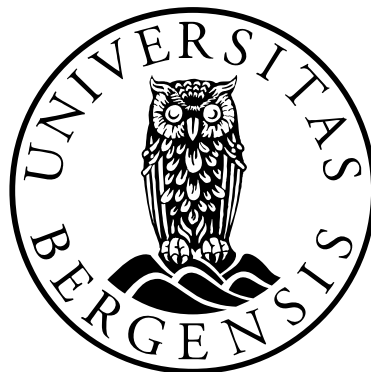


# **Flood and Socio-Economic Vulnerability: New Challenges in Women's Lives in Northern Pakistan**

*by*

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This thesis is submitted in partial fulfilment of the requirements for the degree  
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To

*the greatest lady in the world*

*my dear Mom*

*and her children*

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*“In the name of Almighty Allah.....the Divine Soul that unites us all”*

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*Sumaira Saleem*

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## ABSTRACT

There is growing concern regarding issues related to Climate change like periodic floods, earthquakes, cyclones, melting glaciers and so on. Pakistan was extremely hard hit by the flash flooding in 2010, which occurred due to increase in rains and melting glaciers that swelled the rivers, lakes, and streams and caused huge destruction across the country. The present study was carried out to investigate social and economic vulnerability resulting from the flood and its impact on women's lives. The study was conducted in the province of Khyber Pakhtunkhwa (KPK), district Nowshera, Pakistan. Qualitative methodologies like group discussions, individual interviews and non-participant observation were applied to investigate the phenomenon. In order to analyze the findings of the study, three interrelated theoretical approaches were incorporated. Community resilience theory is the main theoretical framework. However, vulnerability and social capital theory have also been used to support the analyses from individual level to community level. The analyses shows that people in both the studied ethnic groups, Afghan and Pakhtun, were living comparatively the better lives before the flood occurred. However, the pre-event level of livelihood satisfaction was a bit higher in the Afghan than the Pakhtun group.

Moreover, both ethnic groups experienced the exposure to the disaster equally in terms of severity, damage and displacement. The key factor influencing the current bad socio economic conditions is the pre-event poverty entrenched these groups. The level of resistance within both ethnic groups was inadequate to respond to the stressors caused by the flood due to the rapid deterioration of available resources at the time of crisis. Furthermore, the flood had negative effects on women within the households and intensified conflicts within their marital relations because of economic strain and unrest among their spouses as a result of the environmental change. Physical and mental health issues are still persisting two years after the flood, especially among women and children. The feelings towards the future among most of the people interviewed were uncertain and major apprehension was related to the issue of a better future of their children. The role of government, NGOs and INGOs in the re-establishment of the infrastructure and livelihoods of the affected population has not been satisfactory. This generates further vulnerabilities among both ethnic groups. Such vulnerabilities seem to have caused this permanent dysfunction within these communities, and the theoretical analysis indicates a negative outcome of the resilience process.

**Keywords:** Afghan, Challenges, Flood, Gender, Pakhtun, Resilience, Vulnerability, Women

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# Chapter 1

## Introduction

There is a growing global debate on climate change. There are multiple projections regarding the future development in climate change and the scale of the destruction it will cause. The future forecasting of the climate change can be irreversible and extreme (Kovats et.al, 2001). According to the IPCC climate change is “a statistically significant variation in either the mean state of the climate or in its variability, persisting for an extended period (typically decades or longer). Climate change may be due to natural internal processes or external forces. The latter include anthropogenic changes in the composition of the atmosphere or in land use” (cited in Kovats et.al., 2001:1057). It is suggested that climate change is “an issue that has anthropogenic influence” (Boykoff, 2007:477). In Asia, Pakistan is one of the most affected countries and its population is highly vulnerable to climate change, as 60 percent of its population lives below the poverty line (Akhtar, 2011). Mainly, Pakistan is vulnerable to disasters related to natural phenomena like glacier surges, earthquakes, cyclones, draughts, landslides, floods, tsunami and so forth (Khan, 2010). The rapid change in the climate is an enormous environmental, social and economic threat to Pakistan.

Due to the increasing changes in the climate, Pakistan was confronted by a catastrophic flash flood in July and August 2010, that almost ruined the provinces of Khyber Pakhtunkhwa, Sindh, Baluchistan and Punjab. It was a huge flood with its extreme severity, duration and destruction (Akhtar, 2011). The flood was sudden and may be formed abrupt according to the following definition “from the point of view of societal and ecological impacts and adaptations, abrupt climate change can be viewed as a significant change in climate relative to the accustomed or background climate experienced by the economic or ecological system being subject to the change, having sufficient impacts to make the adaptation difficult” (NRC, 2002:121 cited in Hulme, 2003:2003). The northern region of Pakistan is particularly exposed by flash flooding. According to Akhtar (2011:14) “the Indus river basin is the most vulnerable region of flood hazard”. The Indus River emerges from the Himalayas, crosses the Himalayan region of Kashmir and travels towards the NorthEastern hilly areas of Pakistan, where the river Kabul and the river Swat joins the Indus river. Pakistan can be divided into two major regions, the Indus River and its tributaries, and the big complex of mountains and plateaus in the north and northwest of the country. The annual seasonal temperature varies greatly across



the country. In the northern areas the temperature in winter is usually below 0 Celsius, while in the plain areas it reaches up to 50 Celsius in the warmest months (Khan, 2010).

Many scholars and climate experts have written about the climate change and its impact on the human milieu. Many studies focus on social and economic vulnerability, structural vulnerability, climate change and its impact on women, children and minority groups, climate health related issues, food insecurity, etc. (Bohle, et.al. 1994, Akhtar & Kovats, 2008, Kartiki, 2011, Denton, 2010, Mustafa, 1998 & Mank & Jackson, 2012). However, there is need to further excavate the phenomenon of climate change with special reference to its impact on gender relations and future prospects of flood prone populations. The present study examines the pre-event and the post event conditions of people in the Khyber Pakhtunkhwa (KPK) that were flooded in 2010. The focus is on women's situations and gender relations within two ethnic communities (Afghan and Pakhtun). Women's sources of income and dependency on certain elements of patriarchal culture and traditions are also explored. In order to achieve the above described, the following objectives are formulated:

### **1.1. Objectives of the Study**

#### **Main Objective**

To explore socio- economic vulnerability of women in KP following the 2010 flood, and this vulnerability impact on their lives in general and on gender behaviour and roles/activities in particular.

#### **Sub-Objectives**

- To explore the reasons of women's vulnerability in the post flood situation.
- To explore women's sources of income and the impact of flood on their economic activities.
- To explore the ways in which women cope with flood damage.
- To explore the impact of flood on gender roles and dynamics in gender relations.
- To explore the future aspirations of the flooded population and impediments to their well-being

### **1.2. Composition of the Thesis**

The thesis consists of 8 chapters in total. The first chapter presents the introduction, objectives and aims of the study. Chapter two elaborates the context of the study, and includes

information regarding background of the study area and field sites, an assessment of some of the flood damages and the description of the two ethnic groups studied the Afghans and Pakhtuns. Thereafter, chapter three provides a literature review of related topics. It includes causes of vulnerability, adaptation, effects of climate change on gender, and gaps in the existing research. Chapter four presents the theoretical frameworks applied in the study.

Thereafter, Chapter five describes the methodologies and research methods applied in the study, and researcher's experiences in the field.

It also discusses the challenges and limitations in the field and how they were dealt with. Chapter six presents the findings regarding the pre-event situation, crisis situation and post event socio economic situation within the two ethnic groups. Chapter seven elaborates the findings regarding socio economic impediments to getting back their livelihood, and their resistance towards the stressors caused by the flood. Moreover, it discusses the impact of natural disaster on their gender roles and relations. Furthermore, the eighth empirical chapter presents the findings regarding the future aspirations of the flood survivors and the role of the government and NGOs and INGOs in responding to the disaster. It also presents concluding remarks and reflections on the findings described in the empirical chapters and suggests topic for future research.

## Chapter 2

### The Context

#### 2.1 Introduction

The present chapter aims to provide an overview of relevant information about Pakistan and the particular province of the flooded areas where the study has been conducted. It also aims to provide an adequate knowledge about the distinctions between the two ethnic communities that the informants were researched from, the Afghan and the Pakhtun or Pathan. This chapter also presents relevant information regarding the flood.

#### 2.2 Overview of Pakistan

The “system of colonization inscribes their marks so deep upon the societies of both colonized and colonizer that they cannot simply be eradicated by the political act of declaring independence, and even after independence such societies remain heavily under the influence of the gravity of colonial history” (Sokefeld, 2005:939). Pakistan was a part of the Indian sub-continent that was colonized by the British in 1857. The independence of Pakistan was declared on 14<sup>th</sup> August 1947. Pakistan covers a total land area of 796,095sq km. Geographically, Pakistan is located at one of the world’s important crossroads, which makes Pakistan a significant country in the South Asian region (Rakisits, 2012). Thus, Pakistan is “a pivotal player in a region covering Middle East, Central Asia and South Asia, which has much potential, but which also has unresolved conflicts and various degrees of instability” (Rakisits, 2012: 139). Pakistan is the sixth populous country in the world with a population of around 170 million, and with an annual growth of 2.3 percent. The population will reach 340 million by 2040 (Rakisits, 2012: 141). The adult literacy rate was 54 percent in 2008 (Rakisits, 2012: 141). The socio economic and political situation in Pakistan was below any satisfactory level before the flood, and the flood in 2010 made it worse regarding social, economic and political dimensions.



Source: [http://thepeopleofpakistan.files.wordpress.com/2010/02/clear\\_pakistan\\_map21.gif?w=630](http://thepeopleofpakistan.files.wordpress.com/2010/02/clear_pakistan_map21.gif?w=630)

However, Pakistan has experienced a vast range of natural disasters that includes earthquakes, floods, cyclones, draughts, landslides, and also some human induced disasters like terrorism, fires, epidemics, transport and industrial accidents, and refugees (migrants and internally displaced people) (Khan et.al. 2008:8). The worst events in Pakistan, which constituted huge human and economic losses, include the floods of 1950, 1973, 1976, 1988, 1992, 1997, and the massively destructive flood of 2010 (NDMA, 2010). In South Asia, Pakistan ranks number five with regards to annual number of people who are physically exposed to floods. Usually, floods occur during the monsoon season, which is from July to September (Khan et. al. 2008:8). In present, Pakistan is facing significant challenges related to energy, poverty, political instability, rehabilitation of flood affectees, internally displaced populations, re-establishment of infrastructure in the flood affected provinces, water resources (insufficient dams) etc. (Rakisitis, 2012: 139-154).

According to the Human Development Index, Pakistan was ranked 141 out of 182 countries in 2007 (Rakisitis, 2012:141), and Pakistan is also going through a tough situation economically as in 2009-10 the trade imbalance was US\$ 15.6 billion. The debt of the government has been increased up to \$55 billion (Looney, 2012:228). The unemployment level is 15.2 percent,

budget deficit is over 6.2 percent of GDP, inflation rate is 11.3 percent (rose to 15.7% in September 2010) (Looney, 2012:233), and outside debt is US\$ 74 billion (Rakisitis, 2012:140). Approximately 30 percent of the income of Pakistan is dependent on agriculture sector, and almost 70 percent of the population lives in rural areas (Rakisitis, 2012). The average growth of agriculture sector is recorded as 1.2 percent in 2010-2011 that does not meet the set target 3.8 percent (Looney, 2012:230). According to Looney (2012) the 2010 flood caused so huge destruction that is difficult to comprehend. It affected 78 districts of Pakistan.

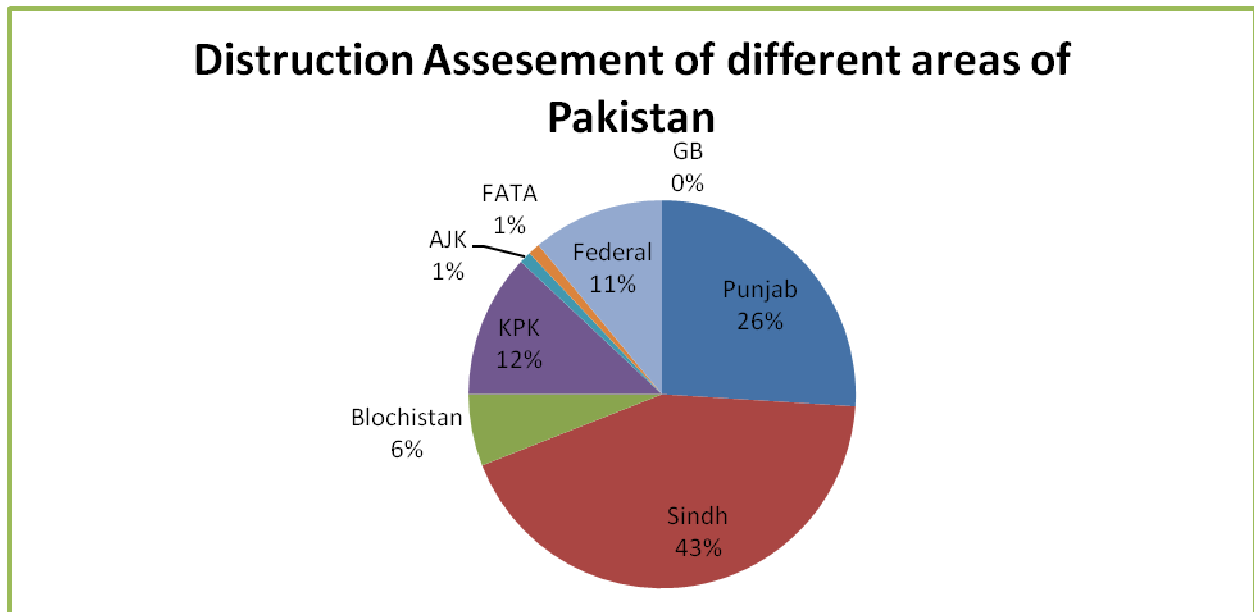
**Table 1: Assessment of affected population during the flood in 2010**

<b>Province/State</b>	<b>Deaths</b>	<b>Injured</b>	<b>House damaged</b>	<b>Affected Pop.</b>
<b>Baluchistan</b>	45	98	75,261	312,774
<b>Khyber Pakhtunkhwa</b>	1070	1056	179,910	3,820,173
<b>Punjab</b>	103	350	500,000	3,200,000
<b>Sindh</b>	72	680	462,251	2,269,846
<b>Azad Jammu &amp; Kashmir</b>	69	83	6472	245,00
<b>Gilgit Baltistan</b>	183	60	2820	8516
<b>Total</b>	<b>1,542</b>	<b>2,327</b>	<b>1,227,858</b>	<b>11,581,875</b>

*Source: PDMA-PaRRSA, (2010, Report)*

The above table demonstrates the province based assessment of affected population in terms of death/injured casualties and homelessness. However, there are some variations between assessments conducted by different national and international organizations because of time difference. For example, table 2.1 illustrates the total number of deaths, 1542, which is the initial report of destruction. The number of casualties increases as time passed. According to Looney (2012, 226) the flood caused 1980 death casualties, 2946 injured, 70 percent of the roads were damaged, 500 hospitals and 10,000 schools were damaged and about 1.6 million homes were destroyed. Moreover, loss of 1.0 million tons of food and around 200,000 livestock was reported in the beginning (Looney, 2012:226). Due to the flood food insecurity, poor sanitation and many infectious diseases broke out. There were 450,000 (Looney,

2012:228) cases of dysentery reported in late August 2010. During the disaster Pakistan also faced the challenge of settlement of refugees as more than 1.5 million Afghan refugees were displaced out of 1.7 million in total. In Khyber Pakhtunkhwa 12,000 refugee settlements were destroyed, which left 70,000 people homeless (Looney, 2012: 228).

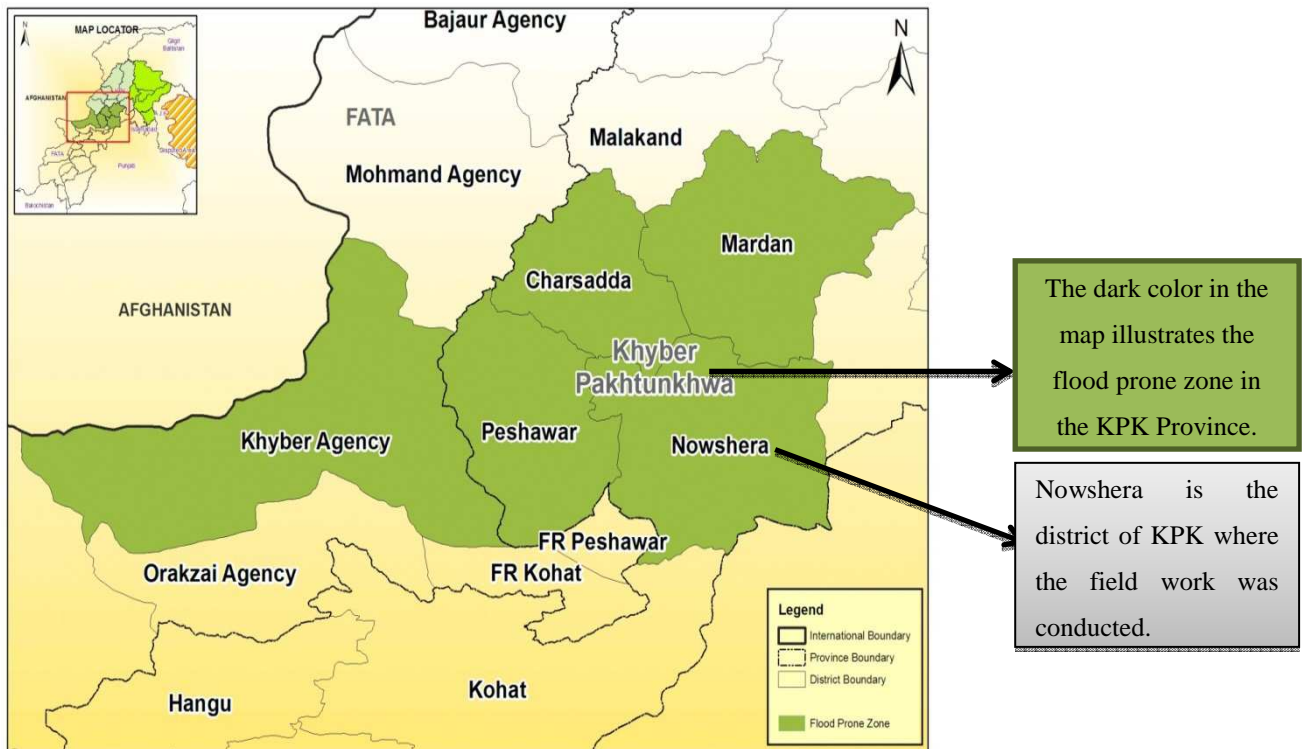


Source: NDMA Annual Report, 2010

This chart illustrates the percentage of different provinces and areas of Pakistan affected by the flood in 2010. The province of KPK is 12 percent on destruction level, because it is the smallest province of Pakistan. However, the casualties are higher than some of the other provinces affected by the flood. This chart also illustrates that the flood did not spare any province of Pakistan and caused huge destruction, especially in Punjab, Sindh and Khyber Pakhtunkhwa.

### 2.3 Background of the Study

Khyber Pakhtunkhwa (KPK) is one of the provinces that was most affected by the flood 2010. Fundamental facilities, infrastructure, human lives, crops and livestock were destroyed on a large scale. Khyber Pakhtunkhwa is the smallest province of Pakistan, covering an area of 74,521sq.km, which is approximately 9.4% of the total area of Pakistan (PDMA, 2012:10). This province is located on the west banks of the Indus River and the Himalayas are in its north. In KPK there are two main river systems, the Indus River and the River Kabul, which flows down from Afghanistan to join the Indus River (PDMA, 2012). The province of KPK has 25 districts, 69 Tehsils and 7335 villages (PDMA, 2012:10).



Source: [http://www.pdma.gov.pk/images/Flood\\_Prone\\_Zone\\_Map.jpg](http://www.pdma.gov.pk/images/Flood_Prone_Zone_Map.jpg)

Prior to the flood, Pakistan was dealing with approximately 4.0 million IDPs (victims of the earthquake in 2005) and refugees in KPK along the border of Afghanistan. However, 95 percent of the affected population by the earthquake has returned to their homes in KPK, but some still remain in the refugee camps because of the devastation of their livelihoods and homes. Moreover, some people have migrated towards the major cities of Pakistan like Karachi and Lahore, which has compounded extra pressure on the existing infrastructure (Looney 2012). The KPK province was already suffering from the consequences of terrorism, militancy and IDPs crisis, but the flash flood which started from the mountainous north of the province resulted in huge destruction. According to the Province Disaster Management Authority, the following are the damage estimations in the different socio economic sectors of the KPK province, shown both in Pakistani Rupee and in US dollars.

**Table 2: Loss estimation of KPK Province**

Sectors	Estimated Damages (PKR millions)	Estimated Damages (US\$ millions)
Social	99,192	1,167.0

<b>Livelihood</b>	16,372	192.6
<b>Housing</b>	78,400	922.3
<b>Education</b>	1,150	13.5
<b>Health</b>	2,780	32.8
<b>Death/injured</b>	490	5.8
<b>Physical Infrastructure</b>	31,934	375.7
<b>Transport</b>	26,409	310.7
<b>Water &amp; Sanitation</b>	1300	15.3
<b>Energy</b>	4,225	49.7
<b>Productive Sector</b>	45,000	529.0
<b>Private Sector</b>	1200	14.1
<b>Agriculture, livestock &amp; irrigation</b>	23,000	270.6
<b>Environment</b>	20,000	235.3
<b>Governance</b>	800	9.4
<b>Grand Total</b>	176,126	2,072.0

*Source: PDMA-PaRSSA, (2010, Report)*

## **2.4 Overview of the Ethnic Communities**

The present study has been conducted within two ethnic communities residing in KPK province and the district of Nowshera. Actually, both communities are quite similar in their norms, traditions, values and language. Therefore, it is hard to draw a strict distinction line between the two (Afghan and Pathan or Pakhtun) based on their values and traditions. However, scholars tried to draw a distinction line that is not very clear because of their shared historical origin. The Afghanistan was founded by the great Ahmed Shah Abdali, and “the territories inhabited by people of Afghan stock were divided between the Persian and the Mughal Empires” (Caroe, 1960: 920). The major distinction between the Afghan and the Pakhtun is found as “Persian designated Afghan was applied to the western tribes, while Pakhtun was used for the eastern tribes who looked towards India” (Caroe, 1960: 922). The Caroe article indicates that, people who live in the western realm and speak the “*Persian*”



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language are Afghan, whereas the tribe who lives in the eastern realm and speaks “*Pashtu*” is Pakhtun or Pathan. Pashto language belongs to Iranian branch of Indo-European languages and 25 million populations are native speakers, which mainly reside in Pakistan and Afghanistan (Rehman, 1995).

