

**Impact of women's participation in disaster recovery on their lives: A case
study from Pakistan**

by

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Abstract

This study used a qualitative case study to examine women's participation in disaster recovery in Union Council Langarpura, Azad Jammu and Kashmir (AJK) state of Pakistan. The specific objectives of this research were to:

1. Analyze how women have participated in the recovery process;
2. Identify the factors that influenced women's participation in the recovery process;
3. Examine how participation in the process of recovery after the Kashmir earthquake has affected the lives of women in the rural communities of Union Council Langarpura, AJK and;
4. Make recommendations regarding how to involve women in recovery and empower women through the recovery process.

This study follows a disaster approach and critical theory paradigm, particularly feminism. In order to achieve the objectives of the study, two focus group discussions, four key-informant interviews and 30 semi-structured individual interviews were conducted in Union Council Langarpura, AJK, Pakistan. A community advisory committee consisting of three local community members and two research assistants were also appointed for the study. The participants of this study were selected using purposeful sampling and snowballing techniques. Participant observations were also carried out to complement data collected through interviews and focus groups. Data was collected in the communities of Langarpura from September 14 to November 25, 2012. Since, the focus groups and interviews for this study were conducted in Urdu or the local language, Pahari, all the data was translated and transcribed into English and QSR NVivo 10 was used for coding and

data analysis. The results of this study contribute to our understanding of the women's participation in disaster recovery in remote rural communities in three important ways:

First, the female participants in Langarpura have played three important roles during the recovery process; reproductive, productive and community roles. The results of this study revealed that if given the opportunity, women in the remote rural communities can actively participate in recovery activities and perform not only traditional roles but also some non-traditional roles.

Second, this research found that women's participation was influenced by four factors: the Kashmir earthquake itself, the culture of Langarpura, the role of social activists, and the role of social capital. This study shows that the death of the male members of family, the outmigration of males and the influx of large number of government and nongovernmental organizations (NGOs), and aid organizations encouraged women's participation in disaster recovery. In addition, loose purdah restrictions and the active role of social activists also facilitated women to go outdoors and take part in recovery. Most importantly, however, social capital played a fundamental role and all the three forms of social capital i.e. bonding, bridging and linking social capital encouraged women in Langarpura to participate in the recovery.

Third, this study examined the impacts of participation in disaster recovery on women's lives. The results of this research revealed that participation in recovery activities contributed to both individual and community resilience of the female participants by improving their material, relational and subjective well-being. The three-dimensional model of well-being proposed by Sumner (2010) was utilized to show how participation in

disaster recovery influenced the well-being and, in turn, resilience of the female participants. Participation also empowered the female participants in personal, family and community spheres and their empowerment led to the transformation of gender roles and relations and gender stereotypes, involvement in decision-making at the family, community and higher levels and enhanced civic consciousness. Therefore, this study revealed that disasters provide “window of opportunity” for the participation of women in disaster recovery which, in turn, leads to social transformation through women’s empowerment and improvement of their gendered status and overall image in the society.

Preface

This thesis is an original work by Shehla Gul. No part of this thesis has been previously published. Since my study involved working with human participants, I needed ethics approval for this study. Ethics approval for this study was obtained from the Research Ethics Board (REB) at the University of Alberta. I applied for the ethics approval in 2012 through the Research Ethics and Management Online (REMO) website and then applied for a renewal of my ethics approval every year till August, 2016 when I sent a closing report to the REMO since I did not need to contact the study participants anymore (please see Appendices 8, 9, 10 & 11). As of July 25, 2018, this study has been closed for ethics approval.

This thesis is the culmination of my efforts and thirst for education and the highest achievement of my life. Education has made me what I am today and I have always strived for better education. I started my schooling from a Pakistani government school where we had no chairs or desks to sit in the class and we used to sit on a hard jute mat. I completed my school and college education as a science student but I always had interest in Geography, particularly in hazards such as earthquakes, floods and thunderstorms: hazards that were very common in Pakistan. However, I had never studied Geography as a major subject until my graduation. I studied Geography as a major subject at the graduate level during my BSc and MSc. Programs and my interest in hazards and disasters further increased during my Masters that I completed at the Department of Geography, University of Peshawar. After receiving a Gold Medal from the University of Peshawar for obtaining record-breaking marks, I was appointed as a lecturer in my own department in May, 2005. I got the opportunity of visiting Sri Lanka in June, 2005 to witness the damages of the Indian Ocean Tsunami of December, 2004. I had barely forgotten the sufferings of the tsunami affected people of Sri Lanka that a severe earthquake hit the norther parts of Pakistan including the State of Azad Jammu and Kashmir (AJK) and the Province of Khyber Pakhtunkhwa. I participated actively in collecting relief goods and funds for the earthquake affected people and also visited the earthquake affected areas in June, 2006. The scale of the damage and destruction was unprecedented but the courage of the local people was also exemplary. I was really impressed with the way the local people were

trying to cope with and recover from the impacts of this biggest disaster in the history of the country.

After a tough competition, I obtained a PhD scholarship from my university and I decided to come to the University of Alberta for my PhD due to the presence of an experienced faculty member in the field of hazard and disaster research, Dr. Tara K. McGee who gave me a very warm and encouraging response and highly facilitated my admission and stay at the U of A. When deciding about my topic for PhD research, I had no hesitation to select the Kashmir earthquake of October 8, 2005 as I always wanted to go back and see how people were recovering from the worst earthquake disaster in the history of the country. Therefore, I visited the State of AJK again in 2011 to select a topic for my PhD research and was amazed to see that women were also participating in recovery in some communities. I quickly decided to further explore women's participation in the recovery process as a topic for my PhD.

Conducting this study enabled me to get a first-hand experience of working in a rural community of Langarpura and get the inspiration by observing how the low educated women of Langarpura, AJK grabbed the window of opportunity provided to them by the Kashmir earthquake to change their lives. It is a lesson for all the women in Pakistan as well as abroad that, if given opportunity and trusted, even the untrained and low-educated rural women can improve their lives and also set a precedent for other members of their community. Working on this topic for my PhD was a great experience because staying in field in the beautiful green valleys of Langarpura, AJK during fieldwork gave me the opportunity to see the Kashmiri culture and experience their hospitality. Especially, when I was leaving my study area after fieldwork and stay of around two-and-a-half months, although it was very early in the morning at 5:00a.m., all of the community members living in the neighborhood of my residence came out to see me off and they kept waving when I was leaving their community with tearful eyes. I could never forget these memories and I still have contact with some of the community leaders through phone and they keep me updated about any progress happening in the community with respect to female participation in the recovery. Indeed, working with Kashmiri people for this PhD study was

an experience of a lifetime which has produced far-reaching and long-lasting memories on my mind and heart.

Dedication

To my husband Rafiq Ali Khan,

My late sister Nargis Saba and Parents Riaz Khan (late) and Abida Parveen

----AND---

The women of Langarpura, AJK, Pakistan.

Acknowledgments

First of all I would like to thank my supervisor Dr. Tara K. McGee, the friendliest and most inspiring supervisor I have ever known, for her support, cooperation, kindness and encouragement during the last eight years. Without her continuous support and guidance, I could never have accomplished my goal of completing my PhD. I have no words to thank her for her encouragement which took me out of trauma after my father and elder sister passed away within five months. It was only the support of Dr. Tara which pushed me back on track and I was able to finish my program successfully.

I am also thankful to my supervisory committee members, Dr. Theresa Garvin and Dr. Cindy Jardine for their continuous support and valuable suggestions during our meetings. A big thanks to Debby Waldman from the Academic Success Center for editing my thesis. I am also grateful to my friends Laraine Stuart and Jennifer Baker who really helped me settle down in Edmonton during the initial days of my PhD program.

I would like to acknowledge the financial support of my home university, the University of Peshawar, for the initial four years of my PhD program. I am also extremely grateful to my teachers and colleagues at the University of Peshawar, Dr. Atta-ur-Rehman, and Dr. Samiullah for their continuous support and encouragement.

I would also like to thank the people of Langarpura, particularly, the women of Langarpura for their warm welcome and cooperation during my fieldwork. I have also developed deep and durable friendship with some of those inspiring women which will last forever. Many thanks to the officials of Sungi development organization and other NGOs which facilitated my data collection process and stay in AJK.

And lastly but most important, I am extremely grateful to all my family members for their continuous support and help. Thanks to my late father Riaz Khan and mother Abida Parveen for initiating my educational journey and encouraging me to move ahead throughout my life. A big thanks to all my in-laws and younger brothers and sisters for their support and encouragement. And most importantly, thanks a lot my elder sister Nargis Saba: my dearest sister and closest friend, Thanks for going to field with me and taking care of my kids when I was collecting data. Thanks for all your calls pushing me to work

harder. I wish you were alive today to see me completing my PhD-I know this was your greatest wish.

And lastly, I have no words to thank you Rafiq Ali Khan, the best husband and friend in the world, Thanks for all your support and facilitation-for bringing your family members to help me write my thesis when you were away in field, in the remote parts of Pakistan, in UAE and in Iraq. I would never have made it through without your support and help. Thank you.

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LIST OF ACRONYMS

Acronyms	Meanings
AJKCDP	Azad Jammu & Kashmir Community Development Program
AJKRSP	Azad Jammu & Kashmir Rural Support Program
CBOs	Community Based Organizations
CDP	Community Development Program
CMH	Combined Military Hospital
Co	Community Organization (singular)
Cos	Community Organizations (plural)
ERRA	Earthquake Reconstruction and Rehabilitation Authority
KPK	Khyber Pakhtunkhwa Province of Pakistan
LSo	Local Support Organization (singular)
LSos	Local Support Organizations (plural)
LHV	Lady Health Worker
NDMA	National Disaster Management Authority
NRSP	National Rural Support Program
SMC	School Management Committees
SERRA	State Earthquake Reconstruction and Rehabilitation Authority
TVO	Trust for Voluntary Organizations
UNDP	United Nations Development Program
UC	Union Council
Vo	Village Organization (Singular)
Vos	Village Organizations (plural)

Chapter 1: Introduction

Pakistan is among the countries in the world most prone to natural hazards. Pakistan is situated in a highly seismically active region of the world (Ainuddin et al., 2013; Halvorson & Hamilton, 2007). Earthquakes are one of the most dangerous and recurrent hazards in Pakistan (Khan, 2007; OCHA, 2006) and especially in the state of Azad Jammu and Kashmir (AJK), mainly due to the location of AJK on the verge of Indian and Eurasian plate boundaries (ADB/WB, 2005) (See Figure 1-2 for the Map of AJK). The most devastating earthquake in the history of Pakistan was the Kashmir earthquake that shook northern Pakistan and the Kashmir region on Oct 8, 2005 at 8:50 a.m. Pakistan Standard Time (ADB/WB, 2005; Durrani et al., 2005). The magnitude of this earthquake was 7.6 and it was followed by more than 978 aftershocks (Naeem et al., 2005) (See Appendix 2 for a map of the location of the Kashmir earthquake and its aftershocks). The Kashmir earthquake caused the greatest damage in AJK and the Khyber Pakhtunkhwa (KPK) province of Pakistan leaving 80,000 people dead and more than 100,000 injured (Durrani et al., 2005, 8). The Kashmir earthquake also left an estimated 3.2 million people displaced or homeless (Irshad, Mumtaz, & Levay, 2011) and resulted in an estimated reconstruction cost of \$5 billion US (ADB/WB, 2005) (See Appendix 1). Rescue and relief efforts were carried out by the Pakistan army, United Nations (UN) agencies and international, national and local non-governmental organizations (NGOs) (Khan, Shanmugaratnam & Nyborg, 2014). However, due to the approaching winter; the relief phase had to be extended for nine months and recovery and reconstruction could not be started until June 2006 (Khan et al., 2014). The post-quake recovery efforts were extensive since the affected area spanned nearly 26,000 square kilometers (World Bank, 2005). The rehabilitation phase lasted for one year and was followed by a long-term reconstruction phase that started in July 2007 (Khan et al., 2014).

Although no gendered data was available for the Kashmir earthquake, it was considered by a number of researchers and international organizations to have gendered impacts resulting in higher rates of mortality and morbidity for women as compared to men

(see, for example, Enarson, 2009; Ferris, 2010; Hamilton & Halvorson, 2007; Irshad et al., 2011; IUCN, 2006). Thousands of women survivors suffered during the relief phase due to the lack of attention to sanitation and hygiene facilities, reproductive health care, the special dietary needs of pregnant and lactating women, and women's access to relief goods and compensation (UNDP, 2006). Women living in relief camps and tent villages also faced a high risk of sexual exploitation, violence, trafficking, and physical abuse (Hamilton & Halvorson, 2007). In addition, there was a disturbing campaign alleging that one of the reasons for the Kashmir earthquake was women's sins, inappropriate behavior, and dress (Hamilton & Halvorson, 2007; Tahir, 2007).

The main reason that women suffered during the relief phase was their pre-existing vulnerabilities. These included poverty and lack of economic independence due to limited access to education, employment, health facilities, training opportunities and productive resources; and lack of participation in decision-making processes (Critelli, 2010; IRP, 2009; ERRA, 2007; Sayeed, 2006). In addition, there was no interaction between the victims of the Kashmir earthquake, particularly women and the government of Pakistan. As a result, women's needs and priorities were not incorporated into the relief and recovery plans after the earthquake. This further deteriorated the condition of women who already suffered a lot during the earthquake due to the lack of emergency health services for and increased burden on them as they cared for the injured as well as the children and elderly members of their families.

Disasters have the potential to lead to important positive or negative changes in socio-ecological systems through changes in dominant ways of thinking and acting (Birkmann et al., 2010). During the recovery phase in some rural areas of AJK, a few local and international NGOs started projects encouraging women to participate in recovery processes in their communities. Since women in AJK had not been involved in any previous disaster recovery processes before the Kashmir earthquake (personal communication with the representative of a government organization involved in recovery in Langarpura, 2012), their participation in disaster recovery activities provided an interesting topic of research. Although much attention has been given to women's vulnerabilities and the direct impact that disasters have on women (see, for example, Ahsan & Hossain, 2004; Akerkar, 2007; Ariyabandu, 2006; Enarson, 2002; Fothergill, 1998;

Jenkins & Phillips, 2008; Neumayer & Plümper, 2007; Peek & Fothergill, 2008; Sherpa, 2007) as well as women's roles in relief and recovery processes (e.g. Ariyabandu, 2003; Bari, 1998; Delaney & Shrader, 2000; Enarson, 1998; Fordham, 2000; Gordon, 2013; Saito & Murosaki, 2012; Yonder et al., 2005), there has been little research on the characteristics and progress of change induced by disasters in society (Birkmann et al., 2010). Researchers have called for more studies about how disasters have brought about social change (Birkmann et al., 2010; Shah, 2012). The research presented in this thesis used a qualitative case study approach to examine women's participation in the recovery process in rural communities of Union Council Langarpura, Azad Kashmir. The specific objectives of the study are:

1. To analyze how women participated in the recovery process;
2. To identify the factors that influenced women's involvement in the recovery process;
3. To examine how participating in the recovery process after the Kashmir earthquake has affected the lives of women in the rural communities of Union Council Langarpura, AJK and;
4. To make recommendations regarding how to involve women in recovery and empower them through the recovery process.

1.1 Political and Cultural Overview of the Study Area

The state of Azad Jammu and Kashmir is part of the former princely State of Jammu and Kashmir, which is a disputed territory between Pakistan and India. At the time of the partition of British India into two independent states of Pakistan and India in 1947, almost 560 princely states including the State of Jammu and Kashmir were given the right to accede to Pakistan or India. The ruler of Kashmir, Maharaja Hari Singh, signed the instrument of accession with India. The instrument of accession was not accepted by the Muslim majority of the Kashmiri population, which started a liberation movement against India and liberated part of the state from Indian occupation (Government of AJK, 2018). The Government of Azad Jammu and Kashmir was established on Oct 24, 1947, in the liberated area comprising 25% of the former State of Jammu and Kashmir, which was entrusted to Pakistan by a United Nations Security Council resolution (Government of

AJK, 2018; Shahzad, Akram & Hashmi, 2016). The Indian government promised to hold a plebiscite to decide about the final dispensation of the territory which was also endorsed by the United Nations. However, the plebiscite could not be held yet and the territory is still disputed.

The state of Azad Jammu and Kashmir lies between longitude 73°–75° and latitude 33°–36° and has an area of 5134 square miles (13,297 square kilometers; please see Figure 1-1 for a detailed map of Langarpura, AJK). Located on the western edge of the Himalayas, the topography of AJK is mainly hilly and mountainous with thick forests and fast flowing rivers including Jhelum, Neelum and Poonch. The State of AJK is treated as an administrative unit of Pakistan with the obligations of a province, though it is not granted the constitutional rights of a province (Shahzad, Akram & Hashmi, 2016). Azad Kashmir has a parliamentary form of government with its own legislative assembly, Supreme Court and High Court. The President of Azad Jammu and Kashmir is the Constitutional Head of the State, while the Prime Minister, supported by a council of Ministers, is the Chief Executive. Azad Kashmir is divided into three divisions (Muzaffarabad, Poonch and Mirpur) and 10 administrative districts. These 10 districts are further divided into 32 subdivisions, 189 union councils and 1771 revenue villages (P& D AJK, 2013).

The total projected 2016 population of AJK was 4.611 million with an average household size of 6.7 (P&D AJK, 2013; 2017) with 49.7% males and 50.3% females (P&D AJK, 2013). Of the total population of AJK, 88% lives in rural areas and 12% in urban areas (P&D AJK, 2013). The literacy rate is 76.6%, which is higher than the 60% literacy rate for the rest of Pakistan (P& D AJK, 2017). Almost all of the population is Muslim. Urdu is the official language of Azad Kashmir while other important languages are Gojri, Kashmiri and Pahari (P& D AJK, 2013). The average per capita income for AJK has been estimated to be 1368 US\$ (P&D AJK, 2013). Some important sources of income for the local people include farming, trading, craftsmanship and remittances from overseas (Weinberger, 2001). Due to a high unemployment rate of 35–50% locally, more than 700,000 men from AJK work overseas (P&D AJK, 2013).

The Muzaffarabad district where the case study area is located, consists of the city of Muzaffarabad which is the capital of Azad Jammu and Kashmir, and suburban areas

(ERRA, 2007). Muzaffarabad was the epicenter of the October 2005 earthquake, which destroyed 50% of the buildings in the city (ERRA, 2007 Please see Figure 1-8). The study area, Union Council Langarpura, is one of the 25 union councils of District Muzaffarabad located at 34°19'00" North Latitude and 73°33'00" East Longitude at a distance of about 56 miles (91 Km) northeast of Islamabad (please see Figure 1-1 and 1-2 for the maps of Langarpura and AJK respectively). It is located on the banks of River Jhelum and has a variable topography ranging from plains in Langarpura Proper to high mountains in remote parts of this union council (please see Figure 1-3, 1-4, 1-6, 1-7, 1-9, 1-10, & 1-11). The total area of Union Council Langarpura is around 853 square kilometers and its total population is 45,000. Females make up 51% of the total population. The population of Langarpura comprises of a number of different indigenous tribes, prominent among which are Mughal, Abbassi and Awan (please see Table 1-1). The area is very fertile with rice and maize being the most important crops (please see Figure 1-5). Pomegranates, apples, walnuts, pears, plums, apricots and a variety of vegetables are also grown there.

During the Kashmir earthquake, more than 2000 persons¹ were killed in Langarpura: around 800 adult women, 800 adult men, and 400 children (Interview data, 2012). I selected Union Council Langarpura as my study area due to my earlier interaction with the local people (particularly females), their cooperation and interest in participating and the fact that Langarpura was among the few rural areas in AJK where women had actively participated in the recovery (please see Section 3.3 for details).

¹ The total death toll and the number of males and females who died during the Kashmir earthquake was taken from interviews conducted with local community leaders. However due to the difficult terrain and scattered nature of communities in the remote parts of Langarpura, these figures may not be correct. I expect that the death toll might have been higher among women who were mostly at home when the earthquake hit. In the absence of any official source of information, I had to use this information to provide a general view of the impact of the Kashmir earthquake.

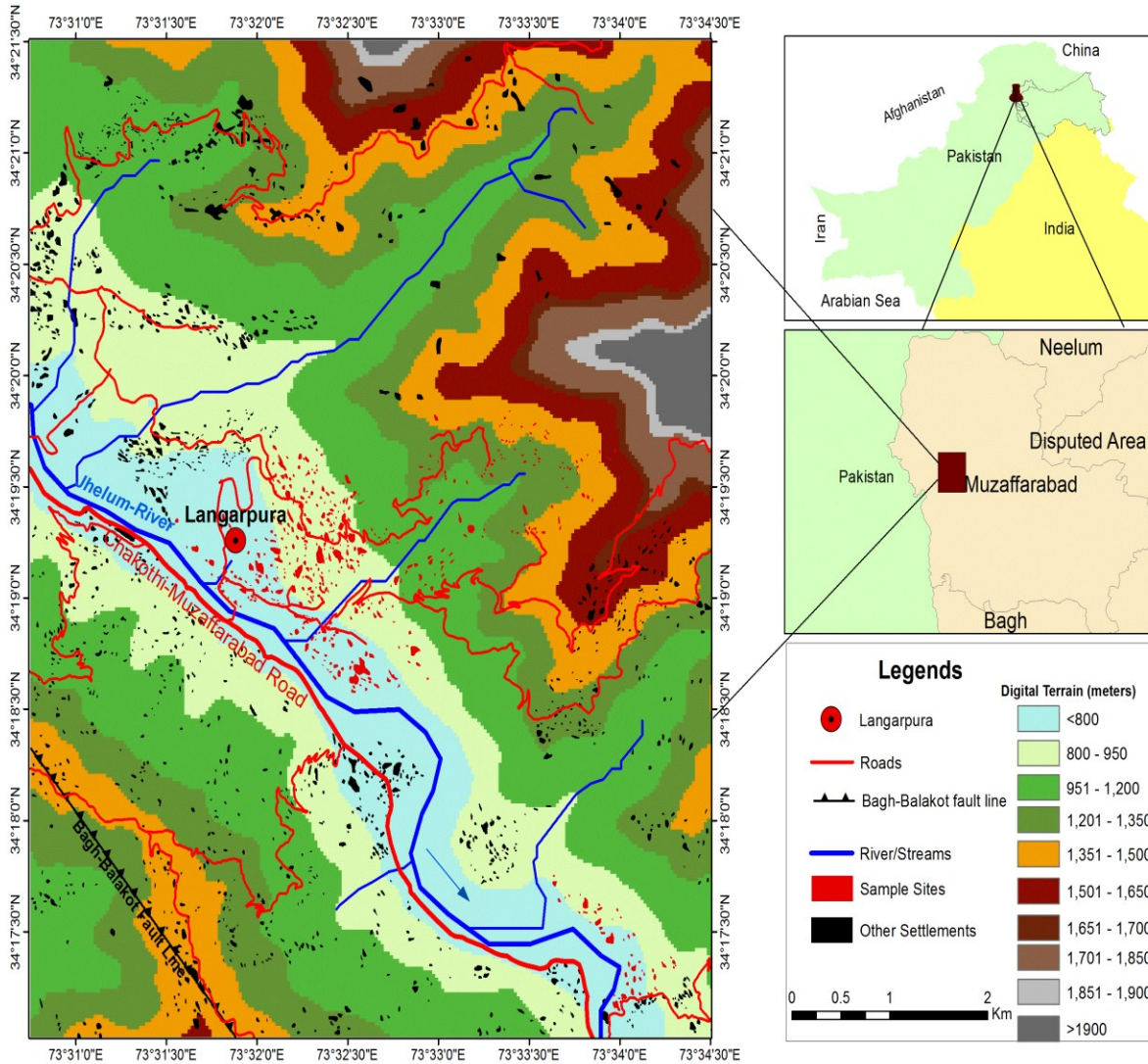


Figure 1-1. Location of Union Council Langarpura, AJK
 Source: Extracted from Shuttle Radar Topography Mission (SRTM) image; Survey of Pakistan sheet no. 43F/12 and 43F/16; Searle and Khan 1996; Survey of Pakistan (SoP), 2003.

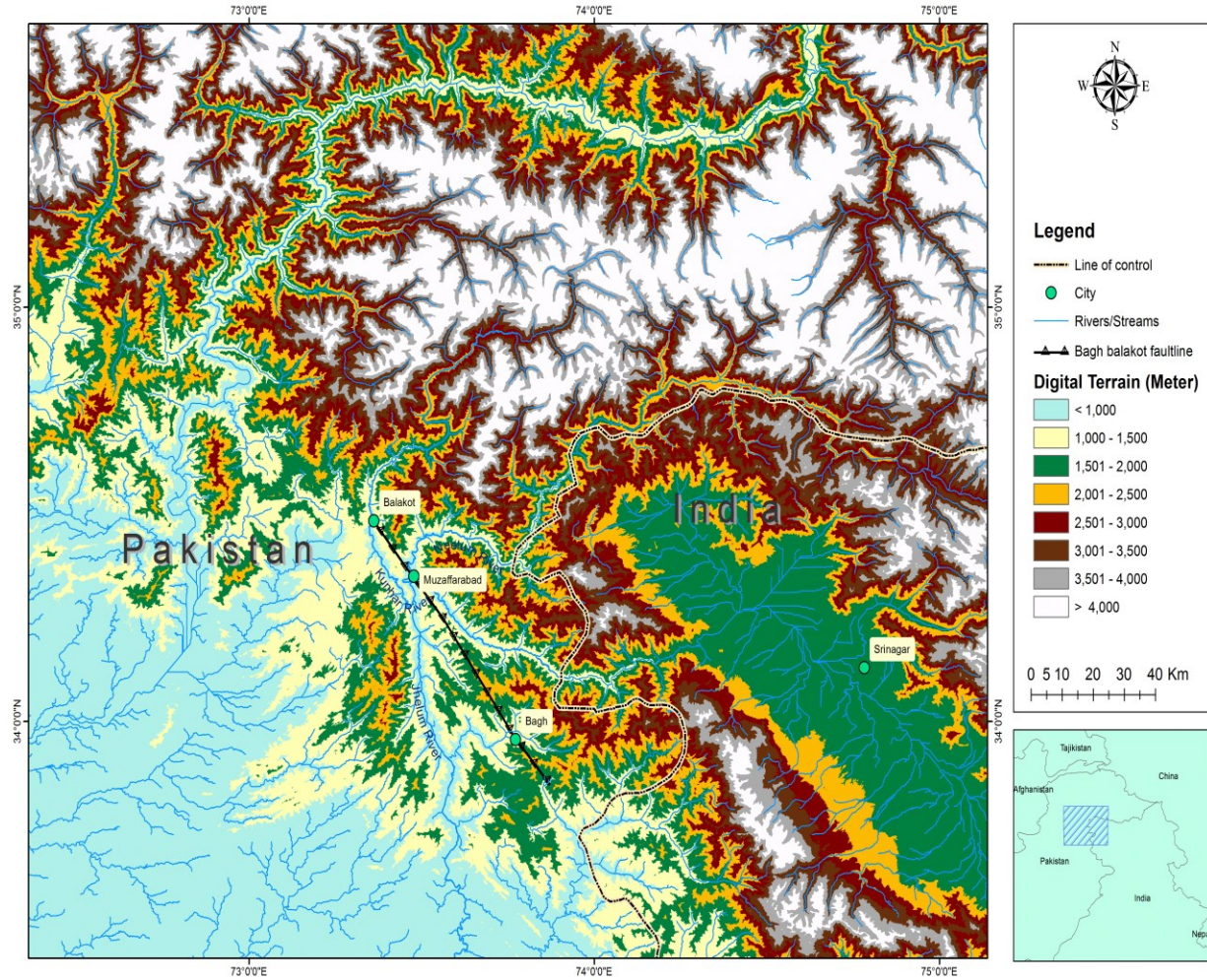


Figure 1-2. Location of Langarpura and surroundings, Azad Jammu & Kashmir (AJK)
 Source: Extracted from Shuttle Radar Topography Mission (SRTM) image; Survey of Pakistan sheet no. 43F/12 and 43F/16; Searle and Khan 1996; Survey of Pakistan (SoP), 2003.

