life of displaced women in Sindh?

3.2 Supplementary Question

How the females of rural Sindh, especially those from flood-affected areas have been affected by the 2022 floods?

Or in detail it can be

The 2022 floods in Pakistan's Sindh province resulted in the displacement of thousands of internally displaced people. How do the personal testimonies and first-hand experiences of these families shed light on the social and emotional repercussions of this disaster, with a

particular focus on the physical experiences of women affected by the floods?

3.3 Research Methodology

In conducting research, the methodology is a crucial component that lays the foundation for the study. In this particular case, the proposed exploratory research utilized a qualitative research method, which involved direct observations, focused group discussions, and in-depth interviews to gather data. The data was constructed through detailed interviews and FGDs with 100 members of the internally displaced community in Sindh, Pakistan. These individuals include individual males and females, groups of males and females, and children, who were significantly affected by the floods that occurred in 2022. Several Interviews were conducted in shelter/ relief camps/ tents in Gaghar village of Karachi, Kemaari, Hub Chowki Karachi near Liari express and in rented homes by displaced families in Karachi main city near Johar town.

Preliminary field visits were conducted in Larkana tent city, and different government schools, where displaced community was settled by the Sindh government. Various castes and displaced communities/ families were adjusted in every relief camp/ shelter home city. Interviews and focused group discussions were not conducted with any particular cast/ community/ families or families of a particular district. The major criteria for the selection of participant were 'displaced family/ individual'.

In addition to primary data, the study will also incorporate secondary data from various sources such as books, articles, journals, and social media platforms to gain a conceptual understanding of the destruction caused by climate change. This research project is aimed to jolt down the experiences of the affected communities in Sindh, highlighting the impacts of the floods and climate change on their lives.

This research project acknowledges that disasters often have a significant impact on marginalized groups, particularly on women, in Pakistan especially in far flung and remote

areas of the country. Therefore, the study will pay close attention to the experiences of all community members, including women and children, in understanding the impacts of the floods and climate change. Overall, the proposed research will provide valuable insights into the lived experiences of those affected by the floods and contribute to the broader understanding of the impacts of climate change on vulnerable communities in Pakistan.

i) Data Collection and Analysis

There were no predetermined or prearranged inquiries; instead, all questions directly pertained to the research question stated earlier. The research involved gathering qualitative data through interviews. Prior consent was acquired from participants to utilize the data for scholarly publications. The interviews were conducted in Sindhi and subsequently transcribed into English to enhance comprehensibility. The data underwent meticulous analysis, enabling the identification of themes that effectively addressed the research questions.

ii) Participants

The study employed purposive sampling to select participants. Specifically, women who had resided in the settlement camps for a minimum of two months were chosen. This selection criterion aimed to include women who possessed a greater awareness of camp living and were more inclined to openly share their experiences compared to recently arrived women. The researcher, who was fluent in the Sindhi language and hailed from one of the selected districts, established a deeper level of communication with the female participants. Prior to commencing formal interviews, the women were assured of their anonymity, and a detailed explanation of the research purpose was provided. Every effort was made to create a trustworthy and secure environment for the women involved, which necessitated conducting individual interviews due to the sensitive nature of the research topic.

iii) Limitation of study

The study encountered several limitations. One notable challenge during the data collection phase was the hesitancy of women to engage in the study due to concerns about potential identity exposure. However, through counseling and assurance of maintaining their anonymity, as well as refraining from audio recording, respondents eventually agreed to participate in in-depth interviews. The collected data was subsequently transcribed into English and subjected to coding for analysis. A significant advantage in this process was the researcher's native proficiency in the Sindhi language, which greatly facilitated the smooth flow of dialogue.

iv) Results and Discussion

The interviews underwent analysis, and a comprehensive thematic analysis was conducted. The analysis of the collected information in the chapter 4 (the next one) revealed the following themes regarding displaced families/ women's experiences of violence, which can be broadly categorized into five main areas:

Destructed Infrastructure and Its Impacts on Families: This theme explores the sense of insecurity experienced by families due to the destruction of infrastructure, highlighting the adverse effects on their overall well-being.

The impact of destructed Infrastructure as a result of 2022 floods on the families residing in Sindh Province.

The Physical and Psychological impact of the internal displacement on women residing in flood affected areas. This theme also covers the gender-based violence, sexual abuse, mental abuse and physical abuse the women residing in the flood affected areas are facing.

Suicide and Abuse: This thematic area assessed the alarming situation of suicides and abuse in the community in post floods era. The women are usually target of suicides and abuse in the flood affected areas.

Destruction and Its Impacts on Intimate Relations of Families: This theme investigated the

effects of destruction on intimate relationships within families, exploring the stress it puts on marriages, partnerships, and familial bonds.

Destruction and Loss of Dowry: This theme examined the loss of dowry and other possessions as a result of destruction brought by the 2022 floods, highlighting the economic hardships faced by women and the broader societal implications.

Destruction and Its Impacts on Education: This theme focused on the consequences of destruction on education, particularly for women and girls, indicating the barriers they face in accessing education and the long-term implications on their empowerment and future opportunities.

Chapter 4:

Introduction

Exploring violent experiences of families and displaced women in post-flood situations following the floods of 2022, a comprehensive analysis of the data collected has revealed important insights into the challenges faced by displaced families and women. These insights have combined into five distinct themes, each providing insight into the complex interplay between destructive forces and the lives of those affected. This chapter delves into these topics, highlighting the multifaceted impact of damaged infrastructure, domestic displacement, gender-based violence, and the erosion of vital social pillars, as well as profound consequences for education and empowerment. The first theme, "Destroyed Infrastructure and Its Impact on Families," examines the impact of destroyed infrastructure on the overall well-being of families. The widespread sense of insecurity caused by destruction of the central infrastructure disrupts the structure of daily life and highlights the need for comprehensive support mechanisms. Going forward, the poll will delve deeper into the consequences of internal displacement caused by the 2022 floods, especially for women living in flood-affected areas. This topic delves into the physical and psychological toll of displacement, delves into the painful context of gender-based violence, sexual abuse, and the mental and physical torture experienced by women living in poverty. These areas face the alarming increase in suicides and abuses after the flood is covered in the topic "Suicide and Abuse". Particularly worrisome is the disproportionate impact on women, who often find themselves the target of such heartbreaking outcomes, painting a stark portrait of the challenges faced by underserved communities affected by floods. The theme "Destruction and its Impact on Intimate Relationships" delves into the stresses caused to close family relationships due to widespread devastation. Marriages, partnerships, and family relationships are under terrible strain, showing how natural

disasters can strain the fabric of these essential relationships. The profound economic hardships faced by women due to the loss of their dowry and property are intertwined with the theme of destruction, as explored in “Dowry Destruction and Loss”. The profound implications of this loss reverberate throughout society, highlighting the systemic vulnerabilities created by such events. Finally, the theme “Destruction and its impact on education” reveals the profound consequences of devastation on education, especially for women and girls. Obstacles to education access become apparent and the long-term implications for empowerment and future opportunities are discussed in the context of these challenges. This chapter therefore serves to explore the multifaceted impact of destructive forces on the lives of families and women displaced by the 2022 floods. Through these themes, an understanding a deeper insight into the challenges facing these communities emerges, inviting reflection on the urgent need for tailored interventions and comprehensive support systems.

4.1 Analysis of the Impacts

i Destroyed Infrastructure

In the last two decades, Pakistan has been in hot water due to man-made natural disasters and calamities which are mostly due to uncontrolled deforestation, emission of greenhouse gases, uncontrolled urbanization, increasing population density in urban areas, poor drainage and sanitation infrastructure, and lack of policy implementation. These calamities and disasters have put the already weak infrastructure on the verge of destruction. This research project was aimed while keeping in mind the identification of adverse impacts of these natural disasters especially on the deprived element of the community i.e. women in far-flung and remote areas of Sindh Province, Pakistan. This research paper is also expected to assess the social and economic impacts of the 2022 floods on the target community.

The already torn infrastructure of Pakistan, which was badly affected by the recent floods

of 2022 has significant impacts including both social and economic impacts. Most of the population depend upon this infrastructure to carry out daily routine activities and could manage bread and butter for their families. The economic impacts of 2022 were observed across all the regions which were hit by the recent floods. As a result, the well-being and livelihood of the residents was badly affected. Looney, R. findings in 2012 revealed that the 2010 flood not only placed significant impacts on the mental health of the population living in the flood-affected areas but also made it difficult for the residents of the flood-affected areas to access basic life facilities like health, clean drinking water, and sanitation. Furthermore, the floods also deprived the residents of the flood-affected areas economically, by restricting their access to markets, roads, hospitals, and job places and made it hard for them to conduct their daily life activities in a natural way. The people also suffered from food scarcity, as a huge gap was observed in the supply and demand of food items, as stated by Asian Development Bank in their 2016 report.