Pashto is the mother tongue of the Pakhtuns, and also official language in Afghanistan, but it is not official language of Pakistan (Rehman, 1995). According to the Caroe (1960:920) “Pashtu means far more than the language, it implies a code of chivalry and a way of life”. Hence, the Afghans are considered more conscious of attired and affinity as compared to any other societies in the world. Moreover, they are more easily distinguishable because of their language, habit and dress than other societies (Caroe, 1960). It is important to mention that, Caroe didn’t particularly emphasize on the distinction between the two communities because of their shared values. That is why; he described their traits just being “Pathan” without any particular classifications of being Pakhtun or Afghan.

Approximately, twelve million Pakhtuns are living in eastern Afghanistan and western Pakistan, and they have been called the largest tribal society on the face of earth (Edwards, 1986: 314). In Pakistan approximately two million Afghan refugees are ethnic Pakhtun also called Pathan and Pashtun (Edwards, 1986). However, the figure is higher than documented because of the recent migration of Afghans from the border of Afghanistan to Pakistan. The Pathan identity is characterized by the following attributes, “patrilineal descent, and belief in Islam, the practice of Pakhtun custom, which also includes both speaking *Pakhtu* and following Pakhtun custom” (Edwards, 1986:315). Moreover, there are some important classifications of Pathan custom like hospitality, Jirga system (Tribal council to resolve issues and decision making) and maintenance of Purdah (Female seclusion). These customs are very significant to keep their identity as Pakhtuns and their distinctiveness, which “emphasize male autonomy and equality, self-expression and aggressiveness in a syndrome which might be summarized under the concept of honour (Izzat)” (Edwards, 1986: 315). Furthermore, in social interactions bravery (ghairat) is very important that means that a person who possesses this trait is able to protect his rights, property and himself.

Pragmatically, we can differentiate both ethnic societies on the basis of current environment. First of all, in the present study I distinguish Pakhtuns and Afghans on the basis of their homeland. The tribes who are living in Afghanistan or belong to Afghanistan are Afghans, even if they speak *Pashtu*. Furthermore, Afghans are more rigid in the maintenance of

“*Purdah*” than the local Pakhtuns in Pakistan. The Afghans life style and values have not changed and merged with the Pakhtuns and still they are maintaining their custom of “*kinship and affinity*”, which is not significantly found in Pakhtuns. Moreover, many Afghan tribes are “*nomadic*” than the Pakhtuns as I observed. In Pakistan many Pakhtuns have adopted with the modern society and culture, but Afghans are highly attached to their indigenous values. Furthermore, these two ethnic communities are studied on the fact that, Pakistan is a multinational federal state, and the Pakhtun is the major nationality in KPK. The Pakhtun in KPK share culture and historical tradition with Pakhtun tribes in Afghanistan. The Afghans I interviewed came as refugees to KPK after the soviet invaded Afghanistan in 1979. So that, both groups are holding different statuses and gain the entitlements and rights differently that is big factor differentiating Afghans from Pakhtuns, prior to their social, cultural and traditional distinctiveness and sameness.

## Chapter 3

### Literature Review

#### 3.1 Introduction

The flood that occurred in Pakistan in 2010 is one of the extreme natural disasters in the history of Pakistan that hit millions of people and one fifth of the total land of Pakistan (Tariq et.al, 2011). “For those flood victims who could not determine that flooding would occur, there were more extensive consequences arising from a lack of preparation and an inability to save their property, resulting in great personal loss” (Tariq et.al, 2011:80). The perusal of available literature pertinent to the present study has provided valuable insights to excavate the phenomena of the flood. In order to provide an adequate overview of knowledge currently available on the topic under study, this chapter is divided into three interrelated themes.

Firstly, 2.1 (Flood and socio economic vulnerability) discusses literature on the consequences of the flood for the affected population. Secondly, 2.2 (Women as Vulnerable: Causes), presents existing knowledge on women’s vulnerability in relation to natural disaster. Finally, 2.4 (Contribution of the present study), discusses the importance and relevance of the reviewed literature with respect to the present study, and also highlights lacks important for a full picture of the phenomenon of climate change, women, vulnerability and gender relations. It also elaborates the contribution of the present study towards the literature on climate change and gender relations.

#### 3.2 Flood and socio economic vulnerability

An article by Brown on vulnerability investigates the practical and ethical implication of the concept as well as distinguish among the people who are most vulnerable in terms of allocation of resources, state interventions etc.( Brown, 2011:313). The author argues that, “vulnerability informs how we manage and classify people, justify state intervention in citizens’ lives, allocate resources in society and define our social obligations” (Brown, 2011:313). Brown’s focus is on children, young adults who are lacking the capacities to cope with damage and other who have difficulties to learn to make adjustments like homeless people, sex worker, asylum seeker refugees and women (Brown, 2011:314). Brown concludes that “vulnerability has close links with choice, responsibility, blame and legitimacy” (Brown, 2011:319).

Bohle et.al. , 1994 investigates the causal structure of vulnerability to food insecurity caused by climate change by using social vulnerability theory. The study is carried out to investigate the socio economic vulnerability of the vulnerable groups in Zimbabwe. In order to gauge the perturbations caused by climate change, emphasis is put on human ecology (means relationship of people with nature), expanded entitlements (means legal and cultural rights to achieve something or cope with, and capacities and capabilities) and political economy. The study also reveals that, agriculturalist, pastoralists, wage laborers, urban poor, refugees and destitute groups are particularly vulnerable (Bohle, et.al., 1994:42).

An article by Sims et. al., 2009 focuses on the spatial disruption and vulnerabilities and dependencies related with flood recovery in the region of Europe. This article reveals, “an emotional and physical landscape of caring in the context of recovery and illustrates the intimate connections that exist between ideas of dwelling and caring” (Sims et.al., 2009:303). Participatory and real- time dairy based research methodology is used to see the severity of vulnerability following the flood in 2007 in Hull, Northeast England. The study reveals that emotionality attachment with home is discovered or exposed when disaster occurs and creates homeless. Damage of the home means the damage of fiscal and physical resources that are used to protect dear ones or close relatives. “The disruption caused by the flood involved a disassemblage of the bodies, emotions, objects, and technologies that constitute the very place in which care takes place” (Sims, et.al, 2009:307). The study highlights that geographical location and space is an inevitable factor in the process of post flood recovery practices e.g. in the provision of health care.

A review of the book on climate change and displacement is by Mank et.al.,( 2012) highlights the issues of migration and displacement due to the environmental changes and some other interrelated factors. Climate change has high impact on the Asia Pacific region, and triggers possible migration as compared to other parts of the world. Hugo emphasizes that a “complex interrelationship exists among the mobility of a particular population, the population resources, environmental changes, economic development and social change” (Mank & Jackson, 2012:270). At the same time, he points out that scholars and policy makers must pay attention to other factors of migration as well after natural disasters, though it is the major cause that influences the migration. According to Hugo, forced migration is often a result of natural hazards. Hugo further argues that displacement due to climate change is usually for short periods of time, because mostly it is sudden and later, affected people want to go back to

rebuild their homes. According to Bernett and Weber, (2012) individuals in rural areas might be on high risk of migration due to changes in climate. They further argue that “financial, informational, and legal barriers pose significant obstacles for people who seek to migrate as a response to the risk of environmental changes that especially affects the poor” (Mank & Jackson, 2012:273).

According to Sharma et.al, 2009, in Asia pacific region natural disasters like floods, cyclones, volcanic eruption monsoons (rains) and earthquakes are recognized to increase over the recent decades. However, the developing countries in the regions are affected by the natural hazard extremely. It is described that, “between 1991 and 2005 more than 90% of natural disaster deaths and 98% of people affected by natural disasters were from developing countries” (Sharma et. el, 2009:134). Therefore, they emphasize the importance of Indigenous knowledge is emphasized by Sharma et.al, in order to cope with the calamitous situations after the flood or natural hazard. They identify indigenous knowledge based disaster risk reduction practices in order to save the culture and society from damage, to build resilience on community level and to create balance between modern technology and local practices. Better strategies (for instance, new techniques for cropping system, livestock and social security) can be developed by the communities to cope with food insecurity as a result of flood or draught.

A study on Bangladesh regarding Socio Economic Vulnerability and Risk Management by Brouwer et.al, (2007) reveals that unequal distribution of income at the community level increase the level of risk exposure individually and collectively. It also reveals that, poor people are more vulnerable to be hit by flood, those who are unable to adopt preventive measures in order to save their property. The findings of this study showed a positive association between environmental risk, poverty and vulnerability. Poor people are at high risk because they live near the rivers as well as because they have insufficient income, less land and less access to natural resources. The findings also suggest that farmers and fish cultivators suffer more in absolute and relative terms. This study also illustrate that the support or flood relief given is often not sufficient.

Furthermore, a study by Kovats and Akhtar (2008) on climate change and human health in Asian cities reveals that climate changes (increase in temperature, rainfall, floods etc.) have negative effects on human health. However, policy makers or climate change assessment institutions often overlook the effects of climate change on humans. The authors suggest an immediate need to improve the effectiveness of public health and interventions to improve the

resilience of affected cities. The study also reveals that, after the extreme event poor people living in the urban areas often experience a greater degree of infectious and viral diseases. Moreover, in India and Bangladesh diarrheal diseases are reported due to the floods. The findings of the study suggest that children are vulnerable to water related diseases because of playing in the stagnant floodwater and living with floodwater inside the home. It is concluded that in poor and middle income countries the effect of climate sensitive diseases are high due to increase in population near hillsides, rivers and flood plains (Kovats & Akhtar, 2008:173).

A study by Kartiki (2011:23) in rural Bangladesh regarding climate change and migration suggests that “migration in response to climate change should not be seen as a failure to adapt, but as a strategy to increase household resilience”. He argues that there are four significant aspects of life that is affected by natural disaster. They include: damage to shelter, livelihoods, lack of availability of clean drinking water, threat to life and weaken the ridge. Moreover, the environmental degradation or change further intensifies the stimuli towards migration to safeguard consistent livelihoods in a safe environment. Furthermore, the frequent changes in climate decrease the ability to cope with future hazards at the household level.

A study by Daanish Mustafa (1998) on the structural causes of vulnerability to the flood hazard in the region of Pakistan depicts that the powerlessness of groups and individuals form their exposure to hazard. People living in the area or locality of Pindi and Qatalpur suffer a lot due to spillways, but they have little to say. His study illustrates that the government designs the spillways and irrigation system of Punjab for the benefit of big cotton growers. Therefore, vulnerability to hazard in this region is due to powerlessness and poverty. Beauocrats and engineers refused to see the connection between this and poor policies that establish spillways and irrigation systems which cause vulnerability to hazard, and rather insisted that flood is the work of God. He concludes in his study that disempowerment is playing a vital role in the vulnerability of such communities (Mustafa, 1998).

After reviewing the pertinent literature, it is found that, in the past few years natural and social scientists have showed concern regarding the rapid changes in climate in Europe, Africa and South Asia. It is found that, natural disasters like hurricanes, floods, earthquakes, draughts and cyclones are the most prominent phenomena discussed under the umbrella of climate change. The literature reviewed has significant relevance for the present study because; major issues related to climate change are earnestly highlighted. For instance, the issues of food insecurity, migration, and unemployment, level of social and economic

vulnerabilities among minority groups or communities are highly relevant for this study. In the following, an adequate overview of literature regarding women's vulnerabilities is given, which is the main focus of the present study.

### **3.3 Women as vulnerable: Causes**

According to Dankelman and Jansen (2010), many women around the world are playing important roles in the production of food. Their book illustrates that women are associated with informal income generation roles dependent on natural resources, for instance energy, crops and water. But there are certain environmental problems, which vulnerable groups, especially women face such as environmental degradation and deterioration. This degradation causes change in power relations within the community and family, and between genders. Women often lose more of their control over natural resources than men as result of climate changes and become marginalized (Dankelman, Jansen 2010).

A factsheet prepared by United Nations demonstrates that women get affected more by climate change than men, and that the majority of the affected women are poor and dependent on natural resources. Especially women in rural areas suffer from lack of decision making and have no access to information, which multiplies their vulnerability to climate change (UN WomenWatch 2009:1). Furthermore, climate change increases the phenomena of internal displacement and migration (UN WomenWatch 2009). This fact sheet further illustrates that climate change has serious impact on health issues because of "increased morbidity and mortality, heat waves, floods, storms, fires and draughts" (UN WomenWatch 2009:4). It has serious impact on women's health, and indicates a greater prevalence of infectious diseases like malaria, dengue fever and cholera among women.

According to Duncan (2007), because of the household division of labour, women usually come in contact with contaminated or poor quality water that results in water related diseases, and women are therefore more vulnerable than men. Moreover, climate change has impacted on and increased respiratory diseases, and 2.5 million women and children die each year due to respiratory infection (Duncan, 2007:11). Some groups of people are more vulnerable due to extreme events for instance immigrant women, indigenous people, isolated groups, poor refugees, etc. (Duncan, 2007). Moreover, Disasters cause serious psychological impacts on individuals like posttraumatic stress disorder, depression, frustration, grief, suicides etc. (Bonanno et. al., 2010). The authors argue that, disaster creates several forms of outcome, like

psychological resilience. It is indicated that, “Some survivors recover their psychological equilibrium within a period ranging from several months to 1 or 2 years” (Bonanno et. al., 2010:1). However, it is difficult for those people who lost their close relatives during the disaster to come out from the psychological and emotional trauma.

Agostino & Lizarde (2012:90) argue that “those in the south who are most affected by environmental changes need to receive justice from those in the North who are most responsible for climate change”. The authors investigate the impact of the un-sustainability of current economic model, particularly on women. They further argued that, there is need to stop the excessive consumption to prevent the future hazards caused by climate change. Women need to be included in decision making and policy making process. The authors argue that, “vulnerable populations calls for processes that refer both to climate justice and restorative justice” (Agostino & Lizarde, 2012:92).

Poverty is linked with vulnerability and the marginalization of women, because 70 percent of women in developing countries are living below the line of poverty (Denton, 2010). Women are not involved in the decision making process as related to climate change, and environmental policies do not integrate women to address their marginalization. The author argues that the importance of women in natural resource management was presented and highlighted in the Agenda 21 documentation in the UN conference on Population and Environment, but not well represented in the policy formulation (Denton, 2010:12).

Vulnerability to environmental degradation and natural hazards is articulated along social, poverty and gender lines” (Nelson et.al, 2010:51). But gender relations are not properly gendered within the development policies of climate change. The authors state that, gender relations are neglected in the climate change development policies because of ‘Gender Blindness’ (Nelson et. al., 2010:52). They further argue that, in the developing countries the phenomena of varying vulnerabilities among men and women to disaster are not studied properly. Women are at high risk because of “culturally specific pre disaster gender norms” (Nelson, et. Al., 2010:55). However, the native people can create resilience to natural hazards by utilizing the natural resources with improvements.

According to Awumbila et.al., (1995), women are the most vulnerable group during environmental degradation. Awumbila et. al. conducted their study on developing countries in Asia (Sri Lanka) and Africa (Ghana, Sudan). The authors argue that the ecofeminist and the



women and environment (Awumbila et. al., 1995:337) approaches do not pay attention to women's time use on their reproductive role that may hinder their abilities to cope with extreme events. It is stated that, cooking and domestic work consume most of the women's time, water fetching takes on average an hour each day, and firewood collection also takes one hour approximately for rural women. However, the specific area, family structure, age and customary norms or context are significant factors that influence the use of time and division of labour. The study reveals that, there is evidence that women have shorter time for rest as compared to men in Asia and Africa. It further suggests that, environmental degradation has cumulative impact on women's assignments (Awumbila et. al.,1995). Similarly, in developing countries "stratification heightens the vulnerability to disaster and catastrophe often intensifies existing gendered social phenomena such as financial strain, marital difficulties, and women vulnerability to male violence" (Bailey.,2005:496).

It has been documented that, in developing countries girls and women spend a lot of time in fetching water from faraway places every day. The water is often contaminated, which results in the health problems among women because women are much in contact with water (UN WomenWatch, 2009). Similarly, a study on climate change and human security in India shows that, "women are more vulnerable than men to differential impacts of climate change because they share most of the household managing responsibilities, but have little access to decision making and governance" (Parikh et.al., 2012:180). It further reveals that men and women are vulnerable in different ways because of the difference in roles and responsibilities. The study also indicates that vulnerabilities are more among women because they do not have enough adaptive capacity, which could be because of illiteracy, inequality in social and legal rights, and insufficient access to resources and information.

Cannon's (2009) study on gender and climate hazards in Bangladesh also demonstrates the relevant information that poverty and vulnerability are closely linked, and further that, it tends to affect women more. The study further illustrates that, the degree of vulnerability in diverse groups varies according to their place, initial condition, mental and physical health, mobility and self-reliance to cope with the natural hazards.

Furthermore, a study by Faisal et.al, (2005) on gender water nexus in Bangladesh reveals that, water is collected by children and women for domestic use so that they are victim of many psychological and physical problems. This is because poor sanitation, inappropriate water storage and improper maintenance of water sources like tube wells and ponds are factors of

water borne diseases. The study further reveals that, water collection is also depends on cultural, religious and socio economic position. Women have less participation in agriculture water management, which is generally related with the right to land. Women are facing hardships because of lack of awareness, education, empowerments and access to resources (Faisal et.al. 2005: 175).

A study has been carried out in the province of Sindh (Sindh is a province of Pakistan) on gender and home building in disaster to investigate the early recovery and shelter provided by national or international organizations. According to Shah, (2012), during the floods of 2010 and 2011, particularly minority groups, old age people, children and women were vulnerable and badly suffered in the provinces of Khayber Pakhtunkhwa and Sindh. In order to deal with the social vulnerability the UN International Strategies for Disaster Reduction toolkit was developed. In order to deal with social vulnerabilities Pakistan, National Disaster Management also established gender mainstreaming strategies. This study reveals that, around 70 percent of women's income source is associated with agriculture (Shah, 2012:252). Therefore, the majority of the women lost their income generating activities due to the flood. The author stated that, women engineers were not engaged in house building process, because the capacities and capabilities of women are under estimated by the authorities. Therefore, women could not utilize the existing income generating opportunities. The results of the study reveal that, gender issues and gender mainstreaming were neither appropriately taken into account nor implemented by the national and international organizations.

Recently, several research papers have been published on the multiple dimensions of climate change affecting the human lives, particularly women and immobilized groups. It is noticed that, there is a lack of literature on recent flooding in Pakistan, especially in the context of women, gender relations and marginalized groups' exposure to disaster. Although health related issues are emphasized especially flood water related diseases among poor or marginalized people, but little attention is paid to consequences of recent flooding in Pakistan on women's lives.

### **3.4 Contribution of the present study**

Recent studies have focused on socio economic vulnerabilities and women's exposure to disaster, but less attention has been paid to excavate the specific issues and concerns within the household, provision of shelter and gender relations comprehensively. The present study

contributes to the literature on climate change in the following ways. It adds knowledge in the context of Pakistan about the multiple socio economic vulnerabilities among ethnic groups caused by climate change. It provides a picture of women's coping difficulties in relation to natural disaster as well as of changes in their gendered roles and attitudes as result of the 2010 flood in Pakistan. It also explores future aspirations of local communities, and local experiences about the assistance given by national and international actors in the beginning of disaster as well as in longer term perspective.