Table 1-1: Important Tribes of Langarpura

Names of important tribes	Percentage composition of total population
Mughal	32%
Abbassi	27%
Awan	12%
Syed	5%
Gujar	5%
Paracha	3%
Sheikh	3%
Jagwal	3%
Rana	3%
Bhagial	2%
Kol	2%

Source: Fizza Organization, Langarpura AJK, 2012.

1.1.1 Women of AJK

The women of AJK constituted 49% of its projected population in 2016 (P & D AJK, 2017). Women usually wear a dress called *Shalwar Kameez* and a type of shawl called a *Dopatta* and most of them also observe purdah [literally “curtain”], which refers to “the physical veiling of women and the institution of segregating sexes and secluding women” (Critelli, 2010, pp. 238). Due to purdah restrictions, women either have to stay indoors or cover their heads and faces with a shawl or burqa [a long loose garment covering the whole body] when going outdoors (UNDP, 2006). A clear division of gender roles exists in the society of AJK whereby most of the women, particularly those in rural areas,

remain indoors performing their household duties including cooking; cleaning; washing dishes and clothes; and caring for the young, elderly and sick (UNDP, 2006). However, the women in AJK also make economic contributions by participating in crop farming and livestock keeping, post-harvest activities and off-farm and non-farm economic activities (UNDP, 2006). Despite their active participation in these economic activities, however, women in AJK cannot own or control resources, and as such are economically dependent on men, whose resources are made possible because of women's contributions (UNDP, 2006).

An important feature of the culture of AJK and the study area Langarpura is that women face lesser purdah restrictions, particularly with respect to their mobility and social participation as compared to women in other parts of Pakistan (UNDP, 2006). Even in the rural areas of AJK, women have more freedom to go outdoors, particularly to markets and attend social events, although they still have to cover their bodies and some also cover their faces. In comparison, women in the rural parts of Khyber Pakhtunkhwa and the Balochistan province of Pakistan are not allowed to go to the bazaars and take part in outdoor activities. Another important feature of the society of AJK is the large number of female-headed households, which was 20% of the total households in 2006 (UNDP, 2006) as compared to 6.4% for the rest of Pakistan in 2006-2007 (Government of Pakistan, 2007). A larger proportion of the female-headed households in this area consists primarily of households where the male member is working abroad or in the big cities of Pakistan while the women are left to manage the household (UNDP, 2006). However, in most parts of the AJK before the Kashmir earthquake, women were rarely involved in non-traditional livelihood activities such as employment in the industry and services sectors (Personal communication with a government official, 2012). Women in urban areas are more isolated while women in rural areas have more social contacts as they engage in common tasks such as fetching water, searching for firewood, rearing livestock and tending land (UNDP, 2006).

In the study area Union Council Langarpura, the literacy rate is 68%, which is comparatively higher than in the other Union councils of AJK (interview with community leader, 2012). The female literacy rate in Langarpura is 55% as compared to the 80%

literacy rate of males (interview with a community leader, 2012). The significant gender gap in the literacy rates between males and females, and the cultural restrictions, together with the absence of girls' higher secondary schools in Langarpura, has resulted in women lagging behind men in education and employment opportunities in the secondary and tertiary sectors (Interview with community leader, 2012).

1.2 The Kashmir Earthquake of October 8, 2005

A large-scale rescue and relief operation occurred in the earthquake-affected areas of AJK and KPK. An important feature of this relief and recovery process was the participation of almost 160 local, regional and international NGOs which, along with the Pakistani army and individual volunteers, provided massive support through charity and donations (Adnan, 2014). However, the effectiveness of these relief and recovery efforts was seriously hampered by a number of issues: lack of co-ordination, blockage and destruction of roads and bridges, poor management of displaced populations in winter shelters and shortage of funding from donors (OCHA, 2005). Due to the absence of any proper civilian authority or infrastructure, the response at the national level was mainly carried out by the Pakistan army (Ozerdem, 2006).

The Kashmir earthquake led to an important change in the field of disaster management in Pakistan. Two institutions, the National Disaster Management Commission and the National Disaster Management Authority (NDMA), were created to implement, coordinate and monitor disaster management activities (Hamilton & Halvorson, 2007). Another important change was the establishment of an earthquake disaster infrastructure: the Earthquake Relief and Rehabilitation Authority (ERRA) was set up with branches called Provincial Earthquake relief and Rehabilitation Authority (PERRA) in all four provinces and the State Earthquake Relief and Rehabilitation Authority (SERRA) in AJK (Tahir, 2007). ERRA helped affected people to recover from the impacts of the Kashmir earthquake by offering compensation for damaged houses and training for earthquake-safe reconstruction (Hamilton & Halvorson, 2007).

1.3 Women and the Kashmir Earthquake

The Kashmir earthquake was a social disaster that exposed the weaknesses of Pakistani society with respect to gender disparity and women's vulnerabilities (Ozerdem, 2006). Some of the important factors which may have contributed to the high rates of mortality and morbidity of women during the Kashmir earthquake included the cultural and religious practice of purdah; because of purdah, women were mostly at home when the earthquake hit while their adult male family members were working in the fields (Hamilton & Halvorson, 2007). As a result, casualties and injuries were reported to be higher among women and girls than men and boys since females were more apt than males to be injured or killed by the collapsing poorly constructed homes (Ferris, 2010; Hamilton & Halvorson, 2007).

Women also suffered during the relief phase due to cultural and purdah restrictions as they could not evacuate their remote mountainous villages to access aid, health care and compensation for their losses. An estimated 50% of the married women in Kashmir were pregnant at the time of the earthquake, and they faced an overall lack of obstetrical care due to the lack of female medical personnel and hygienic delivery facilities (Hamilton & Halvorson, 2007). The shortage of female doctors adversely affected the health and recovery of the female population, leading to permanent disabilities among injured females (Hamilton & Halvorson, 2007; UNDP, 2006). During the relief phase, tent camps were established for people whose houses were destroyed during the earthquake. Women living in tent camps also suffered from trauma and other health issues including scabies, inadequate sanitation, poor hygiene conditions, and constant fears of outbreaks of waterborne diseases (Hamilton & Halvorson, 2007). Since most women earned their living through cattle rearing and dairy farming, the death of a large number of cattle during the earthquake resulted in severe financial losses for women. Exacerbating the problem was that most women also could not get compensation for their losses as they possessed neither National Identity Cards (NIC) nor bank accounts (Sayeed, 2009).

Despite their suffering and vulnerabilities during the earthquake, the women of AJK played a critical role in rescue and relief efforts, digging people out of the rubble, clearing roads and rubble, feeding those in need, taking care of the injured and building

and maintaining temporary shelters (ERRA, 2007; Hamilton & Halvorson, 2007). Women's kinship and friendship networks provided earthquake victims with a means of moral support, security, comfort, and access to resources through self-reliance (Hamilton & Halvorson, 2007). In addition to performing their traditional reproductive role of cooking, cleaning, and collecting fuel and fodder, women also took part in recovery activities as the breadwinners and caregivers of their own families. The death of the males compelled these women to start earning for their families, although they also had to take care of their families and relatives, particularly those injured during the earthquake (UNDP, 2006). Another important task for the women in rural areas of AJK was to take care of the livestock by providing them fodder and water and to work in fields alongside the surviving males in the family.

The influx of a large number of NGOs in the conservative areas of AJK after the Kashmir earthquake provided an opportunity for the government and NGOs to start women's empowerment programs through vocational training (Hamilton & Halvorson, 2007). However, more than seven years after the earthquake, in 2012, when this study was conducted, most of the organizations involved in the recovery process had left the affected areas. More important for this study, no one had evaluated how the women's participation in the recovery projects had impacted their lives, either in the short or long term. In Pakistan, gender issues were of less concern for government departments and non-profit organizations including NGOs and academics before the Kashmir earthquake of 2005 (Hamilton & Halvorson, 2007). The Kashmir earthquake also opened a new phase of disaster research in Pakistan; there is an increasing realization among disaster researchers that it is important to focus on gender and disasters (Shah, 2012). The Kashmir earthquake has also led humanitarian organizations, professionals, the government and those affected to emphasize the need to explore women's and other vulnerable groups' experiences of disaster recovery and rehabilitation (Shah, 2012). However, there have been no systematic and detailed studies of how women lives were affected by participating in the recovery process after the Kashmir earthquake.

1.4 Thesis structure

This thesis comprises of eight chapters. The first chapter includes a political and cultural introduction of the study area, Union Council Langarpura, AJK with a special focus on the women of AJK. It also includes a description of the Kashmir earthquake disaster and its impacts on the women of AJK. Chapter 2 comprises of a discussion about the theoretical approach of this study. It also includes details of critical theory paradigm, feminist theory, public participation, the concept of gender in Pakistan and the concepts of resilience, well-being, women's empowerment, social capital and disasters as "window of opportunity". The research methodology and research methods used for this study are discussed in Chapter 3 of this thesis. Chapter 4, 5, 6 and 7 present the results of this study. In order to fulfill objective 1 of this study, Chapter 4 of this thesis includes a discussion of the role played by women in the recovery process in Langarpura after the Kashmir earthquake. Chapter 5 includes the analysis and discussion of the factors influencing women's involvement in the recovery process satisfying objective 2 of this study. The impact of the women's participation in the recovery process on their personal and community resilience is discussed in detail in Chapter 6 of this thesis, fulfilling objective 3. Chapter 7 also satisfies the objective 3 of this study by discussing the impacts of women's participation in recovery on their empowerment. The conclusion of this thesis provides recommendations to emergency management institutions for involving women in recovery process for their empowerment which satisfies the objective 4 of this study



Figure 1-3: A view of Langarpura Proper located at the bank of River Jhelum.



Figure 1-4: The distribution of settlements in the remote mountainous parts of Langarpura.



Figure 1-5: Cultivated land at the bank of River Jhelum in Langarpura.



Figure 1-6: Typical houses in Langarpura with some families still living in temporary shelters.



Figure 1-7: Traditional wooden roof structure in Langarpura.



Figure 1-8: The scar of a huge landslide in Muzaffarabad city during the Kashmir earthquake.



Figure 1-9: A local private school which was still being run in temporary shelters.



Figure 1-10: A Basic Health Unit (BHU) in Khun Bandi, Langarpura.



Figure 1-11: Facilities inside a BHU.

Chapter 2: **Background**

This chapter describes the theoretical context of this study. The chapter has seven sections. The first section describes the research approach and theoretical context and the second includes details of critical theory paradigm. The third section provides a discussion of feminism while the fourth and fifth describe public participation and the concept of gender in Pakistani society. The sixth section is a discussion about resilience and its relationship to well-being, women's empowerment and social capital. The seventh section explains disasters as "window of opportunity" for social transformation.

2.1 Research Approach and Theoretical Context

This study follows a disaster perspective (please see figure 2.3 for details). The field of disaster management originated during the Cold War. In its early stages, disaster research focused on wars, particularly, nuclear wars and their impacts on societies (Tierney, 2007). However, the focus of the field shifted to responding to disasters after the threat of nuclear war ebbed (Pearce, 2003). Early contributors to the field of disaster research were sociologists including Prince (1920), Carr (1932), Fritz, Quarantelli, Dynes and Hass.

Disaster research was also influenced by a natural hazard perspective, which developed in the field of geography. The foundation of disaster research is generally traced to Harlan Barrows' (1923) concept of geography as "human ecology. Barrows' student, Gilbert F. White, is also credited with helping to create the field of disaster research (Alexander, 1993; Cutter et al., 2000). Geography also has a long record of research and practical application in understanding and managing both hazards and disasters (Hualou, 2011; Kendra, 2007; McEntire & Smith, 2007). Human geography is a subfield of geography that uses the spatial organization of human activity to study people's relationships with the environment (Knox & Marston, 2010). Since disasters are inherently spatial both in terms of physical processes as well as the human implications, the study of disasters is an important field in human geography. This is due to the fact that human

existence in relation to potential hazards and the societal impacts left after a disaster can be described in terms of spatial patterns including patterns of human places, cultures and interactions (Hualou, 2011).

2.2 Critical Theory Paradigm

This study follows a critical theory paradigm because it analyzes the role of gender in women's participation in disaster recovery and the coping strategies that women adopt to overcome those gender barriers (please see Figure 2.3). Gender is considered an important factor in determining the roles of men and women in society (Gaillard et al., 2017). Critical theory perspectives focus on empowering human beings so that they can overcome constraints placed on them by race, class and gender (Creswell, 2007). This theoretical tradition was developed in Germany in the 1920s by the Frankfurt School, a group of writers connected to the institute of social research at the University of Frankfurt (Kincheloe & McLaren, 2002). Some of the important early members of this school of thought included Theodor Adorno, Max Horkheimer, Herbert Marcuse and Walter Benjamin (Gregory et al., 2011). Critical scholarship addresses the tensions between the existing social and material worlds and the possibility for changing these worlds. The role of critical scholars in society is to facilitate progressive change instead of reproducing existing social order (Bauder & Engel-Di Mauro, 2008). Critical theory has a wide scope and there are several critical theories including feminism, critical race theory, and some forms of post-colonial criticism.

Critical scholarship has a long tradition in the discipline of geography, varying with places and language communities in which geographical knowledge is produced and geographical education takes place (Bauder & Engel-Di Mauro, 2008). Critical geography emerged during the early 1970s when geographers began to adopt critical perspectives in their research with increasing frequency by critiquing the objectivity and truth claims of mainstream geography. They also started responding to pressing issues such as civil rights, pollution and war (Blomley, 2006; Bauder & Engel-Di Mauro, 2008; Gibbons, 2001). The perspective of critical geography has been broadened recently with the development of feminist, sexuality, and postcolonial approaches and this has also led to the emergence of the term "critical geographies" (Gibbons, 2001; Bauder & Engel-Di Mauro, 2008). At

present, the agenda of critical geography includes geographies of gender, disability, sexuality, environment, youth, sub-cultures and new-age religion, among others (Gibbons, 2001).

Critical perspective has also been introduced in hazard geography. Hazard geographers have supported a critical perspective in their field (Blomley, 2006; Donovan, 2017). Some important hazard geographers with a critical perspective include Danish Mustafa, Susan Cutter, Ben Wisner and Jorn Birkmann, among others. To benefit humanity, critical geographers call for an interdisciplinary approach to combine the work of critical social scientists with that of physical scientists (Donovan, 2017). An important issue in critical hazard geography includes vulnerability assessment and its relationship with resilience (see, for example, Gallopin, 2006).

2.3 Feminist Theory

My theoretical approach in this study is based on feminism due to the fact that I consider gender to be a central organizing principle of the rural society of Langarpura (please see Figure 2.3). This approach has also been used by prominent researchers in the disaster field (Enarson, Fothergill & Peek, 2007; Hyndman, 2008; Ndenyele & Badurdeen, 2012) and it will help me to understand the experiences of rural women during the recovery process and how this experience relates with the existing social inequalities in the rural society of Langarpura.

Feminism is one of the fastest growing theoretical and empirical fields in geography (Moss & Al-Hindi, 2008). The origin of feminist geography dates back to the mid-1970s when geography began to be criticized as a male-oriented discipline. Mildred Berman's (1974) article on sexual discrimination within the academy and Alison Hayford's (1974) assessment of the wider, historical "place" of women were among the first articles laying the foundation for feminist geography (Dixon & Jones, 2006). Since then, feminist geographers have focused their research on, for, and about women, which has also made feminist geography a source for innovative thought and practice across all sub-disciplines of human geography (Dixon & Jones, 2006; Moss & Al-Hindi, 2008). Feminists believe that women have historically been denied their due rights and privileges. Feminist research

aims to rectify the invisibility of females' experience in order to end women's unequal social position (Lather & Lather, 1991; Olesen, 2011).

A critical dimension of the social structure, gender becomes even more visible during disasters (Enarson, 2009). However, because disaster research began as a male-dominated field, gender was a systematically neglected topic in disaster studies until the 1990s (Aguirre, Enarson & Morrow, 2000; Enarson, 2000; Hewitt, 1997; Tierney, 2007; Tierney, 1998). A paper published by Rivers (1982), exploring gender differences and discrimination in disasters, was the first major contribution in gender and disaster literature. By the late 1990s, disaster scholars began to highlight the lack of a gender focus in disaster research, pointing to the absence of studies focusing on women's roles and experiences during disasters (Bradshaw, 2014 See, for example, Enarson, 1998; Enarson & Morrow, 1997). Fothergill (1996 & 1998), Enarson and Morrow (1998), Enarson (1998), Fordham (2000), Quarentelli (1998) and Gladwin and Peacock (1997) were pioneers in the field of gender and disaster research. In South Asia, gender and disaster research was initiated in 1980s but it became popular after the devastating 1991 cyclone in South Asia (Enarson & Meyreles, 2004) which resulted in a high death toll that was particularly high among women with family responsibility. Since then, disaster scholars in South Asia have increasingly focused on examining issues related to women and disasters (Anderson & Manuel, 1994; Enarson, 1998).

While feminist theory and disaster research have evolved independently, a growing number of scholars are using a feminist theoretical perspective to study and respond to disasters (Laska, Morrow, Willinger, & Mock, 2008 see, for example, Ajibade, McBean & Bezner-Kerr, 2013; Cupples, 2007; Enarson, Fothergill & Peek, 2007; Enarson, 1998; Enarson & Gordon, 2013; Fordham, 1998; Juran, 2012; Meyreles, 2004). Feminist scholarship, particularly feminist geography, perceives gender as a primary organizing principle of all societies and an essential lens through which to view the experience of a disaster (Hyndman, 2008; Reed & Christie, 2009; Seager, 2006). There is a need for more studies to better understand the resilience and resourcefulness of women in disasters. These studies could be usefully incorporated into community-based mitigation (Fordham, 1998; Arora-Jonsson, 2011; Smyth & Sweetman, 2015).

2.4 Public Participation

The concept of public participation is the basic theoretical approach of this study because this study focuses on the participation of women in disaster recovery (please see Figure 2.3). The study also examines the nature and extent of women's participation in disaster recovery as well as the impact of participation on women's lives. "Participation" in this study is defined as the close involvement that people have in their economic, social, cultural and political processes (Rowlands, 1997). The concept of public participation in decision-making dates back to the old Greek city-states. In these city-states, it was common for people to be involved in decision-making (Mohamed, 2009). The theory of public participation developed in late 1960s. One of the pioneering and seminal works on this theory was that of Arnstein (1969), who created a "Ladder of Citizen Participation," consisting of eight levels or rungs, with each rung corresponding to the extent of citizens' power to determine the outcome (please see Figure 2-1). The bottom rungs of the ladder are (1) manipulation and (2) therapy, also called the levels of "non-participation." At these two levels, people cannot participate in the planning or conduct of programs to affect outcomes; they can only be educated by the powerholders. Arnstein (1969) called the next two rungs (3) informing and (4) consultation. She defined these as the levels of "tokenism," where the have-nots can communicate their voices but still lack the power to ensure that their views will be heeded by the powerful. The fifth rung, (5) placation, was called a higher level tokenism; the have-nots can advise but the decision-making power is still in the hands of the powerholders. The top levels of Arnstein's ladder were called the levels of citizen power with every level resulting in increasing degrees of influence on the decision-making process. At the sixth level of the ladder, the citizens could enter into a (6) partnership with the powerholders that could enable them to negotiate and engage in trade-offs. At the topmost levels of (7) delegated power and (8) citizen control, the have-not citizens obtain most of decision-making powers and are able to exert a high degree of control. Arnstein (1969) recognized the role of government as that of a facilitator in the process of public participation. Although Arnstein's ladder focuses on the participation of individual citizens in the United States and might not be applicable to the context of the developing countries, it is so far the best known model of public participation in policy-making processes. It has also been modified by a number of researchers in a wide variety of fields such as public

health (see, for example, Tritter & McCallum, 2006; White, 2003) natural resource management (see, for example, Collins & Ison, 2009; Ross, Buchy & Proctor, 2002), tourism planning (see, for example, Okazaki, 2008) public administration (Yang, 2005); urban development (Blanc & Beaumont, 2005) and child studies (Shier, 2001) to develop new approaches of public participation (Collins & Ison, 2009). Arnstein's ladder has also been used in disaster scholarship to determine the scale of public participation in post-disaster housing reconstruction (see, for example, Davidson et al., 2007; Ophiyandri, Amaratunga & Pathirage, 2010) and climate change adaptation (see, for example, Samaddar et al., 2015; Cronin, Petterson, Taylor & Biliki, 2013; Shaw, 2006). It has also been applied to disaster recovery (see, for example, Vallance, 2015; Chandrasekhar, 2012).

Arnstein's (1969) ladder was later modified by Choguill (1996), who proposed a ladder of community participation for underdeveloped countries based on a study of several development projects. Choguill (1996) also used an eight-rung ladder in which the top three rungs including (1) empowerment (2) partnership and (3) conciliation were considered the levels of government support (please see Figure 2-2). These were followed by three rungs including dissimulation, diplomacy, and informing. Termed manipulation, the purpose of the three rungs was to educate the community. The seventh level in Choguill's ladder is conspiracy, in which no participation in formal decision-making is allowed or even considered, as the government seems to reject any idea of helping the poor sectors of society. At the bottom of this ladder is self-management, in which the government takes no measures at all to solve the problems of a community and leaves problem-solving to the community members. Choguill's ladder of community participation has been applied in a number of fields to develop new approaches of community participation which include health policy (see, for example, Tritter & McCallum, 2006), post-disaster housing projects (see, for example, Davidson et al., 2007; Ophiyandri, Amaratunga & Pathirage, 2010), and post-disaster community recovery (see, for example, Chandrasekhar, 2012).

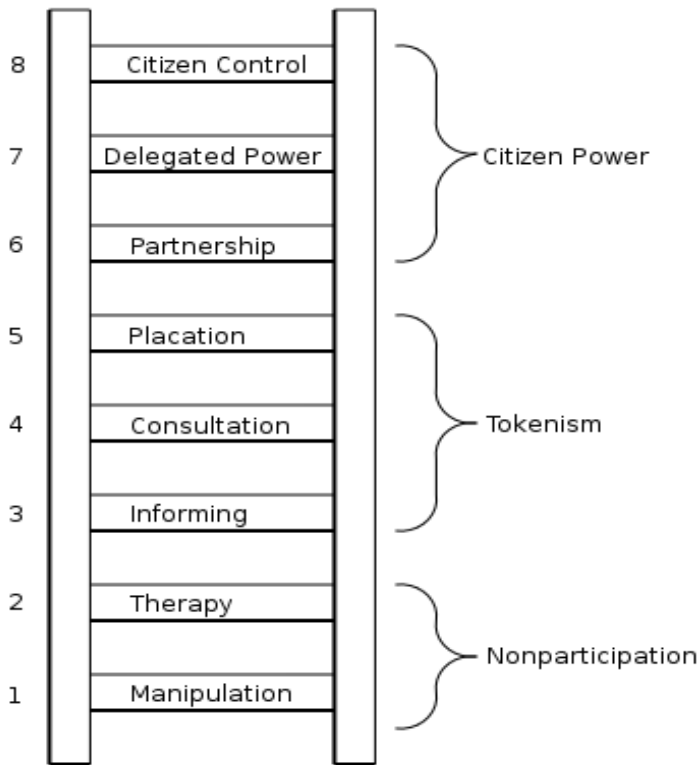


Figure 2-1. Arnstein's Ladder of Citizen Participation (1969)

Source: Downloaded from <https://lithgow-schmidt.dk/sherry-arnstein/ladder-of-citizen-participation.html>

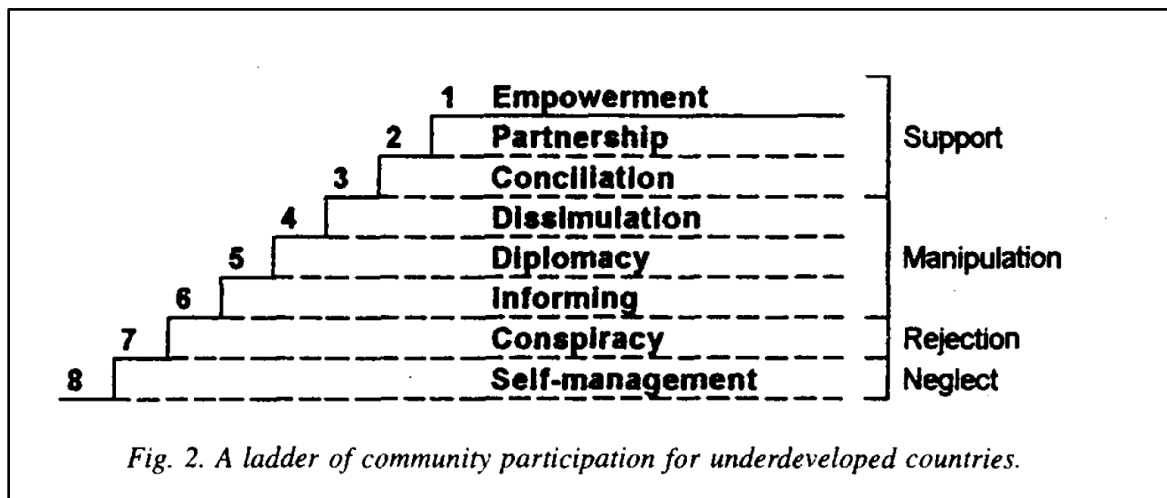


Fig. 2. A ladder of community participation for underdeveloped countries.

Figure 2-2: Choguill's Ladder of Community Participation for Underdeveloped Countries.

Source: Choguill, M. B. G. (1996). A ladder of community participation for underdeveloped countries. *Habitat international*, 20(3), 431-444.

Since the 1950s it has been consistently observed in disaster research that citizens participate in emergency response after a disaster (Drabek & McEntire, 2002; Melorose, Perroy & Careas, 2015). Disaster scholars have made important contributions to the study of public participation in disaster management activities (Melorose et al., 2015). Some of the important contributions in this field include the studies of Cutter et al. (2014), Ganor and Ben-Lavy (2003), Goodman et al. (1998), Pfefferbaum et al. (2005) and Quarantelli (1989). During the past decade, there has been a paradigm shift in the approach to disaster management from post-disaster service delivery to the analysis of communities' participation in decision-making and the impact of that participation on recovery (Nirupama & Maula, 2013; Vallance, 2015). Community participation is considered a fundamental element for community resilience (Norris et al, 2008) and imperative for the successful implementation of mitigative strategies in the disaster management process. It is also considered the right of the community members, particularly the disadvantaged and marginalized, to know and understand the potential hazards and their risks in their surroundings and to participate in the development of mitigation strategies (Pearce, 2003; Nirupama & Maula, 2013). Community participation also leads to increased awareness, better acceptance of decisions, conflict resolution, improved preparedness, empowerment, and community self-reliance (Pearce, 2003; Shaw, 2006; Samaddar et al., 2015). Recent disaster research is focusing more on community participation because community participation is considered to enhance our understanding of people's perceptions regarding hazards, risks, vulnerabilities, and resilience (Nirupama & Maula, 2013). Disaster literature has also recognized the importance of community participation in recovery (Campanella, 2006; Murphy, 2007; Vallance, 2015) because participation affects a community's ability to self-organize, learn, adapt and finally recover (Shaw, 2014).