In addition, the economic activities related to infrastructure like roads, bridges, and buildings are not the only infrastructure affected by natural disasters. The school-going children and lactating mothers were also badly affected by the 2022 floods in Pakistan. Schools and Hospitals were badly affected due to floods, which deprived the residents of flood-affected areas from essential life services like health and education. The nutrition centers were also affected which not only affected the lactating mothers but also affected the neonatal health and nutrition. Hall, Holmes, and Somers found in their study conducted in 1994, that natural disasters like floods, earthquakes, hailstorm, and snow storm not only affect basic infrastructure like road and bridges but also leads to curtailing essential life services like health and education. As per the report of Pakistan Relief Web published in 2006, the 2005 earthquake affected around 8000 schools around the country which resulted in leaving hundreds and thousands of children out of school for a significant period of time.

The destruction of healthcare facilities was mentioned by Kirsch et al. in their study conducted in 2012, stating that 1600 health facilities were damaged in Pakistan as a result of the 2010 floods, which ultimately led to disruptions in healthcare services of over 6 million people.

The destruction of infrastructure in Pakistan can also have significant psycho-social impacts on the population, including anxiety, depression, and post-traumatic stress disorder (PTSD). Disasters can be highly traumatic, and the loss of infrastructure can exacerbate the emotional toll (Makwana, 2019). Research on the 2005 earthquake in Pakistan, for example, found that survivors experienced high levels of anxiety, depression, and PTSD, which were related to the loss of homes, infrastructure, and loved ones (Hashmi et al., 2011).

The existing literature extensively addresses the impacts faced by the suffering community, but there exists a significant gap in the narrative. The available literature fails to capture the firsthand accounts and personal experiences of the affected population, leaving a void in understanding their perspective and the true depth of their struggles.

During the 2022 floods, I met different families and especially women, and interviewed them to record their case studies. Residential areas outside the city center appeared to be in ruins. From Larkana to Karachi, the boundaries of different districts were submerged, causing immense distress for residents who lost their homes and possessions. Through interviews and focus group discussions, it became clear that these individuals were deeply affected by the destruction of their homes. Almost every fourth person with a heavy heart shared their struggles and unhappiness since being displaced and losing the protection of four walls.

“We are grateful to be safe with our families, thanks to Allah and support and protection providers. However, we also feel insecure and unsettled. In our village, we never had to

worry before leaving home to earn”.

Before the 2022 floods, people in rural parts of Sindh were living in communities based on the caste system. Now as hundreds and thousands of people are displaced and forced to live in temporary shelters, it is hard for them to know who their neighbor is and what kind of past they had. Now there is insecurity across the relief camps. Only very few families are lucky to have their relatives or past neighbors in their neighborhood. For the said reason, most of the men are not leaving their tents and to searching for temporary jobs, as they cannot leave their families in a bunch of people who are unknown to them.

“Our family was protected within the safety of our home and surrounded by familiar neighbors of the same caste. Here we are surrounded by people from different areas and we are unable to leave our tent to earn because do not know who is living in the tent next to us. We are unable to sleep peacefully at night because we are not alone here, our females are also with us”

Another 30-year-old lady bravely shared her story of suffering and survival. She said;

“Floods that swept through our humble village, Khairpur Nathan Shah in rural Sindh, leaving behind a trail of destruction that has changed our lives. Being a woman, I witnessed the direct impacts of the recent floods on our community”.

The infrastructure in interior or rural Sindh is already very thin and fragile which was massively destructed by the recent floods. During a visit to temporary relief camps, a woman explained that the floods have pushed us deeper into poverty. The floods not only destroyed our homes, but also deprived us of basic health infrastructure, deprived our children from schools and deprived our men from their jobs. The 2022 floods have brought us nothing, but destruction. This is not just my story, this is the story of every family in the flood affected areas of Sindh, she further added.

“The already weak infrastructure which was not able to stand against any kind of natural

disaster was shredded into pieces, pushing us to more deprivation and curtailing our access to basic life services like health and education. All of the healthcare facilities and schools in our vicinity were washed away by the floods. The damage caused to the roads and bridges made it hard for our men to reach their jobs and hence they were on the verge to lose their jobs".

, Among the many families affected a 25-year-old pregnant woman with two young daughters, faced the frightening encounters brought upon them by the 2022 floods. Their village near district Dadu was drowned in the flood water due to poor policies and drainage and sanitation system in the village, forcing them to internally displace into other parts of the province. They were forced to leave behind their possessions, cattle and other worthy items. The once vivacious locality became a water-logged area with scratched infrastructure, including broken roads, partially or fully damaged bridges, destroyed houses, and the loss of basic necessities like electricity and clean drinkable water. In the face of this catastrophe, the lady and her family grappled with feelings of sadness, fear, and vulnerability. The loss of their home and witnessing the destruction around them left them feeling weak and exposed. They were compelled to seek refuge in a temporary shelter within a crowded camp, where privacy was limited, and the sanitary conditions and healthcare services were inadequate. Lady's worries intensified as she considered the safety of her daughters and the impending arrival of her new baby. The constant fear of illness and the lack of proper resources further heightened her concerns, making this period incredibly difficult and sorrowful for the entire family.

"The floodwaters came rushing into our village, engulfing everything in their path. Our once lively and bustling neighborhood has now turned into a watery wasteland. The homes that provided shelter and warmth are now shattered, and the roads we used to walk on are broken and impassable. Electricity is gone, and the clean water we took for granted is no longer available. It feels like our whole world has crumbled before our eyes".

In Kemari Tent City, I met a woman who was mother to two daughters. Additionally, she

was carrying another child in her womb. The floods washed away her house, leaving her behind in insecurity, vulnerability and lack of basic life needs. The destruction of her house not only deprived her of the shelter and was the reason for financial loss, but also resulted in mental trauma which will last for several coming years. She expressed her feelings in the following words;

“As a woman, I feel the weight of this disaster more heavily. Being pregnant, my concerns are amplified, and I worry about the safety of my daughters. How will I protect them in the midst of this chaos? The destruction of our home has stripped away our sense of security, leaving us vulnerable and exposed”.

Though the relief camps have been providing shelter to the displaced families but it lack basic necessities like clean water, drinkable water, medical care, education and other basic necessities of life. It was also evident from their health and outlook that these families have been really worried and the floods have not only damaged the infrastructure and their house but has also affected their mental health to a greater extent. The phrase that “Woman take more of the load” was observed practically in the relief camps. The women were trying their best to hold on to their duties, but couldn’t give 100 percent due to the psychological impacts of the floods. During a focus group discussion, a group of woman shared that;

We have sought refuge in a temporary shelter within a crowded camp. But it is far from an ideal place to live. Privacy is a luxury we can no longer afford. The bathrooms are inadequate, and the healthcare services are insufficient. I constantly fear that my children will fall ill in these unsanitary conditions, and the thought fills me with anxiety.

In this shattered reality, it feels like women bear a heavier burden”.

In our society, women are considered as more sensitive as compared to men, as women are the guardian of the houses. That’s the reason that the 2022 floods effects can be well

observed in women as compared to men in Sindh Province of Pakistan. A pregnant woman who was affected by the floods, shared her experience with us in the following words,

“Our roles as caretakers become even more demanding in times of crisis. The weight of ensuring the well-being of my children and the unborn baby I carry feels overwhelming”. After years of hard work, my husband and I finally achieved the dream of having our own “home. It may not have been as solid and luxurious as the houses in the cities, but it was our little sanctuary, and it brought us immense happiness. We had worked tirelessly to build a place we could call our own, a place where we could raise our family and find solace”.

The 2022 floods have been the reason for devastating damages across rural parts of the Sindh not only affecting the infrastructure and lifestyle of the residents but has also affected their future planning. Their homes and shelters were heavily flooded and dumped into heavy water. A lady shared that she and her husband worked for ages, saved almost every single penny to build a house for themselves, and when the house was built, it was completely damaged by 2022 floods. She further added that it was not just a house for us, it was our dream and our future which has been washed away by the heavy floods. Now they are residing in a temporary shelter arranged by an NGO which lack basic facilities like security and belongings which once they used to have in their newly built house. The narrator kept weeping of the loss they have encountered as a result of the 2022 floods.