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## Chapter 4

### Theoretical Framework

#### 4.1 Introduction

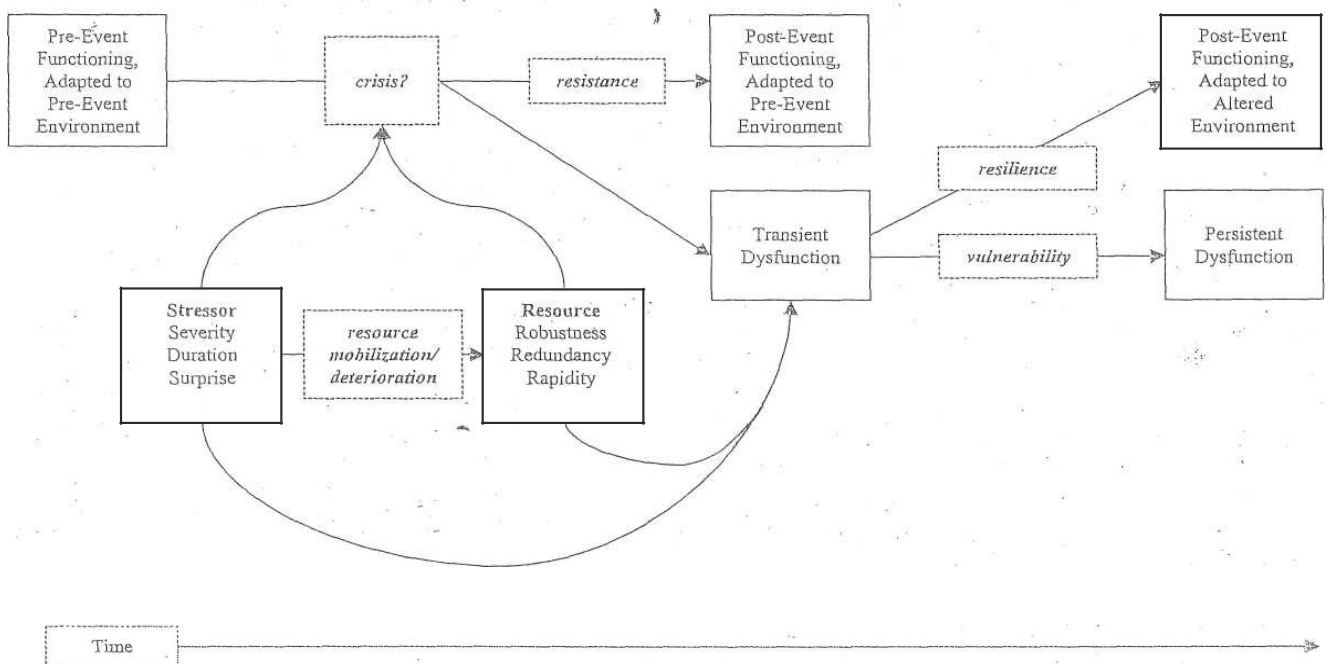
The present study investigates socio economic vulnerability in Nowshera following the devastating flood in Pakistan 2010. Nowshera is situated in the Khyber Pakhtunkhwa (KPK) province bordering Afghanistan. Particularly, emphasis is given to the impact of the flood on women's lives and to exploring changes in gender relations. The present chapter provides a discussion of the theoretical frameworks used in order to answer the study's research questions. *Community Resilience Theory*, *Social Capital Theory* and *Social Vulnerability Theory* are used as tools for the analysis of the research findings. Before describing the theories, I would like to mention again the thematic division of research findings into chapters. The research findings are divided into three empirical chapters. The first empirical chapter discusses social vulnerability as it occurs within two ethnic groups (Afghan and Pathan). The second empirical chapter discusses economic vulnerability and gender relations, and finally, the third empirical chapter presents the flood survivors thoughts about the future. I seek to explain how my informants managed to deal with the natural disaster, and found the perspectives and concepts of resilience, social capital and vulnerability theory to be fruitful combination.

#### 4.2 Community resilience framework

A natural disaster may cause perturbations in a social and economic system as well as among individuals, groups and communities. In order to understand and analyze the flood victims struggle to resist the repercussions of the flood and change in their lives *Community Resilience Theory* is applied. Community resilience means "the ability of a community to absorb a disturbance while retaining its' essential functions" (Longstaff et.al., 2010:4). The word "Resilience" was introduced by the theoretical ecologist C.S. Holling in 1973. He introduced this term to understand reactions to spontaneous or unplanned changes perceived in the ecosystem (Gunderson, 2000). The term resilience may be defined as "the time required for a system to return to an equilibrium or steady-state following a perturbation" (Gunderson, 2000: 426). In ecological studies the concept resilience has been used to describe individuals' adaptive or coping capacities (Norris et. al., 2008). The term resilience indicates resistance

against perturbations caused by natural disaster or structural hazards. Resilience supports as a bouncing force to deal with the calamitous events in an efficient way (Marrero & Tschakert, 2011).

Norris et. al., (2008) used community resilience theory to analyze the processes of adaptation in a way that seems well suited to the present study. Community resilience elaborates the wellness and adaptive capacity of the affected population on the basis of equality. Moreover, four basic sets of adaptive capacities, economic development, social capital, information and communication and community competence are discussed by Norris and his colleagues (2008). These four sets of capacities have great significance in the analysis of empirical chapters in this study. According to the theory, communities should minimize risk and reduce inequities in order to build collective resilience by the participation of locals in the process of extenuation (Norris et. al., 2008:127). In order to alleviate the repercussions of disaster it is significant to utilize the resources, capacities and capabilities within the community, because communities have shared interests and geographical locations. Community Resilience theory contributes to the analysis of the major part of the findings related to resource, risk management and livelihoods among two ethnic communities (Afghan & Pathan) before, during and after the flood. The following model is taken from Norris' above mentioned study of community resilience. The model describes the connection between possible factors that influence the process of a disaster and possible outcomes after the process of resilience.



(Norris et.al.2008:130)

The community resilience model is used to help answer the questions regarding level of stress and coping strategies following the flood. The model helps to analyze the pre-event situations and functioning of the affected population (both Afghan and Pakhtun). It also helps first to understand the crisis situation that occurred at the time of the disaster and then to analyze the stressors, duration, severity and shock caused by the flood. Moreover, it helps to analyze people's reactions and responses towards the calamity in terms of resource mobilization, and thus analyze the communities' initial response to the crisis.

Moreover, it helps to analyze the resistance to the crisis on the basis of resource robustness, redundancy and rapidity. Actually, "Community Resilience is a function of resource robustness and adaptive capacity" (Longstaff et.al., 2010:4), which includes social capital, an important ingredient for resilience. Robustness means "ability to withstand stress without suffering degradation" (Norris et.al. 2008:134). The model of community resilience helps to analyze the post-event functioning adapted to pre-event environment as result of resistance taking place within two communities. It helps to analyze the transient dysfunction that will work as a bouncing force for the process or continuation of resilience to combat vulnerabilities. It also helps to analyze the end result of this transient dysfunction and whole process of resilience that leads to analyze the positive or negative outcome of post-event functioning adapted to the altered environment. For instance, the outcome of the presented model is either resilience or vulnerability. However, the focus of the present study is not just to investigate the outcome of the resilience, but rather to analyze the process that produces the outcome. Furthermore, community resilience framework also helps to analyze the strength of "economic development, social capital, information and communication and community competence" (Norris et.al., 2008:127) all important resources in the fight against deterioration within two communities.

Community resilience is analyzed mainly along the above mentioned dimensions in the empirical chapters. These dimensions focus on the importance of available resources within the community or groups after the disaster to continue the mitigation process. In this study community resilience is used to analyze different aspects on different levels like individuals, family [gender] and community. The later theories are integrated with resilience because; resilience is a process, as mentioned, which includes social capital and vulnerability as well. Resilience depends on the resource robustness (social, economic, natural etc.) that manifests

the increase or decrease in vulnerabilities within groups. Therefore, these theories support each other on central points in the analysis of the empirical findings.

In the first empirical chapter resilience is analyzed in terms of crisis, as mentioned earlier, and level of resistance within the Afghan and Pathan communities to face the hazard. Moreover, above mentioned model presents the broad picture of the socio economic situation within both ethnic groups before, during and after the natural disaster, which is emphasized in the first empirical chapter. The theory is also used in the gender relations chapter, in connection with resource management to enhance the livelihoods and reduce the risk or disaster impact.

The theory helps to analyze the mitigation process in terms of social capital (support from close relatives, property, social contact etc.) and other resources, and analyze the positive and negative outcomes. Communities or groups that are dependent on inadequate resources are less likely to adapt to climate change because it depends on linkages, positions and on proper functions (Norris et. al., 2008). It is likely that, different groups of people get affected differently and resists the perturbed situations differently. There are often higher chances of survival in hazards situations for people rich in resources (both economic and social). Community resilience theory is also applied in the third empirical chapter to analyze the flood survivors' plans to rebuild their livelihoods. It also helps to analyze the continued resistance within both ethnic groups to deal with the damage, and the role of national and international assistance in rebuilding the infrastructure for the proper functioning of the communities. Moreover, it also helps to study whether vulnerabilities are still persisting, or alleviated.

### **4.3 Social capital framework**

“It’s not what you know, it’s who you know” (Woolcock & Narayan, 2000: 225). The notion articulates the significance of interaction among people in a particular setting and how it might lead towards an increase in social capital. The term “Social Capital” was first used in 1980s when sociologists like Bourdieu, Lin and Coleman investigated the concept with details to present the production of capital through social interactions and relations (Lin, 2001). The concept of social capital is defined by Woolcock and Narayan as “the norms and the networks that enable people to act collectively” (2000:225). Furthermore, the concept of social capital is described as

“Those tangible substances that count for most in the daily lives of people: namely good will, fellowship, sympathy, and social

intercourse among the individuals and families who make up a social unit. If an individual comes into contact with his neighbour and they with other neighbours, there will be an accumulation of social capital, which may immediately satisfy his social needs and which may bear a social potentiality sufficient to the substantial improvement of living conditions in the whole community” (Hanifan, 1916:130) [cited in] (Woolcock & Narayan, 2000: 228-229)

According to Lin, (2001) social capital is comprised of social resources rooted in social relations and social structures, and it is an investment in social relations by which resources of other entities can be borrowed. “Social capital theory provides an explanation for how individuals use their relationships to other actors in societies for their own and for the collective good” (Adger W. Neil, 2003: 389). Moreover, social capital means “investment in a social relation with expected returns” (Lin, cook& Burt,:6). It illustrates that, social capital is associated with productive interaction between individuals or groups with an expected outcome. The mentioned arguments are significant in the discussion of the present study. The analysis is made accordingly. The community resilience model presented in this chapter illustrates the resource robustness, Redundancy and Rapidity, and social capital position’s there as a supplementary resource. Actually, social capital is “social resource” (Gotschi et.al., 2008:650) that may work very effectively to buffer the effects of natural disaster, if communities possesses such resources.

I have chosen to emphasize social capital among the many dimensions in *Community Resilience Theory* because in Pakistani society, especially in the northern parts of the country, the structure of the family is strong and influential, as I observed during fieldwork. However, the social capital situations vary in relation to gender, age, ethnicity and position or socio economic standing. Generally, emphasis is given to understanding the formation of social capital through different connections and interactions after the flood.

In the first empirical chapter social capital theory is used to analyze the available resources between the Afghan and Pathan groups to combat the prevalent situation following the flood. Social capital theory helps to understand the questions pertinent to social vulnerability and gender relations following the flood. It also supports the analysis of social mobility, cultural roles and norms in relation to gender. For example, after the disaster many men migrated from



one place to another to seek livelihoods. In the meantime, some women started going to the market to buy food items etc., which was not previously acceptable behaviour in that society. Importantly, some women even started working without caring about protecting their social capital as “*inside creatures*” because it was necessary for them to deal with and resist the stress caused by the flood. Therefore, the theory helps to interpret the creation of new norms as a result of resilience, and the reduction in the influence of customary norms in relation to community adaptation following the disaster. In the third empirical chapter the theory is used to explain whether social capital helps to form their standard of living after the flood or it provides experience to form new ways of accumulating resources through social intercourse. However, it is noted that, social capital is only one aspect of resource robustness, and that also different aspects and kind of resources are considered during the analysis of the empirical chapters. Such resources include, access to information, natural resources and property, mental health, religious beliefs, social services etc.

#### **4.4 Social vulnerability framework**

Vulnerability theory has been widely used in the literature and in many social science disciplines. Vulnerability is a Latin word which means “liable to be wounded” (Guimaraes, J.R Ricardo, 2007: 236-237). The concept of vulnerability is used in many contexts to understand the phenomena like food insecurity, disaster or risk management, poverty, agriculture or irrigation, health, climate change and so on (Kelly & Adger, 2000 ; Bhole, Downing & Watts,1994; Mustafa, 2002; Brown, Kate, 2011). Accordingly, there are several definitions and usages of the vulnerability approach. I find the following definition particularly relevant for the present study. vulnerability can be defined as “the characteristics of a person or group and their situation that influence their capacity to anticipate, cope with, resist and recover from the impact of natural hazards”(Wisner, 2004:11cited in Donner & Rodriguez, 2008: 1090-1091).

The community resilience model presented in this chapter situates vulnerability after the transient dysfunction, which means that if the resources are not robust and rapid, it can create vulnerability. Such vulnerabilities lead toward persistent dysfunction of the society or communities. I choose vulnerability theory to analyze the capacities of affected ethnic communities (Afghan and Pakhtun), whether they are able to get back their livelihoods and adapt the altered environment, or they are still suffering under the effects of the stressors that made them vulnerable. It helps to analyze the outcome of the resilience process on the basis of

available resources and the strength of the resources within the two communities. The emphasis is given to analyze both ethnic communities and genders in terms of resource management, resource robustness, redundancy and rapidity to counteract the vulnerability.

According to Martin Voss (2008:41) “vulnerability itself is a consequence”, that means that it is societal or organizational lacks that cause vulnerability. Vulnerability is a relative term or approach that, “focus on prior damage” (Obrien et.al.,2011:75) and inability to deal with those changes that occur due to climate change. Hence, it is important to this study due to the prevalent issues in northern Pakistan like poverty, an unstable political scenario and lack of political representation to address the hazards that intensifies the vulnerability of inhabitants (Cutter et.al.2009). *Vulnerability* is actually part of *Community Resilience* as mentioned earlier in this chapter. Vulnerability theory is integrated to analyze the social (health problems, anxiety, food insecurity, homelessness or lack of adequate shelter) economic (economic insecurity, joblessness, low income, migration, poverty etc.), and contextual (gender, migrant groups or minority groups, children and ethnicity) vulnerabilities caused by the face of hazard. Vulnerability theory is applied in terms of human risk to disaster and to depict the further consequences of the flood on their livelihoods. It also focuses on the level of vulnerability and outcome after the process of community resilience. This approach is applied on all empirical chapters in this study as it well suited for the analysis of different themes and sections.

While community resilience theory constitutes the main theoretical framework, I have chosen particularly to emphasize two elements in the resilience model, social capital and vulnerability, based on experiences in the field that convinced me that this would be wise. These elements are particularly important in this particular context, because it was observed in the field that most people were still not living decent lives two years after the flood. Therefore, all theories presented in this chapter help in the analysis of the reasons for and consequences of current situation within the two studied communities.

## **Chapter 5**

### **Research Methodology**

#### **5.1 Introduction**

Research is “a process we use to understand our world in a way that goes far beyond simple description, common sense or anecdote” (Matthews & Ross, 2010 p: 7). For the purpose of research we need to adopt certain procedures and strategies to get knowledge about particular phenomena or events. Those procedures and strategies help us to produce knowledge in scientifically valid ways. Therefore, this chapter discusses the research methodologies employed to get the information pertinent to the present study. Particularly, it will describe the way I conducted my research and how I dealt with the situations and challenges that occurred during the field work. The nature of this research was qualitative, comprised on several qualitative research methods such as group discussions, semi structured interviews and observations.

#### **5.2 Qualitative Research Methodologies**

The present study applied qualitative research methodologies suitable to the nature of the researched topic. In order to discover information on the flood disaster through a gender perspective, it was a pre-requisite to understand the phenomenon through community people’s perception by systematic participation. Therefore, qualitative research methodologies were applied because these are used in social and cultural studies to dig out the life world experiences of people. Likewise, I employed qualitative research methodologies in order to excavate the informants’ point of view and experiences regarding the flood in 2010. Information was also gathered about current living conditions as well as live stories before and after the flood, with a particular focus on gender.

I chose qualitative research procedures because it “is pragmatic, interpretive and lived experiences of people” (Marshall & Rossen 2011, p: 2). Qualitative research methods are geared towards providing a holistic picture of a particular event and entities. Here, qualitative research methods were used to collect data because they provide a description and interpretation of the flood phenomenon through the voices of flood survivors by applying methods of data collection such as group discussions and in-depth interviews. Furthermore,

observation added new insight into the phenomenon through analyzing the observations of the specific context along with information given by the informants.

### **5.3 Access to the research area**

I started my field work later than scheduled due to delay of my resident permit in Norway. The scheduled time for starting the field work was middle of June till the month of August 2012. But, I started my fieldwork in the month of August and ended it by the end of September. It was a short period of time but, I made it realize the hard work in such a brief period with the help of my brother in Pakistan. He provided the facilities needed to start my field work and made it possible. For instance, he arranged accommodation, means of transportation, and an interpreter with the help of his friends who are government officials serving in KPK (Khyber Pakhtunkhwa). His contacts were very beneficial in order to access the field. At last, I started the travel to Peshawar from my city Lahore with my brother on 5<sup>th</sup> of August.

I initially planned to stay in Peshawar during the fieldwork, but as the distance between Peshawar and Nowshera is approximately 25 km and the distance from Nowshera to the villages chosen for research would come in addition, therefore, I travelled it proved too far away. To Nowshera, where I started living in a cantonment area in the army officer's mess called ASC center. It was located in the city and it was feasible to move into the city as well as to my research sites. The drive from Nowshera to adjacent villages and towns took around 2 or 3 hours every day. The area was not familiar to me because I never been there in my life and the region is far away from Lahore, where I came from. . In this connection, my assistant and interpreter played an important role to solve my difficulties in order to access the field as well as getting in contact with possible informants. My assistant was well known with the cultural diversity in the geographical locations destroyed due to the flood. The security situation was not safe during my fieldwork and bombs went off in Peshawar on 3<sup>rd</sup> and 4<sup>th</sup> September during my stay. This uncertainty made me eager to finish my field work before the insurgence may spread to the district Nowshera.

### **5.4 Selection of the field area**

The field work was conducted in Pakistan in the province of Khyber Pakhtunkhwa (KPK). The research area was the district Nowshera. There were some other parts of the province badly affected by the flood 2010, like Swat valley Charsadda and Mardan. However, those

areas were not easily accessible in terms of safety, time and money. The district Nowshera was chosen for the research because of the severity of the damage there as well as its easy accessibility. Certain villages and towns were selected as research sites notably, Iza Khail Pir Piai, Pashtun Garrhi, Iza Khail Bayan, Choki Drab, Muhib Banda and Kabul River Bank (Nowshera). The above mentioned villages and towns were badly affected by the catastrophic flood of 2010. Therefore, they were selected as sites for the research. Some camps were also selected to get the wider picture and to understand the problems of different tribes or communities in different settings. Mainly, the camps were located along the roads and railway lines and these camps were not under the protection of NGO or government administration. Majority of the people living in those ordinary camps were Afghan refugees, and these camps were not rehabilitative camps with basic facilities. The purpose to choose those camps was to see the living conditions of people living in different places and surroundings. This region is mainly populated by the ethnic groups Pathans and Afghans. Despite the differences, the local language, culture, values and traditions of the mentioned areas were similar for almost all people in the area. So, it was feasible for me to know their rules of life and act accordingly, instead of adopting different strategies for different cultural settings.

As mentioned before, the area was not familiar to me although I am Pakistani. Thus, it was difficult to know the culture, customs and values of the different ethnic groups. I felt like an outsider there because my language, clothes, culture, tradition and outlook was different from them. But at the same time I felt an intimacy while talking to the local people because of their hospitable attitudes and also an emotional attachment of being one nation. They had suffered a lot due to the flood, and their dilemmas were also painful. Thus, it was a mixture of having insider and outsider feelings. The selection of research areas was also made on the basis of safe access, as the chosen research area was under insurgency. In this regard, my interpreter helped me to choose those villages and towns which were easily accessible and less time consuming. It was also important to consider the time and economic resources spent in the field. Moreover, emphasis was given to those areas where entrance was not prohibited. Access to the field and selecting the research area was challenging, but was made possible with the help of representatives of the authorities in the area.

### **5.5 Selection of informants**

The informants were selected according to the requirements of the topic researched and purposive sampling technique was applied. The purposive sampling gave an opportunity to

select the informants “with purpose” (Matthews & Ross, 2010 p: 167) to investigate the phenomenon. Usually, purposive sampling is linked with small and in-depth studies in qualitative research for the sake of data collection, and with an emphasis on the investigation and interpretation of experiences (Matthews & Ross, 2010). The informants were adult women and men and all the women and men were either married or widowed. Both men and women were included in order to see the variations in gender relations and socio economic vulnerability. Generally the married women informants were younger in age than the married men. It was difficult to select women informants for the group discussions and interviews since northern Pakistan is a very male centered society, and before starting any conversation with women the researcher needed the permission of their male guardian. The informants were selected for the group discussions or for interviews by knocking at their doors and asking for their participation.

Moreover, in order to select informants connections were made through the translator/assistant and the local community. My main assistant in the field area was a soldier retired from army services. He had also worked with several NGOs during the flood. Another was a driver who knew the roads and villages that were extremely affected by the flood in 2010. The main assistant was with me until the end of my fieldwork and was very beneficial. He was my interpreter as well because he was educated and competent to speak Urdu and bit English along with his mother language (Pashto). There were many barriers to communicate with Afghan women because this ethnic group never allowed unknown men inside their house to talk to their women. Therefore, my assistant was not able to help me out in these situations, but he made it possible to locate the informants because of his contacts with the local community. Moreover, he helped me to translate the questions and answers during the discussions, and he assisted during interviews with men and sometimes with women too, but those women were not belonging to Afghan Tribe. The people of the selected areas were hospitable and cooperative once the contact had been established, which made this research possible.

### **5.6 Data collection tools for conducting research under study**

In order to collect the data for this project, qualitative methods were applied. Information was gathered by employing both primary and secondary data, and the following tools were used for primary data collection:

- Group discussions
- semi-structured interviews
- Preliminary and non-participant observations.

### 5.6.1 Secondary data

Secondary data includes books, journal articles, reports on flood victims and damage available on internet, NGOs Newsletter, and governmental websites on disaster management.

### 5.6.2 Group discussions (GDs)

According to Gibbs, “group discussions involve interviewing a number of people at the same time, the emphasis being on questions and responses between the researcher and participants” (1997,p: 1). On the other hand, focus group discussions are “interaction within the focus group based on topics that are supplied by researcher” (Morgan 1997,p:12) cited in (Gibbs 1997,p:1) In this study, it was pragmatic to use group discussions instead of focus group because group discussions provide more constant interaction with the informants. Hence, group discussion was deemed suitable in order to investigate and collect the stories of informants regarding my topic. The researcher can easily get an idea about the individual informants along with the group while conducting group discussions. The numbers of group discussions were 10 in total 7 with women, and 3 with men. Each group discussion comprised 5-6 informants. However, sometimes other people also came to sit in to see the activity going on. They were not participating in the discussions, but, expressed their agreement when any of the informants told the reality about the flood situation.