The importance of and need for community participation has also been recognized in gender and disaster literature, with particular emphasis on the need for women to participate in the disaster management process (see, for example, Orstad, 2001; Halvorson & Hamilton, 2007). It is believed that women's participation in preparedness and disaster mitigation, either as individuals or through women's groups, is essential for reducing the loss of life and property in future disasters (Halvorson & Hamilton, 2007; Orstad, 2001). There is increasing documentation of women's participation as active agents in relief and

recovery processes (Yonder et al. 2005 see, for example, Enarson and Fothergill, 2007; Bradshaw, 2002; Enarson & Fothergill, 2007). Women's participation in planning, designing, implementing, monitoring and evaluating the recovery process can result not only in the provision of basic needs but can lead to community cohesiveness and security (Thurairajah et al., 2008). Women's participation in reconstruction projects is also considered to create an opportunity for modifying women's roles as well as their relations with men. This, in turn, may lead to changing the position of women in society, giving women more decision-making power (Saito & Murosaki, 2012).

Participation and empowerment are considered to be closely linked, whereby participation refers to action or being part of an action such as a decision-making process while empowerment means sharing control, the entitlement and the ability to participate and influence decisions (Claridge, 2004; Lyons, Smuts et al., 2001). The term empowerment can be defined as "the expansion of people's ability to make strategic life choices in a context where the ability was previously denied to them" (Kabeer, 1999, p. 437). Empowerment involves undoing negative social constructions enabling people to see themselves as having the capacity and the right to act and influence decisions (Rowlands, 1997). The empowerment approach was initiated by the Brazilian educator Paulo Freire (1921-1997), who developed the "Pedagogy of the Oppressed" (1970). This approach led to a social and educational movement to create empowerment through critical consciousness (Leder, 2016). Empowerment is increasingly being used in disaster literature with a specific focus on women. Women's empowerment can be defined as "the process of women taking part in decision making issues, enhancing economic self-reliance, ensuring their legal rights to bring equality, inheritance and safeguard against all forms of discrimination" (Prodip, 2014, p. 217). It is considered an important measure for achieving positive development outcomes and well-being (Tripathi, 2011). Empowerment is considered an outcome of participation. Particularly, with the involvement of women, post-disaster situations can offer opportunities to empower women at the grassroots level, build more resilient communities, and initiate long-term social change and development (Yonder et al., 2005).

There is a need for more research as to how participation is, or can be, facilitated in the post-disaster recovery context (Chandrasekhar, 2012; Samaddar et al., 2015.): who participates in disaster recovery and why; what are the influence of organizational characteristics on participation and the effects of participation on community as well as on a participant's own feelings of efficacy (Norris et al, 2008). Although gender is considered an important factor influencing the extent of participation and its impacts on individuals and community (Claridge, 2004), few studies have examined the participation of females or males in disaster management activities and the impacts on individuals and their communities. This study is an important attempt to fill this gap in the research on public participation and disaster management by focusing on how women participated in disaster recovery after the Kashmir earthquake and what were the impacts of participation on their own lives.

2.5 Gender in Pakistani Society

The concept of gender is one of the central themes discussed in this thesis. It refers to socially constructed stereotypes, roles, opportunities and relationships associated with being male or female (Pincha, 2008). Gender comprises three components: physical sex, gender expression and gender identity (Butler, 1992; Serano, 2007). Physical sex is the shape and function of our bodies (Serano, 2007). Gender expression is a set of behaviors, practices and social roles that a person occupies and gender role is typically assigned on the basis of a society's judgment as to the person's physical sex (Serano, 2007). Gender roles are by no means static or uniform and may vary over time and by geographic regions and societal perceptions (UNDP, 2006). Gender identity is a person's internal sense of him or herself as man or woman (Serano, 2007).

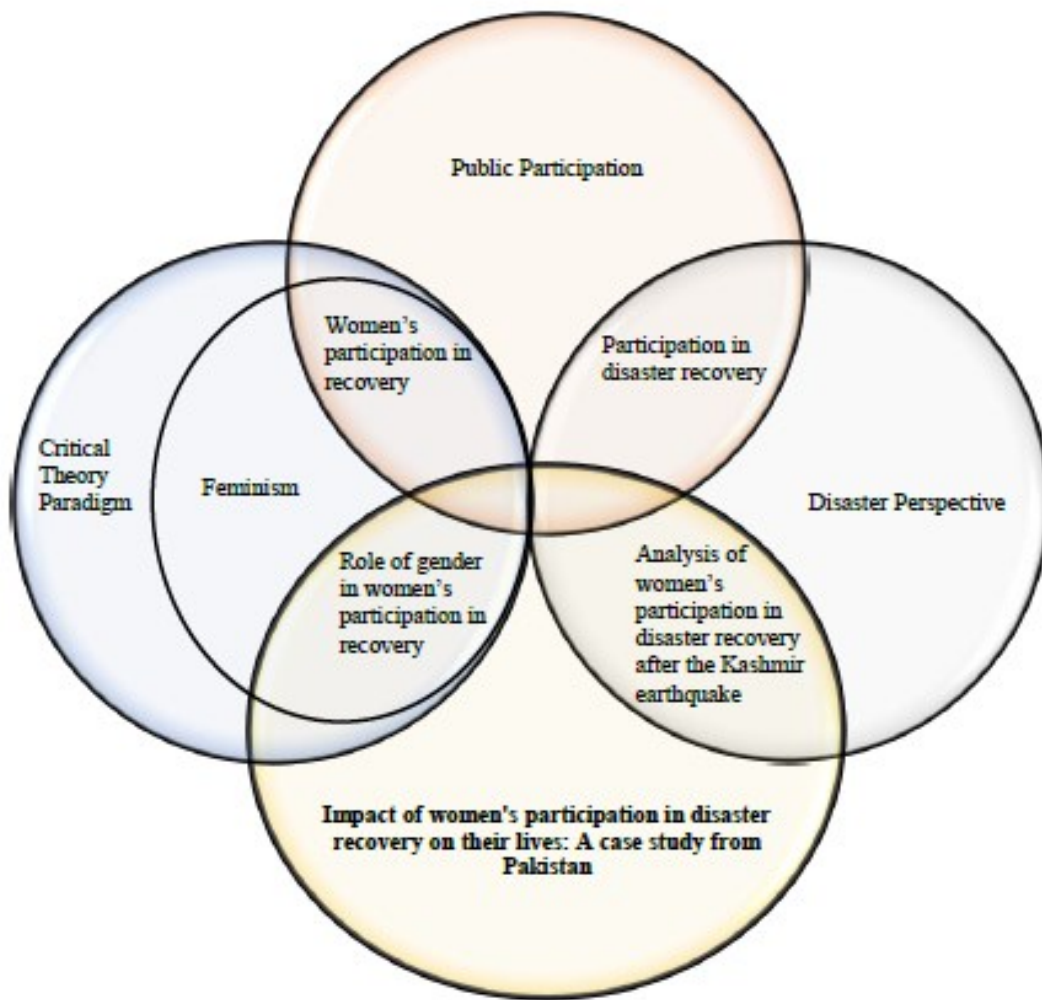


Figure 2-3. The relationship of this study to Disaster perspective, Critical theory paradigm, Feminism and Public participation theory.

Gender is one of the important organizing aspects of Pakistani society (Critelli, 2010). Pakistani society is deeply patriarchal due to low literacy rates, and limited industrialization and urbanization (Bari, 2000; Moghadam, 1992). As explained in Chapter 1, women in Pakistani society are restricted to the inside space of home and the household due to the practice of Purdah. The northern parts of Pakistan, including the Khyber Pakhtunkhwa (KPK) province and the independent state of Azad Jammu and Kashmir (AJK), are considered the most conservative (Berger, 2008; Sayeed, 2006). Women are restricted; they must remain inside their homes due to purdah practices and do not have access to education, health facilities, employment, training opportunities, productive resources and outdoor activities to become economically independent (Critelli, 2010; IRP, 2009; ERRA, 2007; Sayeed, 2006).

The status of women in Pakistan varies depending on class, regions, and whether they live in a rural or urban setting (Bari, 2000; Critelli, 2010). Women in urban areas have better access to education, health facilities, and employment opportunities. They also have fewer purdah restrictions compared to the women in rural areas (Critelli, 2010). In 2017, Pakistan ranked 150 of the 156 countries in the gender development index, a measure of gender disparities in basic human development (UNDP, 2018). Some important factors contributing to the social and economic dependence of women include their lack of vocational skills, lack of training and employment opportunities, high rate of employment in low-productivity sectors, a large gendered wage-gap and their lack of ownership of productive resources (Asian Development Bank, 2002; Bari, 2000; Institute of Social Studies Trust, 2007).

Pakistan has a large gender gap in literacy with an overall rate of 58% including 70% for males and 47% for females in 2013-14 (Government of Pakistan, 2007). There is also a difference in the literacy rate between urban and rural areas. Literacy is much higher in urban areas (74%) than in rural areas (49%). The literacy rate in AJK is 70%; in the rest of Pakistan it is 58% (P& D AJK, 2013). The gender segregated data for literacy rate is not available for AJK. However, the primary school enrolment data for the AJK is; the rate is 80% for boys and 74% for girls (Rehman, Jingdong & Hussain, 2015).

Women play important roles in Pakistani society, particularly in the rural areas where they help farm crops and keep livestock (Bari, 2000). Pakistani women have also been very actively involved in feminist movements to challenge their status in society (Bari, 2000). They are remarkably resilient and willing to make every possible effort for the safety, health and survival of their families (Critelli, 2010).

2.6 Disaster Research and the Concept of Resilience

A common definition of resilience is the ability to withstand and rebound from disruptive life challenges, with good outcomes (Garmezy, 1993; Walsh, 2003). In hazard research, the term resilience refers to the ability to survive and cope with a disaster with minimum impact and damage (Cutter et al, 2008; National Research Council, 2006). Resilience is an important concept in this study mainly because the study examines how women in Langarpura, AJK survived during the Kashmir earthquake and analyzes the coping strategies that they used to recover.

The concept of resilience originated in physics and mathematics. Holling introduced the concept in ecology (1973) as ecological resilience. Research on social resilience started around the same time as ecological resilience, i.e., during 1970s; however, the systematic study of social resilience emerged independently of ecological resilience and its focus was mostly on young people (Masten & Obradovic, 2008). In the field of hazard and disaster research, the term resilience was introduced by Timmerman (1981). Increasingly, it is being used in disaster studies and disaster policy, particularly since the adoption of the Hyogo Framework for Action in 2005-2015, which sought to enhance resilience to disasters (Dahlberg et al., 2015; Gonsalves, & Mohan, 2012; Manyena, 2014; Manyena et al., 2011; Manyena, 2006; Pelling, 2012; Vale & Campanella, 2005). The disaster resilience approach sees disasters as socio-economic and political phenomena and not as unavoidable “natural” events that need to be managed (Mercer, 2010). This approach encourages self-reliance by emphasizing individual and collective capabilities to deal with crises and disasters (Forino, 2015; Liu, & Mishna, 2014; Manyena, 2011).

An early perspective of resilience which originated in the field of psychology focused on individual qualities and abilities (Berkes & Ross, 2013; Ungar et al., 2008). According to this perspective, resilience refers to characteristics such as altruism, self-efficacy, high self-esteem, confidence, self-worth, sense of identity, sense of humor, and flexible coping strategies that help an individual to effectively adapt to adversity (Bartelt, 1994; Brown & Westaway, 2011; Charney, 2004; Masten & Powell, 2003; Selby et al., 2009; Southwick, Vythilingam & Charney, 2005; Staub & Vollhardt, 2008). This perspective also acknowledges the impact of gender, economic status, life stage and culture on individual resilience (Walsh, 2003 see, for example, Agani et al., 2010; Manyena, 2006; Rajkumar et al., 2008).

Since 2000, however, the focus of resilience research has shifted from individual to community resilience, particularly with the introduction of the concept of social capital by social ecologists (Berkes & Ross, 2013; Kulig et al., 2013; Liu & Mishna, 2014). A community's resilience is often understood as the capacity of its social system to come together to work toward a communal objective (Brown & Westaway, 2011). Community resilience is considered to be composed of a variety of factors such as community development (Paton & Johnston, 2001), social capital, information and communication, community competence and community self-organization (Norris et al., 2008).

There is an increasing realization among gender and disaster scholars regarding the need to document women's resilience in the face of disasters and identify factors contributing to women's resilience (Drolet et al., 2015; Smyth & Sweetman, 2015). However, despite this realization, studies focusing on the resilience of women in disasters and the factors contributing to their resilience are very rare (exceptions include studies of Busapathumrong, 2013; Hamilton-Mason et al., 2012 and Liu & Mishna, 2014). Besides, there has been no detailed and systematic study of the relationship between women's resilience and their participation in the disaster recovery process. Therefore, to facilitate the conceptualization and enhancement of both individual and community resilience in the face of disasters, more detailed qualitative studies should be conducted on how women's participation in disaster recovery impacts their resilience (Cutter, Ash, & Emrich, 2014; National Research Council, 2006).

2.6.1 Resilience and the concept of well-being

The concept of resilience is still considered to be strongly influenced by ecological principles and ideas (Armitage et al., 2012). The application of ecological resilience concepts to social systems has been criticized because to date the social dimensions of resilience are poorly understood and less developed (Armitage et al., 2012; Brown & Westaway, 2011; Davidson, 2010). Increasingly, there is a need to better understand the social dimensions of resilience with the help of meaningful and tangible concepts (Armitage et al., 2012; Dahlberg Dahlberg, Johannessen-Henry, Raju & Tulsiani, 2015; Maclean, Cuthill & Ross, 2013). Particularly, in disaster research, there has been a gradual shift from objective analysis of the concept of resilience to a more subjective understanding of this concept (Brown & Westaway, 2011). Hybrid approaches and innovative combinations of social and ecological theory are needed in order to understand the processes and structures that influence social-ecological resilience. One example of such a hybrid approach is linking the concepts of social well-being and resilience (Armitage et al., 2012). The concept of well-being originated in the fields of development economics and social psychology (Armitage et al., 2012). Well-being is an overarching term with both subjective and objective dimensions (Brown & Westaway, 2011). It is defined as “a state of being with others and the natural environment that arises where human needs are met, where individuals and groups can act meaningfully to pursue their goals, and where they are satisfied with their way of life” (Armitage et al., 2012, p. 17).

The concept of resilience is believed to be inherently linked to well-being (Keating et al., 2017; Hommerich, 2012). The term social resilience is used to denote “an outcome in which the members of a group achieve and sustain their well-being in the face of challenges to it even when that entails significant modifications to behavior or to the social frameworks that structure and give meaning to behavior” (Hall & Lamont, 2013, p. 24). A number of researchers are increasingly relating social resilience to the concept of well-being (see, for example, Armitage et al., 2012; Brown & Westaway, 2011; Miles, 2015; Keating et al., 2017) because the concept of well-being offers a complementary lens to better understand the material, relational, and subjective dimensions of the lives of individuals and their reference groups in the context of social-ecological systems. It is also

regarded as a useful means of operationalizing resilience on the ground (Marschke & Berkes, 2006).

Human well-being is a multidimensional and cross-disciplinary concept that consists of people's own perceptions and experiences of life such as feeling hopeful, happy, and good about oneself. It also takes into consideration relationships and the material standard of living (Post, 2005; Sumner, 2010; Sumner & Mallett, 2013). Traditionally, objective approaches have been used to measure well-being with the help of different objective indicators (Brown & Westaway, 2011). Recently, however, there has been a shift to the social conception of well-being, using subjective approaches for measurement. These approaches emphasize the importance of relational and subjective dimensions of well-being in addition to the material dimensions for resilience, thereby underscoring the value of individual and collective perspectives and perceptions (Armitage et al., 2012). Human well-being has three dimensions: material, relational, and subjective (Armitage et al., 2012; Sumner, 2010). These three dimensions are deemed helpful to understand the motivation and behavior of people both in the short and longer term (Armitage et al., 2012).

Human well-being can be measured taking both the individual and the community as the unit of analysis. Well-being is also considered a central component of community resilience (Brown & Westaway, 2011; Miles, 2015; Nobel & McGrath, 2011; Norris et al., 2008). An increasing number of studies in disaster literature have identified well-being as a construct central to community resilience (Miles, 2015 see, for, example; Brown & Westaway, 2011; Miles, 2015; Norris et al., 2008; Nyamwanza, 2012). Individual resilience, on the other hand, is thought to be a dynamic and multidimensional state of well-being in itself (Miles, 2015). In disaster research particularly, well-being is considered a foundational component of disaster resilience (Miles, 2015). A few disaster frameworks have been devised using well-being as a component of disaster resilience (see, for example, Ash et al., 2010; Miles, 2015; Norris et al., 2011; Norris et al., 2008; Nussbaum, 2003). However, all of these studies attempt to establish a relationship between well-being and resilience through discussion, literature reviews and frameworks. I am aware of only one empirical, detailed and systematic study conducted by Hommerich (2012) who analyzed trust in governmental institutions and social networks as a component of subjective well-

being after the earthquake of March 11, 2011 in Japan. She has shown that trust resources positively contribute to subjective well-being which, in turn, constitute an important factor of resilience (Hommerich, 2012). Therefore, there is a need to conduct more empirical work to identify components of social well-being contributing to the social resilience of local people in a post-disaster context in order to test and establish the relationship between well-being and resilience (Armitage et al., 2012).

The concept of well-being has been used in this study as a component of resilience because when talking about the impacts of participating in the recovery process, the participants frequently referred to impacts on their well-being which, in turn, contributed to their resilience. Since there is no term or word available in local languages (Pahari and Urdu) for “resilience,” the participants used the word well-being in a variety of ways to express their views about the positive or negative impacts of participating in recovery. Using well-being as a descriptive term enables the participants to explain their ideas about a “good life” or “bad life” in their own words and gives space for multiple dimensions (Marschke & Berkes, 2006). Well-being is particularly useful as a “surrogate” for the term “resilience” when there are no words or terms available for resilience in a study subject’s own language (Carpenter et al. 2005; Marschke & Berkes, 2006; Nyamwanza, 2012).

2.6.2 Resilience and women’s empowerment

Resilience and empowerment are two widely employed concepts in social sciences (Brodsky & Bennett, 2013). However, both concepts have been critiqued for lacking clear definitions, operationalization and measurement. Also, there has been little theoretical work on the differences and interactions between resilience and empowerment (Brodsky & Bennett, 2013). Some researchers consider resilience and empowerment as loosely synonymous (see, for example, Bein, 1999; Misajon et al., 2006) while others treat them as distinct concepts with distinct goals, actions, and outcomes (Brodsky & Bennett, 2013).

This study utilizes the trans-conceptual model of empowerment and resilience devised by Brodsky and Bennett (2013), which clearly differentiates between resilience and empowerment with respect to goals, actions and outcomes at the individual, community and societal levels. According to Brodsky and Bennett (2013), resilience is

considered the foundation upon which empowerment is built. Resilience can provide the skills and abilities to locate and utilize resources contributing to the individual power to cope, adapt, and maintain oneself and one's community (Brodsky & Bennett, 2013). Empowerment builds on resilience to provide the bridge that connects individual power to social power, thereby changing the world around the individual and local community (Brodsky & Bennett, 2013). Those external changes not only have a profound psychological impact but may also build resources that may, in turn, contribute to resilience in any future disasters (Brodsky & Bennett, 2013). To my knowledge, this is the first study to use this trans-conceptual model of empowerment and resilience in the field of disaster research. Although the concept of women's empowerment is increasingly being discussed in the disaster management field, I am aware of only two studies about women's empowerment and disaster recovery. In one of these studies, Dhungel & Ojha, (2012) analyzed the activities of Women's Empowerment Centers in southern Nepal which were established as part of Disaster Risk Reduction and Humanitarian Programme and also examined their role in addressing the root causes of gendered vulnerability to the impacts of flooding. In the second study, Renuka and Srimulyani (2015) examined the impacts of a recovery project conducted by a women's organization in Sri Lanka after the Indian Ocean Tsunami on women's lives in the context of women's empowerment. However, they did not study how and why women participated in this project nor did they examine women's participation in other recovery projects run by government or other NGOs and its impact on their empowerment. They also used the term empowerment to generally refer to a few changes brought about by the recovery project in the community life of women and did not analyze women's empowerment in personal and family life due to this project. So, far, there have been no detailed and systematic studies about the participation of women in disaster recovery and its relationship with women's empowerment.

2.6.3 Social capital, gender and disasters

An important component of resilience is social capital, which is considered to enhance community resilience (Cox & Perry, 2011; Manyena, 2014). Social capital can be defined as the "features of social organization such as networks, norms and social trust that facilitate coordination and cooperation for mutual benefit" (Putnam, 1995, p. 67). Some

important elements of social capital include the extensiveness of social networks; civic engagement; interpersonal, inter-organizational, and institutional trust; sense of community; place attachment; and citizen participation (Buikstra et al., 2010; Cox & Perry, 2011; National Research Council, 2006; Norris et al., 2008).

Disaster scholars are increasingly focusing on the examination of social capital and its relationship to disaster preparedness, response, recovery, and mitigation phases due to world-wide need to effectively respond to terrorist attacks, viral epidemics, or natural disasters (Ganapati, 2013; Ganapati, 2009; Reininger et al., 2013). Disaster researchers have studied the relationship between social capital and disaster preparedness (see, for example, Reininger et al., 2013), the role of social capital in emergency management (see, for example, Murphy, 2007) the role of social capital in mitigation (see, for example, Yamamura, 2010) and the relationship of social capital and community disaster resilience (see, for example, Guarnacci, 2016). Other studies about social capital and disaster recovery have examined the role of social capital in post-disaster reconstruction and rehabilitation (see, for example, Aldrich, 2011; Chamlee-Wright & Storr, 2011; Hawkins & Maurer, 2010; Islam & Walkerden, 2014; Joshi & Aok, 2014; Marin et al., 2015; Nakagawa & Shaw, 2004; Rahill, Ganapati, Clérismé and Mukherji, 2014; Sadri et al., 2018), the importance of social capital in disaster recovery and community disaster resilience (see, for example, Cox & Perry, 2011) and the relationship between gender, social capital and disaster recovery (see, for example, Brouwer & Nhassengo, 2006). However, to date no studies have been conducted to identify factors that lead to the formation of social capital during and after a disaster (Ganapati, 2009). Similarly, studies examining the relationship between gender, disaster and social capital are also rare. So far, only three studies on this topic have been conducted including a study by Neal and Philips (1990) which examined the role of women in emergent groups in disasters in United States. In another study, Ganapati (2012) examined the benefits of social capital for the Turkish women who were affected by the August 17, 1999 earthquake. Ganapati (2013) also examined the disadvantages of civic networks for women who were affected by the August 17, 1999 earthquake in Turkey. However, both of these studies examined how participation in civic network affected the lives of women in Turkey after the earthquake of August 1999, but they do not analyze factors influencing women's participation in social networks.

To my knowledge, there have been no studies so far that examine the relationship between social capital and women's participation in disaster recovery.

2.7 Disaster as “Window of Opportunity”

This thesis uses Kingdon's (1995) concept that disasters provide a “window of opportunity” for social transformation. According to this concept, separate streams of problems, policies, and favorable political forces come together at certain critical times, usually during a disaster or an important political event. Such convergences might lead to solutions to problems. In this way, major disasters or political events provide windows of opportunity by providing favorable circumstances to join problems, policies and politics (Kingdon, 1995). In the field of disaster management, the concept of window of opportunity was introduced by Van Eijndhoven et al. (2001), who analyzed societal responses to the issues of climate change, acid rain, and stratospheric ozone depletion. Van Eijndhoven et al. (2001) found that windows of opportunity enabled institutions that were not previously involved to become involved in the issues and also led to changes in leadership within already engaged institutions.

Disaster recovery is considered to be the window of opportunity for “building back better” to improve the quality of physical and social infrastructure and reduce the risk of damage from future disasters, thereby building resilient societies (Birkmann et al., 2010; Bradshaw, 2014; IRIN, 2006; IFRC, 2006; Paton, 2006; Renuka & Srimulyani, 2015; Shaw, 2014; Smyth & Sweetman, 2015; Sword-Daniels et al., 2015). Most recently, the Sendai Framework for Disaster Risk Reduction (2015), adopted at the Third United Nations (UN) World Conference in Sendai, Japan, also emphasized “the need to learn from recovery and reconstruction programs, to build back better, reduce future disaster risk and increase resilience to disasters” (Sword-Daniels et al., 2015). In this context, some studies have also been conducted on disaster recovery as window of opportunity (see, for example, Alexander, 2013; Arslan & Unlu, 2008; Birkmann et al., 2010; Enarson, 2000)

In the context of gender, the concept of window of opportunity means that disasters can offer opportunities for women's empowerment through increased participation in non-traditional activities (Enarson, 2000; IRIN, 2006; IFRC 2006). A few studies have been

conducted to examine disasters as windows of opportunities for social change and transformation as part of the recovery process, particularly for women (Bradshaw 2001, 2002; Birkmann et al., 2010; Hoffman, 1998 see, for example, Enarson and Morrow, 1998) while some other studies analyze women's participation in disaster relief (see, for example, Gordon, 2013), preparedness (see, for example, Alam & Rahman, 2014) and recovery processes (see, for example, Drolet et al., 2015; Perera-Mubarak, 2013; Saito & Murosaki, 2012). However, studies documenting changes in gender roles and relations as a result of women's involvement in recovery projects have been scarce (Bradshaw, 2014).

2.8 Conclusion

This chapter presented a description of the theoretical approach and concepts used in this study. Although disaster researchers have examined gender for the last two decades, there is still the need for more disaster research focusing particularly on disaster recovery with a strong gender focus and feminist theoretical context. More specifically, disaster research should focus on and examine factors influencing women's resilience. It is also very important to carry out more gender-based research in the aftermath of the Kashmir earthquake in other parts of AJK and KPK in order to identify the gendered impacts of this disaster on the societies of these areas. To my knowledge, this is the first detailed and systematic study looking at how women are impacted when they participate in disaster recovery.

Chapter 3: Methodology

This chapter describes the methodology used for conducting this study. The reasons for using a qualitative case-study research design are discussed in the first and second sections. Details about the fieldwork, including the selection of the study topic and study area, community advisory committee, focus groups, interviews and participant observations, are described in sections 3-6. A description of data analysis is given in Section 7. Section 8 describes the dissemination of final results. The study limitations, ethical issues and strategies used for rigour are discussed in sections 9, 10 and 11 respectively. Positionality statement is given in section 12.

3.1 Qualitative Research Methods and Gender and Disaster Research

There are three reasons that this study takes a qualitative case study approach. First, qualitative, detailed, small scale and case study work is ideally suited to women studying women particularly because qualitative research allows the development of a less exploitative and more egalitarian relationship between a researcher and her participants (McDowell, 1992). Second, a qualitative approach enabled me to capture new ideas and allow fresh perspectives to emerge from the data collected, resulting in rich insights (Phillips, 1997). Third, these methods were ideal for this study because my goal was to examine the complex issues, factors and experiences of the women of Azad Jammu and Kashmir (AJK) related to their participation in disaster recovery. Since this study takes a feminist approach, it was appropriate to adopt a qualitative approach in order to highlight the voices and experiences of the women of Langarpura, AJK.

3.2 Case-study Research on Gender and Disaster

This research project involves a case study with rural communities located in Union Council Langarpura, AJK, Pakistan (see Figure 1-1 for the Map of the Union Council Langarpura). A case study is an empirical inquiry that investigates a contemporary phenomenon within its real life context, especially when the boundaries between

phenomenon and the context are not clearly evident (Yin, 2009). I used a case study research approach for this study because I wanted to examine how and why women participated in the recovery process in Langarpura and how their participation impacted their lives. Since a case study is conducted when how or why questions are being asked about a contemporary set of events over which the investigator has little or no control (Yin, 2003), this approach was the most suitable for my study. The case study approach was also appropriate because I wanted to collect comprehensive, systematic, and in-depth information about my participants. Finally, case study research is considered an ideal approach for studies focusing on women with a feminist approach (McDowell, 1992). I consider it an ideal approach for this study since it is based on the examination of complex relationships between the mountainous culture of rural societies in Kashmir and the impact of participating in earthquake recovery on the life of women living in these societies.