It was disclosed to me during focus group discussions that the destruction of homes and shelters has been the reason for unnecessary worry for most of the internally displaced families. A woman, mother to a young daughter expressed her pain in such words

“I was busy finding a good and suitable proposal for my daughter, but the floods have drastically changed everything. Now we don't even have shade or shelter, how I can get my daughter married”. Dwelling deeper into the discussion she further added that being a

mother, she was burdened with worry about the future of her young daughter. According to her, her daughter deserved a happy and secure life, but how would she be able to provide that to her in that unfamiliar and uncertain environment?

"We were within the four walls of our own home. These floods badly destroyed my home. Who will bring a marriage proposal and marry her in this relief camp? The prospects seem bleak, and my heart aches at the thought of her future being compromised", she further added.

When I raised the question of rebuilding homes or shelters upon their return to villages and towns, a woman expressed a sense of hopelessness and said that the poverty added to the weight of their consistent struggle. They lack the resources and means to rebuild their homes and start anew.

"The financial burden seems insurmountable, and the road ahead feels daunting and filled with obstacles. The nights have become sleepless, filled with anxiety and uncertainty. The worry has taken away my appetite, and I find myself physically and emotionally drained" she told me in sad face.

During my conversation with a woman affected by the floods, she shared her personal experience and the profound impact it had on her sense of self and privacy, and insecurity. With a tone of sadness, she expressed that she had never known the life outside the confines of her home. She was always a shy woman, and no man outside her immediate family had ever seen her face. But now, in the aftermath of the floods, everything changed. They are living in cramped temporary shelters, surrounded by strangers. There is no privacy anymore.

Another woman responded immediately after her, she said that they were safe in their own homes '*Chadar and char deewari*'. She told that in their village, they had their own space, their own homes where they felt safe and protected. But now, they are forced to live in

close proximity to others. The walls that once shielded them from prying eyes were gone forever and replaced by flimsy tents that offer no real sense of security. In her words, *"It's overwhelming to constantly be surrounded by people, to have so little personal space. I find myself feeling exposed and vulnerable. The thought that anyone can see me, even unintentionally, makes me feel as if I have become shameless. It's a stark contrast to the life I once knew."*

I inquired about women's experiences in the relief camps in Karachi, the metropolitan city with a lot of economic activities, and whether they found it better or if they were happier in their villages with joint families and kinship relations.

A woman responded that she misses the simplicity and modesty of her old way of life in the village. She feels like a part of her identity has been stripped away. The 2022 floods did not only destroy her home but also shattered her peaceful village life.

"Floods have separated me from my loving relations", She said

Another woman shared that she is longing for the day when she would be able to rebuild her homes in the village and regain her sense of privacy. She hoped to return to a life where I could feel safe and secure within the walls of her own home and would rejoin with her blood relations, where she could regain the modesty and dignity she once possessed.

Her words reflected the deep impact of the floods on her personal and cultural identity. The loss of privacy, a sense of shamelessness, and the forced exposure to unfamiliar surroundings have left her feeling disoriented and vulnerable. Rebuilding homes and restoring a sense of privacy and blood relations is not only about physical structures but also about restoring a sense of dignity, modesty, and familiarity to the lives of those affected by the floods.

These case studies presented a descriptive analysis of the firsthand experiences of individuals and families affected by the devastating floods in Karachi in 2022. These

narratives reveal common themes, including feelings of insecurity, the loss of familiar surroundings, vulnerability, and the ongoing struggle to regain stability and dignity.

Women expressed gratitude for their safety and being with their families, but at the same time, they express a sense of unease and insecurity in their new environment. The presence of unfamiliar people and the inability to engage in earning activities due to fear and lack of trust disrupt their daily lives, causing anxiety.

The accounts vividly depict the widespread devastation caused by the floods, which resulted in the destruction of infrastructure and left the affected communities in a state of suffering and despair. Basic amenities were absent, and the loss of livelihoods further intensified their vulnerability. Women faced various challenges, including damaged infrastructure, insufficient sanitary conditions, and limited access to healthcare services in temporary shelters. Their concerns for the safety of their families, especially unborn children, deepened their sense of fear and vulnerability.

The loss of homes and the subsequent living conditions in the relief camps shattered their sense of stability and security. The financial burden of rebuilding their lives added to their struggles, and worries about their children's future prospects weighed heavily on their minds.

Additionally, women shared their experiences of living in close proximity to strangers in temporary shelters, where privacy was virtually non-existent. This lack of privacy caused a sense of shame and longing for the modesty and familiarity of their previous way of life.

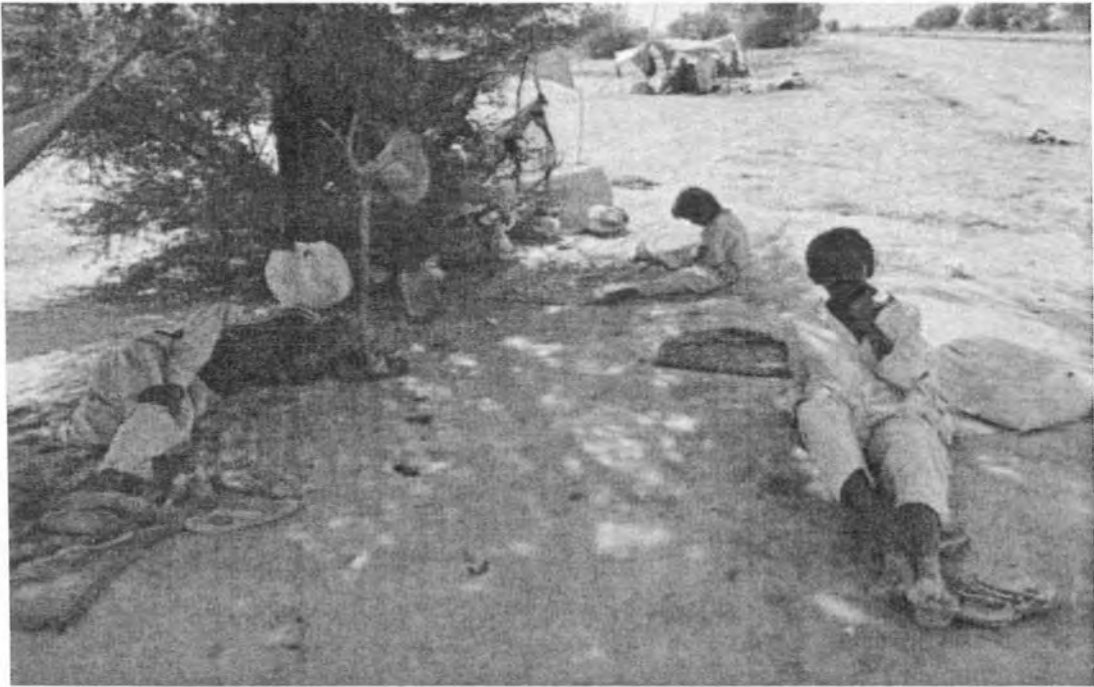
Collectively, these narratives paint a poignant picture of individuals and families grappling with the aftermath of the floods. They face a multitude of challenges, including the loss of homes, infrastructure, livelihoods, privacy, and a sense of cultural identity. While rebuilding physical structures is vital, it is equally important to address the emotional and psychological impact of the disaster. Restoring a sense of security, dignity, and normalcy

in the lives of those affected becomes a crucial endeavor.

The study provides an in-depth analysis of the devastating effects of natural disasters in the Sindh region of Pakistan, particularly the 2022 floods. It examines the negative effects of these disasters on vulnerable individuals, particularly women, and the economic, social, and psychological repercussions of such events. As the 2022 floods demonstrate, the destruction of infrastructure can lead to an increased emotional burden for those affected. Additionally, the study highlights the vulnerability of women, as they are more likely to be caregivers in the event of a disaster. Ultimately, this study emphasizes the multiple ways in which natural disasters can have a detrimental effect on the mental health of the local communities, particularly those of vulnerable groups. It also provides a human perspective of the difficulties and struggles individuals and families face after devastating disasters.

In nutshell, this chapter summarize the deep analysis of the violent behavior experienced by displaced families especially females as a result of 2022 floods in Sindh, Pakistan. This chapter also provides an insight on the difficulties and challenges faced by these internally displaced families and females. Keeping under lens five different but interconnected topics including “damaged infrastructure and its impacts on displaced families, gender-based violence as a result of internal displacement, abuse and suicide, internal displacement and its impacts on intimate relationship between couples, loss of dowry and its impacts and natural calamities and its effects on education system” reveals the complex nature of relationship between natural calamities and its impact on the life of the displaced people especially women impacted by the 2022 floods.





The pictures show how destruction affects the community.



The picture clearly shows how destruction of their homes due to 2022 floods affected them.