**Table representing the number of group interviews and the participated informants**

	Male	Female	Total
<b>No. of Interview with Afghan Group</b>	2	3	5
<b>No. of Interview with Pakhtun Group</b>	1	4	5
<b>No. of informants in each group discussion (both Afghan &amp; Pakhtun)</b>	5-6	5-6	50-60

I chose to use group discussion also because it enabled me to provide the informants with assistance where they were not able to understand the questions exactly. Since the informants were villagers, most of them were uneducated. Therefore, it was a preeminent tool to employ in order to make sure that they understood the questions. The interviews were conducted on the basis of semi structured interview guides for the same purpose. Group interview was a useful method which created a productive environment to explore the issues at hand, like gender relations in a patriarchal culture and the livelihood problems of the flood victims. However, there were some difficulties experienced due to language, which made it difficult to communicate easily.

In order to get the point of view of every female informant on a particular issue during women's group discussion I tried to ask the questions one by one to each informant, but informants speaking Urdu well-tended to talk more. It was also significant to observe that young women's were little bit shy while answering and discussing their conjugal relations. Young men were also shy to answer questions regarding matrimonial relations than old age men and women. I observed that they were reluctant to share the information on marital issues because of the presence of their elders. During the group interviews with men, my assistant was playing an important role in order to make them understand the questions asked and minimize their reluctance by taking the advantage of being man. They felt comfortable to respond to him. In order to make the informants comfortable with the situation I made amicable relations with them and made the questions easier to answer by asking in a very pleasant and polite way. My attitude towards informants was very welcoming whatever the information they were sharing.

### **5.7 Semi structured Interviews**

Semi structured interviews are designed in a "sequence to cover the themes, as well as suggested questions. Yet at the same time there is an openness to changes of sequence and forms of questions in order to follow up the answers given by the subjects" (Kvale 1996, p: 124). Semi structured interviews were applied as another tool for data collection because it allows informants to present their point of view regarding the topic comprehensively. Moreover, it provides opportunity to build constructive relations with the informants through face to face interaction. It also provides an opportunity to probe areas suggested by the informants' answers that the interviewer do not have prior information about (SRS, 2012).



Therefore, semi-structured individual interviews were chosen as a supplement to the group interviews.

**The table representing the number of semi structured interviews conducted during the fieldwork**

	Male	Female	Total
<b>No. of Interview with Afghan</b>	0	1	1
<b>No. of Interview with Pakhtun</b>	3	4	7

The interviews took place in different settings, for instance in schools, homes and in open places outside homes. The Interviews provide quite detailed information, as most of them lasted more than one hour. Moreover, the informants were quite comfortable to tell their stories and experiences because they got the chance to share their problems due to the flood with an individual researcher who was not going to reveal their personal information to their intimates. In some cases, my interpreter was with me during interviewing to translate the conversation between me and my informants because some women were not able to talk in Urdu. While interviewing with men I observed that they were answering the questions to the point, for example, sometimes in just “Yes” and “No”. Thus, I put extra effort to probe comprehensive answers on certain issues. On the other hand, women’s were more willing to share their stories and circumstances. The researched topic was bit sensitive when it came to probe the traumas and sufferings caused by the catastrophic flood and effect on matrimonial relations. Hence, it needed modifications of some questions as well as creation of new probes which provided brief descriptions of the phenomenon without hurting the informants unnecessarily. The informants recalled most of their experiences freely in relation to questions regarding the disaster. I tried to be polite and reserved to avoid situations that might cause emotional trauma for the informants.

## **5.8 Observation**

“Observation thus consists of gathering impressions of the surrounding world through all relevant human faculties” (Adler and Adler 1994: 378) cited in (DeWALT and DeWALT, 2011 p: 80). There are two types of observations commonly used in qualitative research, participant observation and non-participant observation. Participant observation requires researcher’s participation in the community culture for a certain period of time. On the other hand, non-participant observation does not require direct participation or that one acts as a member of the community. In this study non-participant observation was used to supplement the interview data. It was feasible to do non-participant observation because of the short time span, and an easy way of observing the things in which the researcher is interested. It was also more feasible than participant observation because of the unrest in the region, as it made the activity less conspicuous.

The time spent in the field was utilized by taking notes and observing the activities going on in particular settings along with interviews. I was observing the people’s living conditions and culture during the discussions, interviews and when travelling from one village to another. However, during the observation I got some factual information which was significant to support the validity and reliability of the collected data. Observations were made in natural settings, and strategies were not made in order to conduct the observation. However, the observation was done through different perspectives, particularly in relation to investigate the women’s access to public and private spaces. In this regard, different dimensions and roles were observed in relation to gender. I attended a marriage ceremony in a village and observed the local traditions, food and rituals performed at that occasion. I also saw the bride’s room and observed how it was decorated and what kinds of facilities were provided. In fact, this observation was useful to understand the everyday behavior, culture, traditions and activities of the people.

## **5.9. Ethical Considerations during Data Collection**

In social research ethics refer to “moral deliberation, choice and accountability of the part of researchers throughout the research process” (Mauthner, M., Birch, M., Jessop, J. & Miller, T., 2002, p.14). The principles of ethics can be recognized within a particular culture, society and group of people. However, ethical considerations may vary from one research topic to another. It also depends on the sensitivity of the topic being researched and the targeted

groups (e.g. victim's women or abused children). The following were some ethical considerations which were taken into account during fieldwork. Informed consent is an important element of research ethics that should be considered before conducting research on any phenomena. I did not take informants informed consent on a consent form because most of them were not literate and were not able to understand the purpose of my research literally so it was not relevant. Therefore, oral consent was preferred to obtain informed consent. The purpose of the present study was explained in Urdu and Pashto language. Their consent to participate in the group discussions and interviews was a priority. In this regard, many questions from the informants were answered pertinent to the research for instance why this research was being done and what the benefit for the informants would be if they participate.

There are various ways to keep the confidentiality and privacy of the subjects being researched. For instance, the identity of individuals, locations, place and private information should not be revealed or published (Punch, M., 1998). Therefore, the names and age of the informants were not mentioned during data collection. Moreover, the information taken from my informants were concealed for the authorities in order to protect them from any harm. Generally, the information obtained regarding all sensitive or private issues was confidential.

### **5.9.1 Gender, Age, Class, Identity and Reflexivity**

Qualitative research cannot be value free and the researcher's profile is significant while conducting fieldwork. I did group discussions and interviews with both married men and married women. My gender clearly had an affect there, I was a woman researcher. While interviewing men most of the time they were very polite and respectful. On the other hand, some men participants hesitated and were shy to answer a woman researcher about their relations with their wives and express their feelings towards them. Similarly, women were also concerned with my age and status of being single in connection with explaining their conjugal relations. Therefore, my age, gender and status as single prevented some of them to answer clearly on matrimonial issues. However, intrusion into their private life and sensitive issues were avoided to respect the rules of research by not asking irrelevant questions. Therefore, the "Representation and Identity and sense of myself as other" (Lal, J. 1996,) was important to consider.

My class belonging and privileged status as a researcher from Norway, (Europe) was a challenge to deal with in situations during data collection. For instance, in the beginning

informants were expecting monetary advantages from participating in the interviews and discussions. Therefore, they highlighted their economic issues more often than discussing their marital relations. However, I explained the subject matter and purpose of the study clearly, and was patient while interviewing. Some of the informants were reluctant to share what they felt like telling because of this. I was a very wise and knowledgeable person for them, perhaps. But I tried to minimize the power relation by making amicable and friendly relationships with them. Indeed, I tried to provide them with an environment where they shared their difficulties with ease and comfort.

### **5.10 Data Analysis**

According to Kvale, “the precious facts and meanings are purified by transcribing them from oral to the written mode” (1996, pp:3-4). The data analysis is an essential stage in the uncovering of the realities and stories related to the research. The individual interviews and group interviews were recorded during the fieldwork. The data were identified through giving artificial names to the participants instead of putting original names and age. The data was divided into different thematic sections in order to describe and discuss the major topics of the study separately. Fundamentally, data analysis was based on themes and interpreted accordingly.

### **5.11 Challenges and Limitations**

My field area was comprised on ethnic minorities such as Afghan Muhajir, local Pakhtun and nomadic tribes. Nomadic tribes mostly belong to Afghanistan. In the beginning it was difficult to adjust in that culture and people because I never interacted with that culture and people before. Therefore, it was difficult to understand their language but I hired a translator who helped me to make things understandable. It was difficult to talk with women without the permission of their male family members and to communicate with them very freely on the issues of gender relations. They felt shy sometimes and a little insecure. It was also very challenging to find the camps established by the government or non-governmental organizations, because most of them were closed. Another challenge was to explain the informants about my research purpose, because they were expecting help from me mainly in monetary terms. Women always came with their Identity cards and with some other documents, expecting some advantage. It was also very challenging to spend much time in the

field because it was very expensive to rent a car and to travel every day and to rent a room for more than two months, since the research was self-financed.

### **5.11.1 Limitations of the study**

It was not feasible to interview people belonging to NGOs and the governmental sector because there were some security issues. The situation was getting bad in Peshawar due to bomb blasts, and this prevented me from getting information from authoritative personnel. There was also a limitation of time because I had less time in the field than expected due to the delay of my resident permit in Norway.

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## Chapter 6

### **Flood and Vulnerability: An Assessment of Livelihoods before, during and after the Flood**

#### **6.1 Introduction**

The present chapter describes affected people's living standard before, during and after the flood, their discourses on flood vulnerability and the flood's impact on their lives. The field data is presented and analyzed by discussing two ethnic groups, the Pathan (Pakistanis) and Afghan Muhajir (Refugees) in order to highlight local variations in relation to flood vulnerability and management of livelihoods. The resilience in the efforts to maintain livelihoods among Pathan and Afghan Muhajir illuminates the reality of two different groups living with each other. Narrations of their thoughts, strengths, difficulties and vulnerabilities are reflected in this chapter, which addresses one of the main objectives of the study, to investigate flood vulnerability in post flood situations in the region of Nowshera and its impact on people's lives through a gender perspective.

#### **6.2 Pre-event Functioning and Adaptations to the Communities' Environment**

According to the community resilience model, a community's functioning and adaptations to its pre-event environment are of importance for its ability to resist natural disaster. I will in this section look at different aspects of the Afghan and Pathan communities' adaptations to their pre-event environment.

##### **6.2.1. Economic adaptation**

The Afghan Muhajir tribe has been living in Pakistan since almost the last 35 years and has settled there for life. Afghan Muhajirs are considered ineligible for buying land and property because they are not citizens of Pakistan. They were registered as Afghan Muhajir in 1979 in the regime of president Zia\_ul\_Haq (Late). However, being Pathan they belong to the same ethnic population who is living in the Pakistan province of Khyber Pakhtunkhwa and in Afghanistan, and who shares the common language Pashto. The Pakhtun living in the north west of Pakistan are citizens of Pakistan. The male informant from the Afghan group Mustafa Khan stated during the group discussion:

*“Before the flood we used to live in a village nearby. We owned a house and almost all fundamental necessities were available, and I had better working opportunities. We believe that our lives before the flood were better because there was a hospital, clean drinking water and a school. Our children were going to school before the flood (the majority of the male participants agreed with his statement).”*

The narrative depicted that the pre-event socio-economic situations were satisfactory because of the availability of necessary services and livelihoods in the village. Similarly, another male informant, Majid Ali Khan, from the Afghan group elucidated that:

*“Some of us have high vehicles [trucks] and mainly our livelihood depends on monthly wages because we are truck drivers. The monthly wages were around PKR 5000 excluding the tips. And that was sufficient to fulfill our livelihoods, but many of us are not getting work anymore due to the flood” (some male participants supported his narrative).*

The profession of many of the Afghans was truck driving. Some owned the vehicles and some worked as laborers based on monthly wages. The narration depicted that the pre-event economic situation among Afghans was not very challenging, and the management of the livelihood was not a prominent issue.

The informant, Muhammad Ameen, from the Pakhtun group who was living near by the river bank stated that:

*“Our livelihoods before the flood were depending on boating riding. We take inhabitants from one place to another in order to cross the river. Our daily income was around PKR 300, which was sufficient to feed our children. But now the situation is different, and people are not using this service as they did before the flood” (the Majority of the participants agreed).*

Actually, there was a river Kabul passing through the city and the villages, and many people used boats to cross the river, as the researcher herself used the boat to reach the informants. The source of income of the majority of the people living on the river bank was largely depending on the boating, which was satisfactory to feed their families before the flood. A female informant, Sidra, from the Pakhtun group stated during the individual interview that:

*“I and my younger sisters were working in a rich person’s house as maids because we are poor and my parents are not able to work due to physical illness. We had a hard time before the flood but now it became harder to survive without sufficient economic support. Before the*

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*flood we were able to manage some other stuff we like except the food items, for example artificial jewelry and clothes, by saving small amounts of money. Now all our desires are dying inside our heart and we cannot make any wish anymore”.*

The people interviewed were not very rich even before the flood. The literature suggests that, particularly, the level of poverty in KPK is higher than that of other parts of Pakistan (Kurosaki, 2010:88). Nonetheless, at least they could manage some basic expenses in their family as Sidra’s narrative demonstrates. Due to the pre-event poverty and later the crisis their income was affected, making them more vulnerable. Dwindling economic resources deteriorated the living conditions of Sidra and her family after the flood.

While people were not in any way rich, they considered that they were able to live well, and there was also the presence of schools, hospitals, shops and other infrastructure that made it possible for them, despite some challenges, to function quite well economically and practically in their environment. The findings show challenging, but manageable pre-event economic situations within both ethnic groups. Pragmatically, the pre-event situation was not challenging in terms of finding shelter, assembling economic resources and managing livelihoods. However, it seems that poverty was the key challenge to adapt to the environment, even before the flood. In this connection literature suggests that the unequal distribution of resources and services increases the vulnerability to disaster and catastrophe, and often intensifies existing gendered phenomena such as financial strain, marital difficulties and domestic violence (Bailey, 2005). At least, the pre-event environment or system was functioning well before the crisis because of the existence of prerequisites. However, according to the community resilience model prerequisites are not sufficient for the adaptation and resistance against the extreme perturbations caused by natural disaster.

### **6.2.2. Social adaptation**

Afghan Muhajir (Refugee) is an ethnic tribe that comes from Afghanistan. Basically, they are Afghan nationals living in Pakistan from 1979, when Russia attacked Afghanistan. According to the Afghan informant Muhammad Bakhsh, they consisted of 13000 families or kin groups at the time of migration to Pakistan. However, huge recent migration also took place from Afghanistan to Pakistan starting in 2001, when USA attacked Afghanistan. Usually, they migrate with their kin group because of strong cultural and practical bonds among them. In this section I will analyze the pre-event social adaptations of the Afghan and



Pakhtun communities through their experiences. Gul Jaan, an Afghan informant, told during the group discussion:

*“We consisted of four families who are our blood relatives living together before and after the flood” (the Majority of the participant agreed with his statement).*

Muhammad Bakhsh further added that:

*“Before the flood in 2010 we were living with calm and happiness without facing considerable trouble” (some of the participants supported his statement).*

The life before the crisis seems to be less problematic according to Bakhsh’s statement. However, it is difficult to predict the level of their happiness and peace. An Afghan female informant, Janat Bibi, who was living along the highway and railway lines, stated that:

*“We are one clan and before the flood we were living in a village with all the household facilities, especially shelter and food. We used to spend our leisure time in Gup Shup (chatting) with our blood relatives, listening to historic and real anecdotes from old members of the clan, which made us pleased” (the majority of the participants agreed).*

As illustrated earlier, before the flood the Afghans lived in the form of clusters in order to support each other, but crisis disturbed their social life along with economic difficulties. It seems to be difficult, especially for the women’s or girls to adapt to the new environment without any recreation and socio-emotional support.

As far as social adaptation is concerned, it has been found that the Afghan group has very intimate relationships with neighbors those are in fact close relatives. Such bonding is important in social relations and works as a social resource. So it is worth noting that, Afghan refugees had better communication and interaction before the crisis within their groups, which is social capital and significant in the process of resistance and adaptation to altered environment. Social capital theory suggests that social resources are investment in social relation which has expected outcome, and that outcome is social support needed at the time of crisis when other resources are lacking. Moreover, the community resilience model also indicates the importance of social capital along with other resources to resist the dysfunction within communities. Informants of the Pakhtun group have not mentioned any social collectiveness and integration within their community during the group interviews, which suggests a less prominent position of social capital among Pakhtuns before the crisis. It has

been argued that intricate interrelationships exist among specific populations, their resources, social change, socio-economic development and environmental degradation or change (Mank & Jackson, 2012). Lin (2001) point out that, social resources are rooted in social relations and social structures. Judging from the informants' narratives, social capital was more cultivated and appreciated among the Afghans before the flood.

### **6.2.3. Psychological adaptation**

In this section I will describe the pre-event psychological adaptation of the informants within both ethnic communities. In this regard, Hassena, from the Pakhtun group stated during the group discussion:

*“The flood three years ago [2010] was very disastrous. Before that sometimes flood came, but on a very low scale, causing minor destruction that never hurt us a lot. Before the flood in 2010 we were living our lives without fear” (the majority of the participants agreed).*

It is narrated that minor environmental calamities have occurred before the flood in 2010, but the severity and the duration of those events was not highly problematic psychologically. In the perception of the Pakhtun women informants, their pre-event lives were fearless. Similarly, the Afghan informant, Noor, stated during the group discussion:

*“Before the flood we were not afraid of water and rain. Our lives were normal and we were busy in our everyday routine without thinking much about future happenings” (some participants supported her views).*

The pre-event psychological situation did not include thinking about natural disaster and its negative consequences on their lives. The fear of suffering an extreme socio-economic and psychological disturbance was not widespread.

The findings unveil that the pre-event psychological adaptation was not easy for many of the informants. They were doing normal things, as they used to perform their everyday activities and customary roles in their environment. According to the community resilience model this indicates a positive adaptation between the communities and their pre-event environment.

#### **6.2.4. Level of adaptation before the flood**

It has been found that the pre-event challenges and situations were not very challenging in terms of maintenance of livelihoods, shelter, assembling socio economic resources and coping with various socio-emotional dilemmas within both ethnic groups. The main sources of income in the Afghan group were based on monthly wages, as the profession of many of the Afghans is truck driving. Women are not working in public spheres in Afghan community. Some Pakhtun women worked as maids because of particular socio economic problems before the crisis. Furthermore, the pre-event social relations and collectiveness seem to have been more positive and robust among the Afghan group as compared to Pakhtuns. This is probably partly because Pakhtuns are not living in the same form of sharing groups and clusters as the researcher observed. Problematic psychological dilemmas are not found in the narratives of both ethnic groups when describing their pre-event environments. Both groups are found to have functioned well in the pre-event environment and they more or less had the necessary resources to combat the small scale stressors they lived with before the calamity. The conducive pre-event situation is important to enable the community at the time of crisis e.g. as Afghans have supportive network and social capital before the flood. In this connection, Wilby et.al., (2012) indicated the two important factor before or after the natural disaster that are enabling factors and implementing factors. The enabling factors include the preventing measures like pre flood forecasting institutional reforms, regular monitoring, and emergency planning for disasters and legal services or incentives to minimize the vulnerabilities. Implementing measures include the safety nets, update and upgrade the resilience infrastructure, Adaptive supervision, new technology or operating system and regular evaluation to combat the extreme event.

#### **Crisis hits: the flood**

In this section, the Afghan Muhajir and Pakhtun informants' narratives of their experiences during the flood are analyzed. Their experiences are accessed through the informant's voices and interpreted accordingly. In this regard, a male informant, Gul Rahim, told the following during the group discussion:

*“We did not take anything from our homes at that time because we were just in a hurry to move our women and children into safe places. Even our women did not take precious stuff like gold and money, if you dig out the place where you are sitting you will find our gold and*

*money in the ground. It was the hardest time we ever had experienced in our life. Our families were roofless and we took shelter in the Madrisa and Mosque. Food was just thrown down through helipads, if they throw we eat, otherwise we stayed hungry” (the majority of the participants agreed with his statement).*

The intensity of the flood was so huge that it didn't give chance to the affected people to take their valuable assets. During the time of the crisis all the resources were damaged, especially essential stuff needed to survive. To fulfil the essential needs, the prime focus was to provide basic necessities through any channel like helipads. There was the problem of food insecurity because of the destruction of roads and bridges. The displacement of the people during the extreme event created difficulties to get suitable shelter. According to Bohle et.al., (1994) displaced people during extreme event often live with insufficient resources and with little legal and political power. However, some individuals, families and groups of people may be able to re-enter in the productive employment by the community support or personal effort, but the economic or productive options available for this particular group are few (Bohle et.al., 1994:45).

Pashmina, a female informant from the Afghan group, elucidated during group discussion:

*“During the 36 years of life we had never experienced such flood that ruins the village, our shelter and happiness; usually flood came and affected the villages and places near the river banks or canals” (the majority of the participants agreed with her statement).*

The severity and the duration of the flood was intense, that shocked many of the people who were affected by the flood. The unexpected occurrence of the calamity disturbed the ordinary life of many of the Afghan women A study on Pakistan (Tariq et.al.2011:72) reveals that if disaster occur suddenly when you are not prepared for any extreme event it can be more traumatic in the beginning than later, but the situation and painful memories are not easy to forget.. Similarly, a women informant, Amina, from the Pakhtun group also describes her feelings regarding the crisis as:

*“After 40 years of living here we had never experienced the flood like that. This village is situated near the river and flood comes frequently but, never like the flood in 2010. No body informed us before the flood that it can reach our village at night. The intensity of this flood was so huge that water was running over our roofs and water was near our necks till the time of rescued. We were feeling so cold because the water was very cold and the noise of the*

*water was horrible. There were snakes in the water that made us even more scared and screaming, specially the women who were pregnant and near to deliver the babies. They were in big trouble so we tried to settle them in a safe place” (the majority of the participants supported her narrative).*

This narration also unveils the extreme situation occurred during the crisis, where there were lack of information and communication related to the event. Moreover, there were a lack of emergency rescue services and health services, for instance motor boats and ambulances. The situation of the pregnant women during crisis seems quite challenging, to endure the shock and to survive. A study on Vulnerability to flooding (Tapsell et.al. 2002:1514) reveals that, people usually feel the need to be informed by the environment agency before the floods.