3.3 Fieldwork

For this study, extensive fieldwork was carried out over a period of 70 days to collect primary data in the field (see Table 3-1 for details of the community visits). Fieldwork also helped me to interact more frequently with the community, which reduced power issues with my potential participants (Jorgensen, 1989).

3.3.1 First community visit and selection of the study area

The Kashmir earthquake hit on October 8, 2005. I visited all the earthquake affected areas of AJK and Khyber Pakhtunkhwa (KPK) in June 2006 through a field visit arranged by my university. This gave me the opportunity to witness the scale of damage and the sufferings of the affected people. When I started my PhD program at the University of Alberta in January 2011, it was my priority to study how the communities were recovering from the Kashmir earthquake, which by then had been identified as the worst earthquake disaster in the history of Pakistan. For this reason, I visited Azad Kashmir in May 2011 to see the recovery progress and select a topic and an area for detailed study (please see Table 3-1 for a timeline of community visits).

Duration of the community visit	Tasks completed
May 20-26, 2011	First visit to a rural community in Union Council Langarpura. An informal meeting with local males and females and the selection of study area.
September 14, 2012- September 20, 2012	Second visit to study area and presentation of final proposal to the communities. Selection of community advisory committee and research assistants and their training.
September 21, 2012- October 15, 2012	Two focus groups with the community and interviews with the NGO officials. Participant observations
October 16, 2012-November 25, 2012	Interviews with the community members and participant observations.

During this visit, I met the representatives of various government departments and national and international non-governmental organizations (NGOs) who were participating in the recovery process through various projects in different areas of AJK. From these meetings, I learned that some rural communities were actively participating in the recovery. I also visited a rural community in Union Council Langarpura, which was actively participating in the recovery process. There I met a group of 15 community members including five females. These community members shared their experiences of participating in recovery projects. They said that the most important aspect of the recovery process in Langarpura was the participation of local women through community and women's organizations. As a result, I decided to select this area as the focus of my research due to its accessibility from Muzaffarabad and also because it suffered the greatest damage during the Kashmir earthquake.

3.3.2 Second community visit

In September 2012, I visited the study area again and presented my research proposal to a meeting attended by around 60-70 people including residents and community leaders and activists, including members of the Fizza Organization.² The people who attended the meeting welcomed me to conduct my study in their respective communities and pledged their full cooperation during my data collection in Langarpura (please see Table 3-1 for a detail timeline of community visits). With the recommendation of the heads and members of the Fizza Organization, I selected a community advisory committee of three educated male community members who were all employed and permanent residents of Langarpura. I consulted the advisory committee for guidance and input regarding the interview guide and recruitment of participants for focus groups and interviews in July 2012, to help select suitable sites and timing for participant observations, and to disseminate preliminary and final results to the community. I also selected two male research assistants who were local university students and were able to communicate in local languages. I trained them to assist in data collection by taking notes during focus groups and to serve as translators when required. I could not select any female advisory committee members or research assistants because the females did not have the contacts and familiarity with the entire Union Council Langarpura which was necessary for becoming an advisory members or research assistant in my study. Another reason was that females also would not have received permission from their families to travel and visit remote communities with me as research assistants

² The Fizza Organization is a local community organization in Union Council Langarpura which was established after the Kashmir earthquake with the help and guidance of a local NGO, the Sungi Development Organization. The Fizza Organization consists of representatives from all the rural communities of Langarpura and also includes female representatives from various communities. This organization holds regular monthly meetings in a community center run by one of its members. At least three representatives from each community attend the monthly meetings and discuss the progress of various recovery projects as well as future plans for community welfare and development (information obtained during focus group with community members in Langarpura, May, 2011).

3.3.3 Sampling techniques

The unit of analysis in this study is the individual women and men in the community because there is now sufficient evidence that men and women experience disasters differently (Ferris, 2008; Ikeda, 2009; Ndenyele & Badurdeen, 2012; Neumayer & Plümper, 2007). I selected my participants using purposeful sampling, which is the most popular sampling technique used by qualitative researchers as it enables the researcher to select information-rich cases for in-depth study from which one can learn a great deal about issues of central importance to the purpose of the inquiry (Patton, 2002, p. 230). My study participants included both men and woman of Langarpura who experienced the Kashmir earthquake and either participated or did not participate in the recovery. This enabled me to identify how women who took part in the recovery activities were impacted, and to compare that to the experiences of women who had not participated. I included male members of the community in my research in order to understand the importance of their role and cooperation in facilitating women's participation in the recovery. With the advice of the community advisory committee and research assistants and personal visits, I purposefully selected participants from a variety of age groups, educational and socio-economic backgrounds. In addition, information obtained from Fizza and other local organizations was also used to select and recruit participants. These organizations were the gatekeepers (Seidman, 2006), as they have records of local people who participated in recovery projects and trainings in Langarpura and also have contacts with local people. I also used the snowballing technique to recruit participants who had a variety of perspectives about and experiences during the recovery from the Kashmir earthquake.

3.4 Focus Group Discussions

During my second visit to the study area in September 2012, I conducted two focus group discussions with community members in order to obtain information about the overall process of women's participation in recovery and its impact on their lives. According to Schutt (1996), focus groups are unstructured group interviews in which the group leader actively encourages discussion among participants who have personal or professional experience with the topic being studied. I used focus groups in this study for triangulation and because I wanted to collect data by taking advantage of the group

interaction provided by the focus groups in the language of the participants (Stewart, Shamdasani, & Rook, 2007; Smithson, 2008). The group interaction provided by the focus groups proved really beneficial since the participants openly discussed, objected and responded to each other's comments which helped me to get a clear picture of the recovery process in the study area. The group's discussion about women's participation in recovery also enabled me to record a variety of perspectives regarding the roles women played in the recovery, the factors that influenced women's participation and the impacts of their participation on women's lives.

One focus group included only female members of the community. I did this to provide an opportunity to those women who have purdah restrictions, so that they could share their views openly in a comfortable atmosphere. The second focus group included both men and women because I wanted a variety of viewpoints about the overall recovery process, women's participation in recovery and its impact. The focus group consisting of only female participants included eight females and the mixed focus group included four males and two females. I chose a community meeting place for the first focus group, as the meeting place was accessible to the participants. The second focus group was conducted on the lawn of a public school, because all the participants were staff members at the school.

Participants in these two focus groups varied from 16 to 70 years and all were local residents. Most had lived in Langarpura since birth. The males were all employed while the females included both housewives and those who were employed in different sectors. All of the participants knew each other because the participants in the female focus group were members of the same Community Organization (Co) and they met during monthly meetings and lived in the same neighborhood. The participants in the mixed gender focus group were the staff members of a public school who worked together. The familiarity of participants with each other proved helpful in both of the focus groups because everyone felt more comfortable speaking in front of each other. This enabled me to observe their natural interactions with each other in their own language (Bloor et al., 2001; Peek & Fothergill, 2009). My role during the focus group discussions was that of a moderator and the one guiding a discussion and making sure that each participant had the opportunity to

speak. Focus groups provided a useful start to my research, and enabled me to obtain valuable information about the overall recovery process in the study area, information that would otherwise have been almost impossible for me to obtain.

3.5 Interviews

Interviews are an ideal method of data collection for capturing experiences and meanings of the subjects in the real world since interviews allow participants to convey to the researcher their own situation in their own words from their own perspective (Dunn, 2010; Kvale, 2009). Interviews were the main data collection method used in this study because this study focused on the experiences of individual woman during recovery process after the Kashmir earthquake. I used face-to-face interviews because they were the only way for me to obtain detailed information about the experiences and perspectives of individual women from a variety of backgrounds. In order to achieve the study objectives, I conducted 34 semi-structured interviews during field work over a period of 40 days. The semi-structured interview was an ideal method of data collection for my study; semi-structured interviews allow the researcher to include some open-ended questions in the interview guide and also discuss additional topics with the participants during interviews which may enhance his/her knowledge. I used semi-structured interviews because I wanted to enhance my understanding about women's participation in the recovery process in Langarpura by asking follow-up questions that might stray from the interview guide. This style also allowed my interview participants to freely express their views in their own words. Interviews were conducted in offices of the NGOs and government organizations, the office of the Local Support Organization (LSO) in Langarpura, community centers, the offices of Cos, the Basic Health Units (BHU) and participants' homes. I recorded all interviews with a digital recorder, which helped me focus on the interview instead of taking notes (Longhurst, 2009).

Two different types of interviews were conducted: key informant interviews and individual interviews with community members (please see Table 3-2 for the demographics of the interview participants). In October 2012, four key informant interviews were conducted with representatives of organizations to get insight into the role that these organizations played in the recovery process in Langarpura in general and in women's

participation in particular (see Appendix 4 for the interview guide for key informant interviews). Data collected from focus group discussions and interviews with NGO officials was analyzed in detail and some of the themes identified in this data were included in the guide for individual interviews with community members.

The individual interviews with community members (n=30) were completed in October and November 2012. The demographics of these interview participants can be found in Table 3-2. No more interviews were conducted once theoretical saturation was reached. I did not expect to obtain any new information by conducting any further interviews (Baxter & Eyles, 1999). The in-depth interviews were guided by the list of topics in the interview guide (please see Appendix 5). The topics initially included in the interview guide consisted of themes drawn from existing literature about women's participation in recovery. Using an interview guide with a list of topics instead of specific questions allowed the conversation to follow a natural direction and helped me to redirect the discussion to cover any outstanding issues; it also meant that I had to formulate coherent questions and follow-up questions on the spot, which required good communication skills and confidence. However, I did not face any significant problems in formulating questions from my interview guide and for the most part, the interviews had a smooth, natural flow. I included both male and female participants in my study and designed my interview guide to suit both types of participants. However, as my study focused on female participation in disaster recovery, my theoretical framework influenced the selection of topics in my interview protocol. All the topics in the interview guide were related to women's participation in disaster recovery and its impacts on their lives whether I was interviewing male or female participants.

The interviews had two main parts: The key informant interviews were one to two hours long while the interviews with the community members ranged from one to one-and-a-half hours. Although I preferred to interview each participant alone, five participants preferred to be interviewed with their family members, although the family members rarely contributed to the discussion.

3.6 Participant Observations

Participant observation involves the researcher directly observing the participants' lives and examining what people actually do, rather than what they say they do (Jorgensen, 1989). I used participant observations for triangulation and to contextualize the data (Kearns, 2010; Thuo, 2013). Participant observations were conducted in the community in September, October and November 2012. This helped me to observe the participants in their natural settings in their day-to-day, recovery and community-based activities (Jorgensen, 1989). My position during these observations was that of an observer-as-participant. I conducted observations at community centers during community gatherings and meetings, at reconstruction and rehabilitation sites, and at schools, health care units and sewing centers. I observed the day-to-day activities of local people, particularly women and their activities related to the recovery process such as attending meetings of Cos and getting trained at the sewing center.

A weakness of participant observation is that the presence of the observer might influence the behavior of the observed (Kearns, 2010). Although I rarely felt that my presence influenced the behavior of the community members, while attending a meeting or other function, I usually sat in a corner to reduce the level of interference due to my observations. I was also careful not to offend or intimidate anyone through my observations in order to reduce the chances of modifying their behavior or interfering with the normal flow of their activities. I lived in a house in the community in order to establish rapport and a friendly relationship with the research community. I avoided taking notes on the spot or recording conversations of the observed so that I could observe more natural interactions and responses (Kearns, 2010) and avoid circumstances in which others' behaviors may have been modified by my presence (Dyck & Kearns, 1995). After conducting participant observations during the day, I made notes in the evening. I stopped my participant observations when I felt that I had reached theoretical saturation and could not learn anything new from further observations. Immediately after reaching this stage of theoretical saturation, I decided to leave the field in order to start data analysis.

3.7 Data Analysis

The aim of qualitative data analysis is to rigorously and creatively organize, find patterns in, and elicit themes from data that capture and unify the nature of the phenomenon (Sheperd, 1995; DeSantis & Ugarriza, 2000). In this study, data analysis was an ongoing process beginning from the first focus group to the last stage of final data analysis. I listened to the recordings of every focus group and interview to find new topics to be included in my focus group and interview guide for the subsequent focus groups and interviews. The detailed preliminary and final analyses were performed after all the data had been collected and I had left the field.

The focus groups and interviews for this study were conducted in Urdu or the local language, Pahari. In order to make the coding and analysis easier, I transcribed and translated all of the data into English myself, which also helped me to become familiar with the data (Crang, 2005). In order to code and analyze the data, I used QSR NVivo 10, which is considered appropriate for case study research as it facilitates the researcher to manage the data and ideas (Bassett, 2010; Bazeley, 2013; Bringer et al., 2004). QSR NVivo 10 can also enhance transparency and rigour by enabling the researcher to ask questions or test emerging themes through its search and retrieval tools, called queries (Bassett, 2010; Bringer et al., 2004; Crowley et al., 2002; Richards, 1999). I used NVivo 10 to code and analyze data, write memos and run queries to find relationships between themes.

Coding is one of the significant steps taken during analysis to organize and make sense of textual data. It involves subdividing the data as well as assigning categories (Basis, 2003; Dey, 2003). A code is a descriptive or conceptual label that is assigned to excerpts of raw data (Gale et al., 2013). For coding, all the data collected through focus groups, interviews, and participant observations was imported into three main folders using QSR NVivo 10. While coding qualitative data, it is useful to start with a list of pre-established codes but it is equally important to search for additional codes (Stake, 1995). I developed an initial coding framework by including concepts from my literature review and topics in the interview guide. Later on, however, coding was also done inductively by creating codes from the data itself. After coding all the data, the coding framework was further revised to reduce repetition by merging similar codes. If the data shared codes, I kept it together to

make it easier to find themes, patterns, and relationships. I analyzed focus group data separately from interview data although I used the same coding framework to analyze the focus group data and the interviews.

Coding was not only limited to data simplification or data reduction whereby data was divided into separate categories. It also involved data complication whereby coding was used to expand, transform and conceptualize data to facilitate new levels of interpretations (Coffey & Atkinson, 1996). For example, I not only identified and labelled categories about self-confidence, self-esteem, self and collective-efficacy and altruism, I tried to establish a relationship among the categories and how they influenced each other. In addition, I found that most of the themes that were identified as factors influencing women's participation in recovery could be grouped into a few major categories such as the Kashmir earthquake, the culture of Langarpura, the role of social activists and the role of social capital. Similarly, themes related to the impacts on the lives of women who participated in recovery could be placed under two major groups: resilience and empowerment. In this manner, the process of data complication enabled me to organize the themes in a logical manner which made it easy to present them in the form of results. I used the observational data to confirm the data collected through interviews and focus groups, which helped me to obtain deeper insight into my data and verify several responses of the participants.

After the final analysis, the final results were included in the relevant chapters of the results section of this thesis. However, while writing the results chapters, I felt that I needed to organize and present my findings in a more coherent manner to enable the reader to understand these findings and establish the relationship between the major findings of my thesis. For this purpose, I consulted the literature for guidance about organizing my results for conceptual clarity and I found a few models and frameworks which were very relevant to my results. I modified some of these models and frameworks to present my results in an organized and rational order. These included Moser's (1989) framework of women's triple role, the framework of social capital proposed by Szreter and Woolcock (2004) and Sumner's (2010) three-dimensional model of well-being. I also decided to split the chapter about the impacts of participation into two sections after consulting my

supervisor for descriptive and conceptual clarity. As a result, the number of chapters in my thesis increased from seven to eight since the results chapters increased from three to four. Chapter 6 included the impacts on women's resilience while Chapter 7 comprised results about the impact of participation on women's empowerment.

3.8 Dissemination of Final Results

Although I had initially planned to share the preliminary results of the interviews with all of the interested participants in another visit to Langarpura, only two of the study participants opted for the summaries of their interviews. All the interviews were translated and transcribed and brief summaries of the main themes emerging from the interviews of each interested participant were prepared so that I could share them. However, one of the participants could not be contacted because he had changed his cell phone number, and the other preferred to receive his summary and transcript of the interview through email as he was out of AJK at the time of the contact. This participant was satisfied with my preliminary analysis of his interview.

In June 2019, I will share the final results of the study with the community in a formal presentation. I will give another presentation to government departments and local and international NGOs helping in the recovery in Langarpura. Three articles from this thesis will be submitted to international journals for dissemination of the results to academic audiences. I will also give copies of this thesis to government organizations involved in the recovery process in Langarpura and the Fizza Organization.

3.9 Study Limitations

As with any research study, this one had several limitations. An important limitation is that the findings are not generalizable due to the unique nature of the Kashmir earthquake and the culture of Langarpura. Another limitation is the lack of my cultural competence as an outsider from outside Langarpura, which might have affected my level of understanding of the local meanings expressed by different gestures, expressions and behaviors of the participants. A language barrier was another limitation. Although most participants could easily communicate in Urdu (the national language of Pakistan), seven participants could not speak Urdu and instead spoke Pahari (a local language of AJK). I

had a translator for interviews in Pahari. This might have affected the quality of interviews conducted with participants speaking Pahari due to the translator, who may have had some difficulty translating some phrases and idioms accurately in Urdu. Finally, this study is a “snapshot in time” and it has temporal and spatial limitations. It only focused on the impacts of women’s participation in the recovery process in selected communities of Langarpura from September 14 to November 25, 2012.

3.10 Ethical Issues

Ethics approval was obtained from the Research Ethics Board (REB) at the University of Alberta and its guidelines were followed throughout the research project (please see Appendices 8, 9, 10 & 11). Before starting an interview or focus group discussion, an information letter was given to the participants (please see Appendix 6). This letter included information about the research project (please see Appendix 7). Each participant was given a consent form to sign before an interview or focus group. The form included information about the rights of participants with respect to their voluntariness of participation (please see Appendix 7). The information sheet and consent forms were read to those participants who could not read or write. These participants put their thumb impressions on their consent forms. They were also told that they could withdraw from the study before the final analysis and that their data would not be used if they were to withdraw. All the participants were given the option to ask for a summary and copy of the transcript of their interviews in the informed consent forms (please see Appendix 7). However, only two participants asked for these copies. The setting for the interviews and focus groups was chosen according to the preferences of the participants. Care was taken to choose a quiet and comfortable place. In order to avoid any unwanted stressful situation for the participants, I focused more on the recovery process than discussing their sufferings during the Kashmir earthquake. However, I also took time and listened to those participants who wanted to share their feelings about the experience of the earthquake.

Throughout the process of this study, particularly during the fieldwork, the cultural and religious values of the society of Langarpura were respected and observed. This included observing purdah while going outdoors, wearing a Pakistani dress, accepting offers of refreshments, behaving respectfully with elders by allowing sufficient time to

speak and maintaining relationship and contact with participants after the completion of data collection process.

All the participants were informed beforehand that their interviews and focus groups would be recorded with a digital recorder and the recordings would be transcribed and used as data for my thesis. It was also explained to them that their data will be kept confidential and the recordings and interview transcripts will be stored in a secure location to which only I have access. I kept the signed informed consent forms in a secure location and I also locked my personal laptop with a security password to maintain confidentiality of data. In order to improve data security, I also encrypted my personal laptop and any files containing text, audio recordings or photographs of my interview participants. I removed the names and any other personal information from both the recordings and transcripts of all the interviews immediately after conducting each interview and saved the interviews with codes. The list of codes and names was kept separately in a locked cabinet to which only I had access. I used codes throughout my data analysis and presentation of results to preserve the confidentiality of my research participants.

Before starting an interview or focus group, the participants were informed about the risks and benefits of participating in this study. The potential benefits included empowerment, particularly for the females, by feeling knowledgeable and contributing to the research. The only possible harm for the participants was the emotional distress they might feel while describing their sufferings during the Kashmir earthquake.

3.11 Measures to Ensure Rigour

The term rigour in research refers to trustworthiness and whether a study has findings worthy of attention (Baxter & Eyles, 1997; Lincoln & Guba, 1985). Although there are a number of criteria that qualitative researchers use to assess rigour, the most common are those proposed by Lincoln and Guba (1985): credibility, dependability, confirmability and transferability (Baxter & Eyles, 1997; Houghton et al., 2013). Below I describe the strategies that I used to meet each one.

3.11.1 Credibility

Credibility refers to the value and believability of the findings (Lincoln & Guba, 1985). It can be achieved by two processes: conducting the research in a believable manner and being able to demonstrate credibility. I used three measures to ensure credibility of this study: purposeful sampling, triangulation and peer debriefing.

I used purposeful sampling to enhance the credibility and transferability of this study because it stresses the search for “information rich cases” (Baxter & Eyles, 1997). All the participants were very knowledgeable about the research topic and were chosen from different age and ethnic groups in the community. I also ensured that I had both males and female participants. This helped me to get a diverse picture of the recovery process and how participation affected the lives of the women of Langarpura.

Triangulation is one of the most powerful techniques for strengthening credibility (Baxter & Eyles, 1997). The two main purposes of triangulation are data confirmation and data completeness (Casey & Murphy, 2009). In this study, triangulation was used to enhance the credibility of the study mainly for data completeness in order to draw a complete picture of the situation with respect to women’s participation in recovery. For the purpose of confirmation, data collected through interviews, focus groups and participant observations, were used to supplement each other. Data collected through focus groups and interviews produced similar results which confirmed the findings, thereby adding to the credibility (Houghton et al., 2013). Collecting data from a variety of sources ensures completeness of data. Obtaining multiple perspectives leads to a complete picture of the phenomena being studied (Casey and Murphy, 2009). To ensure data completeness in this study, data was collected from officials of NGOs and government departments, community organizations and local people. The use of purposeful sampling further contributed to data completeness by making sure that data was obtained from “information rich cases” (Baxter & Eyles, 1997).

Peer debriefing involves exposing data and interpretations to a colleague in order to root out possible sources of misinterpretation (Baxter & Eyles, 1997). Three interview transcripts were selected for peer debriefing in this study. These were coded both by my

supervisor and me. We then compared our coding and found a few disagreements in our frameworks. We discussed and successfully resolved these discrepancies in a meeting. Except for the differences in the names of three or four categories, the rest of our coding frameworks were the same. This similarity contributed to the study's credibility (Houghton et al., 2013).

3.11.2 Dependability and Confirmability

Dependability and confirmability are closely linked. "Dependability" refers to how stable, accurate and consistent the data are over time and conditions (Houghton et al., 2013; Lincoln & Guba, 1985). According to Lincoln and Guba (1985), confirmability refers to the degree to which findings are determined by the respondents and conditions of the inquiry and not by the biases, motivations, interests or perspectives of the inquirer. For the purpose of dependability and confirmability, an inquiry audit was used as a strategy in this study since the relationship of the graduate student and his/her supervisor provides an ideal form of an auditee-auditor relationship. In this study, an inquiry audit was used since I discussed all important decisions of my research with my supervisor from the selection of my study topic to the presentation of my final results. She advised me about the important decisions related to this study and I followed them after discussing them with her.

Another measure for improving the credibility, dependability and confirmability of this study was keeping a field journal because it provides the rationale for decisions made and the challenges experienced by the researcher during research (Rolfe, 2006). I noted all the important facts and perceptions related to my study in this journal, including the selection of my research topic and study area, challenges faced during data collection and the ways my theoretical and ethnic background might have affected my study results.

3.11.3 Transferability

Transferability refers to the degree to which findings fit within contexts outside the study (Baxter & Eyles, 1997). For transferability of the findings, the original context of the research must be adequately described along with a description of the study area so that judgments can be made (Koch, 1994). I have included a detailed description of my study area along with maps. I also explained the context of research by describing the situation

of women in Langarpura before the Kashmir earthquake with respect to education, employment, health, social participation and gender equality. The general findings of my study are transferable to any disaster-area in Pakistan and elsewhere in the world where NGOs have conducted community-based recovery projects.

3.12 Positionality Statement

I am a Pakistani woman belonging to a rather conservative family living in Peshawar city in the KPK province of Pakistan. My family belonged to a village called Sherpao in District Charsadda of KPK where my father used to live with his mother and one daughter some forty years from now. My father migrated from his village to the City of Peshawar for the sake of our education as there were no girls' schools available in our village at that time. Women in my family are supposed to observe strict purdah by covering their faces and entire bodies while going out of home. However, being an educated woman and living in an urban area, I don't cover my face but only cover my body with a shawl while going out of my home. I must admit that purdah restrictions have never stopped me from studying or becoming what I wanted to be. I still managed to complete my education and become a lecturer in university, obtain a good scholarship and study in a very well-reputed university in Canada. However, I am aware of the challenges many Pakistani women face, especially those living in rural areas, which do not allow them to achieve their goals in life. This has not only left the Pakistani women backward but has also led to their portrayal as weak and vulnerable both in media and in research. I have always wanted to know and highlight women who have become role models for their families, communities and other women in general by overcoming the obstacles in their way and performing well in their respective spheres of life. Therefore, I have always been looking for cases where women have done something new and inspiring to change the stereotypical vision of the society regarding females as weak and incompetent. This inclination might have influenced the selection of my study topic and study area but I also found a significant gap in the gender disaster research which I wanted to fill with the help of my study.

As a woman with this family background, I understand and am aware of the roles and responsibilities of woman living in urban areas. I am also aware of the challenges that urban woman face in performing their roles both inside and outside their home due to

purdah and family restrictions. However, I lack any understanding of how rural women perform their roles and responsibilities in normal situation as well as in times of disasters. I wanted to know more about how it is like to live in a rural area where a major disaster has disrupted the normal life of the communities and what roles do women play in such a situation. I also wanted to understand more how women participate in disaster recovery, what factors influence their participation and how their participation influence their own life. I was interested in learning how they describe their experiences of participating in recovery and whether their participation has produced any significant changes in their personal, family and community life. As I have explained in section 3.3.1 the Kashmir earthquake and my visits to the affected areas provided a very good opportunity for me to study the life of rural women in a disaster situation. Especially, I was able to visit a community in Union Council Langarpura, AJK where I met women who participated in the recovery activities; a phenomena very unique and interesting for a female researcher like me who had a different background but still shared some common characteristics with those women. Hence, I decided to study how the women in Langarpura were participating the recovery, what challenges they faced and which factors facilitated them; how their participation affected their own lives and the lives of their family members as well as communities.

3.13 Summary

In this chapter, the methodology used for this research has been described in detail. The chapter includes a discussion of the rationale behind the selection of a qualitative case-study research design for the study. The fieldwork is described in detail, including a description of the study area, community advisory committee and the strengths and weaknesses of focus groups, interviews and participant observation. A description of data analysis and dissemination of final results as well as study limitations is also given. Lastly, ethical issues and strategies used for rigour are discussed.