Impact of the displacement and emotional and physical health of women

Natural disasters and floods have devastating effects on families in Sindh Pakistan. In addition to the immediate impact of the loss of life, and destruction of property and infrastructure, these events also leave survivors vulnerable to a range of health hazards, including waterborne, vector-borne diseases and emotional health issues. This literature review aims to provide an overview of the research on the impacts of disease on the families and especially women during and after floods and natural disasters in Pakistan.

Waterborne diseases are a significant health hazard during and after floods in Pakistan, as they contaminate the water supply and affect large numbers of people. A study by (Baqir et al., 2012) found that during the 2010 floods in Pakistan, the incidence of waterborne diseases such as diarrhea, cholera, and hepatitis A increased significantly. The study also found that poor sanitation and hygiene practices among the affected population contributed

to the spread of disease.

Furthermore, vector-borne diseases are also a significant health hazard during and after floods in Pakistan, as they are spread by mosquitoes and other insects that breed in stagnant water. A study by (Arshad et al., n.d.) found that during the 2010 floods in Pakistan, the incidence of vector-borne diseases such as dengue fever and malaria increased significantly. The study also found that the destruction of infrastructure and displacement of the population contributed to the spread of disease.

Moreover, in addition to physical health impacts, the psychological impacts of disease during and after floods and natural disasters in Pakistan can be significant. A study by (Yousuf et al., 2023) found that survivors of the 2010 floods in Pakistan experienced high levels of anxiety and depression, which were related to the loss of homes, infrastructure, and loved ones. The study also found that the fear of contracting waterborne and vector-borne diseases contribute

In 2022, floods had a direct or indirect impact on approximately 33 million people from 116 districts in Pakistan. Recent statistics indicate that this catastrophic event resulted in the death of 1,717 individuals and left 12,867 injured. The devastation caused by the floods, including displacement, loss of lives, property, and land, created a multitude of stressors for the flood victims. These stressors, in turn, gave rise to various mental health concerns among the affected population.

A thorough study was conducted in 2022 to put under the lens the impacts of climatic changes induced by natural disasters on the mental health of people living in hilly areas of Pakistan. The report highlights that individual in the affected areas, as well as those residing nearby, have exhibited signs of depression, insomnia, and difficulties in processing their traumatic experiences. Disturbingly, between 2006 and 2017, there were 203 reported suicides in the Ghizer District of Gilgit-Baltistan, which is believed to be

connected to the destruction, suffering, and feelings of helplessness resulting from the floods and their aftermath. Unfortunately, the collection of data and reporting on suicides in that area have been discontinued due to cultural constraints and the stigma surrounding mental health issues (Yousuf et al., 2023).

The current body of literature extensively focuses on the quantification of people affected by diseases resulting from floods and natural disruptions. However, there is a substantial gap in addressing the subjective experiences of those affected and the psychological trauma they endure. Furthermore, the existing literature overlooks the specific mental challenges faced by pregnant women and women during their menstrual cycles. As a result, there is a lack of firsthand narratives and personal accounts from the affected population, leaving a void in comprehending their perspectives and the profound extent of their hardships.

During my field visit and observations, I noticed that about 2 in 3 individuals were experiencing fever, mostly Malaria. The area lacked proper hygiene and personal hygiene practices. Stagnant contaminated water led to the spread of illnesses such as Malaria, diarrhea, and skin diseases. The frequent health problems and lack of access to free or affordable medicine caused distress among the population.

Moreover, despite numerous studies and research focused on women, little attention has been given to their psychosocial well-being during and after natural disasters, such as floods. During my observation of women in Sindh, I saw that they were, both emotionally and physically devastated. Women appeared to be more vulnerable than men, often feeling dishonored because of being exposed to numerous men in relief camps. They were silently disturbed due to the lack of privacy, lack of washrooms, and menstrual and hygiene supplies. The loss of their homes, dowries, and livestock added to their trauma. I approached a woman and asked about how she maintained hygiene during her menstrual cycle without access to pads. I also asked where she washed in the absence of washroom

facilities. She pointed her finger towards the roadside opposite her tent and responded that when she was on her period, she had to clean herself with the water available there, as she only had the clothes she was wearing. In Karachi, I spoke with a woman whose mother was widowed and lost everything in the flood. She told that she can't do anything for her mother,

"My mother is suffering and there is no one to care for her. She used to work as a maid in the village, but now she has lost everything and there is no male family member to support her. As a married woman, I am unable to provide her home with me as my in-laws are uncooperative", she requested.

I encountered a woman in a public-school camp in Karachi and attempted to engage in conversation with her. Despite my efforts, she remained silent and kept her gaze fixed downward. I inquired about her children, yet she did not respond. I noticed that her eyes welled up with tears several times, but she was unable to release them. I stayed with her for a while hoping that she would open up and express the pain she was feeling, but I could not comprehend the depth of her emotions.

I saw many women and newborn children suffering. There were no separate washrooms for women, no sanitary pads, or any extra cloth to use during menstruation because the poor people have lost everything. They did not have extra suits; they were taking showers with that one on their bodies. A woman said, there isn't a washroom facility for them, they wait for the evening and after sunset, and they pass urine. Because they did not have extra cloth or pads during menstruation, they pour water from the tap along with the clothes to clean the discharged blood. I observed women were leading a life like hell in the shelter camps! Where the common man cannot stop for five minutes to pass out urine, women used to wait for the whole day.

I saw woman in a relief camp, I went over and tried to talk. A few of them could not even

say a word because of the mental trauma they just kept their eyes down. I asked a woman about her children, she did not respond. I saw tears in her eyes several times but she could not let tears out of her eyes. I sat with her for some time to listen to a single word from her, but unfortunately, I failed and so I could not understand her internal feeling and pain.

Why do you not go to the hospital or any medical camp providing free medicines? I asked different people.

"We visited the hospital but they only gave us prescriptions and told us to purchase the medicine elsewhere. We don't have the money to buy it. In medical camps, there's not enough medicine to avail, and the number of sick people is more than the available number of medicines. We can't bear to see our kids suffer like this. We have lost our homes, are homeless we are battling with hunger, illness, and mental stress. The stress keeps us up at night, along with the mosquitoes", a common response by most families.

I met pregnant women, women who delivered babies in a time of displacement, and menstruating women and girls. I asked about their health, required nutrition, medicines to recover, and availability of menstrual and hygiene kits.

"I don't have menstrual pads and nor do I have any extra cloth pieces to use on these specific days", a young girl responded.

Then how do you manage these days? I asked without taking a break.

"I menstruate/ bleed in the same suit I am wearing", she responded out of shyness.

If you do not have any extra suit then how do you wash and clean blood stains from it? I asked out of surprise.

"Actually, there is the pump of freshwater opposite our relief camp, when I feel I am bleeding more heavily I go there and sit under the water pump for seconds and wash myself and the blood with the suit I am wearing" she responded back with an unwanted

slight smile and pain on her face.

Another woman shared that when she bled, she would go and sit on sand or mud so that her blood would dry on the mud and the clothes would not get too bad.

Are you getting required care in the shelter camp? I asked an almost 25 years old young woman who gave birth to a child two days back. She said;

2022 floods caused a lot of destruction, as per shared statements families and women lost everything they had. A lady shared that being in the shelter camp on the roadside to whom she would ask to take care of her. In her own words,

"She has given birth to a child that does not mean I am alone in this miserable situation; my all-family members are suffering differently. I could not request my mother to come and take care of me in this situation and why would I ask her to come here, she is safe in her village.

Are you taking supplements? I asked her because usually women are suggested to take different supplements filled with Iron and vitamins by to doctors to overcome their weakness.

You are asking me about supplements! We do not have even access to the clean drinking water!!" she responded with excitement and tears in her eyes

I talked with another woman who one and half months back delivered the baby. I asked her whether she was breastfeeding her child or was using powdered milk. She shared that she did not have enough breast feed being sick and weak because of the lack of medicine and food to eat. In The first month, they received a milk pack from a team and that was almost finished her husband requested different teams but failed to avail the milk for the baby.

Then what are you giving your baby as feed? I asked her question without taking a break.

"What should I do? I can't kill her, but when she cries, I put her on my breast. She just keeps on sucking the empty breast. Becoming a mother also became unfortunate for me in

these circumstances", She cried while responding.

I talked to another woman who two days back delivered the baby. I asked her if she had maternity pads or clothes as she must be bleeding after delivering the baby.

"I am sitting on this cart since I delivered the baby with C-Section, a nurse in the hospital gave me a few pads and I used them initially, now I do not have anything except this chaddar I am sitting on. She shared

While sitting with a few women in the relief camp in Kemari (Hub Chowki) Karachi, I asked women about their emotional well-being and most of the respondents could not understand the raised question.