A male informant, Imran Ahmed Khan, from Pakhtun group expresses his experience in the following words,

*“Before 2010 no floods came like that, this flood was very dangerous and water was up to 12 feet. Our house was totally sunk in water and fell down. Everything fell down and we were running towards safe places with other family members. In this bad time our relatives helped us and gave us shelter. Our cattle and sheep also drowned in the flood water, and they were our only source of income”.*

The stressors of the event were extreme in its severity and consequences, as illustrated by the narrative of Imran Ahmad Khan. It was a combination of psychological distress and the deterioration of economic resources. Such rapid deterioration of available resources multiplied their worries and apprehensions to re-establish the livelihoods. However, he appreciated the social- emotional support and service given by his relatives at the time of crisis. It is indicated that social support is like a pyramid and fundamentally based on the primary groups like family neighbors, friends and co-workers (Norris et.al., 2008). This indicates that social capital also plays a center role among the Pakhtuns.

Another female informant from the Afghan group Bano bibi stated during group discussion:

*“Experiencing homelessness was a terrible state of mind, our brains stopped working and our tongues were uttering TOBA ASTAGIFRULLAH (a way to say Almighty Allah for forgiveness). Some women’s were without Dupatta (a piece of cloth, which covers the head*

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*and some parts of the body) and shoes. Our children were suffering from hunger and disease so we were worried more about our children than anything”*

The natural disaster left negative psychological impacts, especially on women, also because this forced them to be in public places without proper Purdah, which was not acceptable for them psychologically. Most of the women were saying sacred or holy words to get protection from the disaster and its consequences. Moreover, they were very concerned with the protection and safeguard of their children during crisis. It is stated that, disaster can create many health and psychological problems among survivors like mood disorders, helplessness, fatigue, depression etc. ((Bonanno et.al., 2010:5).

The findings unveil the fact that, the flood was extreme in terms of severity, duration and shock because of human displacement and deterioration of natural and other resources. The flood was so severe that it ruined 50,000 square kilometers (Looney. R, 2012). Both the ethnic groups, the Afghan and the Pakhtun, faced many challenges during the crisis that includes food scarcity, homelessness, living without indispensable hygiene, loss of leisure activities, loss of livelihoods and property and maintaining purdah, which is very important for them. The literature indicates that the intimate and emotional attachment with home is very strong, and argues that damage of the home means the damage of fiscal and physical resources (Sims et. al., 2009). Severe health conditions for the pregnant women during the flood were tragic because of inadequate resource mobilization. The lack of access to information and adaptive capacities increased the socio-economic vulnerability within both groups. According to Khan et.al.,(2008) in Pakistan the importance is given to structural aspects of disaster preparedness and mitigation process. Other element like protection of livelihoods and the knowledge and capacities of local people tend to be ignored.

The social and economic crises caused by the flood in the Afghan community are severe because of their poor status, and that influences their adaptive capacities. As pointed out by the representatives of both the Afghan and the Pakhtun groups that, the severity of the event was so intense and sudden that it surprised most of them, and many went through psychological distress, especially women, because of huge magnitude in displacement and destruction. The vulnerability approach suggests that the characteristics of the group and their circumstances influence their adaptive capacity and resistance to deal with the effects of the disaster (Donner & Rodriguez, 2008). Moreover, according to Obrien et.al., (2011) the inability to deal with stressors caused by climate change is because of the prior challenges and

impairments in the society. The findings gave the impression that both the ethnic groups failed to resist the perturbations caused by the flood because of lack of robust resources, proper mobilization, deterioration of infrastructure, insufficient social capital and other resources. This resulted in vulnerability and created transient dysfunction within the communities.

### **6.3 Transient dysfunction: Life during the first period after the flood**

The literature on vulnerability and adaptation suggests that, local or indigenous communities are more vulnerable to environmental degradation because of their close relationship with natural resources, land, rivers or sea and culture. Moreover, poverty, marginalization and unavailability of legal rights are considered as significant factors that hinder the resilience and adaptation capacity (Ford, 2012). Therefore, in this section I will discuss and explore the reasons for vulnerability within both groups and causes of transient dysfunction in the period after the flood.

#### **6.3.1. Economic situation**

The following description is from an Afghan male informant, Mustafa Khan, concerning the hardships and apprehensions persisting after the flood:

*“As the flood got over we tried to go back to our homes, but after 40 days water had still not dried. The support from the government and NGOs were also minimal and it was difficult to survive. Finally we came home after 45 days and found that everything was destroyed. We were roofless and still we have just one room and we have a large family, but we have to live in this room. There is no other place to live in. Before the flood there was a school, clean water from the hand tap, a small hospital and a bazaar (market), but now we do not have any facilities and our children are wandering here and there. Economically we became very weak because our assembled stuff, including money, was sunk by the flood water” (majority of the informant agreed with his narrative).*

It is depicted that after the crisis the situation was difficult for many of the Afghans. However, the Afghans entered a new phase of struggle to mobilize their inadequate resources to deal with the transient dysfunction. The Afghans expressed dissatisfaction with the insufficient support from authorities, the deterioration of infrastructure and social services that creates problem for them to take their women to hospitals situated at distant places. To maintain

purdah as is their tradition, they hire private transport, which is very expensive. This is due to their tradition to protect women from the “other’s eyes” or what they call “Namehram”. There is an Afghan proverb, “a woman is best at home or in the grave” (Saigol, 2002:10). For this purpose, they have to spend a lot of money at times of emergency, which their economic conditions cannot support. They have also large households to provide livelihood, as observed by the researcher. Their marginalization, lack of resources and cultural norms made them vulnerable up to some extent.

A woman informant, Ishrat, from the Pakhtun group explained during the interview:

*“My home is broken and all the furniture is destroyed. I and my children are roofless yet. My husband all the time fights with me on petty issues because of the bad economic situation. It is bad to live in this condition. Moreover, our cows, buffaloes and sheep died in the flood too. Along that we are suffering from bad skin and eye infections. During flood we were living in a school and at that time the government and NGOs were providing us food items like sugar, flour, cooking oil and cookies. But now it is difficult to survive because we are managing everything by ourselves and we are not getting any assistance anymore”.*



The pictures are taken by the researcher

The pictures above confirm the claim made by Ishrat regarding her poor economic living conditions. Lack of economic resources and social support made her more vulnerable after the disaster. The assistance given by NGOs and government has been reduced. That is not good in the process of adaptation and resistance to the vulnerability. As the model of community resilience suggest transient dysfunction takes place because of lack of robust resources, slowness of resource mobilization and redundancy. Later, without proper adaptation facilities and services the transient dysfunction may last longer as the narration above illustrates and



may further increase poverty and vulnerability. To obtain a process of adaptation and move forward from the transient dysfunction, it is important to reduce poverty, increase employment levels, re-engage in education, increase in participation in decision making, and especially the inclusion of women in this process (Seneviratne et. al., 2010:82).

Muhammad Yaqoob, from the Pakhtun group, narrated during the interview:

*“We did not own a house before the flood, but now we bought some land for our home and NGOs built two rooms for us. So we are happy because the house is a very important thing that we have now”.*

After the crisis, some NGOs built rooms for people who have lost their homes due to the flood. It was necessary to own a land to get such help from the NGOs. This excluded all Afghans from such help, as they cannot own land. In this connection, Muhammad Yaqoob got the help from the organization in terms of attainment of a house, which was a dream for him. Otherwise, quite few people experience improved living conditions after the disaster, and according to my observations and the group interviews, large numbers of people are facing big challenges to survive and get back the livelihoods after the disaster.

After the crisis the overall situation is not satisfactory because many of the informants are suffering from economic shortfalls. Both the ethnic groups are facing dysfunction in their communities because of the economic loss and impediments on opportunities to live according to their culture. Poverty and lack of political representation to address the stressors caused by the flood has been shown to intensify the vulnerability of inhabitants (Cutter et.al., 2009).

### **6.3.2. Social situation**

The following narration is from a woman informant, Bano bibi, from the Afghan group during group discussion:

*“Our skin is rough and itchy due to the flood water. After the flood we got a lot of infectious diseases among which eye infection, pimples and diarrhea is very common. Our children are suffering from the same diseases and we do not have facilities to provide them medicine. The doctors who were working here during the flood had also gone so we need to go to the city for treatment. Besides that, we cannot take children into private hospitals because we are poor*

*we cannot afford this. So, ultimately we have to go to public hospitals where facilities and good care is lacking” (the majority of the participants supported her statement).*



The pictures added are taken by the researcher at the village and printed with informant permission

The pictures above represent the bad social situation of the Afghan Muhajir (Refugees), living in hard circumstances because in their village basic necessities after the flood were almost absent. Diseases were very common, almost in every house; I observed that women and children were very affected by the consequences of the flood. Moreover, inadequate economic resources and restrictions on women’s mobility made their living conditions even more challenging and problematic. For instance, women and girl children were not allowed to cross the threshold of the home without a man, even in case of emergency. The loss of proper housing makes such living conditions much harder. However, Afghan men claim that, one man is always staying at home when the others are out in search of earnings in order to accompany women in case of emergency.

Another female informant, Sakeena, from the Afghan group added during the group discussion:

*“My one girl child is paralyzed due to the flood and her brain is not working properly. She is a bit abnormal and unable to stand on her feet properly. Moreover, her grandmother has lost her eyesight due to infection in her eyes, and due to poverty she did not get any proper treatment”.*

The outbreak of infectious diseases was another large scale social problem to handle, which affected millions of people during and after the flood. Particularly women and children seem

to suffer from such diseases, as well as from psychological trauma, especially when they do not have proper social and economic support to counter the vulnerabilities. The literature discussed in the literature review suggested that, some groups of people are more vulnerable to extreme events than others, for instance poor refugees, women, indigenous people and children (Duncan, 2007). My findings support this.

The findings reveal that social problems in the post-flood situation are due to the bad economic conditions of both communities. Social and economic problems are quite interrelated and challenging for both communities. In order to obtain community resilience, four basic adaptive capacities are needed like Economic Development, Social Capital, Information and Communication, and Community Competence (Norris et.al., 2008). Both ethnic groups seem to lack of such adaptive capacities to a large degree.

### **6.3.3. Psychological situation**

Psychological wellness is important in the process of resilience and must be on a main focus to repair a dysfunction. Moreover, four basic criteria of adaptation has been developed by the Norris et.al., (2008:133), which are absence of psychopathology, healthy pattern of behavior, adequate role functioning and high quality of life. These are few signs of such qualities in the informant's lives. For instance, a female informant, Nida, from the Paktun group stated during the group discussion:

*“Our children are scared of rain and they get awake at night even if they are sleeping. They have fear on their minds, and that is why they do not like water and rain. In the rainy season my children suggested that Ammi (Mother), we should collect our luggage and leave the home because flood will come again” (three other participants agreed with her statement).*

It is depicted that the crisis influences the health of children psychologically and physiologically. Children are prone to get affected during the exposure to disaster along various physical, social and psychological dimensions, as illustrated also in other studies from the region Bangladesh. “Children complained about living in cramped conditions, not being able to move around freely, being hungry and sick from close contact with dirty water and worried about rising water level and snakes (Delap, 2010:666)”.

A female informant Pashmina, from the Afghan group stated during the group discussion:

*“I am going through a very bad time because most of my family members are suffering from different diseases and my mind is not working” (the majority of the participants supported her views).*

Many psychological problems have emerged after the crisis due to loss of livelihoods and increased level of viral and infectious diseases within households. The literature discussed in the literature review suggests that disasters cause serious psychological impact on individuals in the form of grief, depression and frustration (Bonanno et.al., 2010).

Psychological problems are found existing within both ethnic groups, especially among the women and children of the groups studied. The psychological vulnerability is related to the deterioration of natural resources, property, infrastructure and lack of social services. Psychological problems among women seem to have intensified after the crisis, as their families and they themselves are not getting the proper treatment. The social system is not working properly, which exacerbate the vulnerability.

#### **6.3.4. Level of dysfunctions shortly after the flood**

The dysfunction within both ethnic groups is persisting in terms of economic, social and psychological vulnerabilities. Poverty, livelihood destruction, marginalization of the groups, especially the Afghans, culture and lack of political representation to solve the transient dysfunction are main reasons for the economic vulnerabilities and impediments. The social situation of the informants is also found to be vulnerable due to lack of social capital, economic development and community competence. Further, the psychological situation after the crisis has been found disturbed because of loss of socio-economic infrastructure and lack of information and communication. Sharma et.al., (2009) emphasize the importance of indigenous knowledge and identify indigenous knowledge based practices to save the culture and society from damage and to build resilience on community level, for instance by introducing locally developed techniques for cropping, livestock rearing and social organization. However, such practices have not been found within any of the groups, which maintain the dysfunction and exaggerate vulnerabilities. According to the community resilience model there are two options after the crisis and transient dysfunction. People may struggle to obtain a high level of resilience or they may suffer in continued vulnerability. The former presents adaptation to the new environment, and the latter presents persistent dysfunction. Presently, it seems that the flooded population is in transient dysfunction trying

to resist, but destruction of socio-economic and psychological wellbeing pushes them towards vulnerabilities that might lead toward persistent dysfunction.

#### **6.4. Life two years after: adaptation to new environment or persistent dysfunction?**

This section elaborates the socio-economic and psychological situations and adaptations of the informants two years after the disaster. It is important to analyze the adaptation strategies and the struggle of the flooded population to get back their pre-event environment or adapt to the new environment. In order to adapt to climate change there is need to arrange wider preparedness of the communities to deal with the vulnerabilities (Wilby et.al.2012).

##### **6.4.1. Economic adaptation**

This section emphasizes the informant's sources of income and efforts toward resilience and adaptation to their new environment, or their failure to achieve resilience and their suffering from vulnerability or persistent dysfunction. A male informant from the Afghan group, Muhammad Bukhsh, described his current financial position during the group discussion:

*“We do not have land to cultivate and we cannot buy land because it is not legal for Afghan Muhajir to buy land. We are truck drivers and working on weekly wages and sometimes monthly wages. The traders or our employers give wages like PKR (Pakistani Rupee) 4000 to 5000 per month, which is not sufficient in this expensive world to fulfil even the basic needs. Sometimes we spend 3 days or one week on one trip to supply things from one place to another. For example, we travel to Afghanistan, Islamabad, Multan, Karachi and Faislabad to deliver material provided by merchants. In this way we stay far from our children and wives but it is important to earn money otherwise from where our children will get livelihoods. We Afghan do not allow our women to have a job or to do any work to earn money because it is against our traditions and custom. In our culture just men are responsible for the economic affairs, not women” (the majority of the participants agreed).*

It is depicted that the profession of most of the Afghans is truck driving as earlier mentioned in this chapter. The wages seems not sufficient to deal with the dysfunction and vulnerabilities persisting in their families. Afghans travel across the border because of their easy access to Afghanistan as citizen of Afghanistan. However, what they earn is not sufficient to compensate for the present vulnerability, it is difficult to even survive on their wages. Moreover, the mobility of Afghan women is restricted, and women are facing considerable

trouble to manage their matrimonial and social lives in the absence of proper housing and adequate income.

Similarly, a woman informant from the Pakhtun group Dilshaad elucidated during the group discussion:

*“People in this village are poor and dependent on labor work. Our husbands are also laborers and earn small amounts of money. Though, we are poor, we women are not allowed to go out for work. Before the flood our problems were not intense as these we are now facing after the deterioration of all prerequisites. However, women are participating in education more than men. There are some vocational training centers where girls are going to learn tailoring and embroidery to earn some money. If we work at home to earn money then it is not problematic for our men, but we cannot work in offices. After the flood the economic pressure on our husbands has increased and we also want to work to help our husbands but they do not permit us” (the majority of the women participants agreed).*

Due to the pre-event poverty and current economic difficulties, the journey towards a better life seems uncertain and indefinite. The poverty and restricted mobility of many of the women with regards to work place creates impediments to resist the transient dysfunction and the economic vulnerabilities. However, women believe that they have a potential to help their families economically if they get the chance. The literature in the literature review indicates that, women are more vulnerable than men during extreme events, because women share most of the household managing responsibilities with men, but have very little access to decision making and governance (Parikh et.al.,2012:180).

The informant Fajar from the Pakhtun group also stated that:

*“Usually women take care of the cattle and sheep to earn a livelihood by selling milk and butter in the village. But sometimes men overcome on the women’s earnings and do not let the women keep the money” (the majority of the participants supported her statement).*

Culturally acceptable ways for women to make money are vulnerable due to men’s interference. Though the responsibility to take care of livestock lays on the women’s shoulders, but they have very limited access to the money their work generates. This correspond with literature that suggests that, in developing countries, often women are

omitted or excluded from the process of decision making and access to use land or resources important for their livelihoods (UN WomenWatch, 2009).

Furthermore, a male informant, Taseer Khan, during the interview stated that:

*“Some people have their own businesses both on small and large scale, some are government employees or under military services, some are totally dependent on livestock and labour work on daily wages and some are the owners of small land approximately around 4 or 5 acre. Unemployment levels are high here as there are no more government jobs. This makes it difficult for people to get out from the psychological, social and economic strain”.*

The above depicts that there are lots of social and economic problems and obstacles persisting that needs to be addressed. The majority of small business men, agriculturalists and pastoralists are having big difficulties to manage their livelihoods. They need a lot to enter a new environment. For this to be possible, some important issues need to be addressed such as shelter, food and clothing. Moreover, the constraints which do not let people get out from transient dysfunction are for instances lack of economic resources in terms of non-permanent jobs, businesses, and lack of land, education and patriarchal culture which do as not allow women to take part in the financial affairs.

The findings unveil persistent economic vulnerability in both ethnic groups and vulnerability of both men and women in relation of exposure to environmental degradation. Women are found to be more restricted within households in order to manage household responsibilities. Largely, men are the bread winners and most of the informants’ descriptions demonstrate the poor economic standing of the people. On the basis of the findings, it seems that the flooded population does not have capacities to anticipate, cope with, resist and recover from the consequences of the natural disaster (Donner & Rodriguez, 2008: 1090-1091).

#### **6.4.2. Social and Psychological adaptation**

The female informant Resham from the Afghan group states during the group discussion:

*“Due to flood we lost our homes, basic facilities like clean drinking water, hospitals, schools, Madrisa’s and livestock. That made it difficult for us to cope with the situation. We do not understand either we should spend on eating food or on the re-establishment of homes and damaged stuff. We are poor and it is even difficult to eat three times in a day”.*

Most of the people are suffering inadequate access to basic social services and lack of economic capital even two years after the flood. The temporary dysfunction seems to become a permanent dysfunction in the affected and marginalized community (The Afghan). There is a continuous struggle to find opportunities for better livelihood, but it seems very difficult for poor people to manage. Similarly, a female informant Janat Bibi from the Afghan Muhajir group stated during the group discussion:

*“Our husbands do labor work and get PKR 200 per day but most of the time they do not get any work. It is very difficult to survive on a very little amount of money. Neither do we have shelter nor do we have proper food. If one time we eat the food in a day we are not sure about the second meal. We are living temporarily on government land which is dangerous too for our children because we are in between the highway and railway lines after the flood. We and our children are sick but we cannot go to the doctor, it is very expensive, we poor people cannot afford it. We women do not work outside the home because our men do not permit. We do household work like wiping the floor, cooking, washing clothes and utensils, and taking care of our children and men” (the majority of the participants agreed).*

Poor people's economic and health problems get multiplied without having an own home and land. Women cannot work outside home because of culture and customs. Therefore, it may be right to say in this context that women and children's socio economic condition depends on their husbands and fathers socio economic condition. This corresponds with literature that suggests that economic insecurity is the key factor in social vulnerability (Enarson, 2000).

Hayaat Bibi, a female informant from the Pathan group, elucidated her narrative during the group discussion:

*“My husband died during the flood and my son got killed by somebody in this village. Nobody is left in my home to earn money for us to live a life. I lost my cattle during the flood so nothing is left to earn some money. I started to work in some other people's home as a maid and my daughter also work with me and in this way we earn our livelihoods. They pay PKR 1000 per month to me and PKR 1000 to my daughter, that is not sufficient to fulfil the basic needs, but there is no other way” (some participants supported her elucidation).*

The loss of important individuals in her life as result of the catastrophe and personal rivalry has impacted this informant psychologically. The tension of economic security and emotional loss makes survival difficult. Livestock is considered the main source of income for many



women in that region. Livestock died on a large scale during the flood, which also weakens people's economic position, especially women. Hence, this situation correspond with literature that suggests that, women headed households are poorer than others (Jonsson, 2011).

The findings show a positive link between the economic inadequacies and socio-psychological dilemmas or vulnerabilities. Due to the deterioration of the resources and lacks in the rehabilitation of the infrastructure and social services, vulnerabilities are persisting in terms of lacks in social and psychological wellbeing.

#### **6.4.3. Level of adaptation two years after the flood**

The finding reveals that even two years after the crisis vulnerabilities are still persisting within both ethnic groups and between both genders. Labour work and livestock were the main sources of income before the flood. Generally, the mobility of women is restricted and the main responsibility of women is to manage households and take care of the livestock. However, the economic outcome of this is very small. The Afghan group has the opportunity to go back to their country in order to seek work, but the situation is not satisfactory there. On the other hand, they have the misfortune that they cannot buy land and other property because it is not legal since their status is refugee. This corresponds with the literature that suggests that small agriculturalists, pastoralists, wage laborer, destitute people and refugees are particularly vulnerable groups in relation to disaster (Bohle, et.al., 1994 & Duncan, 2007). By comparison, the Pakhtun group has an opportunity to do government jobs and buy property. But due to insufficient resources, poverty, illiteracy, culture, norms and insufficient employment quotas from the government, also this group remains vulnerable. It has been indicated that, poor people are worse hit by natural disasters than rich, because poor have less access to education, economic resources, and are less competent to afford housing to overcome the stressors caused by disaster (Neumayer & Plumper, 2007). The literature further suggests that, areas that are ecologically fragile with dense populations are at high risk of environmental deterioration and chronic poverty, especially when they are lacking knowledge and capital to safeguard the local resources (Dixon, 1994). It has been found that, due to the lack of resources within both groups, the communities fail to achieve an adequate level of adaptation to the new environment and is moving rather quickly towards persistent dysfunction.