Table 3-1: Demographics of Interview Participants

	No of participants		
	Individual interviews	Focus groups	Key informant Interviews
Age			
16-29	14	4	
30-39	5	4	2
40-49	4	4	
50-59	5	1	2
60-69	2	1	
70-79			
80-89			
Sex			
Female	21	10	
Male	9	4	4
Involvement in the recovery			
Females participating in the recovery	17	5	
Females not participating in the recovery	4	3	
Males participating in the recovery	4	2	4
Males not participating in recovery	5	2	
Residents of Langarpura			
Yes	30	14	1
No			3

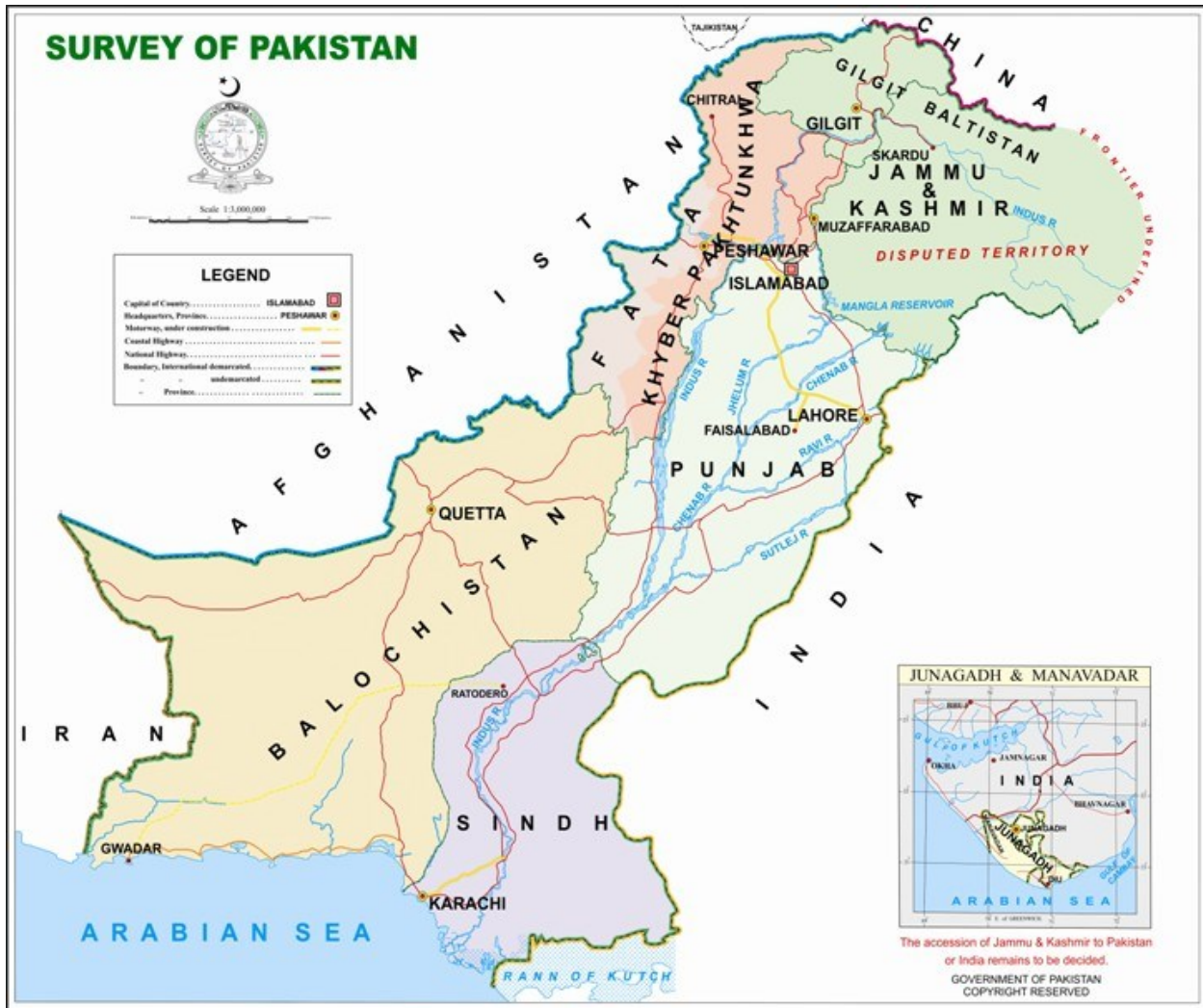


Figure 3-1: Administrative map of Pakistan.
 Source: Survey of Pakistan (<http://www.surveyofpakistan.gov.pk/>).

Chapter 4: Recovery after the Kashmir Earthquake and the Women of Langarpura, AJK

This chapter addresses the first objective of this study, which includes examining the roles of women in the recovery process in Langarpura after the Kashmir earthquake. In order to present the results in an organized manner, I have used a framework proposed by Moser (1989) regarding the triple roles of women: reproductive, productive and community. To my knowledge, there has been no detailed and systematic study focusing on women's roles during disaster recovery at the international level as well as in Pakistan, particularly in the context of the Kashmir earthquake. An important contribution of this chapter, therefore, is that it examines, in detail, women's roles in recovery after the Kashmir earthquake using Moser's framework, which to date has not been used in any study on gender and disaster. Subsections 4.1.1, 4.1.2 and 4.1.3 provide detailed descriptions of the Langarpura women's productive, reproductive and community roles, respectively, during the recovery.

4.1 Women's Roles and Their Impacts on the Recovery Process of Langarpura

An important finding of this study was that along with other stakeholders of recovery, including the federal and the state government, international non-governmental organizations (INGOs), local non-governmental organizations (NGOs) and local community members were also involved in the recovery process in Langarpura after the Kashmir earthquake. The most interesting feature of community participation in the recovery process of Langarpura, however, has been the active participation of women.

In order to analyze in detail the different roles women in Langarpura played, these roles need to be divided into distinct categories on the basis of some criteria. Moser (1989) proposed that typical household women of the third world play a "triple role" in their

society: the productive, reproductive and community managing roles. Reproductive roles include roles within the household and the family which include bearing, nurturing and rearing children; cooking, cleaning the house and yard; washing and laundering clothes; fetching water and fuel wood; purchasing groceries; and caring for sick and elderly; Reproductive roles might also include agricultural work in the homestead and work relating to livestock within the household (Ariyabandu & Wickramasinghe, 2003; Moser, 1989). Women's community roles include maintaining kinship relations, religious activities, social interactions and ceremonies, communal sharing and caring activities and communal survival activities (Ariyabandu & Wickramasinghe, 2003; Moser, 1989). Finally, productive roles are those that receive economic remuneration for manual labor, professional labor and subsistence activities (Ariyabandu & Wickramasinghe, 2003; Moser, 1989).

Disaster researchers are of the opinion that this categorization of women's work in the reproductive, productive and community spheres contributes to the social construction of daily life under both routine and extreme conditions (Enarson, 2001; Enarson & Morrow, 1998; Wiest et al., 1994). Studying these roles during disaster situations, however, is helpful to understand them better as it provides an opportunity to "learn how women construct and make sense of their roles" (Fothergill, 1999, p.126). Besides, due to the unique circumstances of a disaster, women also take on some non-traditional roles in addition to their traditional roles (Fothergill, 1999). To date, however, Moser's (1989) categorization of women's triple role has not been used by any disaster researcher. The analysis of women's roles after the Kashmir earthquake reveals that women played the "triple role" during the recovery process in Langarpura (please see Table 4-1). The details of each of these roles played by the female participants in Langarpura is given in the following sections.

4.1.1 Women's reproductive role in the recovery process of Langarpura

Female participants performed their reproductive roles during the relief and recovery phases, when they cared for the injured, cooked, cleaned, kept livestock and gave moral support to their children. Immediately after the earthquake, these women found it very difficult to perform everyday household chores due to the widespread destruction of

houses and disruption of facilities, including facilities that provided their water supply. However, they still performed the tasks of cooking, fuel-wood collection and fetching water for domestic use from remote springs. One female participant said:

I think that females have suffered more during the earthquake and they have also performed a more important role in its aftermath. For the females it was like, our water supply pipeline had also got damaged and the females had to fetch water from so far for washing clothes and dishes and for cooking. ...The water tanks had all collapsed, so we didn't even have clean water to drink. Now the males were building houses, etc. They had to go on their duties as well since the government had announced that you should report back on your duty, otherwise you would be sacked. So they had to report back on their duties. If they were available at home, they could have done something, but they had gone. So because of that, females had to do more: fetching water to wash clothes, to wash dishes, cooking, cleaning, and removing the rubble because it was everywhere. ... And then it was Ramadan as well, so we had to take care of our families which included injured as well and the elderly and children as well, and we had to do all this alone with little help from males. (Participant No. 9)

Another female participant said:

We had nothing left in our home after the earthquake. Everything was destroyed; furniture and utensils were buried under the rubble and we had nothing for cooking...we females had to go far for fetching clean water and collecting fire wood. We cooked in whatever utensils we could find or dig out from under the rubble. In this way we passed the first few days and weeks after the earthquake. (Participant No. 15)

Looking after injured family members was also the responsibility of the females. Two-thirds of the female participants (22/31) said that they struggled while taking care of their injured family members. The lack of medicines and first aid, the destruction of hospitals and Basic Health Units (BHUs), and the destruction of roads made it difficult to access

health facilities. One female participant explained how she struggled while taking care of her injured daughters:

My elder daughter had her front teeth broken and she was also hurt on her back while the younger one couldn't stand because she had a spinal cord injury. My husband works in Kuwait and he was abroad when the earthquake hit. I had only one male at home to take care of my two injured daughters, my son. And he was very young at that time, only fifteen years old. Many people came here for first aid at that time. Their treatment was the same; to give painkillers or to give some other tablets or injection. There were no doctors in the beginning. There was no road left, and my younger daughter couldn't walk. It was a big problem to carry her. Around 15 days passed in this way. After 15 days we took her from here on a *Charpai* [bed] and then in a vehicle to a Turkish hospital in Gojran. The doctors over there told me that she had a spinal cord injury. [And] that I will have to take her to Rawalpindi [a city close to Islamabad]. I said I neither have money nor any such transport so how will I take her there? The girl cannot walk and I cannot carry her on my shoulders....I started crying and begging for help.... All of a sudden, a person came and took us to the helipad.... My daughter was taken to Rawalpindi.... She had a four-hours-long surgery and I stayed there with her for almost a month.... She has completely recovered now and can walk. (Participant No. 12)

These roles of women including cooking, cleaning, preparing food, fetching water and caring for the injured has also been reported by Krishnadas (2007), Gordon (2013), Mishra (2009), and Hamilton and Halvorson (2007). However, none of these researchers have used the term “reproductive roles” in their studies. An unexpected and new finding of this study was that during the recovery period, women in Langarpura supervised the reconstruction process in the absence of their male heads of the families. This was an extension of their reproductive responsibilities because they did not have economic gains from these tasks. More than two third of the female participants (24/31) said that the women

of Langarpura supervised the reconstruction of their houses because the male heads of their families were unavailable to do so.

When the soldiers used to come to monitor [the reconstruction], I asked them myself about different techniques of earthquake-safe building. I said you should at least tell us that even if we don't have males at our house and we females are supervising the work, so we should at least know this much: what type of iron should be used in it? What type of pillars should be used in it and what should be its underground depth? If we are putting a ring in it so how many of them should be there and what should be their shape? At least the females should know about these things since the females are certainly involved in this whole process. (Participant No. 17)

Females physically participated and supervised the rebuilding of their own homes to help their families recover with minimum expenditures of cost and time. When rebuilding their homes, the women also performed tasks which are traditionally considered men's jobs: carrying bricks and stones and fetching water in carts.

We have constructed these houses ourselves, by fetching water in carts and doing it all ourselves. We also carried bricks and stones on our heads and helped men to fix the pillars. We have built these new houses with the help of God. We have made these houses with so much difficulty. (Participant No. 4)

The above quotes reveal that the female participants in Langarpura participated shoulder-to-shoulder with males in the recovery process and they also performed a variety of non-traditional tasks. One reason that women were more active in the non-traditional role of house-building is that they were home to do so: most men work away from home, but the women were home and could supervise and do the labor. Hence, the women had more freedom and time to interact with masons. According to the female participants quoted in this section, the women of Langarpura not only withstood this shock and crisis

but helped their respective families to survive in the face of this calamity with the help of their reproductive roles during and after the earthquake.

4.1.2 Women's productive role in the recovery process of Langarpura

The productive roles of female participants included their participation in different income-generating activities to earn money for their families and themselves. This included earning a daily wage by participating in physical labor.

My husband used to run a tuck shop before the earthquake. He could hardly fulfill the needs of our family with whatever he used to earn from that shop...Our shop was completely destroyed and all the stuff got buried and was spoiled...My husband and two sons were badly injured during the earthquake and they could not do any job or labour at that time...so I decided to go out and do whatever I could in order to help my family to survive...To tell you the truth, I have done everything to earn a few rupees for my family: I have carried bricks on my head wherever buildings and houses were being constructed. I also used to perform other labor work including fetching water for construction and even mixing cement and sand. So I have performed all these tasks and the little money that I earned with it I used it to help my family. (Participant No. 4)

Another important productive role of female participants was in dairy farming, which included raising cattle and processing dairy products, which some female participants then sold to earn money. Others raised poultry and sold poultry and eggs:

We suffered a lot during the earthquake; my husband's foot was fractured while my only son was also badly injured...For the initial few days after the earthquake, we were given food and other relief items but it was not sufficient for our needs. And we didn't feel good to rely on relief for long but we didn't have any other options since there were no jobs and the males were injured as well...So I had a cow and two goats and they were fine; they didn't die during the earthquake. So I used to milk them and sell their milk and also yogurt, butter and curd...I used to earn some

money with it and started running my home with that money. So that was all I could do. (Participant No. 3)

In order to support their families and help them recover from the impacts of the Kashmir earthquake, some female participants who had not worked outside the home before the earthquake had to search for jobs. Some joined the education sector as teachers and the health sectors as lady health visitors, lady health workers or lady health supervisors:

I think women proved themselves very strong at that time... [Although] they were emotionally suffering and almost every one of them had either lost a family member or had an injured family member to take care of. But still, they started working again as soon as the earthquake was over...I mean, if there was an uneducated woman so she started taking care of her cattle again so that she can help her family. And then if there were any educated women so they started doing some kind of job...like school teaching or working as a lady health worker or lady health visitor...I personally know many such women who did not do any job before the earthquake but when they saw that their males were unable to support their families after the earthquake, so they started a job after the earthquake...Most of them used to join the education and health fields...These were the two fields in which women were allowed to work mostly by their respective families. There were not very many women who worked in education and health before the earthquake. (Participant No. 28)

A few other women participated in the revival of the agricultural sector after the earthquake. During the earthquake, most of the crops were destroyed due to landslides and other forms of ground failure such as liquefaction. The majority of the affected people had to rely on relief goods for survival, as they had lost their agricultural income. As soon as the recovery stage started, the residents of Langarpura started growing their domestic crops again. However, because they had lost most of their cultivation tools, seeds and fertilizers, due to the earthquake, the production of different crops was not satisfactory. In addition, most of farmers still used ancient techniques for cultivation which resulted in poor yields of crops. About half (16 out of 31) of the female participants said that although the

agricultural department and a few NGOs offered training, most of the males were not free or willing to attend because they were busy with reconstruction activities and their jobs. Women came forward and attended sessions about cultivating wheat and other important crops grown in Langarpura. They were also given free seeds, fertilizers and tools after attending these sessions. Since most of the local women also help their husbands in the fields, the training helped everyone to increase production of major crops. The training also helped women to work in fields on their own in the absence of their male relatives. In this manner, women also did typically males jobs such as sowing, composting, weeding and harvesting the crops. This not only made their families self-sufficient in their food and fodder requirements but contributed to the family income because the women then sold the surplus:

On behalf of the CDP [Community Development Program], we were trained how to grow wheat. So previously we used to just scatter the seeds but then they told us about the way they do it in agricultural practices. So in the beginning the people, the majority of the males, were not willing to attend this training. Some of them were not available while others were saying that in this way the wheat seeds will get spoiled and will not grow successfully. But we females attended it. We did the sowing the way they told us to do it by tying the ropes and they also told us to do the weeding, which is better for the crop. So the CDP trained us for that, and then we females told our males to follow this technique. So surprisingly, the production was so good after that...and we sold our extra production for a good price...and we are still practicing those techniques.
(Participant No. 14)

A few other researchers studying flood and hurricane disasters have reported that women worked in fields and engaged in productive reconstruction work such as fetching and carrying sand, water and bricks for quick recovery from disasters (see, for example, Drolet et al., 2015; Cupples, 2007). However, women's engagement in dairy farming and education and health sector for productive purposes during post-disaster recovery stage are the unique findings of this study.

4.1.3 Women's community role in the recovery process of Langarpura

Keeping in view the cultural restrictions of the society of Langarpura, the analysis of data revealed that the most important role of women reported by all the study participants was their community role. The women of Langarpura became very active at the community level immediately after the earthquake. Their roles included taking part in search and rescue activities, clearing the rubble, collective cooking and food sharing, supervising the reconstruction of public buildings, and running a community sewing center.

During a disaster, local residents are usually considered first responders because it takes longer for disaster response organizations and relief to reach the disaster-stricken areas due to disrupted transport and communication systems (Islam & Walkerden, 2014; Berke, Kartez & Wenger, 1993). During the Kashmir earthquake and its immediate aftermath, it was the local people who rescued those from under the collapsed buildings and also gave first aid to the injured before the outside help could arrive. As mentioned by the study participants, the women of Langarpura contributed to the search and rescue activities even though their own family members were affected by the earthquake:

During the earthquake, many people got buried under the collapsed buildings; kids were buried under the collapsed school buildings. In this situation, I ran to my kids' school to save my kids.... I saw local people trying to save their loved ones on self-help basis. And many of them were women. I saw women trying to dig out their kids with bare hands or whatever tools they could find. I also saw some women doing bandages and giving first aid to the injured. Women also took care of their injured family members by providing them food and consoling them.... Many women helped other injured people even if their own family members were also affected by the earthquake.... I really think they saved the lives of many females through their timely help. (Participant No. 23)

Many female participants (23/31) also highlighted the active role of the women of Langarpura in communal cooking, clearing the rubble and arranging for clean water in the immediate aftermath of the earthquake:

It happened that for the first three, four days or maybe 10 days, no one came here. No one could come because there were no routes. The routes had vanished away; the roads had been totally destroyed. There was no contact. There was no arrangement for food at that time; there was nothing to eat so then whoever had anything to eat He shared it with others. Women did a lot of work during this time.... In fact it was us [females] who had to worry about food and water since the males were busy in burying the dead bodies. All the shops had been destroyed and the people who had kids They were gathering things which had dropped down from the shops. For example, if there is kheer [a sweet dish] lying there, or suji [semolina] lying there Women were feeding their kids with that by taking out the wood of their own broken houses and burning them to cook their meal. Now all the utensils were buried under the rubble and if someone found a cooking pot we used to cook collectively in it for all the people and we used to put it in one dish and eat it together.... Then if a female found a clothes-washing soap A few females took all the clothes of people and washed them with great difficulty.... There was no water either; the water had finished. The ground cracked so the water got submerged under it. The cattle didn't get anything like water or grass for three days.... So some females had the duty of going to the springs up there in the mountains early in the morning and fetching water in whatever pots they could find. So then we used to share that water and used it carefully...I remember that women fetched water for months from uphill springs before the water supply could be restored in our area. (Participant No. 11)

Some of the women who were working with NGOs also supervised the reconstruction of public buildings, including the schools in Langarpura. The contribution of female participants in the reconstruction activities not only inspired other women to participate, it also helped to change the perception of men about women's capacities to contribute to the recovery. For instance, a male participant told me about his impressions of the contributions of a local female who was an NGO worker and had been supervising

the reconstruction of schools in her community during the recovery. He showed me around a school that she had helped to rebuild:

Madam Aisha is from that NGO. She came in the beginning. Our ex-foreign minister, she is his wife. I haven't seen such a strong lady in my entire life. She stood herself on the site and made others do work for eight, nine hours. Here is that school called Ali Akbar Awan High School. She has supervised its reconstruction. The same way, she has constructed countless schools in the Jhelum valley and she used to supervise everything in person. She has made a great contribution in the education sector for the communities of Langarpura. (Participant No. 13)

Another significant contribution of two local women in Langarpura was the establishment and running of a sewing center where girls were taught sewing and knitting which enabled them to earn money and support their families. One of these women told me about the contribution of their sewing center:

We have run the center after the earthquake and we have taught over here. I worked without pay for the first six months. I have taught the girls the same way as I used to teach them when I was getting my salary... I used to think that it is a part of my life, that if something is being transferred through my hands ... that was very good... I have trained around, 400, 500 girls so far and they are all doing commercial work now; they are earning for themselves as well as for their families. (Participant No. 29)

Other researchers have reported that women have participated in search-and-rescue activities, communal cooking and the rehabilitation of the local infrastructure including school buildings (see, for example, Buvinic, 1999; Cupples, 2007; Fulu, 2007; Gordon, 2013). However, none of these studies focused on the Kashmir earthquake. Besides, given the socio-cultural context and purdah restrictions, it was very unusual for the women of Langarpura to participate in such outdoor communal activities as search and rescue, clearing rubble and supervising the reconstruction of public buildings.

The results presented in this chapter confirm that local residents are the first responders when a disaster strikes in an area (Berke, Kartez & Wenger, 1993; Islam & Walkerden, 2014; Saito, 2014) and they also confirm the generally held perception in disaster studies that women are active disaster responders (see, for example Enarson, 1998; Enarson, 2001; Twigg, 2004; Yonder et al., 2005). In addition, the findings of this study confirm that women's role in the community is an extension of their productive and reproductive roles, which cannot be separated from each other (Ariyabandu & Wickramasinghe, 2003). Women earned through a variety of productive activities including kitchen gardening, dairy farming, sewing and participation in saving schemes. However, instead of using the money for themselves, these female participants used their income to help their families recover from the impacts of the Kashmir earthquake. Only after fulfilling the needs of their families could the women take part in the community recovery activities. The findings of this chapter show that women were the front-line responders during the Kashmir earthquake and that their three important roles (reproductive, productive and community) in the post-disaster phase were interconnected and interdependent.

4.2 Conclusion

This chapter explored the roles of women in Langarpura during the recovery process after the Kashmir earthquake. Women in Langarpura played a variety of important roles in reproductive, productive and community spheres and proved themselves as capable and resilient members of their community. The productive roles of women included their normal household responsibilities of cooking, cleaning, and caring for the cattle but also included non-traditional responsibilities such as caring for the injured, elderly and the disabled and rebuilding their homes. Another important role that the women played was their productive role which involved participating in a variety of income-generating activities such as carrying construction material and water for daily wages, working in fields, dairy farming and working in the education and health sectors. The most important and prominent role of the women of Langarpura, however, was their community role. In addition to traditional community roles including search and rescue activities, caring for the injured, collective cooking and food sharing, women also played some non-traditional

roles. For example, for the first time in the history of Langarpura, women participated in the reconstruction process at the community level by supervising the reconstruction of public structures including schools, roads and water supply facilities. Some female community activists set up a sewing center to provide vocational training to local women. In this manner, the female participants from Langarpura played an important, active and effective role in the recovery process, which had a very important impact on the overall recovery of their respective families and communities.

Table 4-1: Women's roles in the recovery process in Langarpura

Women's reproductive role	Women's productive role	Women's community role
<ul style="list-style-type: none"> • Taking part in search and rescue activities. • caring for the injured • Cleaning and clearing the rubble. • livestock-keeping • Giving moral support to children and dependants. • Cooking and fetching water for domestic use • Arranging for the food and other items. • Finding utensils for cooking and collecting firewood. • Treatment of injured family members. • Physical participation in the reconstruction of houses by fetching water in carts for preparing cement, carrying bricks and stones • Supervision of the process of reconstruction in the absence of males. 	<ul style="list-style-type: none"> • Participation in physical labor including carrying bricks, stones and cement and fetching water for the reconstruction activities on daily wages. • Cattle-rearing and processing of dairy products. • Selling milk, yogurt, butter and curd. • Sewing and stitching. • Work in the education and health sectors as teachers or lady health visitors, lady health workers or lady health supervisors. • Participation in the revival of agricultural sector by performing traditionally males' jobs such as sowing, composting, weeding and harvesting the crops. 	<ul style="list-style-type: none"> • Taking part in search and rescue activities. • Caring for the injured. • Collective cooking and food sharing. • Providing moral support to other community members through personal visits. • Clearing the rubble and arranging for clean water. • Supervision of the reconstruction of public buildings including school buildings. • Community welfare activities, particularly related to widows and orphans. • Establishment and running of a community sewing center to teach sewing, stitching and knitting to local females.

Chapter 5: Factors Influencing Women’s Participation in the Recovery Process in Langarpura after the Kashmir Earthquake

This chapter addresses the study’s second objective, to identify the factors that influenced women’s involvement in the recovery process in Langarpura after the Kashmir earthquake. It comprises five sections. The first section includes results and a discussion about the role of social capital in women’s participation. The second section discusses how the Kashmir earthquake influenced women’s participation in recovery. The third section examines the role that the culture of Langarpura played in women’s participation and the fourth section discusses in detail, the role that social activists played in women’s participation. These sections are followed by the conclusion. In order to examine, in detail, the influence of social capital on women’s participation, a framework of social capital presented by Szreter and Woolcock (2004) has been used to present the results in an organized manner. A unique contribution of this chapter is that it includes the discussion of factors influencing women’s participation in disaster recovery, a topic that is altogether ignored by disaster researchers both internationally as well as in Pakistan, particularly in the context of the Kashmir earthquake. Another contribution of this chapter is the use of Szreter and Woolcock’s framework of social capital for the first time in the context of women’s participation in disaster recovery.

5.1 The Role of Social Capital in Women’s Participation in the Recovery Process

Social capital is generally divided into three main types: bonding, bridging, and linking (Aldrich & Meyer, 2015, Aldrich, 2012; Kawachi, Kim, Coutts, & Subramanian, 2004; Szreter & Woolcock, 2004). Woolcock (2002, p. 26) has defined bonding social capital as relations between “family members, close friends, and neighbors” and it grows from organizations and activities connecting similar individuals who often live in close

proximity to each other (Schuller, Baron & Field, 2000). The strong connection makes bonding social capital good for providing social support and personal assistance, especially in times of need such as disaster (Hurlbert et al., 2000).

Bridging social capital, on the other hand, describes acquaintances or individuals loosely connected that span social groups, such as class or race (Aldrich & Meyers, 2015). Bridging activities and organizations bring together individuals from different neighborhoods, ethnicities, and races (Schuller et al., 2000) and provides novel information and resources that can assist individuals in advancing in society. Bridging social capital often comes from involvement in organizations including civic and political institutions, parent–teacher associations, and sports and interest clubs along with educational and religious groups (Small, 2009).

According to Szreter and Woolcock (2004), linking social capital is composed of “norms of respect and networks of trusting relationships between people who are interacting across explicit, formal or institutionalized power or authority gradients in society” (p. 655). Linking social capital connects those of unequal status, thereby bringing together citizens with decision-makers and leaders who hold positions of authority and can distribute often scarce resources (Aldrich & Meyer, 2015; Aldrich, 2011).

5.1.1 The role of bonding social capital.

Immediately after the Kashmir earthquake, the families of most of the participants in Langarpura had to either stay outdoors or take refuge with relatives whose houses remained safe. There was an acute shortage of food, potable water, milk for infants, medicines, blankets and other basic amenities. However, due to the widespread destruction of roads and bridges, there were no possibilities for relief and rescue teams to reach Langarpura immediately after the earthquake. In this situation, the kinship and family networks of female participants were the only hope for survival. Hence, the bonding social capital in the form of kinship and family networks and relations between family members, close friends, neighbors and relatives (Schuller, Baron & Field, 2000) played an extremely important role in the immediate aftermath. Victims and their helpless families took refuge with relatives and neighbors. They also shared food and available medicines and cooked

and ate together in the days and weeks immediately after the earthquake. With the end of the relief phase and the start of the recovery phase, these informal structures of bonding social capital transformed into more formal, family-based organizations in which all the people in a single family were given membership (Interview data, 2012). These organizations had properly defined rules and committees to make arrangements for everything from a dowry, to food and utensils needed for weddings, to burials:

[After the earthquake], a committee was set up by our family, and we decided to make our family organization. Today, *Mashallah* [what God wills], so many organizations have been set up, in every home. The Tanoli family has a separate organization, the Abbassis have a separate one. In the Abbassi family only, there are four organizations. That is a very big family, so they have four organizations. Tanoli has four. There are four in the Gilani family as well. So we are all members of this organization. (Participant No. 11)

The presence of bonding social capital in the form of family organizations encouraged women's participation in recovery because it increased everyone's awareness of what women could do by participating in the activities of such organizations. Many females (23/31) who participated in recovery told me that being involved in their family organizations facilitated their further participation in recovery.