"Often we cannot sleep at night, have headaches and it seems that everything is over and everything that remains will also go away". Common response I received.

A weak woman appeared, I asked her the reason for her weakness and she said either she does not menstruate or she does so much that she does not understand and the bleeding continues.

And when I wanted to know this from the doctor, I found out that most of the women have it due to trauma. When women are traumatized, their reproductive system is affected by the trauma and sometimes they don't menstruate and sometimes there is more bleeding and this abnormality in the system affects their emotional and physical health.

Based on the observations and conversations with the women in the relief camps, it is evident that they are facing significant challenges and hardships. Many women and newborn children are suffering due to the lack of basic facilities and resources. There are no separate washrooms for women, no sanitary pads, and no extra cloth for menstruation. They have lost everything and do not have extra clothes or suits. They have to shower with the same clothes they are wearing, which leads to unhygienic conditions.

Due to the absence of washroom facilities, women have to wait for the evening or after

sunset to pass urine. During menstruation, they do not have access to extra cloth or pads, so they pour water from taps and their clothes to clean the discharged blood. The living conditions for women in the shelter camps are described as hellish, with limited opportunities for basic bodily needs.

The mental trauma caused by the displacement is also evident among the women. Some of them were unable to speak due to the emotional distress they were experiencing. They displayed signs of sadness and tears in their eyes but struggled to express their feelings or pain. The lack of access to medical facilities compounds their suffering. Although they visited hospitals, they were only given prescriptions and told to purchase the medicines elsewhere, which they could not afford. Medical camps also had limited supplies of medicine, and sick people outnumbered the available resources. As a result, women and children are struggling to survive with illnesses and limited healthcare options.

When asked about assistance, the women mentioned that representatives from various government and non-government organizations visit them regularly but have not provided any aid or returned after taking their information. Pregnant women, new mothers, and menstruating women expressed their concerns about their health, nutrition, and the availability of menstrual hygiene kits. Some of them mentioned not having menstrual pads or extra cloth, and they had to bleed in the same clothes they were wearing. They shared their makeshift methods of managing menstruation, such as sitting underwater pumps or on sand or mud to avoid staining their clothes.

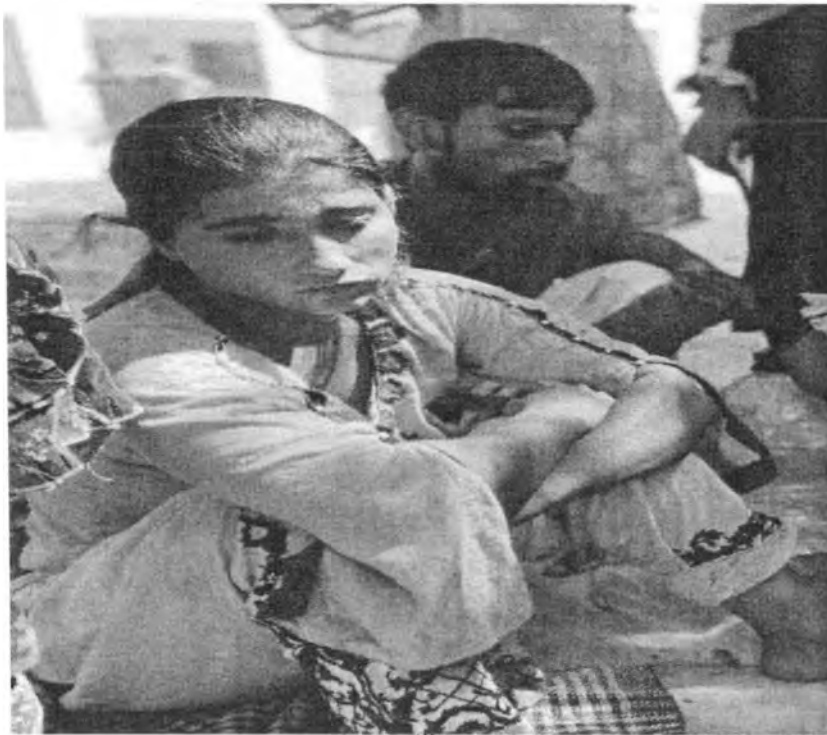
The lack of care in the shelter camps was evident, as one woman who had recently given birth expressed the difficulties she faced without any support. She mentioned the loss of everything and being unable to ask her mother to come and take care of her in the current situation. Access to supplements and clean drinking water was also a concern for her and others. The woman's response regarding breastfeeding highlighted the lack of food and

resources. She could only put her baby on her breast, even though she didn't have enough food to eat herself. The absence of maternity pads or clothes further added to the challenges she faced after delivering her baby.

Overall, the experiences shared by the women in the relief camps reflect the dire conditions they are enduring. They lack basic necessities, access to healthcare, and support systems, resulting in immense suffering and hardships for themselves and their children.



Pictures are showing disease due to 2022 floods



The picture show how women are mentally suffering and traumatized



The Picture show how women wash themselves during menstruation.





These pictures are showing how women are suffering, which has ultimate effect on their mental health.

iii) Suicide, abuse, and death

The physical health consequences of disasters have received attention, the long-term psychological effects have been relatively neglected. Disasters not only lead to physical injuries but also contribute to psychological problems such as anxiety, depression, PTSD, aggression, insomnia, and suicide. Survivors of natural disasters are at an increased risk of suicidal thoughts and attempts, although the precise extent of this connection is still

debated (Jafari, Heidari, Heidari, & Sayfour, 2020).

Another study by Rezaeian, M. (2013) notifies that natural disasters have the potential to increase the occurrence of violence both in the short and long term. The aftermath of such disasters often leads to a rise in mental distress among affected populations, with a significant number developing conditions like post-traumatic stress disorder, depression, and anxiety disorders. The reasons behind this trend include personal threats to life, loss of loved ones, property destruction, breakdown of social security systems, and the collapse of social cohesion. Studies indicate that the impact on mental health is greater in the case of catastrophic disasters compared to milder ones.

Various factors contribute to the link between exposure to natural disasters and the development of mental distress, which can subsequently manifest as different forms of violence. Vulnerable groups such as women, children, the elderly, low-income individuals, and those who have previously experienced traumatic events are more susceptible to mental distress and becoming victims of violence in the aftermath of natural disasters. It is important to note that exposure to multiple natural disasters can further exacerbate adverse psychological outcomes. However, individuals who receive social or religious support are less vulnerable to experiencing these negative effects.

The 2022 floods in Sindh, resulted in significant destruction and displacement of communities. This disaster led to increased instances of suicide and abuse, particularly among vulnerable populations such as men and adolescents. The loss of homes, livelihoods, and access to basic necessities added to the already existing stress and trauma, leading to increased mental health issues.

The current body of literature extensively focuses on the types of destruction and the total number of people affected and died resulting from floods and natural disruptions. However, there is a substantial gap in addressing the subjective experiences of the families

of those who committed suicide due to persistent anxiety and depression and the psychological trauma they endure. As a result, there is a lack of firsthand narratives and personal accounts from the affected families, leaving a void in comprehending their perspectives and the thoughtful extent of their destitution.

Floods and natural disasters as floods cause a lot of destruction from an economic point of view and have bad impacts on the general health of the destructed population. Affected people recover physically over time but the people continue to suffer psychologically due to the disturbed economic and financial system.

Moreover, there are many reasons why people might choose to end their own lives after a natural disaster, even if it's been months. People who experience disasters can be hurt or lose their loved ones, friends, belongings, or jobs. Even those who don't suffer direct losses can still be affected by the disaster. The long-lasting changes in their daily lives and the breakdown of social connections are just as important as the immediate physical effects of the disaster. Places, where people used to meet and find support, may have been destroyed. Moreover, after natural disasters, problems with mental health, such as depression and hopelessness, are often linked to factors like grief, loss of property, and the disruption of social connections. These problems increase the risk of suicide. Having strong social support can help protect against suicide, but research shows that people often feel less supported and connected to others after natural disasters.

During the 2022 floods and destruction, many committed suicides out of depression and anxiety due to the unavailability of resources and limited financial situation. Most of the families in the relief camps continued their joint family system from the security point of view.

A community member said that they live together so that they can protect and feed each other by cooperating and facilitating each other as a group/family member. On a daily basis

as per decided turn a few of us go to do labor to earn something to feed our families.

Has it ever happened that someone refused to go as per his turn? And if that happened, then what do you guys do?

That is not possible, we all need to oblige each other because in this situation we all need each other's cooperation and support. If anyone of us still refuses to attend his turn then there would be conflict and fight

On my visit to the Ghaghar relief camp, I met a crying woman. I asked the reason from other women sitting beside her,

"Her young son has committed suicide because he could not do anything to provide food for his family", she replied.