## 6.5 Discussion

Drawing on the community resilience model, the present chapter found that the pre-event socio-economic and psychological situations were quite acceptable for both ethnic communities. Women in both groups were not permitted to work in public places, especially among the Afghans due to strict Purdah system. The social capital and collectiveness in social relations have been found to be quite positive within both ethnic groups, particularly among Afghans because of their traditional norms and affinity. The pre-event functioning was good within both the Afghan and Pakhtun group despite ordinary apprehensions within households. When the flood hit, it was extreme in terms of severity, duration and trauma for both groups. Huge socio-economic and human displacements occurred during the crisis. Many economic, social and psychological difficulties occurred, which have not been alleviated because of inadequate resource mobilization and deterioration of available resources. However, both communities were not sufficiently robust in resources before the crisis, and pre-event poverty increased their vulnerabilities. Some of the literature in the literature review chapter indicates a positive association between poverty and vulnerability (Brouwer et.al., 2007).

Moreover, the social and psychological health situation among the informants after the natural disaster has been found quite disturbing, especially among women and children. Literature on post-traumatic stress disorder suggests that it is difficult for the people to come out from the psychological trauma due to loss of property and close relatives (Bonanno et.al., 2010, Edwards, 1998 & Freedy et.al., 1994). The findings reveal a dysfunction after the crisis that shows the supportive association of the findings with the community resilience model. Furthermore, two years after the flood, the socio-economic and psychological situation and adaptation have not been found very satisfactory. The findings show that the prevalent poverty in rural Nowshera seems to be the major obstacle for both ethnic communities to create resilience and to achieve wellbeing as a whole. The population most affected by the flood in 2010 was poor, and these groups seem to will face prospect of intergenerational poverty (Webster et.al. 2011:01). However, the vulnerabilities and resistance to those vulnerabilities may vary within both groups, as mentioned earlier on the basis of social capital, social class, kinship or affinity, legal rights, entitlements etc. Keeping in mind the community resilience model (Norris et.al.2008), failure in resource mobilization and inadequate resources cause temporary dysfunction during disaster as “loss of livelihoods increase the vulnerability and marginalization” (Parikh et.al. 2012:182). However, the

findings unveil a persistent failure to achieve wellbeing due to poverty and lack of resilience that increases the already existing vulnerabilities, which seem in the process of causing permanent dysfunction.

## Chapter 7

### Flood, Socio-Economic Impediments and Impacts on Gender Relations

#### 7.1 Introduction

“Any dramatic and unplanned change to the environment will present practical challenges to how people make their livelihoods, and this in turn will challenge or reaffirm women’s and men’s roles, and power, in their families, communities, and wider society” (Sweetman, 2009 cited in Hunter & David, 2011: 310).

This chapter aims to apprehend the impacts of flood on gender relations in the post flood situation. It elaborates gendered vulnerabilities and describes how the disaster affects the household and matrimonial relations. It also explains the reasons why changes have occurred in gender relations due to the disaster. This chapter provides valuable insights into decision making processes, power relations on household level, and gendered roles. Moreover, it aims to elaborate how cultural norms and values shape women’s lives in Pathan (Afghan & Pakhtun) society and whether migration has had any significant impression on the lives of women following the flood.

#### 7.2 Victims’ knowledge about the reasons for the 2010 flood.

As discussed in the literature review, a range of literature points out a connection between access to information and decision making and people’s vulnerability in relation to climate change and natural disasters, and emphasize that women often are more vulnerable as result of having less access (UN Women’s Watch 2009:1 & Faisal et.al., 2005). I therefore start this chapter with an exploration of the kinds of information about the reasons for the 2010 flood that is present among informants of both genders.

A range of reasons for why the flood occurred were given by different informants. For instance, a male informant, Muhammad Bakhsh, from the Afghan group articulated his views in these words during the group discussion:

*“Actually the heavy rains caused the flood because the rain did not stop for 4 or 5 consecutive days in the whole area [the whole province]. Therefore, the River Kheali from Swat and River Kabul swelled and consequently the flood came. The flood lasted for 18 hours*

*in this area and the government opened the Terbella Dam, which caused a lot of destruction physical, emotional, sociological and economical. This man [there was an old man participating in the group discussion] spent 4 days in a tree during the flood. He was hanging from a tree without any food for 4 days. Similarly, sixty people were stuck in the water in our village and they saved themselves with the support of wooden sticks (two other participants supported his statement)”.*



informant permission]

The man who is wearing white Shalwar Kameez with black waist coat is the one who survived after eating and drinking nothing for four days. The informants revealed that they were unable to recognize him because of his swelled mouth and weak health condition caused by mosquitoes and other insects living in trees [the picture is taken by the researcher and printed with

This informants' perception regarding the causes seems to be in correspondence with the literature available on the causes of the flood in Pakistan. For instance, Webster et.al (2011) states that rain and the geographical location of the region caused damage to Khyber Pakhtunkhwa along with other provinces.

Similarly, an informant, Suleman, from the Pakhtun group gave a statement during group interview that corresponds with the information given by the Afghan informant Muhammad Bakhsh.

*“The access of water in the Dams caused the flood and destruction” (three other participants supported his statement).*

While containing bits of science-based information, women informants' answers contained more alternative explanations than the men's. For instance, the Afghan woman informant, Zuhra Bibi, stated during group discussion:

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*“The flood came due to lack of dams. Flood came due to heavy rain and it was the Azaab (Wrath) from Allah. It was a time of an exam for us. We suffered a lot because of our deeds and Allah gave us punishment” (the majority of the female participants agreed).*

Among locals, natural hazards are often perceived as an act of God, and that in order to avoid new catastrophes, they need to struggle hard in their lives with honesty. Such explanations seemed to be more widespread among women. Women informants also had other alternative explanations of the flood for instance the female informant from the Pathan group, Dilshaad, explained the following:

*“Some people say that America and India are the reason of this catastrophe. When there was a cricket match between India and Pakistan (the semifinal in the world cup between India and Pakistan) the Indian government threatens the Pakistani government that if India loses the match they will leave water into Pakistan and will destroy the country. That is why we let them win the match and they won but I do not know why they still send the water in our country (few female participants supported her statement)”.*

While this explanation builds on real political events and challenges, (Sinha, 2010: 482), it is with regards to this actual flood without any root in reality, and appears more like a fantasy than an informed account of what happened.

The findings show that male informants present explanations more based on factual information, while female informants' understandings of the flood rely more on religion and myth, which again strongly suggests that men have more exposure and access to proper information than women in this area. It is likely that men have better access to information because they have access to the public spheres, including decision making processes during evening sittings or *punchayat* (a formal or informal gathering to resolve the problems), which women of that particular area are deprived of. That gives men access to information through communication and interaction with others, so that information passes from one person to other.

As mentioned in the beginning of this section, when women have more restricted access to information, this increases their vulnerability. Information is therefore also an important resource that may increase resilience in the face of natural disaster. Due to cultural restrictions on women's access to the social spheres where information is available, they are more vulnerable than the men. On the other hand, it is not necessarily so that this decreases the

resilience of the groups, as they are family- or kinship based, and men have the responsibility of taking decisions regarding the course of action of the entire group. Although many male informants seemed to be fairly well informed about the reasons for the flood, they reported that they had not had access to information that could have saved them and their communities from the flood.

*“Flood came at 3.AM and we were sleeping at that time. Suddenly, we heard the voices of screaming people and words like “water has come Save Save Save”, and an announcement was made to evacuate the homes as soon as possible. However, it was too late to inform us because water had already penetrated into our village and homes.*

There does not seem to have been any warning from the authorities to the local population about the flood prior to its arrival. Such information could have enabled them to rescue people, livestock and other property, and would therefore have increased the resilience of the community significantly. Many of the informants expressed great disappointment and distrust in the authorities, which they thought had neglected the responsibility for the people living in this region for a long time. For instance, the informant Akbar khan stated that, *“the government cannot do anything because if the government wanted to do anything it should have been done 50 years before”*. He questioned the government’s capability of making enough water dams in the country to control the water flow. Disappointment with the government and its failed policies to manage the water resources is a significant concern of many of the informants. As suggested by Voss (2008), societal and institutional inadequacies and lacks can cause vulnerability. Moreover, the findings further reveal an inefficient communication system organized by the authorities, which may exacerbate the vulnerabilities during flood. This correspond with the literature that suggests the improved of efficient communication system like radios and public sirens to inform people to vacate the dangerous places, and that lack of proper knowledge increase vulnerability (Seneviratne et.al. 2010).

### **7.3 Contribution of Cultural Norms and Taboos in Shaping Women’s Lives**

“Each culture must determine which paths to follow to attain these (dignity and self-esteem), keeping in mind the multidisciplinary character of women’s traditional roles” (Dupree, 1990:13 cited in Saigol, 2002:28).

Customary norms and values are assets of a particular culture that shows their dignity and reverence. In this regard, the researcher will explore how such norms and values

interact with women's lives and influence their inhibitions, freedoms and choices for them to participate in the society.

An informant, Mustafa khan, from the Afghan Muhajir group elucidates that:

*“We want to keep our women under Purdah in all cases and we have Burqa (veil) system here. Our women wear frocks that take approximately 12 meters fabric. Our women do not dress in Shalwar Kamees (the national dress of Pakistan). Our culture and traditions are the barriers in the development of women. We do not feel it appropriate to send our women out across the threshold of the house in order to study or work”.*

As narrated by Mustafa khan, his culture does not give freedom of expression and liberty to women for external mobility. Purdah is a very important element of their honour and dignity, which is considered a social capital. Therefore, they cannot permit their women to stop covering themselves and work in public places. He agreed that women cannot take part in outdoor economic activities because of their traditions and customs. The informant Gul Jaan added that if some people allow their women to work outdoors for instance, they will receive enormous discouragement from their community or Jirga (Jirga is comprised on very honorable people in the community and works as a court).

A female informant Zuhra bibi from the Afghan group articulated during the group discussion:

*“We cannot go to school for education because our men and our culture do not permit us, but we are happy with our system. We want education and we want to work if it could be possible inside home, like machine work [stitching, embroidery etc.], because after the flood we have bad economy. In this way we can earn money and will be able to help our family. It will not be problematic for our men if we get work at home” (the majority of the participants agreed).*

It is also depicted that because of the fear of losing social capital and fear of humiliation from the community, women have to frame their attitudes and behaviors accordingly. They want to get education and economic independence, but they need proper support to access these opportunities within the household, in a way it should not be problematic for their culture, husbands and for themselves.

Furthermore, a female informant, Mehreen, from the Pathan group stated during the group discussion:



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*“Women themselves are responsible to a certain extent to keep Purdah and stuff like that. For example, my grandmother used to say that I should wear Burqa instead of Chaddar, so in this way she is creating hurdles in our way. It is typical Pathan culture, Burqa is a kind of symbol to represent Pathan culture. Moreover, our language and traditions do not match with the other people’s for example with people in Punjab. If we speak even Urdu it is difficult for others to understand because of different accent. These are hurdles in women’s way to get involved in and adjust to economic and social spheres of life”.*

The above narration illustrates that women are forced to maintain the culture, which might be problematic for the transformation of the young generation particularly girls. It seems that keeping Purdah is obligatory for both Afghans and Pakhtuns. It is important to notice that old grandmothers assert their influence on young women’s to wear Burqa. Chaddar is also a piece of cloth that can cover the whole body and it is easier to wear, but as mentioned above Burqa is a symbol of prestige and distinction.

The findings unveil that strict cultural norms and the tradition of Purdah within the Afghan and Pathan is a major impediment in the development of women’s. This corresponds with literature suggesting that culture and traditions are informants of patriarchal control, and further that “culture is a patriarchy and not a mere reflection of it” (Saigol,2002:57). Burqa is considered a symbol of their recognition and prestige, especially among Afghans. It thus represents a social capital for family group and is a major resource in these communities. It is quite challenging for them to lose their social capital and symbol of distinction for the sake of managing the disaster impacts. The literature indicates that “in some places and situations women are more at risk because of culturally specific pre-disaster gender norms” (Nelson et.al., 2010:55). So, gender roles and cultural norms within both ethnic groups intensify the stressors of the disaster, because of women’s exclusion from the economic sphere. It has been found that, different kinds of taboos and norms, especially the solid Purdah obligation, cripple the women’s potentials and make them vulnerable towards poverty and isolation. Interestingly, often women themselves contribute to the problem and impose purdah on their subordinate women. It seems that, the Afghans and Pakhtuns are very concerned to preserve their social capital linked to purdah, but that this increases their vulnerabilities and lessens the ability to adapt to the new environment.

## 7.4 Gender Roles

This section will explain the different coping strategies prepared to deal with the stressors that occurred due to the flood. It also explains the socially and culturally ascribed roles and activities for men and women in these communities and elaborates if the roles and activities have changed due to the flood. The male informant Gul Jaan from the Afghan group elucidated during the group discussion:

*“Actually, both men and women are struggling. For example, women are working and managing household affairs and men are working outside the home and managing outdoor affairs. Our women are not allowed to go out for work, but we sometimes discuss household problems and we think that it is not a bad thing. However, we feel that we should not give more space to our women because it will be problematic for us”.*

It is depicted that, men and women have culturally defined specific roles and activities. Women are not supposed to perform their activities in the public spaces. Generally, women are taking the responsibility of managing household affairs within the household. Afghans believe that they will lose their honor and integrity if they permit their women to take part in male oriented public activities. Similarly, the following quote expressed by a female informant Sakeena during group interview indicates that there is a clear gendered division of labor and gendered roles also in the Pakhtun ethnic community:

*“My husband works outdoors to earn money. For this, he goes out every day in search of work because he is a laborer and I work at home. My responsibilities are to cook food, clean the utensils, fetch water, wash clothes and take care of my children. We both are struggling together and sometimes I go to buy vegetables from the market. Before the flood I was not allowed to go out to buy something, but now our circumstances have changed. My husband sometimes travels to search for work. Then I need to buy food items from the market. He discusses problems with me, but we have burdens and grief on our heads. We discuss about the children, how we will manage their clothes, the requirements of their education and food” (a few participants agreed with her statement).*

The gender roles seem to be persisting, but due to the disaster some change has taken place in Sakeena’s marital life in relation to freedom of mobility and participation in discussions related to the household. Prior to the flood, Sakeena’s mobility was restricted to the home.

This correspond with the literature suggesting that in the rural communities the key responsibility of women is domestic work (Faisal et.al., 2005).

Further, a female informant Amina from the Pakhtun group expressed during group discussion:

*“Men just go out to earn and they never perform any activity at home except building cottages. We help them in building cottages and cutting wood, but they do not help us in cooking and other indoor activities. In fact, Pathan men do not work at home or take part in household activities; they feel they are insulted even if they drink a glass of water by themselves. Pathan men do not like to work at home and now women mold themselves in this way. If somebody sees men who work with women then they talk behind their backs because the culture is like this. The stuff that men brought from outside, it is the responsibility of women to take care of those things” (the majority of the women participants agreed).*

The cultural designated responsibility of women is to feed the husband or male members of the family and to provide them comfort when they return from outside.

The findings demonstrate that, there is a clearly distinguished division of labor between men and women, in terms of paid and unpaid labor. Men’s work or activities are directly linked with money and paid work, while women’s activities are related to managing the household affairs, for which they do not get any payment or profit. The distinction between men work and women work, roles and responsibilities has structured by the traditional norms. Women are perceived as “*comfort agents*”. Moreover, the norms restrict the women’s mobility by demarcating public places for men and private places for women. Some of the literature in the literature review suggests that women are poor because women are marginalized (Denton, 2010).The nature of their culturally specific responsibilities has not changed significantly due to the flood. Men continue to have better access to economic capital within and outside the community and they also have better access to information. While, women contribute to the social capital of the family group through observing purdah, it is the men who are able to make use of this capital in the public sphere. This finding is reflected in literature stating that it is difficult for women to transform social capital into better access to information and markets when it is needed (Gotschi et.al., 2008).

## 7.5 Gendered Vulnerabilities

The focus of this section will be on the men and women's gendered vulnerabilities following the flood 2010. Vulnerability will be discussed here in terms of physical, social and economic vulnerability. Priority is given to the informants' voices and expressions regarding the discernments of vulnerability. Akbar Khan from the Afghan group described his thoughts about women's vulnerability during the group discussion:

*“Women are more affected because they faced the household damage of things like Gold Jewelry, which costs almost 4, 00000 or 5, 00000, linens, utensils, cattle and sheep which was swept away with the flood water. Household stuff and assets belong to women and they are responsible to take care of that. Ultimately, when everything got destroyed by the flood they got hurt and weakened because they spent lot of time and energy to build everything” (the majority of the men participants agreed).*

It is depicted that the men participants in this focus group considered women as more vulnerable than themselves in terms of loss of household property, which they believe belongs to women. Although, men paid for the household stuff or jewelry, yet they respected the women's management efforts, which is a positive attitude of men regarding difficulties faced by women. Similarly, the female informant Janat bibi added during an interview that:

*“Women suffered more than men because we make the houses and work hard to make all the stuff needed for our comfort. But now all the stuff has been destroyed so we women have got this pain, not the men. Men go out to provide the grains to cattle and sheep but we are at home and take care of everything at home. Therefore, we suffered more than men in terms of resource and emotional trauma”.*

Janat bibi's viewpoint corresponds with the men's perception about the women's efforts to organize household material according to their taste and need. Therefore, the loss of household property means a lot for women, and that caused psychological vulnerability. The literature suggests a positive association between resource loss and psychological distress within both genders (Freedly et.al., 1994).

The female informant Fajar from the Pathan group stated during the groups discussion:

*“Women are affected more than men because men are bold and strong, whereas, women are weak physically and her heart is also weak. Men experience the outer world and they are*

*aware of dangers, but, women always stay at homes so it is difficult for women to survive dangerous situations. That is why women got more affected physically and psychologically during the disaster because women and children were more suffering from fatal and infectious diseases than men. Men can sleep anywhere, but the problem was with the women and children to sleep on roads and open places” (the majority of the participants agreed with her statement).*

Women believe that they are vulnerable because they are biologically weak as compared to men. This belief is also culturally conditioned because Pathan men are considered a symbol of courage and bravery, as indicated in the context chapter. Here Fajar indicated the public and private distinction as an important indicator of vulnerability. For instance, sleeping in public places was quite disrespectful for women as they never had experienced this before, which made them vulnerable. Moreover, children were also vulnerable along with women mainly due to viral and infectious diseases and less resistance capacity. The literature on natural disasters suggests that women suffered from malnutrition because of poverty, which decreased their resistance towards the diseases (Nelson et.al., 2010).

The female informant Pashmina from the Afghan group elucidated during the group discussion:

*“Men are more affected by the flood than women because men were busy taking out stuff. Men build houses and buy the household stuff, but now it is damaged, so men are more affected” (a few other participant also supported her narrative).*

Pashmina’s account reveals a different approach to vulnerability assessment. She believes that men are more vulnerable than women because of the economic consequences of the flood. Same of the Afghan women thought that men are facing considerable troubles in the public spheres that they are not aware of and they therefore suffer more.

However, the female informant Fazila, from the Pathan group stated during the group discussion:

*“Men and women are affected equally, as men do not have jobs and earnings, which minimize their purchasing power to buy new things and to re-establish the home. While women have lot of household responsibilities and it is difficult for them to arrange everything*

*from scratch. The 14 feet water affected everybody, men, women, and children, but differently” (the majority of the women participant agreed).*

It is quite significant what Fazila narrated. In fact, sudden deterioration of socio-economic resources and houses created vulnerabilities for both genders as observed by the researcher in the field as well. However, the level of vulnerability may vary among women and men and also among children, but generally the level of socio-economic vulnerability is quite high in their lives.

Further Amina from the Pathan group added during the group discussion:

*“It depends on where you are living. For instance, the people who live in brick houses are less vulnerable. They are not affected as the poor people who live in mud houses because due to the flood water mud houses get destroyed within seconds but brick houses just get a little damaged. Moreover, the people who live in brick houses are richer than those who live in mud houses so that they have opportunity to renovate their homes again, but poor people hardly found the means to buy three times bread” (the majority of the women participants agreed).*

This informant points to an important factor of class or socio-economic status. The impact of climate change is usually different for different groups within societies, linked with the availability and distribution of resources, and based on the geographical location, ethnicity, race and class (Bernadette, 2011).

Although the findings show significant vulnerabilities among both women and men, women seem to be more vulnerable as compared to men due to deterioration of household possessions or resource loss, bad health and also deprivation of health facilities due to lack of access to information, less access to economic or public spheres and psychological trauma. Some literature references in the literature review also indicate that women are more vulnerable due to poverty, lack of decision making, differences in division of labor, less access to land, skill training, education etc. (Elasha, 2009, Parikh et.al., 2012, Awumbila et.al, 1995, Denton, 2010, & Duncan, 2007). Together this suggests that, women are at greater risk during natural disasters. Women’s lack of access to adequate resources enhances the vulnerabilities and reduces the adaptive capacity to climate change. On the other hand, men are also found vulnerable but the degree of vulnerability is lesser than for women, as illuminated in the informants’ descriptions. My observations also endorsed that argument. Generally, men are

vulnerable in terms of economic inadequacies that again lead towards social vulnerability. Literature suggests that not all the time just women are vulnerable though, women are vulnerable because of their marginal social position with men (Jonsson, 2011: 748). However, men can also be vulnerable to climate change on the basis of powerlessness. Jonsson (2011) gave an example that shows that farmers committed suicides in India because of stresses caused by the natural disaster, where men were not able to fulfil the need of their families in the time of food insecurity. The literature provides evidence that fits with the findings that men and women both can be vulnerable to natural disaster with differences depending upon their roles and social positions.