The support of close family members and other relatives is also an important component of bonding social capital (Hurlbert et al., 2000). This study found that the presence or lack of support and cooperation of close family members, particularly males and other relatives, strongly influenced a woman's decision to participate. Those female participants who had cooperation from family members were able to participate easily in recovery as compared to the ones who did not have a supportive family. For instance, one female participant said that the support of her family was her greatest strength which enabled her to participate in the recovery projects even though she faced resistance from the community:

My family members have been the ones who have always helped me the most. You can understand that if your family members don't support you then the outsiders cannot help you at all. So in my view the most important thing was that my family members supported me. If the whole village turns against you but if your family members are with you then you can do everything. So this is the biggest thing that they have been with me all the time. So I have also not betrayed their confidence since they had a belief in me. (Participant No. 8)

The lack of family support and the household responsibilities of some other female participants, however, kept them from taking part in the recovery. A female social activist told me about the problems she faced in assembling women for a meeting of Community organization (Co) in the beginning since most were busy with their household responsibilities:

I used to send three males to call one female. The reason for that was that they are people of the rural area. Someone has cattle which is standing in the sun so they have to bring it to the shade. They have to give them fodder. Someone's kids will come back from school and they need to be given a meal. Someone has an ill person at home to take care of and she is bound to stay with that person or someone didn't get the permission so she has that problem. So these were the problems that I faced in engaging women in Cos. (Participant No. 09)

Two female participants said that they could not participate in outdoor activities because they were not getting enough support from their families to look after their children when they were outside:

I had a big obstacle in my going out for work. I had very young kids, so I was worried who will take care of them when I go outside. That is why I preferred to do something at home and earn for my kids, like if I could get a sewing machine to stitch clothes at home so that would have been fine but I didn't have the money to buy it. I left my kids with my aunt

for a few days to attend training for stitching. She was taking good care of them but still my kids used to miss me since I had never left them alone before that. So my kids used to cry after me and especially my son because he was too small and he was hungry. So I couldn't continue that for long and I had to quit my outdoor activities. (Participant No. 15)

The role of male members of the family was another important factor identified in this study which had a direct influence on women's decisions to take part in the recovery. Almost two-thirds of the study participants (30/48) said that the females were able to participate in the recovery process mainly due to the cooperation and support of male family members:

We have such an atmosphere that unless the males are willing, the females cannot go beyond the doorsteps of the house. I think it is my luck that Allah has given me such an environment. My husband cooperated with me and because of his cooperation, I have even gone to Islamabad and I have attended workshops in Kotli as well. So obviously my husband's permission was with me. If there was no permission ... I couldn't have gone outside. (Participant No. 11)

The representative of an international non-governmental organization (INGO) also underscored the importance of male's cooperation in enabling women to participate in the activities of his organization:

The reaction of males was very cooperative, very supportive. They didn't make any problems for us or for their females to participate in our training programs or other activities, not at all. They were very cooperative. So this has been my personal experience in Langarpura, at least. (Participant No. 03)

Two female participants said that their male relatives did not allow them to participate in the recovery projects. One of them had been actively involved in the recovery process before getting married but could not continue her work after:

I really want to participate in the activities of Community organization [Co] but my husband is not permitting me, since my husband didn't like it personally that the females should go out and participate in such activities so much, but I had done a Masters in Sociology for the same reason that I wanted to work for the people and the society. I used to be very active before getting married and my mother is still running a [non-governmental organization] NGO but I had to quit all of my activities for community welfare because of my husband. (Participant No. 19)

The quotes above further confirm that the presence or absence of support and cooperation of family members, particularly from males, was a decisive factor in women's participation. Most of the female participants did not have a choice about working outside of the home; they were compelled to do so for the survival and recovery of their respective families. However, the family cooperation helped some female participants to take part in the recovery process, while family resistance and hesitation created obstacles for others.

5.1.2 The role of bridging social capital.

In Langarpura, bridging social capital was found to exist in the form of (Cos) and village organizations (Vos). Although three study participants said that a few Cos existed in some communities of Langarpura before the Kashmir earthquake, most of the existing Cos and Vos were established after due to the influx of a large number of NGOs and government organizations and with the objective of ensuring the involvement of the local communities in the recovery. The majority of these Cos were set up by the Azad Jammu and Kashmir Rural Support Program (AJKRSP), a government organization for encouraging community participation in the recovery process. A few other organizations such as the Sungi Development Organizations and Children First also established such Cos in a few parts of Langarpura. These Cos were mostly established at the *Muhallah* level and were composed of a president and secretary and 15 to 30 members who belonged to the same *Muhallah*. The term *Muhallah* is defined by the Oxford Dictionary as an Indian word for an area of a town or village. *Muhallah* is used in Pakistan as an alternative for the English term neighborhood or community. Only one member from each family was

allowed to be the member of each Community organization (Co) and migrants were not allowed membership.

When a sufficient number of Cos had been set up in a particular village, all of the Cos in that village used to unite in the form of a village organization (Vo). The Vo would meet at least once a month. Representatives from all the member Cos would attend. This resulted in the creation of bridging social capital comprising Cos and Vos. This not only helped the local people to recover quickly from the impacts of the earthquake, it encouraged women's participation in the recovery process in Langarpura because separate Cos were set up for females in many communities, and these Cos were run by local females. According to many male and female participants (32/48), a significant number of women became members of females' Cos. There they received a variety of training arranged by the collaboration of NGOs with Cos. These Cos also provided a platform for monthly meetings at which female members discussed and solved their personal and community issues including providing loans to needy members, dealing with issues of water supply and sanitation, and rebuilding a girls' school and roads. These female-centered Cos have played a commendable role by providing vocational training; running credit programs; and giving necessary guidance, tools and materials to local women so that the women can start a new business or job. The women of Langarpura completed a variety of recovery projects with the help of their Cos and other partner NGOs which also helped other female members of their community to recover from the impacts of the earthquake. Among the females' Cos projects that benefitted the whole community were providing water supply and sanitation facilities, the reconstruction of school buildings and roads, the establishment of a sewing center for women and also credit and savings programs, and financial assistance for widows and orphans (please see Chapter 6 for details). According to two-third participants (36/48), the members of each community organization (Co) and village organization (Vo) belonged to the same community and village and most also had a common socio-economic background since they belonged to the middle and lower-income level classes.

Bridging social capital in the form of Cos and Vos encouraged female participation in recovery in order to make them independent:

I think the best thing about these Cos and other organizations [such as Vos and Local Support Organizations [LSOs] is that the females and the rest of the people should be able to stand on their own feet and they should not sit waiting for ... outside assistance. If there is any such disaster ... they shouldn't be waiting for ... outside help.... They have set up so many organizations. Females should be aware of their problems and how to solve them. So whether anyone comes from the outside or not, they should solve their problems themselves, so this is the best aspect of these organizations. (Participant No. 04)

The role of bridging social capital in women's participation in recovery was effective: this was obvious because according to many study participants (32/48), the number of females' Cos was larger than that of males' Cos in Langarpura. Also, females' Cos performed better as compared to males' Cos in terms of completing recovery projects and the number of training sessions offered to the local females.

The Cos and Vos in Langarpura used a variety of strategies to encourage women's participation in recovery, including credit and saving programs for local women with nominal interest rates and easy mechanisms to repay loans. These Cos and Vos also offered vocational training in collaboration with NGOs and government organizations to enable females to start a business and earn at home. With the help of these programs, women in Langarpura were able to take part in a variety of productive activities which facilitated their own recovery as well as the recovery of their families. Hence, manifested in the form of Cos and Vos, bridging social capital facilitated the participation of many female participants in recovery by enhancing their skills and creating more employment opportunities through training and credit and savings programs. According to more than half of the female participants (21/31), those females who attended vocational training and took loans from Cos are successfully running some kind of business at home or have started a business for the male heads of their families. These results show that even though bridging social capital was not visible during the relief and rescue activities, it became strong and visible during the recovery phase.

5.1.3 The role of linking social capital.

The example of linking social capital in Langarpura was that of a local support organization (LSO) locally known as the Fizza Organization. The Fizza Organization functioned at the union council level because it was the highest level organization with representatives from the local Cos, Vos and government organizations. Hence, it acted as a link between the local communities and the related government organizations such as the AJKRSP. The Fizza Organization provided the venue for meetings at which local communities presented issues and suggestions, and discussed them with the government officials. The officials consulted with the Cos and Vos representatives, made decisions, and then implemented those decisions with the help of Cos and Vos. An official of a government organization said:

The philosophy of community-based organizations is that at the level of *Muhallah*, there will be a Co. A Vo will be at the level of a village and there will be an LSo at the union council level and then, further at the state level, there will be AJKRSP. Now the purpose of involving these communities is that if the right demands and right needs of these communities do not reach the government, the government cannot work properly. For instance if a minister visits an area, he cannot know for himself about the major issues of that area, so who will take the real demands to the minister? So these organizations at the level of *Muhallah* were set up for the purpose that the actual need should reach from Co to Vo and then to the LSo, from the LSo to the donors, and from them to the government or AJKRSP. So when the actual need will come, whatever work will be done, it will be done according to the needs of people, and no single group can take benefit in it. So the basic objective of these organizations is that the actual needs should be taken from the grass root level to the government level and donor's level. (Participant No. 02)

Three of the female participants and three male participants were also members of the LSo and all of them said that the LSo has encouraged women's participation in the recovery process by giving equal representation to women in its membership. This

organization also arranged vocational training in collaboration with other NGOs and government organizations and provided matching grants to Cos and Vos to run credit and savings programs, thereby providing livelihood opportunities to the women in Langarpura. The basic role of linking social capital, however, was that it helped to connect the local people of Langarpura to the other stakeholders of recovery including the international non-governmental organizations (INGOs), NGOs and government organizations. This role of linking social capital not only encouraged women to participate and recover but also contributed to women's empowerment; it allowed the women to incorporate their priorities in the recovery projects and become involved in the decision-making process (please see Chapter 7 for details). A female representative of the Fizza Organization, the LSo of Langarpura, discussed the positive role of that organization in involving the local females of Langarpura in recovery:

I think the Fizza Organization has been helping the women of Langarpura in every possible manner. It has given 50% representation to females in its executive body, and they have also arranged a variety of trainings for women, like dairy farming and poultry farming, stitching and sewing and kitchen gardening. Different NGOs have assisted us to offer those trainings. AJKRSP has also been helping us. The credit and saving scheme was also approved by the Fizza Organization first and then it was implemented through Vos and Cos. The good thing is that now we are planning to move one step ahead so that we can also make women aware about their basic human rights and tell them what are their rights in property, in jobs and why do they deserve it? (Participant No. 11)

Another female representative highlighted the role of LSo:

The most important role that our organization has played here is that it has arranged our meetings with other organizations, like AJKRSP, and international NGOs....We discuss our community's issues in our meetings at Co and Vo levels, so after that, if an issue is very important, we also discuss it in our meetings with NGOs and government organizations arranged by our LSo....In this way, we force them to solve

our urgent problems. I can give you several examples of issues that were discussed and solved in LSo meetings in this manner, like the water supply issue here, and the issue of the reconstruction of our girls' school building. So I really think that if our LSo was not there, we could not have communicated our problems and priorities to these higher organizations and they would not have given us financial and technical support to solve these problems. (Participant No. 16)

The above quotes support the findings of this study that the LSo was also responsible for arranging financial and technical assistance for recovery projects in their respective communities through their collaboration with NGOs and government organizations.

The social capital in Langarpura, however, was not without its negative aspects. One negative aspect of social networks, which included Cos, Vos and LSos, was the rule of not including migrants in these organizations. This rule deprived many outsiders of financial support and opportunities to attend training that could have enabled them to become financially independent and recover quickly. As one migrant midwife said:

I am very interested to join the females' Co in our Muhallah, but they don't allow me to become its member. They say you're a migrant, an outsider, despite the fact that I have been living here for the last seven years. I wanted to participate in their saving scheme and I also need to take a loan but I cannot take it since I am not its member. (Participant No. 16)

Similar findings have also been reported by Rahill et al. (2014), who identified potentially negative consequences of social capital when survivors of the 2010 Haitian earthquake only allowed members of their own communities to participate in the recovery and did not allow immigrants to obtain much-needed resources. The analysis of the results above show that all three types of social capital played an important role in enabling the female participants to recover from the impacts of the earthquake and to participate in the recovery process as well (please see the Figure 5-1 for a model of factors).

5.2 The Role of the Kashmir Earthquake in Women's Participation

The Kashmir earthquake disaster itself was found to be an important factor influencing women's participation in disaster recovery. The earthquake resulted in a number of changes in the society of Langarpura and brought a variety of external influences as well, which contributed to women's participation in recovery (please see Figure 5-1 for a model of factors).

5.2.1 Death and injuries during the Kashmir earthquake

The death and disability of thousands of male heads of families during the Kashmir earthquake resulted in a drastic increase in the number of female-headed households comprised mainly of widowed women as well as women caring for their disabled husbands and other sick or needy family members (Sayeed, 2006; ERRRA, 2007). These female-headed households were entirely different from the ones existing in the same areas before the earthquake. The earlier female-headed households used to be economically self-sufficient as they received financial support from their male members working abroad. The female-headed households which emerged after the earthquake, however, were entirely dependent upon their female heads of the family who mostly lacked professional skills and had never gone out of the home to earn. Many women were left with no other option but to take the role of breadwinner and head of their respective families in order to ensure their survival. However, the lack of vocational skill became a great hurdle. Most of the training was offered only to the members of these Cos. As a result, a number of unskilled female heads of the households joined the Cos to attend vocational training so that they could earn money with their newfound skills. They also took part in the credit and savings programs that the Cos offered, which could help them to start a business. This enabled the women of Langarpura to play the non-traditional role of the family breadwinner. Among the female participants in this study, four were also heads of their families and said that they had to go out and work to support their families only after the earthquake. Three of these females had lost their husbands during the earthquake while the other's husband had been permanently disabled. In the words of one female participant:

I think that the problems of females have increased after the earthquake in a sense. Many females have been widowed. Their husbands passed away. Many lost their brothers. Now those females who had never come out of their home, they had to go out of home for work and the majority of them had no skills. They didn't know what to do to earn money and that was the time when females started joining NGOs and Cos. Several women attended vocational trainings offered by NGOs and they are now earning. (Participant No. 12)

Some female heads joined the health sector to earn for their dependents:

When my husband became disabled after a serious spinal cord injury during the earthquake, all my kids were studying at that time and it had become very difficult for us to manage the household expenses. On top of that you can see how much dearness is there. Therefore, I had made two of my kids sit at home and they were not going to school anymore. I wanted to do a job but in the beginning they [her male family members] didn't allow me. But later on my brothers-in law and father-in-law gave me the permission. So I started making efforts, and then I got this job of midwife with the help of my friend. I was living near the airport previously, so I had to shift to Langarpura Proper for the sake of this job. (Participant No.16).

It is interesting to note, however, that this female participant was not a member of any Co; she didn't have due time, because she had to perform her household duties, go to work and also take care of her disabled husband. The need to support her family compelled her to go out and earn money but it simultaneously hampered her ability to participate in community-based recovery activities.

The loss of family members and close relatives also left several women with trauma. Their suffering made them feel more compassionate toward other earthquake victims and encouraged them to go out and help others in order to forget their own losses. All except two of the female participants (19/21) said that they participated in the different

relief and recovery activities mainly because they thought it was the only way they could forget the pain they were experiencing due to the loss of their loved ones who had died in the earthquake. A female participant likened the loss of her two daughters to a bruise:

This bruise that I have got myself, I have done everything because of that...If it had not happened to me, if my own house had not been destroyed...even if my own business had not been disrupted and if I had not lost my kids, perhaps I would not have cared for anyone else. I would never have been compelled to go out of my home and help others. I started feeling it for others when I experienced it myself, and I went out of my home to help others only to forget my own loss and grief. (Participant No. 27).

According to Staub and Vollhardt (2008), one's own experiences of suffering can lead to a greater ability to understand how people who have suffered feel and can also encourage people to care about and help others. In other words, victimization and trauma can lead to "altruism born of suffering" (Staub & Vollhardt, 2008, pp.267). The results of this study show that the loss of life and property experienced by females led those females to develop altruistic feelings which compelled them to participate in the recovery in an effort to overcome their own trauma. Akerkar (2007) also found that many members of the local women's organizations in Sri Lanka who suffered from the traumatic impacts of the 2004 tsunami participated in relief and recovery activities to forget their stress and help others to recover. Disasters offer opportunities to transform women's identities and roles as a result of the physical and social disruption in the aftermath of disasters (Horton, 2012). The Kashmir earthquake provided a similar opportunity for the transformation of gender roles whereby the women of Langarpura were compelled for the first time in their lives to go out of the home and take part in non-traditional activities to earn money and support their families.

5.2.2 Outmigration of men

The trend of males' outmigration for employment opportunities, which was prevalent in Azad Jammu and Kashmir (AJK) before the earthquake, increased after the

earthquake due to the disruption of business and the loss of employment opportunities. However, many of the participants (30/48) said that women were only symbolic heads of their families before the earthquake because they were still financially dependent upon the male heads of the family and had limited freedom to change their gender roles. These participants said that before the earthquake women were only involved in making important decisions about their family, mainly about the children's education and marriage. They had the least involvement in financial affairs and no involvement in decision-making processes regarding community affairs. Their only community involvement was through functions and festivals such as marriages, deaths and greeting on Eid (a religious Muslim festival celebrated twice a year).

The husbands of four female participants had to go out of AJK for work after the earthquake. The wives said that their husband's absences gave them more freedom to go outdoors, interact with outsiders and take part in the recovery. I observed that those female participants whose husbands were working abroad due to the earthquake were very active in community welfare activities. Some of the women with husbands abroad were also the presidents of their communities' females' Cos. This might be due to the fact that females whose husbands were working outside AJK had the freedom to fulfill the responsibilities of the president of Cos, including meeting with NGO and government officials, attending training sessions and workshops and interacting with community members. One such example was a female from Langarpura Proper who not only helped female members of the community to set up a Co but was trying to set up a women's rights forum:

My husband has always been very supportive... If he was not there then I would not have been able to go anywhere...but his absence helped me more as compared to his presence—I mean to be where I am right now...He works in Kuwait and he is away most of the time. So it was easier for me to go out and interact with NGO people and other community members. In fact, when there was only a male's organization, the Young Social Welfare Organization, I was a proper member of that organization as well...But I really think that I would not have been able to do it if he was here. I think either the people would be instigating him against my

activities, like why is your wife going out and working with NGOs? Or they would have created other hurdles. (Participant No. 12)

These findings show that male outmigration has produced significant changes in the lives of the four female participants whose husbands had migrated out of AJK for work by increasing their responsibilities and workload on one hand but also increasing their freedom and decision-making power on the other. These female participants had more freedom to leave their homes and take part in the recovery as compared to those female participants whose male heads of the family were at home. This was because their male heads of the family used to hear the negative comments from other community members which made them reluctant to allow their female relatives to take part in the recovery. Another female participant whose husband had gone abroad for work after the earthquake explained:

My husband works in Saudi Arabia. He went there five months after the earthquake. It was so difficult for us to survive when he lost his job in a grocery store here after the earthquake because the store was completely destroyed during the earthquake. So he had to go abroad to earn for us...But when I think back, my husband's going abroad has not only increased my responsibilities but has also given me something positive...I mean, I have more freedom to go outdoors and make decisions than other woman whose husbands are with them. It was due to this freedom that I was able to become a member of my community's Co. I have been taking part in the Cos' activities very actively and I believe that if my husband were here, he would not have allowed me to do all this. He would instead have ordered me to stay indoors and do the household chores. (Participant No. 25)

The migration of males in normal circumstances is believed to increase women's autonomy, self-esteem and decision-making power, leading to women's empowerment by expanding their role and responsibilities in the household beyond the traditional ones (see, for example, Mahendra and Rabi, 2014; Karki, 1998; Sadiqi and Ennaji, 2004). However,

there has been no research on disaster-induced male outmigration and its impacts on women, particularly with reference to women's participation in recovery.

5.2.3 The role of NGOs, government and aid organizations

The Kashmir earthquake was the first incident in the history of AJK that brought a great number of NGOs to Langarpura and other parts of AJK. Immediately after the earthquake, the Pakistan army, the government of AJK and the federal government of Pakistan and a number of national and international NGOs started the largest relief and rescue operation in the history of the country (information obtained during field visit, 2012). Although a great majority of international NGOs (INGOs) and local NGOs left Langarpura at the end of rescue and relief phase, several NGOs remained in the area to help the local communities to recover. Many government organizations also helped supervise and implement recovery projects at this stage. These organizations included the National Disaster Management Authority (NDMA), Earthquake Reconstruction & Rehabilitation Authority (ERRA), State Earthquake Reconstruction and Rehabilitation Authority (SERRA) and Azad Jammu & Kashmir Rural Support Programme. Some of the important NGOs and INGOs involved in the recovery process in Langarpura included United Nations Human Settlements Programme (UNHABITAT), United Nations Development Programme (UNDP), Children First, Sangi Development Organization, Islamic Relief and a number of local NGOs. Along with their positive role in the overall recovery of the communities of Langarpura, these INGOs, NGOs and government organizations also played an influential role in women's participation in the recovery process.

An important factor encouraging women's participation in the recovery of Langarpura were the gender-inclusive programs and projects run by NGOs, INGOs and government organizations. Two third of the participants (32/48) appreciated the involvement of both genders in different training sessions and recovery projects and also said that these programs had produced many positive impacts on the life of females as well as on the overall community in Langarpura. The representative of a government organization helping with the recovery in AJK explained his organization's strategy for the involvement of both genders:

We are including women in all the projects we are running so far, or the guidance we are providing to the people in different things, so we are also including females in them on the basis of equality. We have also given equal membership to females in our LSos, so they comprise 50% of the membership in most of the LSos. Besides, since we know that the culture of Langarpura is a bit strict and some families do not allow their females to go out, so we also include the male members of those families in our trainings and workshops so that they can attend those trainings together. In some communities where we faced more resistance to women's participation in trainings and Cos, we firstly trained the males only. We told them that we are not teaching immodesty to your females. We are just trying to make them independent, and when they were convinced, we also offered trainings for their females (Participant No. 02).

Some NGOs and government organizations conducted gender-specific programs. Only females were encouraged to participate. These programs were designed to equip the local females with the necessary knowledge and skills to earn a living and obtain loans and access to local and regional markets to start and expand their businesses. The representative of an earthquake authority offered a comprehensive explanation of his organization's strategies:

Some gender-specific programs were also launched, among which was the first women's microfinance bank of the Agha Khan Foundation in the Jhelum valley. They did some lending in microfinance as well. Then Women Development Centers were constructed in all three districts. Some training was done. Free legal aid was provided to the local females in Langarpura, too. A special livelihood program and training projects were run for women-headed households. And to improve their livelihood situation, a project was made together with an organization named *Aik Hunar Aik Nagar* [one skill one region], through which their market linkages were developed so that the things these women are producing in

the form of handicrafts, those could be marketed in the big cities of Pakistan. So many things like this were done. (Participant No. 01)

The representative of an international NGO also highlighted some of the factors which facilitated women's involvement in the NGO's projects. His NGO was committed at the policy level to include females in its projects and was also committed to equal opportunities in staff hiring and the allocation of funds for both males and females:

You can say that this was a commitment at the policy level, that whichever project we will start, we will keep in view the participation of females.... And then we used to keep a strong balance when there was hiring of the staff, so that the females and males both should get equal opportunities. So we had female staff to interact with local women, which helped us a lot to involve local women in our projects... We also had a mandatory allocation of funds for females in every project or program. For example, this used to happen, that if the beneficiaries of this project will include 400 males, so 350 or 400 females will also be their beneficiaries. When it was mandatory, then it used to become a mission for us, for all of us to achieve that. (Participant No. 03)

In order to facilitate the participation of women in training sessions, these organizations also adjusted their training schedules. The representative of an international NGO said:

If the time of the training is from 8-5 pm but the females had to leave early; so we used to close the training session a little early.... Because the women had to take the decisions [to attend the training] after a lot of thinking.... We used to make some adjustments keeping in view their problems. (Participant No. 03)

About two-third of the participants (35/48) said that females were included in almost all types of vocational trainings and NGOs and Government organizations used to give various incentives to women to encourage them to participate in the training. Some of

these incentives included tools, cash grants and loans, and chickens and cattle for rearing. In the words of a female participant:

We attended training about agricultural practices, and they gave us sickles, shovels and other tools for cultivation. They also gave fertilizers and seeds to our Co which were distributed among the members then. We needed these things since we had lost all of the seeds and tools during the earthquake...Other female members of Cos attended trainings for toy-making like stuffed bears, and the NGO used to give all the material to the participants themselves, so that the women could make toys and they could sell them as well, for 200, 400 rupees. Some members of the Cos were given sewing machines after attending training for stitching and sewing.... Those who attended training for poultry farming received 25 chickens. Others attended trainings for livestock keeping and were given sheep or goats for rearing. And I know some females who used to attend these trainings only because they needed skills as well as these tools and materials to start some kind of work. Like I have a widow neighbor who knew sewing to some extent but she didn't have a sewing machine, so she attended the sewing training and got a sewing machine so now she is stitching clothes and earning to support her two kids. She is also doing commercial work now. (Participant No. 9)

NGOs also used peer-learning strategies to inspire females to participate in the recovery process. Seven female participants said that their Cos were involved in peer-learning activities whereby visits were arranged so that members of females' Cos from different communities could meet to provide each other with inspiration about participating in activities including the credit and savings programs. This was particularly useful for those women who did not trust their Cos to deposit their savings, as well as for those women who were skeptical about the benefits of participating in Cos. A female participant said:

We had set up our Co shortly after the beginning of the recovery period but we couldn't start our saving and credit scheme like other Cos.

The reason was that some of the female members were not satisfied about it. They had doubts in their minds, like they thought that the president will confiscate their money and they will not get their money back. So when I told our LSo about it, they arranged a visit for us to the Co of Khun Bandi in Langarpura. We went there and met the female members of the Co over there. They told us how they were saving money and how it benefitted them by taking loans and starting businesses. So when we saw that they are doing it successfully, we also started our own saving and credit scheme. (Participant No. 19)

In this way, the participation of females in peer-learning activities has inspired women in other communities to set up their own Cos and benefit from the Cos' credit and savings programs.

Another important factor which facilitated women's participation in training sessions and recovery programs was the establishment of separate male and females' Cos. This gave females the chance to participate in the activities of Cos in areas where there was cultural resistance to mixed gatherings and mixed organizations. The representative of a governmental organization explained it this way:

We have three types of Cos: men's Cos, women's and mixed. [So in areas] where men and women want to sit together, where they can sit at the *Muhallah* level... we make mixed Cos there, [so] that males and females can sit together...If males say that our Co will be separate and that of the females will be separate, the males' and females' Cos are made separately. So this is our strategy that if we see that there is some resistance then we focus on males' Cos and then train them a bit in gender that there is nothing wrong about it. So in this way, we have been able to encourage women to take part in the activities of Cos. (Participant No. 02)

Similar comments were also made by the head of a females' Co in Langarpura who underscored the importance of establishing separate male and females' Cos in encouraging females to take part in Co activities:

I think a very positive measure was the establishment of separate Cos for women. You know there are several communities here in Langarpura where it is not considered good that the males and the females should sit together. I mean, if they don't belong to one family. So in such areas, even if the women were willing, they could not take part in the schemes of Cos... It was only due to the presence of female-only Cos that women in remote rural communities were also able to become members of these Cos. (Participant No. 41)

5.3 The Role of Culture in Women's Participation

The Dictionary of Sociology defines the culture of a society as “the totality of its shared beliefs, norms, values, rituals, language, history, knowledge and social character (2006, p. 58). The culture of Langarpura requires women to stay indoors and, while outdoors, to observe purdah. However, more than half of the participants (28/48) said that the cultural constraints with respect to purdah were much less in Langarpura as compared to the other parts of AJK and Pakistan and varied among the families living in Langarpura. I personally observed and it was also confirmed during interviews that some families in Langarpura were stricter about purdah restrictions while others were not very particular about it. Females in more strict families had less freedom to go outdoors and interact with strangers, particularly males, and they were not allowed to work outdoors. Females belonging to more conservative families had to cover their faces and bodies while going outdoors. Purdah restrictions and other cultural constraints on female participants to go outdoors were also found to have a strong influence on their participation in the recovery process. This point was elaborated by the representative of a government organization:

A very good thing about the society of the major part of Langarpura is that females do not have those problems in going out of their home which the females in other parts of Pakistan have...there has been no restriction on their coming and going and sitting inside their *Muhallah* or at the village level. While in other areas, females cannot even go out of their home. One reason for this is that the education, the literacy rate here is better, so the people know the benefits of women's participation,

because we never have so many problems. When we request females or their males.... They allow their females...to attend the meeting of Cos, and that, within their area...whatever activities of their Cos are going on in their own area, the men encourage the women to participate Even many times if we have to do a seminar or workshop here in Muzaffarabad and if we request them, those females come to Muzaffarabad as well. (Participant No. 02)

Five female participants said that purdah restrictions and cultural limitations on women's participation vary from community to community in Langarpura. According to these participants, many females still face resistance from their families and communities to go outdoors and participate in recovery, and the reason is purdah. A female participant explained:

Ours is a male-dominated society and the females who go for jobs outside, they go in such a purdah which is exactly like the way our society permits. They don't give the opportunity to anyone to say anything against them. But those females who do not observe purdah, the people don't consider them good. They stare at them, and they say bad things about them. (Participant No. 03)

Another female participant further clarified the situation, stating that females had faced more resistance due to the purdah and culture earlier in the recovery process. This resistance to women working out of the home decreased with the passage of time. The female participant said that there are still some males who do not consider it good for females to go and work outdoors:

Females faced a lot of problems in the beginning. It seemed a bit odd to the local people here that females are going out and moving about here and there with the NGOs, with unknown males. So some restrictions started coming due to that. Those people who are illiterate, they have such a mentality that they consider it bad for females to go out and talk so boldly. They don't think it's good for females to go out and be confident.