The mother was so distressed because her son was the breadwinner in the home after the death of his father two years back.

"Who will arrange the wedding for his sister, who would take care of me and my home in the role of head of the family? Who will be the final representative of an aging individual like me", she said while crying.

I met another family in the relief camp, a woman and a man (almost 50 to 55 years old). They lost their son, two grandsons, and daughter-in-law. Did they die during evacuation? I asked the old lady. She remained silent at first and then said shared that the flood completely ruined her family. Everything she had was gone, and her innocent grandchildren were starving. Her son couldn't provide food for his children, so he made a terrible decision to poison the kids, his wife, and himself.

"We, as old and helpless parents, don't know what to do now. We feel lost and don't know who to turn to for help. We wonder what support the government provided us initially and what assistance they will give us now. 18 years old boy was the eldest in his family and was busy laboring on daily wages in one of the cloth factories in Karachi after the

displacement because of floods. He was quite fine in behavior and attitude but one day his parents found him dead in the early morning”, that Aman (the old lady) shared.

As I walked around the shelter camps to observe the overall situation, I randomly chose families to sit and talk with. During my rounds, I came across a group of women surrounding a visibly distressed woman. Curious to understand her situation, I approached them and began asking various questions. The woman suddenly burst into tears and started screaming, overwhelmed by the trauma she had experienced. After a few moments, she composed herself and began sharing her story with me.

“Men bete ko uthane gae tau amuman woh ek awaaz per uth jata haye per us din teen dafa bulane per bhi nh utha. Mene jb use jhanjhora to pata uske kalai se khoon dekha. Mene uske abu ko uthaya kyun ki men uski kalai per khoon daikh kar pareshan hogae the. Jab uske abu ne use daikha to pata chala k usne apni kalae kati the aur mere pairon se zameen nikal gae jab use abu ne kaha k woh saams nhn le raha. Mera beta mar chukka tha”.

According to his father,

“We immediately took him to the nearby hospital, he was the only son in the family, and I was praying for his life consistently. I could not save my son; doctors finally pronounced him dead. We really do not know why he committed suicide, he did not share anything with me and his mother”.

Pakistan has a longstanding history of flood occurrences, yet the floods in 2022 surpassed all previous levels of destruction and devastation. The aftermath of these floods has had profound and lasting effects on the mental and social well-being of displaced families, with reports of suicides, deaths, and instances of abuse. While a limited number of suicide cases were officially documented, many more went unreported and concealed. Similarly, incidents of abuse suffered the same fate, remaining hidden from public awareness.

“I requested him to go with us but he refused to leave at any cost, he asked all of us to leave”

Wife of the deceased person narrated, a resident of the Dadu districts. She further said that we all moved to the Karachi to stay in the relief camp but the dead person remained there in district Dadu to save our home. His brother said that,

“He died next night due to the heart attack due to the shock because landlords of the relevant area/ village to change the direction of the water to save his lands”.

“The poor man was very much affiliated with his home because his father made that home himself and he had attachment with his birthplace”, he further added while talking to me.

His son told me that his was went in shock and died of heartache as soon as he came to know that the cut has been made in Manchar Lake.

His Brother told me he was a very kind and had a very emotional attachment with the land of his forefathers. He said that everybody knew him in the village.



Women of Hindu family are sharing how flood 2022 took life of their family member



The picture shows the sad face of an old lady because her son took his life and his family.

iv) Destruction and intimate relations

Since the 1970s, there have been vast gains in the understanding of the impact of disasters on families. Despite these gains, the research on the impact of disasters on marital relationships is still sparse and our understanding of the impact of disasters on marital relationships remains unclear (Morrow, forthcoming). Despite the paucity of research on the impact of disasters on marital relationships, there have been four important findings. First, divorce rates may increase following a disaster (Swarns, 1993; Morrow & Enarson, 1996; Morrow, forthcoming). For instance, divorce rates increased nearly 30 percent two months after Hurricane Andrew (Swarns, 1993).

Second, domestic abuse may increase following a disaster. After Hurricane Andrew, informants reported an increase in violent relationships with their spouses. This increase was attributed to the shortage of money as well as the stress of living in tents, cars, and half-repaired homes (Morrow & Enarson, 1996). However, Enarson (1997) found that this increase in domestic violence was not due to new cases but was mainly from previous domestic violence cases. This suggests that disasters appear to heighten pre-disaster relationship issues.

The third finding, and most significant to the current study, suggests that disasters appear to heighten pre-disaster relationship issues, both negative and positive. Harvey et al. (1995) found that following the 1993 Midwestern floods, flood victims' written narratives indicated that roughly 30 of 45 (67%) of the respondents reported that their marriage or relationship with a significant other suffered problems prior to the flood. These respondents further reported that during the flood pre-existing problems with their significant others were exacerbated. Therefore, coping with the flood made the marriage/relationship even more problematic. In contrast, 15 of 45 (33%) of the

respondents reported that their marriage was "good" before the flood. These same respondents stated that the flood had strengthened their marital relationship.

Destruction due to floods in Sindh has severely impacted the privacy and intimate relations of husband and wife living in tents. The close living quarters and lack of privacy in the tents did lead to stress and strain on the relationship. The loss of possessions and displacement from their homes has also added to financial and emotional pressure, further impacting the couple's relationship. In addition, limited access to basic necessities such as proper sanitation facilities have also affected their intimate relationship.

Natural disasters and conflicts in Pakistan have devastating effects on infrastructure and communities, leading to displacement, destruction of property, and disruption of social relationships. This literature review aims to provide an overview of the research on the impacts of destruction on the intimate relationships of families in Pakistan.

The destruction of infrastructure and displacement of people during natural disasters and conflicts in Pakistan can have severe impacts on social relationships, including intimate relationships within families. A study by Saeed and Afzal (2019) found that the 2010 floods in Pakistan led to the displacement of families and the breakdown of social networks, leading to the loss of social and emotional support for intimate relationships.

Mental Health Impacts: The psychological impacts of destruction on intimate relationships in Pakistan can be significant. A study by Khalid et al. (2019) found that the 2005 earthquake in Pakistan led to an increase in marital conflicts, domestic violence, and emotional distress. The study also found that the loss of family members, displacement, and economic stress contributed to the psychological distress of families.

Gender-based Violence: Gender-based violence is a significant issue during and after natural disasters and conflicts in Pakistan. A study by Azmat et al. (2018) found that the 2010 floods in Pakistan led to an increase in gender-based violence, including sexual

violence, as women and girls became more vulnerable in the aftermath of the disaster. The study also found that the destruction of infrastructure and displacement of families contributed to the increase in gender-based violence.

Protective Factors: Protective factors can help mitigate the impacts of destruction on intimate relationships in Pakistan. A study by Farooq et al. (2018) found that social support and coping strategies were protective factors for families affected by the 2010 floods in Pakistan. The study also found that gender-sensitive interventions that address the specific needs of women and girls were critical for protecting families from the impacts of destruction.

The literature on the impacts of destruction on intimate relationships of families in Pakistan highlights the significant social and psychological impacts on families. Disasters and conflicts can lead to the disruption of social relationships, increase in gender-based violence, and psychological distress. Protective factors such as social support and gender-sensitive interventions can help mitigate the impacts of destruction on families.

The current body of literature in Pakistan extensively focuses on the quantification. However, there is a substantial gap in addressing the subjective experiences of those affected and the trauma they endure. Furthermore, the existing literature overlooks the specific mental challenges faced by married couples and especially women. As a result, there is a lack of firsthand narratives and personal accounts from the affected families, leaving a void in comprehending their perspectives and the profound extent of their hardships.

During field visits, I repeatedly asked women participants about their privacy and intimate relationship while living in tents. They shared that it was unfathomable to spend time with their husbands in that environment due to the lack of privacy. Their entire family was housed in a single tent, with their children having to sleep in close quarters as well.

"Hum pet se bhooke kuch or kese sochen, apko kia lagta haye k ye kapre k bane kheme humen ghar wala sukoon dete han. Ye mera khema haye our iske bilkul sath pta nh kiska khema haye. Mujhe to sharmindagi hoti haye or baki lough kia kahenge, Mazak uraenge. Is waqt hum azaab men mabtalaah han, humare ghar khatam hogae han", a man replied with distress and pain.

(English Translation)

"How can we think of anything other than an empty stomach? What do you think, do these cloth tents provide us with the comfort of our homes? This is my tent, and I have no idea whose tent is right next to it. I feel embarrassed, and what will others say, they will make fun of us. Right now, we are suffering, our homes are gone."