### **7.6 Dynamics in women's relations with men**

In this section, the impact of the flood on household milieu and spousal relations are elaborated, and how it impacts on women's lives in particular. A male informant, Gul Jaan from the Afghan group, elucidated during the group discussion:

*“We do not fight at home although, the situation before the flood was relatively much better than now. There is one thing, we have the custom of bride price. Therefore, if we pay good money for a girl she should be respected. Usually, the amount that we pay can be one million (PKR) or more than that [they mean that they pay a large amount of money to marry a girl so that, they have to give her respect to avoid breakup of the relation, as it will cost them again to get marry a new girl]” (the majority of the participants agreed).*

As narrated by Gul Jaan, they had cordial relationship with their families and with the wives before the flood and even after, but the good relationship also depends on the bride price at the time of marriage. If a boy pays a good proportion of money or other precious stuff for her, she has better chances to get respect from the husband as well as from the other family members. Usually, the money taken by the girl's family should be spent on her marriage, to buy her good equipment, which also affects her respect and status in the groom's family. Therefore, for the Afghan tribe the marital bonds are determined by the bride price up to a certain extent, regardless of the flood repercussions.

Malika, a female informant from the Afghan group, articulated during the group discussion:

*“The relationship between us [mean husband and wife] is not the same as it was before the flood. The difference is that everything has changed. When men are facing difficulties, women*

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*are also facing the same, so sometime hardness comes during conversation”(the majority of the participants supported her statement).*

It is depicted that change has taken place after the disaster because of economic problems that have resulted in problems in marital relations and increased frustration among men.

Similarly, the female informant from the Pathan group Mehwish stated during the group discussion:

*“Our husbands do fight with us on petty issues now days. We have frequent hot talks when we demand anything. There is even no love and affection between relatives. Lots of problems have emerged due to the flood and we do not have sufficient resources to cope” (the majority of the participants agreed).*

It also depicted that negative change has occurred in women marital lives because they do not have much resources to resist and counteracts the vulnerabilities.

Sakeena further added that: *“when you have difficulties in the fulfillment of basic necessities of life then there will be tension that results in quarreling”.*

Failure to achieve wellbeing leads to depression and frustration, resulting in cracks in the relationships. Another female informant, Alisha from the Pathan group, stated that:

*“We do fight, sometimes the situation becomes problematic due to economic strains. Otherwise we do not fight. If they do not bring anything, we demand, then quarrel happens most of the time before the flood. But now women do not demand much so we have less fights and tense environment than before the flood”(the majority of the participants agreed).*

It is worth noting that the changes in marital relations may vary between couples and families. The flood has had negative impact on the emotional environment the affected families because of financial strain, but for some it seems to have had positive impacts as well. For instance, some women do not demand much anymore and compromise with the prevalent situation because they realize that their partners cannot afford their demands anyway, and in this way they avoid relationship conflicts.

The findings suggest that, the wellbeing of marital or spousal relationships is largely determined by economic conditions. Relationships need care, affection and fulfilment of basic



needs. When people fail to provide and to fulfil their responsibilities, problems occur, and the findings show the impact of financial strain and difficulties on spousal relationships. On the basis of the findings I argue that, women are facing relational problems because of unequal access to resources, lack of education, lack of economic development, lack of awareness and cultural inhibitions. Such factors hinder women to participate in the process of disaster management and this exacerbates not only the vulnerability among women but also affects the environment of the whole household or family and the community on a larger scale. Literature suggests that multiple factors influence vulnerability, “ranging from poverty and inequality to communication difficulties and cultural barriers” (Kelly et.al., 2000:348).

### **7.7 Decision making and power relations between genders**

It is important to elaborate the differences and consistencies in power relations and decision making process between men and women following the flood 2010. A male informant Mustafa from the Afghan group elucidated during the group discussion:

*“Men make decisions in our culture and our women do not create tensions in this regard. They do not object to our decisions. Actually, men earn the money therefore men are responsible for the decision making. All authority is in the hands of men” (the majority of the men participants supported the statement).*

According to this group of Afghan men, men decide about right and wrong within the household, women are there just to obey the instructions given by their men because women are not empowered economically.

The female informant Pashmina from the Afghan group describes her views as follows:

*“Men take the decisions regarding household affairs. At home if there is a problem between women, then an older woman takes the decision to solve the problem. For example, I am a mother, and if there is a problem among my daughters, then I have power to take a decision. Otherwise, men are the decision makers” (the majority of the participants agreed).*

It is depicted that women have a very diminutive power in their hands, just to resolve their private problems among themselves. Apart from that, women have passive participation in the process of decision making regarding allocation of resources on domestic or household level. This correspond with the literature that unveil that, women experience increased impact of

climate change because they are responsible to manage the household affairs more frequently than men and get very little access to contribute in the decision making (Parikh et.al., 2012).

A female informant Dilshaad from the Pakhtun group during the group interview stated that: *“Pathan men are very strict in case of their honor. They do not like women as decision makers. They do not want women to speak loud. This is against their honor..... what is a woman in the Pathan household.....she is nothing .After the flood we are fighting almost every day. I am just staying in this situation because of the children”*(the majority of the participants agreed).

The informant narration illustrates that, local customs and culture often attach definite attributes like bread winner, honor and power to men as dominant persons, while women are considered weak and subordinate.

The findings unveil that, in the Afghan and Pathan culture almost all the power and right of decision making are endorsed to men. Women have very passive participation and power in decision making process as both in public and private domains. Even though the private domain is traditionally considered as women’s place (Fordham, 1998), they are not directly involved in processes of decision making regarding them or for their children. The traditions of these ethnicities may vary to some extent, but the idea behind not giving decision making rights to women is the same, that is, to control the women through power relations. It is suggested that “unequal power relations between men and women lead towards their differential access to environmental resources and opportunities for income diversification” (Denton, 2010: 17). Thus, women were unable to decide about their lives during the flood. As discussed earlier in this chapter, they do not personally possess economic resources and social support. They do not have power and opportunities to explore their potentials to resist the crisis and adapt to the new living conditions after the collapse of their environment.

### **7.8 Flood, Migration and Women**

This section elaborates the impact on women of the migration that has taken place due to the flood in 2010. Has migration played a vital role in transforming women lives or has it laid further difficulties in their way? In this connection, a woman informant, Pari Gul, from the Afghan group articulated that:

*“Due the flood lots of people migrated from one place to another. My brothers and husband also migrated and went to Lahore and some other cities to hunt for work. Some of them went to Afghanistan, but we never stay alone at home. One male is supposed to stay at home and the responsibilities lies on his shoulder regarding providing everything needed at home. Our men do not give money to their women because we are not responsible for buying paraphernalia” (the majority of the participants supported her narrative).*

Pari Gul’s narration illustrates that, many people migrated at the onset of the flood as well as later to hunt for work. This can also be called “livelihood migration” (Hunter & David, 2011:310). The Afghan women did not consider that migration impacted on their lives considerably. As already discussed in this chapter, Afghans have restricted women’s outward mobility. Therefore, Afghan women are almost experiencing the similar situation as before the flood, except for the distance between themselves and their husbands, fathers and brothers.

A male informant Muhammad Yaseen from the Pakhtun group stated during group discussion:

*“I am working in Karachi and I came after one year on holiday for 5 days because of the recent flood. I need to rebuild the walls. The employer does not give me frequent holidays, but this is our compulsion to work there when we do not find any work here. I send money to my mother and she takes care of everything because she is the oldest one at home”.*

According to Yaseen, he migrated from his home town to Karachi (a big industrial city in Pakistan) to earn his livelihoods. It is worth noting that the older woman at home has same power to access the remittances sent by her son because of her status being “mother” and because of the absence of an older man at home. The information given by Yaseen correspond with literature on migration suggested that environmental conditions have significant influence on the mobility, people usually migrate to where there are enough security of economic, social, political and demographic processes (Bohra-Mishra & Massey, 2011).

A female informant Alisha from the Pathan group told during the group discussion:

*“People have migrated from one place to another. Even women also migrated to seek livelihoods after the flood. They travelled to other cities and some people who can afford it travel to other countries, but those are very few. Money is not in the hands of women. Men*

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*always keep money and used to buy food items and other stuff themselves. Women are not participating in money generating activities so that, men has a right to keep the money because they earn. This is a common perception in Pathan culture” (the majority of the participants agreed).*

It is depicted that disaster impacts trigger migration from one part of the country to another in order to maintain the livelihoods. Apparently, some women also migrated as a result of the flood. However, women do not have control over money because of culture and men’s interference. This information correspond with the literature that indicated that livelihood labour migration is not gender neutral, and the “environmental push” factor influence on women as well (Hunter & David, 2011: 310).

Hajra from the Pakhtun group further added that:

*“My husband migrated after the flood to another city called Multan to earn money, but he never sent me money. I am alone taking care of my children and struggling to fulfil their needs, but in vain, because I have six children. I cannot afford their clothing and food, but at the same time I cannot throw them out as they are everything for me”.*

It is depicted that migration as result of the flood causes major problems for the women left behind with large households. The literature suggests that, “gendered migration and household division of labour often result in increased workloads for the women left behind by male-dominated migration stream”(Hunter & David, 2011: 310).

In the Afghan community there are no significant new dynamics due to the migration in relation to women’s economic power and decision making except increased distance from their husbands. In that group, women are not allowed to migrate because it is not culturally acceptable. The gendered nature of migration is often reflective of social order and cultural norms (Hunter & David, 2011). However, in the Pakhtun community migration increases some of women’s problems because of the resulting lack of emotional, social and economic support from their husbands, and the burden of child rearing. The findings show that at least in some cases men’s migration and socio economic and emotional displacement exacerbates women vulnerability to adapt to environmental degradation.

## 7.9 Discussion

The findings reveal that men have better access to information than women. Men are well informed because they have better access and exposure to the public sphere and social interactions. While, women's understanding regarding the reason behind the flood was based on religion and myth because of social exclusion and limited mobility. However, religious belief may create meaning in events otherwise incomprehensible, and such religious interpretations can work as a coping strategy (Voss, 2008: 53). Further, findings also suggest that men did not get prior information regarding flood manifestation due to institutional lacks, and that increased the risk and vulnerability. Furthermore, cultural norms, values and traditions also exacerbate the existing vulnerabilities, especially among women. Because of patriarchal and cultural inhibitions women did not participate properly in the process of resilience. Purdah is considered obligatory and generates social capital, which men do not want to lose by permitting their women to work in public places. Here, existing cultural norms created obstacles in the process of adaptation to the new environment and in women's development. Literature suggests that in some regions of Pakistan cultural norms, especially purdah, limited the women from access to health care and economic incentives during the crisis (DNA Report, 2010).

The findings further reveal the passive participation of women in income generating activities and adaptation to the climate change due to lack of information, education and awareness. Findings show the clear distinction of gender specific roles within the Afghan and Pakhtun culture separated in the public and private domains. This dichotomy marginalizes women and problematizes the disaster management at family and community level. The vulnerability of women is intricately linked with poverty, marginalization and the extra load of domestic work during the extreme events (Denton, 2010, Jonsson, 2011 & Nelson et.al., 2010). It has been found that women are more vulnerable than men because of their lack of access to socio economic resources, resulting in poor health conditions, loss of household property, lack of decision making power, and illiteracy. Literature review indicates similar reasons of women's vulnerability as a result of natural disaster (Duncan, 2007, Parikh et.al. 2012 and Denton, 2010). Poverty is the main factor of women vulnerability but it is not the only factor impacting women vulnerability (Jonsson, 2011). Men are also vulnerable, but they differ from women in the way that they are vulnerable because they are mostly unemployed and unable to fulfil the economic responsibilities towards their families. Decision making power is endorsed

to men within both ethnic communities because it is culturally acceptable. Negative changes have taken place in gender relations in the post-flood environment. It has been found that financial strain is the main cause of cracks in spousal relationships after the flood, as women are not culturally permitted to assist their men economically.

Moreover, gendered migration has had a negative impact on some women's lives, as they get the extra responsibility of bringing up the children alone. This trend has been found among the Pakhtun only, as Afghans did not leave their women alone. The community resilience model suggests that vulnerability occurs when there is lack of competencies and resources to buffer the temporary dysfunction. Communities need to expose the ability to counteract the disturbance, and adaptive capacities often based on a pre-event conditions and resources that enables communities and individuals to contest to climate change (Tompkins & Adger, 2004). The lack of social capital and socio economic vulnerabilities between genders and within both ethnic groups is persisting from the beginning of the crisis till now. However, chances of survival may vary as mentioned earlier in this chapter within both communities on the basis of citizenship status, wealth, legal rights and entitlements. Vulnerabilities and marginalities are also context specific and can be altered by changing situations on the basis of nationality, class, gender and ethnicity (Jonsson, 2011). According to the community resilience model it has been found that the Afghan and Pathan do not have adequate resources and coping capacities to adapt to the new environment. As a result, the existing vulnerabilities that decrease the community strength create permanent dysfunctions and a negative outcome of the community resistance.

## Chapter 8

### The Future of the Flood Victims: Hopes and Worries

#### 8.1 Introduction

This chapter elaborates flood survivors' thoughts about the future. How are they approaching their livelihoods and what are their hopes for the future? What are in their view the attributes of a good life and how do they perceive the future of their children? It also aims to provide the opinions of people regarding the assistance given by NGOs and government during and after the flood. A story is described in connection with the flood to articulate a woman's choice among accessible options for the survival of her family.

#### 8.2 Struggles towards getting livelihoods

This section elaborates informants' initiatives towards getting improved livelihoods in the future. Their hopes for an improved future are discussed and analyzed in terms of resilience or adaptive capacity in the face of disaster. The male informant Akbar from the Afghan group narrated during the group discussion:

*“We do not have much hope about the future. Before the flood, there was a school and our children were going to school and we were hopeful for their future. Now there is no school or Madrisa nearby. Our children are wandering here and there, so we do not have much hope for their future. Neither do we have business nor do we have enough resources to get back our livelihoods again of the same standard as before” (most of the participants agreed with his statement).*

It is depicted that they are struggling to excavate the economic resources to adapt to their new environment after the extreme event. However, it seems that they are not able to achieve what they had before the flood. They have been entangled into social-economic dilemmas and deprived of essentials. In addition, their children are wasting their time in useless activities because of unavailability of schools. This causes worries for the parents regarding the future of their children.

A female informant, Khadija, from the Pakhtun group stated that:

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*“If God will give us a home in the future then our lives will be better, but if we do not get any home then we will be in the same difficult situation as we are. We think in this way, but we do not know what will happen tomorrow because nobody knows about tomorrow. I think that the coming days will be good. I think we will not get our livelihoods back. We hope that we will have a better life in the future” (the majority of the participants agreed).*

The possession of an own home has significant importance for the women as they are very concerned with having shelter. Feelings are associated with the home as indicated in the literature review chapter. This informant expresses ambivalent thoughts about their future, both optimistic and pessimistic.

The female informant Haseena from the Pakhtun group articulated during the group discussion:

*“I do not think that the situation will be better in the future. Our livelihoods are based on livestock, and many cattle have died during the flood. Everything is expensive and we are even not able to meet the three meals per day requirement. If we will have good number of cattle and sheep, then our lives will be good” (the majority of the participants agreed).*

The quote illustrates feelings of dissatisfaction among the informants about their present situation, and that also reflects on their future. Their hope for a better future is diminished by dissatisfaction, worries and fears. The pre-event sources of income of many households were dependent on livestock. Therefore, they believe that if they get back their cattle and sheep their future will be decent. The early assessment literature on the flood in Pakistan in 2010 (Solberg, 2010) reveals that millions of poultry and livestock died along with standing crops worth US\$ 1 billion. According to this assessment their future is uncertain due to loss in economy and social services, and it might take years to re-establish what they had before the calamity (Solberg, 2010). Another female informant Alisha from the Pakhtun group along the river bank told during the group discussion:

*“The future cannot be good until the government does give priority in this regard. Otherwise, the situation will remain dissatisfactory. However, we hope that, this government will assist to make our future better as there are not government jobs in this area. People are unemployed. They are living their lives on daily wages as well as on boating which is not enough to survive” (the majority of the participants agreed).*



The importance given by the informant to the government's role in the process of restoration and rehabilitation in the above quote in order to deal with perturbations caused by the flood is highlighted. It is indicated that Pakistan was already battling with poverty and other internal and external security challenges. Further, the flood has had negative impetus in the socio economic development of the country. It resulted in poorly managed social safety nets, lack in the provision of social services and difficulties in the restoration of infrastructure like schools, energy, transport and so on (Rakisits, 2012).

A male informant, Ahmad khan, from the Pakhtun group elucidated during the group interview:

*“We do not know how we will survive in the future because everything is expensive. Some of our children go to school. We hope to make our own home here. We were struggling with the problem and still we are. Nobody knows the time; there can be changes in the next hour. Life is not certain. We have just hope but we are not sure about our children's future. I am head of the family, I see all the children with the same eye. I love them all. I hope that, their future will be good since we are bearing this burden on us, so that, they might have good time in their future” (the majority of the participants agreed).*

This quote presents the socio-economic vulnerability people are still facing, and that, they are interpreting their future accordingly. However, they try to have optimistic thoughts regarding the future of their children.

The findings unveil pessimistic and doubtful thoughts regarding the future due to persisting vulnerabilities and dysfunction. The literature suggests that the positive and negative effects of the climate changes are not taken seriously for the well-being of the people, and predictions to response and deal with the future calamity and adversity is not examined properly (Siegrist & Gutscher, 2008). The majority of the people are very concerned with the future of their children and struggling to overcome the existing vulnerability. However, it has been found very difficult for the informants to increase the socio-economic wellbeing for years. For instance, the inflation rate rose up to 15.7 percent in September 2010 and unemployment levels increased up to 15 percent. Further, due to the flood food prices have increased as crops and stored grains were badly damaged, and government inadequacies depicted incapacity of the civilian administration to combat the stressors caused by the flood (Fair, 2011). Keeping in mind the community resilience model that suggests that the lack of robustness in resources

and capacities reduce resistance, it seems that such lack creates persistent dysfunction in the communities. Thus, the findings demonstrate the lack of capacities within both ethnic groups for the adaptation to their new environment. The findings further demonstrate the importance of government participation in the process of resilience as informants themselves point out, because the affected population do not have resources to build schools and hospitals etc. However, the political leaders of Pakistan have been criticized for not dealing with the security and economic problems of their nation (Rakisits, 2012).

### **8.3 Children's participation in household activities and hopes towards children's future**

This section describes the children's participation in household activities after the flood and parents motivation towards their children's future and their contribution to make this certain. It is significant to apprehend the differences between boy and girl child activities at household level. It also describes the helplessness and inability of parents to transform their children's life.

The male informant Ahmed Khan from the Pakhtun group stated that:

*“I want to send my children to school, especially my sons, for their better future. I cannot send my daughters to school because people have this perception that if a girl gets educated she will run away with somebody one day. We do not prefer girls to go to school” (the majority of the participants agreed).*

People tend to realize the significance of education for an improved future. However, preferences are given to the boy children because their mobility is not confined and they are considered to be responsible for running the family affairs later. Moreover, there are some beliefs and prejudices attached to the girls' education. Many parents believe that their daughters may cause harm to their social capital by dishonoring them in the community, if they run away with any boy. Such prejudices and rumours create difficulties for the majority of the girls to get their basic right of education and liberty to move freely. It has been suggested that, “culturally girls are a protected possession and resource” (Manyena et.al. 2008: 316), and the liberty of free mobility can spoil the girls.

A female informant Pashmina, from the Afghan group, told during the group discussion:

*“Children do not work much at home, especially the very small children. Daughters work with their mothers at home and sons go for daily wages. We teach our daughters household*

*work when we do all household work like cleaning, washing and cooking. Before the flood, we used to make breakfast for them and prepare the food before their arrival home from school. But now they are doing nothing and their books have been swept away by the flood water” (the majority of the participants agreed).*



The picture are taken by the researcher and printed with the permission of the informants.

The description illustrates the gendered division of labor and discrimination between children on the basis of sex. For instance, the girl children are involved in helping their mothers inside home on the other hand the boy children are helping their fathers to reduce the economic burden instigated by the flood. Even where schools exist, children in some cases become an asset to maintain the livelihoods of the household following the calamity. Instead of spending money on the children education, parents let them work to earn some money (Bartlett, 2008). Girl children have the same restrictions on their mobility as the adult women, therefore they cannot go out to work or to study. In the pre-event situation, the boy children were used to go to school, but now they are wandering in search of labor work, and they do not have study material anymore.

The terrible economic conditions compel some of the parents to give away their children to someone else, as it happened during one of my group interviews with the Afghan group. An informant, Maryam, requested me to adopt her baby boy if possible. According to her, the future of her small child is not certain with her as she is living near the railway lines and the highway, with poor living conditions, which is dangerous for her child’s future. She tried to

convince me that her child will have a better future if he stays with me. According to Bartlett (2008), the children, especially poor children in poor communities, are at greater risk of vulnerabilities by environmental stressors.

Another informant Sakeena, further added that:

*“We have just hope that, our children will not suffer in the future, but hopes are not enough to live a life. Actually, we are not sure about our children’s future.”*

A male informant Muhammad Afzal from the Pathan group during an interview states that:

*“Inshallah, our children will have a better future and our wish is to see them in a better position. They are going to school as well as in the Madrisa (a place or institute where they learn holy teachings)”*.

Clearly not all informants have lost access to education for their children and such seems to lead to more positive attitudes towards the future.

The findings reveal that, gendered divisions of labor among children have existed within both ethnic communities both in the pre-event and post-event situations. The flood impacted on children’s daily routines and disturbed their schooling, especially the boys because of unavailability of schools nearby and due to economic insufficiency. Since boy’s are not going to school they are involved in income generating activities in order to reduce the economic vulnerability of the family. Girl child education is not prioritized due to local perceptions and rumours that education spoils the girls in a way that may result in loss of social capital. Girls are mostly associated with inside household affairs, for instance managing food stuff, cleaning dishes, moping the floor, washing clothes etc. Literature supports the findings that, in patriarchal societies the gendered roles are ascribed by cultural specific norms, for instance different roles are associated with boys and girls, like the boy child may get the responsibility to do labor work in the market or herding the cattle and sheep. Girls perform the “feminine” (Manyena et.al. 2008: 316) activities like collecting fire woods, cooking food and taking care of small siblings. The findings further suggest that, Madrisa education also is seen to have significant importance for the improved future of the children, because holy teachings are highly appreciated in these communities. According to the community resilience model, the findings show that inadequate resources and fear to loose social capital make girls vulnerable. Because of the restrictions on mobility and decision making girls cannot actively participate

in the income generating activities, which increases existing vulnerabilities of the girls and family at large in the post-flood situations. This corresponds with the literature stating that rural women in general have little access to resources and decision making that influence on their lives (Denton, 2010, Parikh et.al. 2012 & UN Women, 2009). However, the freedom of girls to participate in the socio-economic spheres may help to reduce the vulnerabilities caused by the flood, and an increase in adaptation capacities within households and communities to adapt to the new environment. Boys also do not possess enough resources to have a better future and to curtail the vulnerabilities and persistent dysfunction. However, they have better chances to survive later, because of access to the public and socio-economic spheres, where girls are restricted.