Some of the males started saying that now they have started a new drama. They are making women more powerful and the women may become too much independent. So you can see that going to workshops and trainings and to be a part of the organizations is far from being possible in such an environment. People didn't consider it good that this female is trying to encourage other females to come and work with her. Even today if I say that 100% of the people are willing that their females should work outdoors and they are happy with it, so that is not true. As far as my own point of view is concerned, I think that almost 50% of people are satisfied with it. The rest of the 50% couldn't understand this thing so far, that the females' participation is necessary and that the females should set up organizations and be a part of the organizations, and they should move forward and work. (Participant No. 03)

5.4 The Role of Social Activists in Women's Participation

Social activism is considered an important resilience strategy and includes activities such as engaging in advocacy movements (Singh, Hays & Watson, 2011). The founders and heads of the majority of Cos had a fairly long experience of social work in their communities and were known and trusted by the local people, which enabled them to effectively mobilize their community members to cooperate and work with the different organizations in Langarpura. Hence, some of the female participants in Langarpura engaged in social activism to facilitate the participation of other female community members in recovery activities. With the encouragement of these female social activists, a large number of women have become members of the local Cos and have also attended a variety of vocational trainings, enabling them to earn money. These social activists proudly shared their experiences of working for community welfare and the impact on the lives of the local females. As one of them said:

I used to go out and go to other people's homes after cooking a meal etc. after 2 o'clock, and I used to advise everyone that you should attend the meetings and trainings of Cos. I used to tell them that a female NGO worker has come so we will sit with her and we will talk to her, but

they used to ask what she will give us. Money? I used to reply yes she will, everyone will have money but it will not fall from the sky. If you do something, then you will get it. So they listened to me, and today all of them are working. Some of them are knitting sweaters for themselves and for their kids with the help of machines. They are also selling sweaters and earning in this way. Some of the females also learned the parlor [local term for a beauty salon] work in Co and the NGOs also used to give 3000 rupees to the married females who used to come there and learn the work of parlor. Some 12 married females had also attended that training and they learned it and now they are working at home. They shape eyebrows and earn 60 rupees [in their homes]. If they do bleach ... they take 100 rupees. If they dye hair ... they take 500 rupees for that. It is their own business, so they do it like this. And now they want to learn computing as well. They want to move ahead now. (Participant No. 12)

Another social activist who was the president of a females' Co told me about her efforts to encourage local widows to participate in a government program and earn money:

In the Benazir Income Support Program, they have given cards to the widow females, and they said that they should learn the sewing and stitching. There were many females who didn't have the time to do it. So I told them that you will have to take out time and go and see. For one thing they were told that you will get a monthly stipend and if you apply at the end then you will get a sewing machine.... So I was really pleased that upon my advice, there were many females who participated in that scheme. Many of them are now professional tailors. They are stitching clothes and earning a sufficient amount of money. They are supporting their families with that money, you know. So I am really pleased to see that. (Participant No. 30)

These social activists not only participated in recovery projects themselves but also convinced, guided and helped the other local women through their awareness-raising activities and visits to set up and run their own females' Cos and improve their situation

with the help of saving schemes, credit programs and vocational training. The results described above show that social activism was an important factor encouraging women to participate in recovery in Langarpura, which inspired them to engage in activities that facilitated their financial independence and long-term recovery

5.5 Conclusion

The aim of this chapter was to identify and analyze factors influencing women's participation in the recovery process in Langarpura. The results show that four major factors played a significant role in women's participation in the recovery process in Langarpura. The first and most significant factor influencing women's participation in recovery was the role of social capital in the form of social networks. Social capital, which included bonding, bridging and linking, enhanced awareness among females about the importance of participation and made participation possible through training sessions, credit and savings programs and arrangements of financial and technical support.

The second factor identified in this chapter was the Kashmir earthquake which significantly influenced women's participation in recovery due to its high death toll and injuries, male-outmigration, and the role of NGOs, and government and aid organizations. The third factor identified in this chapter was the culture and society of Langarpura which influenced women's participation through purdah restrictions while the role of social activists was the fourth factor that affected women's participation in recovery.

An important contribution of this chapter is that it is the first academic attempt to identify factors influencing women's participation in disaster recovery. No prior research has focused on factors that encourage or inhibit women's participation in recovery activities. Although there has been considerable theoretical discussion about concepts such as social capital and culture, there has been no prior attempt to relate these concepts to the participation of women in disaster recovery. This chapter is an effort to fill this gap by relating factors (e.g., social capital, the Kashmir earthquake, and social activism) to women's participation in disaster recovery. The findings of this chapter show that the Kashmir earthquake provided a window of opportunity for the women of Langarpura to change their status and stereotypical roles in society and go out and take an active part in

the recovery of their families and the community at large. Their participation has produced long-lasting and significant changes in the society of Langarpura as well as in their own lives. These changes will be discussed in detail in the next two chapters.

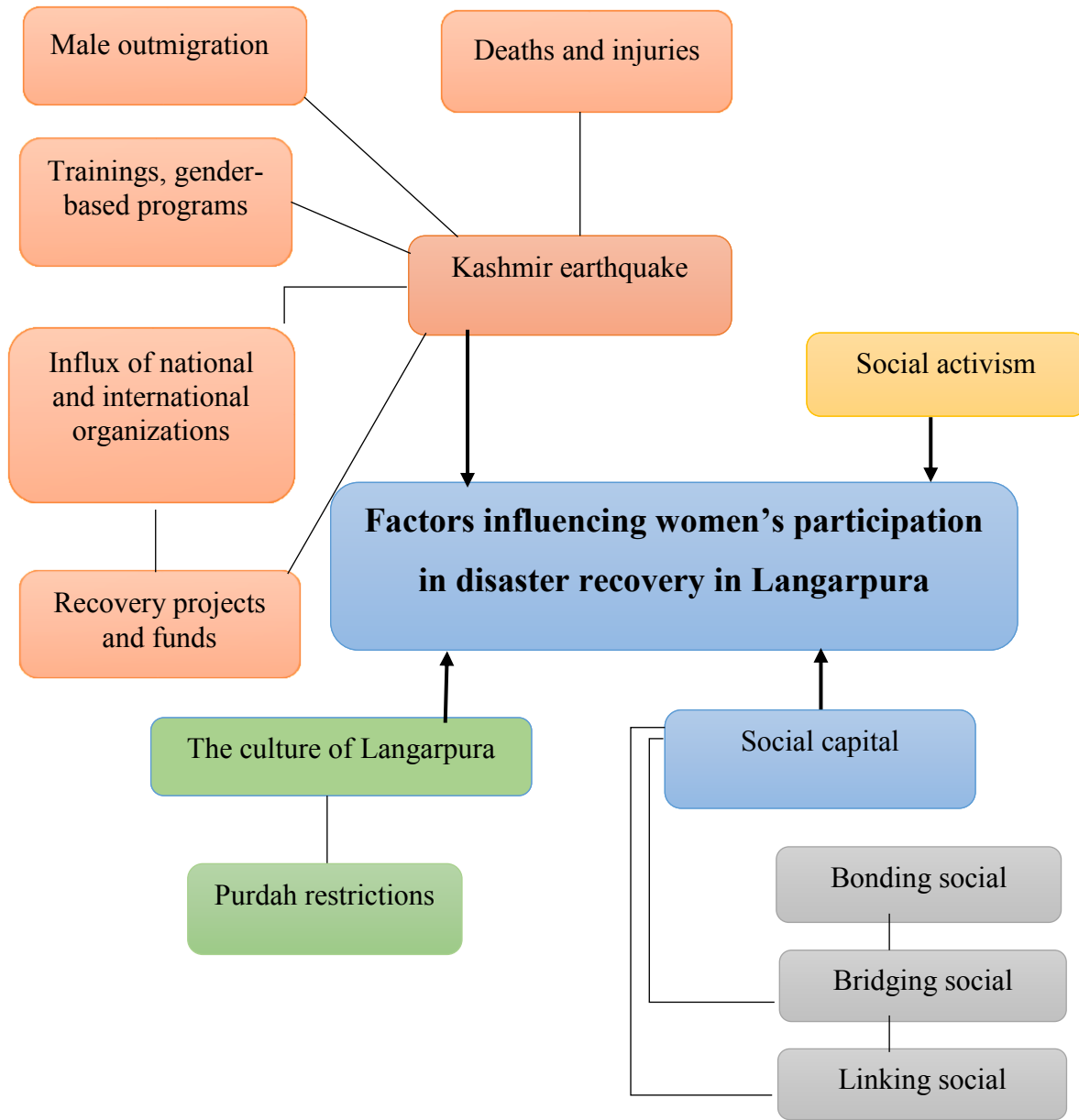


Figure 5-1: Model showing factors influencing women's participation in recovery in Langarpura

Chapter 6: Impact of Women's Participation in Recovery on Their Personal and Community Resilience

The aim of this chapter is to present, analyze and discuss the impact of women's participation in recovery on their personal and community resilience. In order to present the results of this study in an organized manner and establish the relationship between the results, a three-dimensional model of well-being proposed by Sumner (2010) has been used. This model was used because the emergent themes related to the impacts of participation were found to be relevant to the three dimensions of well-being in this model, which proved very helpful in relating the dimensions to individual and community resilience. The significant contribution of this chapter is the analysis of how women's participation in recovery impacted their resilience. This analysis was done using Sumner's (2010) three-dimensional model of well-being. It was the first time the model was used in gender and disaster research. This chapter has three sections. The first presents the findings of this study related to the impact of women's participation on their material well-being. The second includes results and a discussion about relational well-being. The third presents results about how participation impacted the subjective well-being of women.

6.1 Impact on the well-being of female participants and their communities

For the purpose of discussing the results of this study related to the concept of resilience, an integrated approach of resilience is being followed. This approach proposes that the community and individual levels of resilience are not necessarily distinct and are considered to be interrelated because the same social, psychological, environmental, and economic factors generally contribute to both levels, though to varying extents (Buikstra et al., 2010). The impacts of participation in disaster recovery on female participants' resilience is discussed below in the context of the concept of well-being (please see Figure 6-1 for a model of women's resilience due to participation and Section 2.5.1 for a discussion regarding the link between well-being and resilience). The different

determinants of well-being are discussed in detail in the following section and have been supported with relevant data from the results of this study.

Human well-being comprises people's own perceptions and experiences of life as well as their relationships and their material standard of living (Sumner, 2010). Sumner (2010) proposed a three-dimensional model of human well-being, which has the following three dimensions:

- i. Material wellbeing: The material dimension of well-being consists of “practical welfare and standards of living” (Sumner, 2010, p. 1066). The key determinants of material well-being include income, wealth and assets; employment and livelihood activities; education and skills; physical health and (dis)ability; access to services and amenities and environmental quality (Sumner, 2010, p. 1066).
- ii. Relational well-being is concerned with “personal and social relations” (Sumner, 2010, p. 1066). Its main determinants are relationships of love and care; networks of support and obligation; relations with the state law, politics, and welfare; social, political and cultural identities and inequalities; violence, conflict and (in)security; and a scope for personal and collective action and influence (Sumner, 2010, p. 1066).
- iii. Subjective well-being consists of the “values, perceptions and experiences of people (Sumner, 2010, p. 1066). Its key determinants include understandings of the sacred and the moral order; self-concept and personality hopes, fears and aspirations; sense of meaning/ meaninglessness; levels of (dis) satisfaction; and trust and confidence (Sumner, 2010, p. 1066).

The results of this study showed that participation in recovery produced significant impacts on the well-being of the female participants including material, relational and subjective well-being (please see Figure 6-2). Sumner's model (2010) was used because it includes all of the elements of well-being that the study participants said they had experienced as a result of taking part in the recovery. These impacts were included in a three-dimensional model of well-being. This model helped establish a conceptual link between the various impacts of participation and also relate the impacts to the concept of resilience. The impacts are discussed in detail below:

Dimensions of well-being	Material	Relational	Subjective
Areas of Study	The objectively observable outcomes that people are able to achieve.	The extent to which people are able to engage with others in order to achieve their particular needs and goals.	The meanings that people give to the goals they achieve and the processes in which they engage.
Indicators	Needs satisfaction indicators. Material asset indicators.	Human agency indicators. Multi-dimensional resource indicators.	Quality of life indicators.
Key determinants	Income, wealth and assets; employment and livelihood activities; education and skills; physical health and (dis)ability; access to services and amenities; environmental quality.	Relations of love and care; networks of support and obligation; relations with the state -law, politics, welfare; social, political and cultural identities and inequalities; violence, conflict and (in)security; scope for personal and collective action and influence.	Understandings of the sacred and the moral order; self-concept and personality hopes, fears and aspirations; sense of meaning/ meaninglessness; levels of (dis) satisfaction; trust and confidence.

Figure 6-1: Sumner's (2010) 3-Dimensional Model of well-being: dimensions, areas of study, indicators and key determinants.

6.2 Impacts on the material well-being of female participants and their communities

Participation produced positive impacts on the material well-being of most of the female participants. These impacts included financial independence due to increased income and livelihood opportunities, better education and skill enhancement, and improvement in physical health.

6.2.1 Financial independence

Most of the female participants taking part in the recovery activities belonged to the middle and lower income classes. A positive impact of participating in vocational training sessions and credit and saving programs of community organization (Cos) was skill development which, in turn, made the women financially independent. Female participants gained financial benefits from attending training sessions about kitchen

gardening, which improved their skills at growing vegetables and helped them earn extra money. For instance, one female said that although she had some knowledge of kitchen gardening before the earthquake, her attendance at a kitchen gardening training session after the earthquake equipped her with modern techniques of growing healthy vegetables in larger quantities and enabled her to earn money by selling the extra produce:

I used to grow vegetables in my home from the very beginning. My mother taught me how to grow them, but we used to consume all of them [at home] because the quantity was not that much. But I tell you one thing that this kitchen gardening training that was offered by our community organization [Co] here, that was very helpful....They told us how to use manure and pesticides, and how to do weeding and sowing. So I felt much more confident to grow vegetables in my backyard after attending that training, and the best thing about it is that the production of my vegetables has almost doubled. And now I sell the extra production in the market outside. (Participant No. 19)

This participant had a very large kitchen garden with a variety of vegetables. Almost all of the female participants who were practicing kitchen gardening in their homes felt proud about their efforts and insisted that I should visit their kitchen gardens and see the variety of vegetables that they grew (please see Figure 6-4 & 6-5). One female participant twice sent a gift of freshly picked vegetables to my residence while another gave me fresh vegetables at the end of her interview. Both women made a point of proudly saying that the vegetables were fresh, and that they had grown and picked them with their own hands.

Participating in training also made most of the female participants self-sufficient in the production of vegetables and some fruits, which reduced their financial burden and daily expenditures. In the word of a female participant:

We don't sell them [vegetables] but we don't have to buy them either. We use our own vegetables; we don't bring vegetables from the market since our own are much better.... All of the females who have

attended trainings are growing their own vegetables...and in this way we save a lot of our expenses, at least the expenses of the vegetables. You know how expensive vegetables are. Fruits are also getting more and more expensive here. (Participant No. 29)

Some other female participants attended training about stitching and then started commercial work which helped them increase their income and become financially independent:

We do a special type of stitching that is called *Gabbha* work, so we do it on order. I also do it. There is a shop in Muzaffarabad City and they give orders to our center. So we complete it at home and then our work is taken to Muzaffarabad and they are sold in the market. Other females of our *Muhallah* have also learned stitching and *Gabbha* work from our center and now they also do commercial work sitting at home and they are earning a good sum of money in this way. We have an increase in our income.... If we make one bed sheet in one week ... we sell it for 700, 800 rupees and if there are two bed sheets ...1400 or 1800 rupees. (Participant No. 23)

Participation in training sessions also motivated some female participants to start a new career. For example, one female participant explained how attending a training of purse-making improved her skills:

I had done the training here, of purse making. I attended the training and after that they selected me themselves as a trainer due to my good work and they told me that we are opening a center for you and you will run it. They sent me for a course of three months for the master trainer. So I learned it there and then I taught there as well...and then I have also been doing it at home and I have been running that center.... I have a skill now for my entire life and if I want to utilize it, I can. So the NGOs have left but now I can do it...that experience that I got, it is still benefitting me. (Participant No. 11)

These findings show that participation in vocational training sessions, credit and savings programs and income-generating activities has also produced a positive impact on the productive role of females and their financial independence. As discussed in section 1.1.1 Women's participation in the labor force was low in Azad Jammu and Kashmir (AJK) before the Kashmir earthquake (UNDP, 2006). This study found that females who were not earning before had been introduced to a number of options for livelihood through training sessions. Most of the women also started earning money by availing themselves of these opportunities, leading to an increase in their income and financial independence. This increase in the number of females participating in income-generating activities might be due in part to the increase in the number of female-headed households because of the death or outmigration of the male heads of the family. As a result, the females were compelled to participate in training sessions and credit and savings programs of Cos in order to be able to earn money for their families.

Another possible reason for the increase in the number of economically active females might be the growing awareness about the importance of women's participation in economic activities, due to the women's interaction with the outsider organizations. These findings do not support those of Bradshaw (2001), who found that the proportion of women in productive activities in Nicaragua declined after Hurricane Mitch both in absolute numbers and relative to men's employment in income-generating activities. This was due to the fact that females had to spend more time on household tasks such as cooking, cleaning and caring for the children and injured, which did not allow them to engage in productive activities.

6.2.2 Impacts on the health and education of female participants

Health is considered an important component of well-being (Miles, 2015). More than half of the female participants (17/21) said that there has been improvement in their health due to their participation in health-related training sessions and workshops which have increased awareness about the importance of caring for health and hygiene. A female health worker explained the improvement:

I have been living here from the beginning.... A lot of mothers used to die during birth and there was no trend of their check-up with doctors. They used to pay little attention to their health and well-being. Most of the females were anemic but they used to feel shy while going to the hospital from here. Now, thanks to Allah... not too many deaths are taking place and women do their regular checkups and they also pay attention to their diet. And that is mostly due to the awareness of the females themselves because of trainings. (Participant No. 12)

About two-third of the participants (35/48) also said that participation in training offered by different NGOs and government organizations has increased their awareness regarding the importance of education. All of the female participants said that education was equally important both for girls and boys. They attributed their awareness to participation in training about the importance of education. As one female participant explained:

If you take my example, I was not very willing to send my daughter to school before the earthquake; I used to think that girls don't have to do jobs, so what is the need of sending them to school? All they need to learn is the household chores. But then after the earthquake, NGOs came here...and we got trainings about the women's rights and the importance of girls' education, that it is equally important to send girls to school just like boys. So I was convinced and I admitted my daughter in school. So, *Mashallah*, a sufficient number of people send their girls for education and more girls are going to school now as compared to before the earthquake. (Participant No. 38)

6.3 Impact on the relational well-being of female participants and their communities

Relational well-being is concerned with the extent to which people are able to engage with others in order to achieve their particular needs and goals (Sumner, 2010). Some of the important impacts of women's participation in disaster recovery on their

relational well-being included the development of an altruistic approach, collective efficacy, group identity, self-management, self-organization and self-reliance, which are discussed in detail below.

6.3.1 Development of altruistic approach

Altruism is important characteristic of resilient individuals (Charney, 2004; Nobel & McGrath, 2012; Southwick, Vythilingam, & Charney, 2005). Altruism requires a focus beyond the self and it is considered to be closely related to resilience (Staub & Vollhardt, 2008). High levels of altruism and prosocial behavior have been documented by researchers at times of natural disasters (Staub & Vollhardt, 2008) and altruism or helping others is also considered to be strongly connected to well-being, health and longevity (Ishinoa, Kamesakab & Muraid, 2012; Post, 2005).

An important finding of this study is that participation in training sessions and the activities of Cos resulted in the development and enhancement of an altruistic approach among the female participants. The exposure of female participants to the sufferings and problems of the other females in their communities compelled the participants to forget their own losses and help the other females by setting up social welfare organizations and charity funds for them. At the time of my interviews, more than half of the female participants (27/31) were or had been involved in some type of voluntary social work. These activities included the start of charity programs for orphans and widows and the opening and running of sewing centers. Some other female participants took part in social mobilization by encouraging poor women to participate in different income-generating and skill development programs. Almost all of these female participants (25/31) stated that they developed altruistic feelings for other community members due to their exposure to the sufferings of other people because of their participation in different recovery activities. One female participant described how members of her Co demonstrated their altruistic feelings by taking part in welfare activities for widows and orphans:

We have worked with an international NGO. Then, after that, we collected our own charity funds and gave packages to the orphan kids. We paid for their school fees and bought uniforms for them and bought books

for them. We also worked for widows and worked with an Islamic relief organization and AJKCDP to give cattle to widows for rearing so that they could earn a living. (Participant No. 27)

A local community leader who was running a sewing center for the local females before the earthquake started it again after the earthquake although she was too busy with her kids. She said that her sewing center totally collapsed during the earthquake but she decided to start it in a temporary shelter for the welfare of the females of her community (please see Figure 4-1 & 4-2). She also started a females' Co and was working as a secretary of that Co. She explained how running the sewing center changed her way of thinking:

In [my] personal life, this was also a change [because of running the sewing center for community welfare] that I should think about someone else as well, apart from my own self. And this feeling compelled me to set up an organization and then register it. And I also started my sewing center again which had been completely destroyed during the earthquake. So my special focus is to work for those people, for those women who do not have any other source of income since they had no skills. So this is a contribution of our organization that females come here and learn different skills here along with their study, like sewing, stitching, cutting, knitting, embroidery, and the like.... And we teach poor girls for free. Then, after learning it, they do the commercial work further as well. Like there is a girl here, so we have taught her for free because she is a widow and now she is further doing commercial work. So in this way she is managing the expenses of her daughters and herself. So this has really brought a big difference in her life. So there are many examples like that and this is also a source of pride for us. (Participant No. 19)

The female participants were able to help others only because they attended training sessions that enhanced their skills and capacities and made them feel more confident about helping their fellow community members. Another participant who was a lady health supervisor shared her experience of saving the life of a young girl due to her training experience:

One of the trainings that I attended for first aid, it has been very beneficial for me since I belong to the health sector. I am proud of one thing that if I had not learned it so maybe a death would have occurred in front of me. What happened was that something got stuck in the mouth of a young girl while her mother was feeding her. She was my relative's child, so I also was present there by chance and they were giving more milk to her. So I stopped them [and said] that now something is stuck in her throat so you should not put anything else in her throat. So I took her to Muzaffarabad in my vehicle, and then in the hospital no one was available to give her first aid. So I gave her the first aid myself.... The people present there said we don't know how to operate these machines. So I operated two, three machines myself. Later on, when the doctor came, he also said that thankfully, you had some knowledge so you saved her. So then I felt satisfied that someone's life has been saved because of me. (Participant No. 15)

The altruistic feelings among the female participants who took part in different recovery activities was a sign of resilience. Similar findings have been reported by Drolet et al. (2015), who found that women in Florida who took part in recovery activities after hurricanes in 2004 and 2005 developed an altruistic approach to their community members and organized as a grassroots group to assist community members who were not proficient in English. Similarly, Ishino, Kamesakab and Muraid (2012) found that Japanese people became more altruistic after the Great East Japan Earthquake, which further improved their well-being.

6.3.2 Collective-efficacy

Sampson et al. (1997) defined collective efficacy as “a composite of mutual trust and shared willingness to work for the common good of a neighborhood” (Norris et al., 2008, pp.142). Collective efficacy is considered an important element of community identity, which in turn is an integral part of community resilience and well-being (Miles, 2015; Sumner, 2010). The completion of water supply and sanitation projects was an important contribution of the females' Cos in their respective communities in Langarpura

and was mentioned during interviews by all 21 of the female participants and six of the nine male participants. The women of Langarpura had been facing serious problems in their everyday lives due to the lack of water supply in their houses. They had to rise early in the morning to fetch potable water from remote springs. They carried the water in pitchers on their heads, which added to their already enormous burden of household chores. The Kashmir earthquake further aggravated this problem for women because the earthquake destroyed most of the fresh water springs and existing water supply pipelines. The most important issue arising immediately after the earthquake was that of water supply and sanitation, which posed a huge challenge to the different stakeholders during the recovery. The women of Langarpura set a new precedent in their communities by completing a number of water supply projects through their females' Cos. The water supply project of Khun Bandi and Langarpura Proper solved the problems of females with respect to domestic water supply (please see Figure 6-3). It also helped in the reconstruction process by providing water for rebuilding homes and contributed to the income of local females by facilitating kitchen gardening (please see Figure 6-4 & 6-5). Since the female participants who were also members of females' Cos were involved in solving the water supply problem by constructing water tanks and pipelines, they developed a sense of collective efficacy because they were able to successfully address their most important problem through their own Cos (please see Figure 6-3). One female participant explained how the women of Langarpura solved their water supply problem:

The females of Langarpura got together and I [head of a females' Co] took the females of my family into confidence and told them that we can never solve this water supply problem on our own, I mean individually. When we will gather at one venue and will raise our voice for one thing then our voice shall be heard.... So if we will raise our voice together then a lot of our problems will get solved. So they all cooperated with me and we set up our own Co to solve our problems. We discussed it with our local support organization [LSO] representatives and they also arranged our meeting with donors. In this way, we also received some financial assistance from an NGO and constructed this water tank here. (Participant No. 13)

The establishment of females' Cos to complete water supply projects was also a manifestation of the collective efficacy of the female participants and their respective communities. In the words of one female participant:

We had such a serious problem with respect to water. We had to fetch water from such a remote canal that we had to stop on our way and put down our pitchers to take some rest before we could reach our home. To wash our clothes, all the females used to go to the canal, carrying their clothes, and they all used to wash their clothes over there. There was no water available here, neither for drinking nor for other uses. So when these organizations came here.... We started having contacts with these organizations. We had several meetings with them and in order to solve our water problem, females made their own organizations.... So we completed a project with TVO [Trust for Voluntary Organizations] and brought water from a remote source in the mountains.... We brought water from there and supplied water with the help of pipelines to everyone's home. So now there is a separate water supply to the kitchen and washrooms. So this is something we feel proud of. (Participant No. 24).