Other women said,

"Bs kia Karen hum inkaar nh kar sakte, aurat ka kam haye mard ki baat sunana or farmanbardari karna. Hum iske ilava kar bhi kia sakte han".

(English Translation)

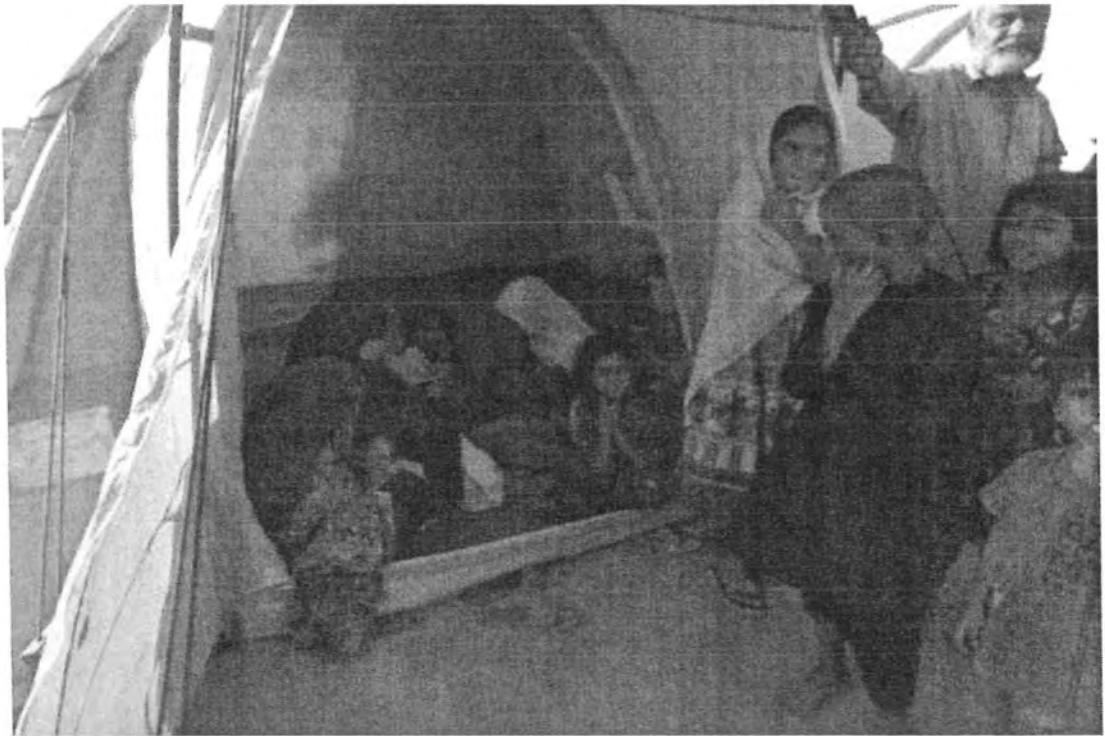
"What can we do? We can't refuse. It's a woman's duty to listen to a man and obey. Besides this, we do not have any other option."

I observed one thing, females were in pain but still they were smiling and laughing.

"Agar hum naa kahen to pitae bhi hoti haye, mard ka kia haye, usko thori smjh ata haye k ghar haye ya ye kapre bana tent. Jab uski zaroorat haye to haye, wo na humse poochte han na dekhte han k kia haal haye. Humen to sharam ati haye ab kia kahen".

(English Translation)

"We cannot refuse! If we do, we face physical beatings and abuse. Men do not think even once before wishing and doing, they don't understand whether it's a home or tent. When they have need, they demand without considering the situation. they neither ask us nor check on how we females are wishing and feeling. We feel ashamed now!!"



pictures are showing true story of how family relations are disturbed because of living in tents

v) Displacement and loss of Dowry

Displacement, whether internal or external, as a result of a conflict, or natural disasters or calamities, or development in a specific region not only affect the affected community negatively and directly but also can have a long-lasting impact on the culture and society as a whole. The objective of this study was to assess the impacts of displacement on dowry as a result of the 2022 floods in Sindh Province of Pakistan, and the subsequent consequences on vulnerable population like women's livelihood, reproductive health, family life and social traditions. A lot of research has been undertaken to assess the impacts of disasters on women's lives but still there is sufficient room for research to assess the impact of displacement on dowry as a result of natural disasters or calamities.

A dowry can be defined as an asset or assets transferred to a wedding girl (bride) and wedding boy (groom) as a gift from the bride's parents at the time of wedding. Almost in all parts of the world, assets such as house, land and jewelry are transferred to the bride while the groom receives the dowry in the form of car and cash. The custom of dowry can have both positive impacts and negative impacts on the society; on the positive side it can increase social and financial security of the bride, and can attract more successful and handsome groom for the bride while on the negative side, it can place an unnecessary and undue pressure on the bride's family. The dowry system might also lead to gender-based violence and domestic violence in post-marriage scenarios, if the groom's family feels the dowry received as insufficient. The dowry system can be closely related to the inheritance system in most of the countries, especially in developing countries, as the dowry system takes place at the time of marriage while inheritance takes place both before and after marriage between children and parents. Furthermore, the dowry system is in practice by both poor and wealthy components of the society, while the inheritance system is practiced only in rich families of the society.

The 2022 floods in Sindh Province of Pakistan have directly and severely affected the dowry collected by the women for their daughters, as a result of internal displacement due to these floods. The woman living in flood affected areas of Sindh has not only been prone to the loss of dowry but

has also been facing worth noting cultural and social disruptions. They have lost their loved family members, houses, cattle's, valuable possessions and their livelihoods, which has not only affected their present day living but has also constrained the ways to plan about their future. The internal displacement has affected almost every aspect of women living in the flood affected areas, ranging from identity and status to security and well-being. The internal displacement and the loss of dowry as a result of displacement has significantly changed their role as care givers in the form of mothers, wives and daughters.

Dowry is a prevalent practice in the Sindh region and has significant impacts on females. According to a study by Shaikh, R. (2017), "The dowry system in Pakistan: causes, consequences and recommendations," published in the Journal of Education and Practice, dowry demands often lead to economic strain on families and can result in physical and emotional abuse of the bride. The study highlights the importance of addressing this issue to protect the rights and well-being of females in Sindh.

The literature on displacement and loss of dowry isn't sufficient enough in developing countries like Pakistan as lesser amount of research has been conducted on this area. The lack of literature in this area has resulted in firsthand knowledge about the feelings and hardships faced by the women who have lost their dowry as a result of internal displacement.

During my research, when I was visiting the flood affected areas of Sindh, I met at least ten mothers who were under a lot of pressure due to the loss of dowry which they have gathered for their daughters.

"We struggled greatly to gather the dowry for our daughters' weddings, and now we are aware that all of it has been lost. What are we to do? Our homes and possessions are gone, and we are unable to figure out how to proceed with the marriages of our young daughters. This uncertainty keeps us from sleeping peacefully".

"Now who will marry my daughter and how I will get my daughter married without

dowry? We have a satanic custom of giving dowry to our daughters but unfortunately all have been washed away by floods. You mention and I will tell you that what I have not collected for my daughter including bedsheets, cutlery, utensils, dishes, clothes and some jewelry. I have lost my loved ones during these floods, our houses were washed away which was not easy to handle, but the loss of my daughter dowry is above all and irreplaceable. What we are left with now? Nothing!!!! And this pain doesn't let us sleep" a woman grieved out of pain in front of me.

The affected families were really concerned about the deep-rooted challenges they will face due to the cultural practice of dowry. The loss of dowry, which they have collected with immense efforts and resources have really put them under pressure for getting their daughters married, and it was the story of almost every flood affected family.

The custom of dowry can be well termed as satanic tradition in most of the societies where it places an unnecessary and undue pressure on the families and leads to financial burden, inequality and commodification of marriage. The flood affected families, who have already lost their houses and livelihoods are going through a lot of stress which is doubled by the loss of the dowry they have collected for their daughters. Every family, who has lost dowry of its child is living under pressure that how they will get their daughters married and who will marry them without dowry. Still if they manage to get their daughters married dowry, it will be a social stigma for their daughters for the rest of their lives that they were married without dowry and subsequently they will have to face social and financial inequalities in their wedded houses.





These pictures were taken while talking with females regarding loss of the dowry gathered for their daughters

vi) Destruction and its impacts on the education

The effects of disastrous floods can be seen everywhere in the flood affected areas of Sindh, a southern province of Pakistan. The 2022 floods have not only resulted in internal displacement of hundreds and thousands of people but have also affected every aspect of their lives including livelihoods, infrastructure including health facilities and schools, roads, bridges and markets etc. The student community of the flood affected areas are one of the top most vulnerable community. The students who use to go to schools early in the start of the day, and keep spending long hours in learning and playing with their friends have nothing to do now after their schools being washed out. In some areas where even the schools are not washed out, they are still flooded with heavy water and it's a nightmare for the students to reach to those schools.