#### **8.4 Elements of a good life: local perceptions**

In order to answer the question of what a good life is after the flood, the perceptions and viewpoints of the informants are elaborated. For instance, what do informants think about a good life, and what the entitlements and elements are important to have a good life?

A woman informant Pashmina, from the Afghan group, told during group discussion:

*“If we have the facilities of good schools, hospitals, electricity, clean drinking water, peace in the country, and availability of all basic things necessary for life, then life will be good. The husband should have job, children should be all alive. They should have clothes, shoes and food, then it would be a good life” (the majority of the participants agreed).*

The safety of the children from disease, hunger and social evils is also considered an important blessing and part of a good life, along with other essentials of life. It has been noted in the first and second empirical chapters that the Afghan Muhajir prefer a simple lifestyle. The information given by the Afghan Tribe showed that they are contented and accustomed to spend life in a simple way. However, some needs cannot be ignored to have a good life, as they stated.

Similarly, a Pathan informant, Majid ali, during the individual interview stated that:

*“It is important to have an own home, job and other necessities like hospitals, schools and electricity to live a good life. However, we are not sure when will we be able to get such essentials.”*

This quote correspond with the previous quotes by the Afghan informants that fulfillment of basic necessities are important to have a good life.

A female informant, Amina from Pakhtun group narrated during the group discussion:

*“Money is important to have a good life. Without money there is no good life. Money is important to fulfil the needs because when you have purchasing power you can buy all things you need for a better life. Therefore economic resources are important for the good life”*(the majority of the participants agreed).

Amina presented a different view point where she emphasized economic resources, especially money, to have a better life. However, in order to see the variations among the preferences and thoughts of individuals regarding good life, I include the thoughts of a woman informant from the Pathan group Zaiba:

*“A good life is when the husband is with you, his sincerity and care is very important for a happy and good life, along with other prerequisites”*

A good life cannot be accomplished without the loyalty of a life partner. Women tend to feel themselves crippled without the support of their husbands, as stated by the woman informant. Cultural norms and traditions are very important to consider their choices. A woman from the same group named Khadija supported her statement by saying that: *“Yes, the support of husband is very important when you are married”*. Since women are living under the protection of men, they are concerned with the loyalty of their husbands. Furthermore, before getting married, women live under the protection of their father and brothers. After her marriage the husband becomes an important person in her life to depend on. Therefore, the husband’s love and care play a crucial part in order to have a good life, along with basic necessities, because this is what women have as a resource.

A male informant Yaqoob Khan from the Pathan group stated during his interview that:

*“In order to live a good life, all facilities should be available including luxuries like car and air conditioner. When you have everything that makes your life easier as rich people do have, then life will be good”*.

The description demonstrates that, some informants want more than just the basic needs. Luxury is considered vital to have a good life because it revives the life and provides the

intrinsic satisfaction instead of contentment. However, the level of satisfaction varies individual to individual. The wish to achieve the highest level of status and prosperity can be found in every individual, but the circumstances and conditions can be different from person to person. Therefore, Yaqoob is not considering the fulfillment of basic needs a part of good life rather he expects more to have a good life after the disaster. However, the flood made it difficult for people to achieve that goal after the huge destruction, and it seems that it needs the struggle of generations to overcome the damage.

The vulnerability theory suggests that socio-economic and contextual vulnerabilities make individuals and communities unable to deal with changes that occur due to environmental degradation. The theory supports the findings that unveil the local perception regarding good life, primarily concerned with the fulfilment of basic requirements necessary for life that includes, safe environment (especially for children), sufficient purchasing power and economic capital. However, it has been found that flood affected population is not able to adapt to the new environment and remain vulnerable. Therefore, the availability of essentials is considered to have a better future and good life. The sincerity and responsible attitude among conjugal relations are emphasized by some of the informants to have a good life along with the other mentioned attributes of good life. It is an important aspect to be considered that men and women participate together to respond the stressors for the better future adaptation. However, for some of the informants just the fulfillment of primary needs is not enough and does not guarantee the secure future and a good life. The luxurious life style is indicated as an important attribute for a good life where they can encounter the difficulties and dysfunction caused by the flood.

### **8.5 Role of NGO's and Government in disaster management**

“Social, economic, political transformations rooted in colonial history, assimilationist policies, and accelerated by globalization are having implications, many negative for indigenous people and their adaptive capacity”  
(Ford, 2012: 1262)

During the flood in 2010 many national and international organizations participated in the management of disaster along with the government of Pakistan. In order to minimize the effects of disaster, assistance has been given to the affected people up to some extent. The assistance and relief given by the NGOs and governmental institutes during or after the flood

are described according to the stories told by the informants. In this regard, a male informant, Gul Jaan, from the Afghan group expresses his narrative during the group discussion:

*“In the beginning of the flood, government and some NGOs gave us tents and food item like flour, but we just got a tent. They did not help us in rebuilding our homes. However, it can be possible that they just build a school, or the government might solve the problem of electricity. Generally, NGO people come here to take photos, videos and write about the destruction of our village, but they do not provide us anything. They gave assistance to some other people. We are keeping our purdah and we do not spread our hands in front of them. They provide assistance to the people who have NICs (National Identity Cards)” (the majority of the male participants agreed).*

It is depicted that, the national and international organizations have provided some help to most of the affected people at the time of the crisis in the form of rescuing people and providing them food and temporary shelter. However, the flood affectees are not satisfied with the assistance given by both the national and international agencies. Polastro et.al. (2011) found similar findings where their informant states that *“we were affected by the floods but we were not asked about what our needs were. Some group visited, but they met the local feudal landlords only. These people made promises to provide us with repair support for the home, food, and tents and took our land ownership papers and never came back”*. This supports Afghans’ blaming to the NGOs and INGOs for just doing paper work, which is not productive for many of the people. Afghans are proud and esteemed and they do not like to ask for assistance again and again, because it’s against their honor. They believe that they did not receive financial aid from the government because of their status as refugees and that they get discriminated, which heighten their vulnerability.

A female informant, Ayaat Bibi, from the Pakhtun group articulated during the group interview:

*“The NGO personnel gave us soaps, lentils and flour, besides that, nothing more. They wrote down everything and they did not give us anything except hope. The government introduced WATAN CARDS, but they only gave to some people. And they just gave us two support premiums instead of four which are around PKR 40,000. Now they are not giving us the rest of the money” (the majority of the informants agreed).*



The monetary relief given by the government has not been provided adequately. The assistance given by the authorities are not appreciated because of delays in providing the premium of Watan Card among the Pakhtun group. It is indicated in the NDMA annual report (2010) that the government of Pakistan launched a financial package of 20,000 PKR for those who are less affected by the flood, but 80,000 will provide to those people who have lost their homes during the flood for the reconstruction. Because many mud houses in the villages have been vanished by the flood water, as the researcher observed. This financial relief is provided through the Watan Cards across the country and NADRA issued approximately 1.42 million cards for the affected people (NDMA, 2010:39). However, it is not easy for the government and other organizations to deal with the millions of affected people and meet their needs. Moreover, the access issue was a challenge especially in KPK (Khyber Pakhtunkhwa) , FATA (Federally Administrated Tribal Area) and Baluchistan because of security issues and damage to infrastructure (Polastro, et.al. 2011).

Furthermore, another informant Fajar from the Pakhtun group added that:

*“Generally, government personnel’s gave assistance to their friends in order to extend their friendships but they do not help the poor people”.*

The flood inquiry commission revealed that during the disaster a loss of PKR 855 billion happened due to the irrigation department. Moreover, it further reveals that wilful breaches have been made to divert the flow of flood water in order to save the land of elite people (Nasir, 2011) <http://www.aaaj.tv/2011/06/floods-2010-inquiry-commission-submitted-its-final-report/>. It is interesting to notice that people do have an idea about the distribution of relief fund that, it may not be going on as it should be. It is suggested that, the initial relief activities were carried out without proper coordination and were just based on organizations priorities (Polastro et.al.2011).

According to the community resilience model proper utilization and mobilization of resources are important to repair dysfunction. Otherwise, it may create persistent dysfunction in the community if vulnerability is not tackled seriously. In this regard, the findings illustrate the efforts taken by national and international organizations along with the government of Pakistan to provide an initial recovery relief to the affected population. But the assistance given proved not sufficient for the Afghan Muhajir because of not holding the national identity cards necessary for the financial aid (e.g. Watan Cards), and Pakhtuns also complaint

about the delayed and insufficient support. The majority of the affected population especially Pakhtun women and other vulnerable groups did not receive the Watan Cards. Moreover, the efficiency and effectiveness of the national and provincial disaster management to provide sufficient assistance to the affected population was slow and insufficient (Polastro et.al. 2011). Moreover, funds and resources were distributed according to characteristic principles as narrated by Fajar. The findings further suggest that the initial assistance provided to the flood victims were in the form of food items and temporary shelter. The NDMA annual report (2010) revealed that, early support was mainly given in four particular sectors like food, health, shelter and water and sanitation. Afghans claim that government and other organizations did not provide help to re-build their homes and school. It seems that the assistance given during the crisis was short term, just to make people survive from the disaster. In fact, it is indicated that initial response and funds were given for the lifesaving activities during the crisis (Polastro et.al. 2011). Keeping in mind the community resilience model, the support given by the national and international authorities are not enough to combat the consequences of the extreme event. As a result, the majority of the affected population is facing vulnerability and experiencing dysfunction in the communities.

## **8.6. Discussion**

The findings suggest the uncertain future aspirations of the majority of the informants due to insecure post-flood economic and social situations in the studied areas. Literature also indicated that it is difficult for the affected people to predict their future during and after the disaster (Siegrist & Gutscher, 2008). Majority of the people within both ethnic groups Afghan and Pathan are much concerned with the future well-being of their children as many children are not going to school after the flood due to inaccessibility and availability of schools two years after the flood. Moreover due to the persisting vulnerabilities it seems that the majority of the flood affected people are on the level of persistent dysfunction with uncertain future wellbeing. Some important elements of psychological wellbeing are suggested by Norris and his colleagues along with other factors necessary for wellness. The authors define four criteria that include the absence of mental distress, healthy lifestyle and attitudes, adequate resources and roles working at home, school and high living standard (Norris et.al. 2007: 133). However, many socio economic and psychological dilemmas are persisting in their lives as mentioned in the previous two empirical chapters. Further, such socio-economic and psychological unrest has uncertain and negative impact on their future positioning.

The findings further unveil the gendered division of labour among children of both ethnic communities that intensifies the daily chores of children. As finding reveals that boy children are wandering in search of labor work to support their fathers economically, while girl children are busy assisting their mothers in domestic works, their future seems quite vulnerable. Primarily, women are responsible to manage household works and to participate in the agricultural sector, which is usually unpaid (Thompson & Sultana, 1996). The education of girls is not prioritized, especially in the Afghan group, because of cultural specific norms, which can be interpreted under the context of Purdah. According to the community resilience model, the resilience of the community based in the community capacities and resource network which is a combination of economic development, social capital, information and communication, and community competence (Norris et.al. 2008). Thus, women's passive participation in the process of resistance generates future problems for many of them to produce effective resilience, which cause vulnerabilities. The findings further suggest the importance of government participation and initiation to restructure the infrastructure and social services for the improved future of the affected communities. Literature also suggests that social processes specially the political processes of greater exclusion have enormous influence on vulnerability of the communities and society (Voss, 2008:40). The persisting vulnerabilities within both communities showed the political exclusion in the process of rehabilitation and resilience that exacerbate the existing vulnerabilities and uncertain future.

The finding further unveils the importance of money to have an improved future after the disaster. The attributes of a good life revolve around money, ownership of tangible material or material, occupational status, certain culture, harmony, peace in family relations (Calestani, 2009). The findings further proposed the dissatisfaction of many of the people regarding the assistance given by the government disaster management institutes, national and international organizations. The Afghan group was complaining about the unequal assistance given by the government and other NGOs and INGOs that exaggerate the vulnerabilities. The Watan cards are not provided to the Afghan Muhajir because they do not hold the National Identity Cards. However, Watan Cards are not issued to all the affected population (Polastro et.al.2011). As suggested by the community resilience model, vulnerabilities engender permanent dysfunction between the communities if they do not have robust resources. According to Wisner (2001:251, cited in Norris et.al. 2007) the process of mitigation in developing countries often failed to address the "root causes of disaster vulnerability, namely, the

economic and political marginality of much of the population and environmental degradation". As argued by Norris and his colleagues the wellness and resilience of the communities emerge from the multiple adaptive capacities of the communities, which they associated with the robustness, redundancy and rapidity. Unfortunately, both ethnic communities, especially Pakhtuns, showed lack of the less competence and social support to show the strong resilience to buffer the vulnerabilities that caused permanent dysfunction and negative outcome of the resilience process. However the future of such communities seems to be vulnerable for years to come.

### **8.7. Concluding Remarks**

The 2010 flood had multiple socio economic negative impacts on genders within the Afghan and Pakhtun ethnic communities. The severity and duration of the flood has created psycho-emotional distress especially among women. The pre-event socio economic situations in both ethnic groups were satisfactory, although Afghans expressed more contentment with life before the flood, probably largely because of living with their kin or close relatives. At the time of the crisis, the exposure to the flood within both communities has been found almost equal in terms of contextual, social and economic apprehension such as homelessness, food insecurity, health problems, loss of property and privacy issues among women. The overall pre-event situations and socio economic conditions were not very challenging as after the crisis, but the post event situations are worse because of pre-event poverty and illiteracy, and due to the sudden deterioration of available natural and other resources. The large scale destruction caused major social, psychological and economic dilemmas that limit the resistance of both ethnic groups and exaggerate the existing vulnerability.

It has been found that men have better access to information and communication regarding the manifestation of the flood than women because of their greater mobility in the public sphere. Women have mostly religious interpretations regarding the occurrence of disaster. Both ethnic groups are homogeneous in terms of exposure to disaster, culture and language. But these groups are heterogeneous in terms of coping schemes to disaster, where Afghans are able to across boarder travel to find work, while the Pakhtuns have better access to state support. Purdah is taken so seriously by both the Afghans and Pakhtuns as it attached to their honour, and this problematize the consequences of the flood for the family groups. Moreover, the cultural taboos create many problems for women's participation in the management of post flood situations because of lack of accessibility, lack of education, permission and

freedom of mobility. Further, men and women both are found vulnerable to disaster with small variations due to their economic positions, gendered roles and activities. Furthermore, poverty is the key factor that influences vulnerabilities between genders in the Nowshera region. The gender roles and activities are important in the process of resilience during or after the natural disaster. In both the Afghan and Pakhtun community there is a clear gender division of labor. Women are confined to their private space and manage their feminine tasks like cooking, cleaning, washing clothes, and caring for family members. Men are the breadwinners and have greater access to resources.

The bad economic condition of many of the people causes difficulties in marital relations between genders, especially among the Pakhtun women. As stated earlier women are not permitted to work in the public sphere as they are not heads of the households and decision makers. Moreover, the imbalances of power relation between the genders along with other socio economic apprehensions stress their marital relations after the flood. For example, men burst their anger on women while they feel helpless to feed their family and children. Furthermore, migration also impact women's life and create extra workload and responsibilities for the women, when the migrated men are unable to send money. Migrating Afghan men seem to fulfil their obligations better. Due to the bad socio economic resources and cultural norms the resilience process has been found too weak within both communities to counteract vulnerabilities, rather, it is increasing the vulnerabilities.

Due to the prevalent poor condition among the affected population, the majority of the people has an uncertain feeling about the future. Since their children are not going to school and they are not doing very well after the disaster the future forecast is not very hopeful, although they believe that their bad time will pass in the future. The boy children are hunting for work to help their families. Girl children are helping their mothers to manage household work. The girl's education is not prioritized in both groups, especially in the Afghan group because of indigenous cultural values. Many parents are not able to resend their children to school due to lack of income and lack of schools nearby. The loss of infrastructure and social services has become very critical for both communities, and they do not see how to survive in the future without the assistance of the government. People from both communities are found dissatisfied with the assistance provided by the government and NGOs as it was only for a short time, and with poor distribution of resources. The government of Pakistan issued the Watan Cards for the affected population, but it is not distributed to everyone who needs it. In

fact, the Afghan Muhajir are completely excluded from this opportunity of financial assistance as Watan Cards are distributed only among National Identity Card holders.

The poor people who are living in villages and small towns are extremely vulnerable to multiple socio economic and legal deprivations, as discussed. They are not capable to buffer the extreme situations caused by the flood due to lack of robust resources, which created negative impacts on the process of resilience during and after the flood. The model suggests that resistance fails if people are not able to adapt to the altered environment, which leads to vulnerabilities and further dysfunction within the communities. By the help of community resilience model it has been found that the studied communities experience negative outcomes from the process of resilience, and remain vulnerable.

### **8.7.1 Topic for future research**

Based on the findings it has been observed or noted that further research should be carried out on post-flood situations in more detail, with special reference to the future aspirations and forecasting through the perceptions of local people in order to understand their needs. Moreover, an important area for research is also to investigate the political and administrative efforts to overcome the stressors caused by the natural disaster.

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## **APPENDICEX**

### **In-depth Interview Schedule:**

1. Flood vulnerability
2. Where did you live (mean near the river or far away from the river) before flood?
3. Probe: Since how long you are staying here?
4. Probe: Is this the first time you suffer due to flood?
5. How many sons and daughters do you have?
6. Probe: Is he/she living with you?
7. Who is the head of family in your home?
8. How and why do you think that flood ruin your village and homes?
9. How many people in your family are affected by the flood?
10. Probe: how are they affected and what have they experienced?
11. What do you think about who suffered or faced the problem much either men or women?
12. Probe: why men or women are more affected by the flood (illustration with example, if any)?
13. What kind of problems are you facing due to flood?
14. Probe: if yes, why such problems are still persisting in your life?
15. Which reasons do you think made you vulnerable to disaster?
16. Did you own the land you lived on and how much is it?
17. Probe: if yes, who is the care taker?
18. Is your land affected by the flood and how?
19. Probe: was it near the river or canal?
20. Are you working to earn money to maintain your livelihood?
21. Probe: if yes, where do you work?
22. Probe: if yes, What kind of work is it and how much time do you spend on it?
23. Are you working due to flood or were you allowed to work before disaster as well?

### Gender Relations

24. Did you feel or see any change in your home environment due to flood?
25. Probe: if yes, what kind of changes are those?
26. Do you feel any difference in your relationship to husband after the flood?

27. Probe: if yes, what kind of changes have you noticed, and in your opinion what are the reasons of that change?
28. Do you feel and notice something new in your matrimonial relation that you think that has never happens before?
29. Probe: if yes, do you think your husband is more polite with you than before flood or the opposite?
30. Did you work together and ask each other before taking any decision regarding household before the flood?
31. Probe: do you do this more or less now?
32. Do you think both of you are struggling to cope with this hard situation equally?
33. Do you discuss your social and economic problems with your husband/wife every day?
34. Probe: what kind of problem you are used to discuss together?
35. Why do you think inequality at household level persists and what are the reasons you feel make you less powerful (if any)?
36. Do you notice any change in your husband/wife (positive or negative behavior towards her/him, change in roles, status if any etc.) due to flood?
37. What is your activities and responsibilities at home as well as at work (for instance in the field)?
38. What were your responsibilities at home and work before the flood?
39. What were your husband's responsibilities before the flood and what are his responsibilities now?
40. Are your children's (sons/daughters) working with you at home and e.g. on field?
41. Probe: if yes, how old are they and what are their working responsibilities or activities?
42. Do you think that your values and norms (e.g. Pardah, male centered culture, social taboos) play role in shaping your lives?
43. Probe: if yes, what are those familial and ethnic barriers and how are these creating obstacles in order to achieve livelihood after the flood (give examples, if possible)?
44. Does your husband give you money in your hand to run the family or does he keep all in his pocket?
45. Did your husband migrate anywhere else in order to achieve livelihood?
46. Probe: if yes, is he sending money to you and how you are utilizing with it?
47. Probe: are you saving any money after spending on your necessary expenditures?



48. Do you know about any woman who is surviving without her husband and husband support after the flood?
49. Probe: if yes, is she married and is she has children?
50. Probe: if yes, how many are they?
51. Probe: if yes, how is she managing her livelihood and how people think about her?
52. Probe: do you appreciate her courage?

#### Future orientation

53. How do you see your future?
54. Do you think you will be able to get back your livelihood as it was before flood?
55. What kind of hurdles are you facing in order to achieve livelihood?
56. Probe: if any, can you please enlist those obstacles (if any, socio- cultural or economic)?
57. In your opinion what is good life and what are the attributes (qualities) of good life?
58. Probe: can you give some examples of having good life (e.g. car, brick house, big land, and business, lot of money or respect and honor)?
59. How do you think about your children's future?
60. Probe: are they going to school, working somewhere or doing nothing?
61. Did any NGO or government institution help you out during and after the flood?
62. Probe: if yes, how did they help?
63. Do you think the assistance provided by NGOs and Govt. is sufficient in to bring you out of the difficulties? (some assistance from Govt like Watan Card)
64. Do you think will they provide any assistance in the house in order to get back your livelihoods?

#### Ending Question

65. Do you want to add something else which you feel important to say or addressed or (any experience related to flood which is unforgettable)?