Children are one of the top most vulnerable communities in the events of floods and natural disasters. The children in developing countries are hit by natural disasters in three ways; firstly, the disasters badly affect the children physical health by causing them injuries or sometimes even gets killed. Secondly, they are more prone to malnutrition and waterborne diseases. Moreover, natural disasters also severely affect their mental health. Thirdly, the disasters badly affect the children's education by either washing out the educational institutes or making it hard for the children to access their educational institutes. All these affects combined have long lasting effects on the children future.

Before the floods in 2022, the education system in Sindh, Pakistan was already facing numerous challenges such as a shortage of teachers, inadequate funding, and a lack of access to quality education for many students, particularly in rural areas. However, the situation worsened after the floods hit the province, causing widespread damage to schools and affecting the education of hundreds of thousands of students by converting educational institutes into shelter homes for flood-affected victims. Many schools were either

completely destroyed or left in a state of disrepair, leaving students without a place to continue their education.

The destruction of infrastructure and losing the educational opportunities can have a severe and long-lasting impacts on not only children personal development but also curtail the future opportunities for the children and their wellbeing. In recent floods of 2022, hundreds of schools have been washed out in Sindh Province alone, and the reports suggests that hundreds and thousands of children are out of school. A lot of reports have been compiled by different governmental and non-governmental institutes but none of them have directly engaged with the children affected by the floods. Very limited or no literature is available on their personal feelings and how they feel about their schools been washed out by the 2022 floods in Sindh Province of Pakistan.

To understand the expressions of those children who have lost their schools and education, I got engaged in deep and detailed conversation with them and they shared their experiences in the events of floods. As per my understanding and analysis of the situation, the loss of schools and education will have long-lasting impacts on these children which will for sure affect various aspects of their lives.

A student of class 9th shared that with all heart-mind and interest, he was attending school. He wanted to be a successful and learned man in the future “I was going to school in order to be a successful man one day, but the floods have washed away my dreams.

I used to go to school at the start of the day but now when I get up there is tension all around and I don't know where to go. I don't have any clear path to go on, nor do I have a clear direction. I am really worried about my future”, in his own words.

An 11 years old boy shared that badly was missing his class fellows and time spent in class with teachers. For him the schools were not only the place to get education but according to him “I was going to school not only for my education but also to enjoy my leisure time

with my friends and play with them for long hours” told by an 11-year-old school going children.

The schools and education are not just about the academics but it also helps the students to form the society of their own. School going children make deep-rooted bonds with their colleagues and teachers, which serves like a family for them. Losing the educational infrastructure due to current floods have not only separated them from their education and bright future but have also separated them from their friends and teachers which ultimately have pushed them into feelings of loneliness and isolation.

A young girl shared that she cannot compete with other girls if she is not educated. She sadly said that she lost her school due to the recent floods and destruction in her village and she didn't have any nearby school. The floods not only washed away their school but it has also washed away her and other girls' future too. She said how she would be able to stand with rest of the girls of her age who are school-going and are receiving education, that thing pushed her deeper into lower self-esteem.

The destruction of infrastructure, especially schools have badly affected school-going, children and adolescents. They were much stressed and were so confused about their future. Instead of going to school, they have been busy all day while roaming in the streets. I met a child, who was a student of class 7, and expressed his grief in the following word;

“The current situation has not been easy for us, especially for my mother as she is suffering a lot due to the current floods. I also have lost my education. I don't know how to provide some comfort to my mother as we are left with no means. I want to make a humble request to the government of Pakistan and NGOs/INGOs to put some efforts into restoring our schools and education, we want to study for the sake of our bright future”.

In the next, 5th chapter, the conclusion and recommendations are discussed in detail.

Chapter 5

5.1 Discussion

Climate change in Pakistan has been the talk of the town for the past few years. As with minimal emission of greenhouse gases, still Pakistan is one of the top five countries most vulnerable to climate change. The persistent increase in the temperature has caused an alteration in the precipitation patterns in Pakistan. The floods are droughts, and both are observed across different parts of the country. The evidence is clear - temperatures in the region have increased, snow melt from the Himalayas has increased, and there has been a decline in rainfall patterns. These changes are causing the Indus River to overflow, leading to widespread flooding and the destruction of homes, crops, and infrastructure. The effects of these floods are devastating, affecting the livelihoods and well-being of millions of people in the region.

Generally, different stakeholders and researchers are engaged in working to calculate and study social, economic, and structural losses and impacts on the community. Less importance has been paid to studying embodied experiences of the affected community.

Based on my field visits to different villages and cities of Sindh, I observed that the community is very severely affected by the 2022 floods. I noticed that Individuals reside in tents on the sides of the road, with a portion of them utilizing beds or carts as seating arrangements, while the remaining individuals are seated on bare land. A lack of adequate clothing was noted, with some individuals having cloaks to cover their heads, while others were exposed to the elements and experiencing severe sunburn. Children with bare feet and a lack of appropriate clothing and women have been exposed to all types of injustice.

I observed that the residential areas adjacent to the main city appear to be in a state of ruin and the scene is described as evoking a sense of punishment inflicted upon the individuals,

and upon reaching affected parts of Sindh, I felt as if the region has regressed for several decades. The scene was a reflection of impoverished and underdeveloped conditions in Sindh. The journey to Sindh was filled with very unpleasant conditions along the way. There was a strong stench while passing through the main city, and I was concerned about the potential health effects of prolonged exposure to this odor. I was thinking about how the local residents were tolerating living in such unpleasant conditions.

It was noticed that the empty state of different canals and inquired about the reason for this with a local resident. The resident informed, me that the government claims that the water disposal machines are not functioning and that they do not have the funds to repair them. The local residents had attempted to operate the machines themselves but with limited success and at a high cost. I also visited various government schools and colleges in Sindh and expressed concerns about the education and the provision of shelters for the flood-affected community in Sindh.

The state of sanitation and water management in Sindh was poor and the government was not taking adequate measures to address the issues. The stagnant dirty water in the region is identified as the main cause of these diseases, as well as others such as diarrhea and skin-related conditions. Besides the commonly documented chronic effects on the population, there are less-studied and discussed individual or embodied psycho-social experiences. Through my interviews and group discussions, I explored a list of frustrating experiences faced by the affected population in Karachi tent cities (Ghaghr, Kemari, chakra khan).

5.2 Conclusion

The study was aimed to examine the effects of displacement on the social psychological life of families due to the 2022 floods in Sindh, Pakistan. The research was conducted using a qualitative research methodology, including direct observations, focused group

discussions, and in-depth interviews with 100 internally displaced community members. The results showed that the impacts of the floods were devastating, affecting the livelihoods and well-being of millions of people in the region. The findings revealed that the affected individuals were facing numerous challenges such as inadequate housing, clothing, and exposure to the elements, leading to various health issues and increased poverty. The study highlights the need for more research to be conducted to understand the embodied experiences of affected communities and the impact of natural disasters on their psycho-social well-being. Furthermore, there is a need for government intervention to provide adequate support and resources to mitigate the impacts of natural disasters and protect vulnerable populations.

5.3 Recommendation

The research suggests that communities are socially affected by disasters. Moreover, communities can be affected so severely that they never recover from a disaster. However, this is atypical. Strong community bonds, optimism and hope following a disaster may help people with the healing process after the disaster. Additionally, when communities and their members rely on assistance from voluntary and involuntary agencies, they are more likely to recover quickly. Moreover, research indicates disasters may actually pull communities closer together.

The social science literature on families and disasters shows that families can be both a source of support and strain before, during, and after a disaster. It is also apparent that certain types of families are at a greater risk than others. More specifically, research suggests that minority groups, low-income families, the elderly, and women are a greater risk during times of disaster.

Additionally, this research project has also focused on identifying the psychological needs of women during and post disasters situations. During the study, it was observed that

commonly women are perceived as the marginalized community and very few efforts are taken for their rehabilitation in the post-disaster period, but in actuality, the situation was very different. The women who are internally displaced due to floods or any other natural disasters, feel themselves under immense pressure and pass through intense mental stress, while this side was almost completely ignored by the relief providers and researchers. This research study found that women, who are residing in flood-affected or any other disaster-affected areas, need psychological counseling way more than materialistic needs. This research project placed all the aspects under the lens to assess what are the actual needs of the women who are affected by natural disasters as a result of climate change.

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