Apart from the non-availability of potable water in Langarpura, there was also a shortage of water for reconstruction purposes after the earthquake. Although Langarpura is located on the bank of River Jhelum, it is located on a river terrace with a steep cliff towards the river which makes it very difficult for the local residents to fetch water from the river to build their houses and other physical infrastructure. The completion of water supply projects by females' Cos also solved this problem by making a sufficient quantity of water available for rebuilding activities, thereby speeding up the overall recovery process. The majority of the participants said that these water supply projects have had a positive impact on the pace of reconstruction, making it possible for people to reconstruct their own houses more quickly. This also contributed to the collective efficacy of the females' Cos since the women were able to solve their problem and start the reconstruction process on the basis of their own skills. As one participant explained:

We really wanted to start the reconstruction of our houses immediately after the earthquake. But there was no water. It was not enough for our domestic uses even...neither for drinking nor for washing clothes. But when we set up our Co, we completed this water supply scheme in our community. We laid pipelines and constructed water tanks.... We females did it with the help of male laborers. Only after that, we had enough water to start the reconstruction of our house. And people started reconstructing their houses immediately after that. It was much easier for them to do that due to this water supply. (Participant No. 11)

Another significant problem caused by the earthquake was the destruction of major roads and bridges due to land sliding which rendered most of the remote, mountainous parts of Langarpura completely disconnected from Langarpura Proper. This made it impossible to carry out relief and rescue activities in the mountainous area. Although the Pakistani Army and government departments rebuilt and opened the main roads within a few months of the earthquake, it was not possible to reconstruct minor roads in Langarpura. Hence, the people of Langarpura faced immense difficulties carrying goods and construction material to their remote villages for survival and to reconstruct their houses. The females' Cos of Langarpura again came forward and completed a number of road reconstruction projects with the financial and technical assistance of different NGOs. These roads linked almost every house in the communities to the main roads, enabling community members to transport to their remote villages, food and other necessary goods as well as construction materials such as cement and iron rods. The females' Cos of Khun Bandi, Langarpura Proper and Dehi Banan were included among the Cos which completed road reconstruction projects in their areas (please see Figure 6-6). The head of females' Co in Khun Bandi told me about the condition of roads after the earthquake:

After the earthquake, there arose the problem of the road. This road linking our village to the main Shahrah-e-Quaid-e-Azam [the main road connecting Union Council Langarpura to the capital of AJK, Muzaffarabad, through a wooden bridge] was completely destroyed during the earthquake. There was so much land sliding. It was just a heap

of gravel and big stones after the earthquake. We had to walk from the bridge to reach our home here. So when we needed construction material, we could not bring it from Muzaffarabad because it was heavy, and the vehicles could not come on this damaged road. (Participant No. 14)

Since it was against the norms of the society of Langarpura for women to supervise road reconstruction and participate in outdoor activities, female participants had to face a number of obstacles while completing the road reconstruction projects. However, the training sessions attended by the female participants gave them an understanding and the confidence to supervise road reconstruction projects. Ultimately, these roads proved an important contribution to the recovery process. Participation in road reconstruction projects also gave the female participants a sense of collective efficacy because they were involved in the decision-making process regarding road reconstruction and completed these projects on their own. They also developed trust in their Cos and their own collective capabilities and strengths, since they were able to complete the road reconstruction projects despite the resistance of some community members. As one participant explained:

We took this issue [of road reconstruction] to our LSo and they agreed to give us this project. They [males] said how will women construct roads? I replied, I will supervise it myself, and I did it. I was standing right there, with the laborers, all the time.... I guided them since I had attended [Earthquake Reconstruction and Rehabilitation Authority] ERRA's trainings and many others. So we hired male laborers and provided them food and tea, turn by turn. Every household used to give it to them. So we completed this project with a cost of 450,000 rupees.... And the males, they first used to laugh at us. But later on, they also joined us and helped us a lot. But the major contribution was that of our own Co." (Participant No. 09)

6.3.3 Group identity, self-management and self-organization as females' Cos

Group identity is another important determinant of relational wellbeing which was developed as a result of women's participation in disaster recovery activities. Tajfel and Turner (1979) proposed a theory of group identity and defined group identity as a person's

sense of self derived from perceived membership in social groups (Chen & Li, 2009). According to this theory, humans have a tendency to identify with some section of their society on the basis of similarities and differences. Tajfel and Turner (1979) proposed that there are three major components of social identity theory: social categorization, social identification, and social comparison. The first component, social categorization, involves allocating different categories or groups to different people, including ourselves. These categories could include males, females, Muslims, non-Muslims and students and teachers. The second component, social identification, refers to the process of relating ourselves with certain groups. The group with which we identify is the “in-group,” while the one with which we do not identify is called the “outgroup” (Chen & Li, 2009). The third component, social comparison, is the process by which we compare our group with others. It usually involves creating a favorable bias toward the group to which we belong (Chen & Li, 2009).

The findings of this study showed that female participants who became members of females’ Cos and participated in the recovery activities through these Cos developed group identity because they associated themselves with these females’ Cos and felt proud to belong. Although the NGOs were encouraging males and females equally to participate in Cos activities, there were more women’s than men’s Cos at the time of my study. Both male and female participants explained that most of the active Cos were Females’ Cos while the males’ Cos had either disintegrated or stopped meeting. The females’ Cos had secured more funding and training opportunities, and completed more recovery projects. A female participant expressed her feelings of group identity:

After the earthquake, several organizations have come here, and I tell you that only females have worked there. There is a road, Jilgaran road, which has been constructed by females’ Cos up there. And do you know who has taken its approval? The females did it. A separate project was run for the road reconstruction and they [female members of Cos] gathered the people and showed them how to run the project. They told the people of their community that the NGO is providing financial support for the reconstruction of this road so we people should also be involved. So you see there has been a change. I mean if we give a bit of freedom to

woman; if we give her a good environment and support her, then I don't see any reason that there will be no development in Langarpura. (Participant No. 19)

Other researchers have reported that women outnumber men in the leadership and membership of emergent grassroots groups working on disaster issues (see, for example, Busapathumrong, 2013; Enarson & Morrow, 1998a, 1998b; Enarson, 2002; Fothergill, 1998; Neal & Philips, 1990). However, the impacts of women's participation on group identity or well-being in general have not been studied by any researcher so far. The successful existence and performance of these Cos has resulted in a continuous increase in the number of and membership in females' Cos, leading to social capital building. Social networks and trust among community members are two important components of social capital. The different types of community organizations working in Langarpura (e.g., family organizations, Cos, village organizations (Vos) and local support organization (LSO) and their relationships with community members are manifestations of the development of social capital. As the number of Cos, Vos and LSO in Langarpura continue to increase, so will social capital.

The completion of water supply and road reconstruction projects by some females' Cos also provided their members with a sense of group identity. The women considered themselves members of active community organizations working for community welfare, which was obvious when they talked proudly about these projects:

This water supply project in our *Muhallah* has been completed by our females' Co here, and we really feel proud that we females have completed it. It was not an easy task at all but, still, we managed to do it. And now the entire *Muhallah* is benefitting from it. We feel it is a great achievement for females who are members of our Cos. (Participant No. 06)

Another female participant expressed her feeling of group identity when she compared the performance of her females' Co to that of other female and males' Cos:

Ours was the first successful female organization in Langarpura; after that the others also followed us and started their own organizations. But our organization really proved itself and now we have 40, 45 members in our organization. Our savings is now more than 200,000 rupees in bank and we are now giving loans as well. (Participant No. 48)

It was also due to the development of this group identity that more than half of the female participants (26/31) felt significant improvement in their life after the earthquake. They felt confident that this improvement was the result of their own efforts. They realized the importance of women working as a group:

I think the lives of females here have really improved after the earthquake. And I will give the credit to the women themselves; we have brought about this change and improvement in our own lives. That is because we didn't do anything at all before the earthquake. (Participant No. 09)

The women's contributions did not end with the completion of these projects: females' Cos were still supervising some of maintenance tasks of these projects while I was doing fieldwork for this study. This was further evidence of self-management in the communities of Langarpura in general and on the part of the females' Co in particular. The role of females' Cos in maintenance and supervision has become a means of a continued presence and a source of recognition in community life. It has enabled females' Cos to take a leading role in Langarpura society. A woman described the role that her Co played in maintaining a water supply system:

Firstly, our females' Co did the construction of water tank.... Today, we have 30, 40 houses here and we get the water supply easily, and we don't have any problem. We have appointed one person for maintenance since the water tank is on a hill and the pipes bring water from there. So when the pipes get damaged because of rain and land sliding, we collect 100 rupees from every house and we give it to the maintenance person. He takes the plumbers to that place and repairs it over

there and then that person opens it and fixes the pipeline so we manage it accordingly. (Participant No. 23)

Self-organization is another important component of community resilience (Berkes & Ross, 2013). Female participants gained discipline and tolerance as members of females' Cos. About half of the female participants (16/31) said that they learned self-organization as a result of training sessions and Cos activities:

There has been considerable change in our life.... We didn't know ... how we can live together in an organized manner. We couldn't even bear each other. So after setting up the organization, it has happened that we have learned how to live with each other and how to sympathize with other community members. (Participant No. 12)

In this manner, working together in Cos helped the women to realize their individual strengths as well as the strength that comes from working in a group. This led to the development of a group identity among the women in the females' Cos as members of efficient women's groups through self-organization and self-management skills. In disaster and community resilience literature, the concept of identity is valued (Berkes, 2007; Kulig et al., 2013; Norris et al., 2008). In Langarpura, this valuable concept was evident in the way the women in females' Cos developed a group identity which contributed to the resilience of female participants and their respective communities.

6.3.4 Self-reliance

Further evidence of the contribution that females' Cos made to the resilience of the local communities was the effective and unprecedented response of these Cos to floods that devastated Langarpura in 2010 and 2011. During the floods, the females' Cos helped local communities by taking part in search and rescue activities and sharing vital information with governing authorities. Their actions helped the authorities to speed up the relief and rescue activities. This strengthened the self-reliance among the respective communities of females' Cos since it showed that they no longer had to depend on government agencies and NGOs to help with disasters. The representative of a government

organization told me how local Cos proved to be a symbol of community resilience after the 2010 floods:

When the flood came in 2010 in Neelam valley, our LSo was established there. Now the government was definitely working over there but when the government went there to support them, the LSo came in front of them. Because if the affected UC [Union Council] where the people had experienced losses could not do anything so the UC in the neighbor, their Cos came over. They set up medical camps, collected funds, they assisted the government in search and rescue activities. (Participant No. 02)

The Cos' effective response to the 2010-2011 floods was possible because the Cos provided updated information about their respective community members. Most of this information was not available through the government organization. The females' Cos felt proud and resourceful that they were able to share information about their communities with the government departments. One female participant told me that her females' Co collected data during the 2010 flood. She described the benefits of that effort:

We keep updating the lists of beneficiaries or the needy people in our communities...and if the government or NGOs need it then we give it to them. So when the flood came in 2010...surveys had to be done. [We had to know] how much is the damage? Now we already had our members sitting in this community and our setup was already made. So there was no need for an outsider organization to collect data and we had this data already. So it really saved their time and they could easily help the deserving families with the help of that data. (Participant No. 23)

Similar findings were reported by Drolet et al. (2015), who found that after the hurricanes of 2004 and 2005, the women in Volusia County, Florida, developed self-reliance and organized as a grassroots group to provide assistance to local people who were not proficient in English. They also prepared lists of all the existing social services agencies in their area for people who needed more help (Drolet et al., 2015).

6.4 Impact on subjective well-being of female participants and their communities

Subjective well-being represents people's evaluations of their lives, both in terms of cognitions (e.g., "My life is satisfying") and feelings (e.g., "My experiences are pleasant and rewarding") (Diener, 2012, p. 590). Important determinants of subjective well-being found in this study include feelings of self-confidence, trust and esteem, the details of which are given below:

6.4.1 Self-confidence

Self-confidence is defined as an individual's belief in his/her ability to perform a task and manage prospective situations (Brown and Westaway, 2011; Liu, & Mishna, 2014). The self-confidence of the female participants was found to be another important element of well-being and resilience that developed as a result of the women's participation in recovery. Two-thirds of the female participants (26/31) said that their involvement in recovery activities enabled them to gain self-confidence. One female participant said:

I was not like this before, you know. I thought I had no special abilities whatsoever. But my interaction with different people in [my] females' Co changed my mind...I believe in my strengths now. I am sure I can do everything that a man can do. I am earning for my family like a male, you see. (Participant No. 24)

Another young female participant said that she gained a lot of self-confidence after working with an NGO and a females' Co:

Previously, I didn't consider myself wise enough. Now I think I am a wise person—wise in the sense that I couldn't talk to anyone before... I used to feel shy. Now it is like I meet every person...and participate willingly in all activities. I do everything. (Participant No. 14)

6.4.2 Development of trust

According to two-thirds of the female participants (24/31), women's unprecedented and increasing participation in local Cos, combined with the Cos' continued existence and

services and positive impacts on life in Langarpura, led to a relationship of trust and confidence between the local people and Cos, particularly the females' Cos. They credited the trust to the good performance of these Cos and the benefits gained by their members and the community as a whole. Due to this trust, the females are taking more interest in the Cos' activities and projects. Also, over time the number of females joining the Cos has increased, as has the total number of Cos. One females' Co member explained the increase this way:

In the beginning, there was some hesitation in females. They didn't trust us. But now the females have seen our performance, and they are coming to join our organization. They come and request me to write their names as a member in the organization. [They say] if you write our name, we will also attend the meetings and take part in the saving scheme. Only yesterday a girl said the same, so I [said to] her... you used to distrust us, [you thought] that we will take away your money and spend it somewhere without your consent. She replied no, that is not true, we believe you now. So I said ok. So now they are admitting it themselves. That is because they have witnessed how we have benefitted from the trainings and the savings and credit schemes. So now they are also convinced and they support us now. (Participant No. 23)

Many female participants said that this trust might be the result of regular contact and interaction that occurs because of the Cos meetings. As one female participant explained:

I think the females' Cos have been more successful and the reason is that females' Cos have a proper system of working.... Like, there are regular meetings every month and once we decide the venue and date, we communicate it to all the members of our Co. So there are regular meetings and in this manner all of the members see each other and they have a contact with each other. So every member comes with some suggestion and then they discuss their problems here and give suggestions as well. So they listen to each other. So if you see, males' organizations had also been

set up but they could not run for long; they were not successful at all. Because, you know, males did not attend the meetings of their Cos and they were not taking it seriously. (Participant No. 48)

These results support the findings of Ganapati (2012), Fukuyama (1995) and Putnam & Feldstein (2003), who reported that participation in social networks provided repeated face-to-face interaction, which helped to build trust and reciprocity among individuals, thereby enabling cooperation for mutual benefit.

Successfully completing different recovery projects earned the females' Cos the trust of the NGOs and government departments. As a result, these Cos were considered to represent the interests of women in Langarpura to conducting community welfare projects in their respective communities. The representative of a government organization said that most of the donors and NGOs now prefer to give their recovery projects to the Cos, further evidence of their trust that the Cos will continue to provide services to ensure community welfare:

Whenever any donor wants to implement its project, even when our own organization brings projects...every possible effort is made that it should not implement these projects themselves. We implement them through LSos just like the Fizza. And the LSos then implement them through Cos and Vos, because their strength, their financial capacity, is being built in this way. They will get money, and since people also trust them [the LSos] more, the outcome of these projects will also be positive and long lasting. Because they have been helping people for more than seven years now. So people have developed trust in them now. (Participant No. 02)

6.4.3 Development of esteem

Self-esteem refers to one's overall evaluation of oneself (Vignoles, 2011). According to Harter (1990) self-esteem is "how one likes, accepts, and respects oneself as a person" (Tam, 2011, pp. 50). Most of the participants expressed feelings of self-esteem and satisfaction due to their financial and physical contributions to their families' recovery.

Participation in income-generating activities and the subsequent financial independence fostered feelings of self-esteem among the female participants who started thinking about themselves as contributors, earners and active members of their families rather than a burden to their male relatives. In the words of a female:

Previously, I used to sit at home the whole day just doing my household chores, but I didn't feel good about it. That only my husband should earn and we should all be dependent on him.... Now I have kept two buffaloes after taking a loan from Co. I sell milk and butter. I now have enough money to pay for some of the household expenses myself. And I really feel proud of my contribution to my family. My husband is also very happy about it. I really think I am doing something for my family rather than being a burden. (Participant No.13)

Esteem is also considered an important attribute that influences community identity (Miles, 2015; Norris et al., 2008). According to Tajfel (1979), the groups with which people identify also become important sources of pride and self-esteem. Since women's self-esteem can strongly influence their perception and attitudes toward their adaptive capacities, it can also have a strong influence on their resilience (Mahmud et al., 2012). These findings coincide with the findings of Moyle, Dollard and Biswas, (2006), who found that participation in women's self-help groups in two northwest Indian villages was positively correlated with collective efficacy, proactive attitudes, self-esteem and self-efficacy, and positive appraisals of self-worth and economic independence (Moyle, Dollard, & Biswas, 2006).

6.5 Conclusion

This chapter showed how, for female participants, involvement in disaster recovery contributed to individual and community resilience. Important indicators of the female participants' resilience included positive well-being, which included impacts on the material, relational and subjective well-being of the female participants themselves as well as their families and communities. For the female participants, important attributes of material well-being resulting from their participation included financial independence due

to skill development and increased livelihood opportunities, and positive impacts on their health and education. Their relational well-being was enhanced because they developed an altruistic approach, collective efficacy, a group identity, self-management, self-organization and self-reliance. Their subjective well-being was improved because they developed self-confidence, trust and self-esteem. All these determinants of well-being contributed to the female participants' individual and community resilience. The community resilience of females' Cos was also tested and confirmed during the floods of 2010-2011, because the Cos played an effective role in relief and rescue activities and collected and disseminated important information about their communities.

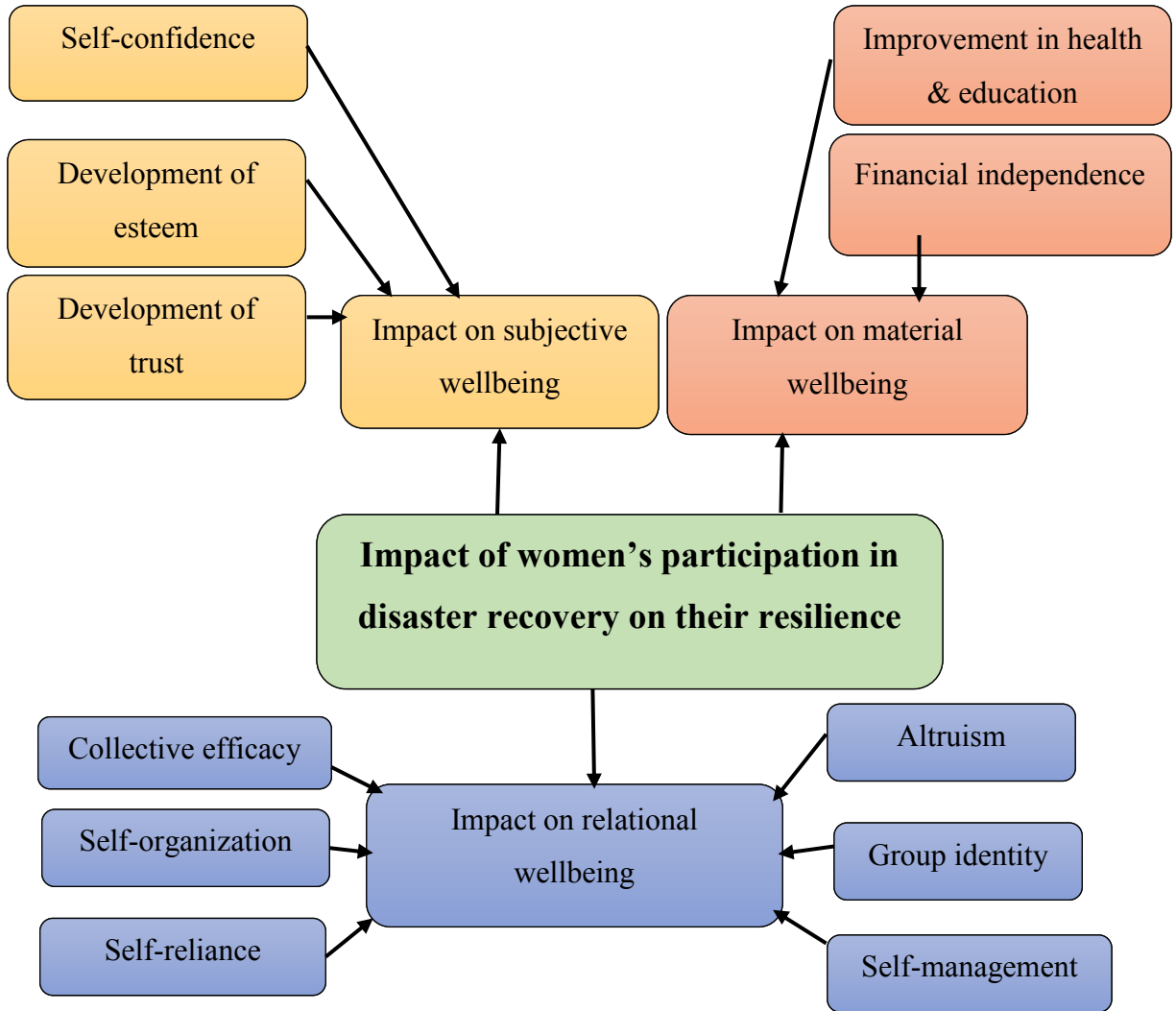


Figure 6-2: Model showing the impacts of participation on the resilience of female participants.



Figure 6-3: A water tank constructed by a local females' Co in Khun Bandi, Langarpura.



Figure 6-4: Kitchen garden and cattle of a female participant in her home.



Figure 6-5: Females used any extra plots in their home for kitchen gardening due to its financial benefits.



Figure 6-6: A road in Khun Bandi, Langarpura which was reconstructed by a local females' Co.

Chapter 7: Impact of Women's Participation in the Recovery on Women's Empowerment

This chapter presents the results related to the way in which participating in disaster recovery impacted women's empowerment. The emergent themes after the final data analysis revealed that participation empowered women in their personal, family and community lives. The unique contribution of this chapter is that it examines how participation in disaster recovery impacted the empowerment of women in the context of the Kashmir earthquake, a topic that until now has not been studied by disaster researchers. This chapter has two sections. The first includes results and discussions related to how participation empowered women in personal and family relationships. The second includes results related to collective empowerment of women.

7.1 Empowerment in personal and family life

Participation is regarded as a human right which requires that poor people are able to take part over a short period of time in a process that strengthens their own abilities and possibilities, allowing for equity and empowerment (Weinberger, 2001). It is important to analyze the empowerment aspect of women's participation in the recovery process (please see section 2.6.2 for details). The objective of this section is to establish and analyze the relationship between women's participation in the recovery process and their empowerment in Langarpura. Hence, in the context of women's participation in the recovery process of Langarpura, empowerment can be defined as the process allowing women to realize their abilities to act and the capacity to influence decisions in their families and society.

Empowerment involves people taking control of their lives by gaining skills, building self-confidence, engaging in decision-making and developing self-reliance (Bari, 1998). According to Rowland (1997), empowerment in the context of personal life and close relationships refers to developing a sense of self and individual confidence and the

capacity to undo the effects of internalized oppression, to negotiate and influence the nature of a relationship and the decisions made within it. Although women are an integral part of the household and take part in all household activities, they are generally in a weaker position than men because their contribution remains invisible and is not recognized (Bradshaw, 2004). The Kashmir earthquake paved the way for significant changes inside the household in Langarpura with respect to women's roles and gender relations (see Figure 7-1). Participation in recovery activities changed the status of the female participants from weaker, invisible members of the family to stronger, prominent and actively contributing. This occurred because the female participants' financial status improved and their knowledge base expanded because of their involvement in training sessions, savings and credit programs, and other recovery activities that enabled them to start new jobs and businesses and contribute to their families' finances. Some important findings related to women's empowerment in their personal and family life are discussed below.

With the exception of five participants, all of the women in this study who were members of female community organization (Cos) had been involved in their Cos' credit and saving programs, which allowed them to first deposit monthly savings and then obtain loans at negligible interest rates. Most of the female participants used their credit for the benefit of their families by either buying cattle and selling milk or starting a business themselves or for their husbands. An unexpected finding was that the female participants' financial contributions to their families' recovery empowered them because those contributions led to positive changes in their relationships with their close family members. Those changes included more control over domestic affairs, increased decision-making power at the household level, and feelings of increased importance, respect and gratitude from family members. Female participants provided a number of examples to illustrate how women helped their families to recover from the impacts of the Kashmir earthquake:

Women have collected 100 rupees out of their daily expenses and then they deposit it with the Co. Later on, they could take out a loan from Cos on the basis of their savings and use it to reconstruct their houses. So many women have done it. Others have used these grants to buy a buffalo. Some women took a loan for a poultry farm. They have kept chicks, etc.,

at home. Some women opened a small shop at the domestic level by taking a loan of 10,000, 5,000, 20, 000, so they have some income from it. They are also helping their families in rebuilding their homes or paying school fees of their kids. So in this way some of them are helping their kids while others are supporting their males. (Participant No. 12)

Similar findings have been reported by Ganapati (2012), who concluded that women were dependent on their parents or husbands before the earthquake of August 17, 1999 in Turkey; however, they became independent after becoming involved in social networks (Ganapati, 2012). An interesting case in my study was that of an adult female who had a minor disability. With the encouragement of her mother, she joined a female community organization (Co) and attended several training sessions, after which she was selected as a trainer herself. She also became involved in different health projects through her Co and she was recently selected as the president of a community organization for women's rights. She was to start her position a few weeks after my fieldwork. Her participation in the recovery empowered her because she gained confidence and financial independence and no longer considered herself a disabled person:

My association with the Co and then my work in the health project has given me an invaluable return. I haven't got that much financial gains but I have gained a lot of confidence. And I don't think that I am a disabled woman anymore. I feel that I can also do whatever other normal people can do. My experience of working in the health recovery projects has been very encouraging and I have learned that if you believe in yourself and get confident, you can do whatever you want. It doesn't matter if you are disabled even.... I feel a big change. I learned a lot. Now I can do anything in my life. I will not face any difficulty if I have any problem in future, so I will handle it in any way. (Participant No. 7)

Another important factor that contributed to the female participants becoming empowered in their families was that some of them took on the role of head of the household after the earthquake. Those participants (4/21) supported their families, thus

gaining more control over their domestic affairs and also becoming more powerful because they were making decisions at the household level. As one such participant told me:

I really feel a change in our family, just like we have changed our positions, my husband and I. Like previously, he used to earn while I used to stay home and eat it. Now it is me who is earning, so that has really brought a change in our life. Like my husband, he didn't consider it important to consult me while deciding about my kids' education or some other important matter of our life. Now, we decide it together. (Participant No. 16)

Both male and female participants agreed that families were recognizing that the women were contributing to their recovery. In particular the men were coming to this realization, leading to a change in gender relations that increased the women's importance in society. In the words of one male participant:

I think men are now recognizing the importance of the women's role in their family and in the overall society. Because, you see, they [the females] are saving money...borrowing money...and they mostly use the loans for their family. And whatever they are earning is also being utilized for the whole family. (Participant No. 18)

Similarly, another female participant said that her contribution to her family's economy has won her respect and appreciation from her family members:

My husband had a small grocery shop which was completely destroyed during the earthquake. We needed money to reconstruct our damaged house and he had no money, no job. So I took a loan from my Co and I opened a shop for him again because he had nothing to do at all. He is running it for the last six years, and he is managing the household expenses with it. But the interesting thing is that the behavior of my children and, particularly, that of my husband has really changed since I have opened this shop for my husband. They now respect me more than

before, particularly my husband. And they are also thankful to me, so I am proud of my contribution. (Participant No. 11)

The participants also said that successful participation in recovery and contributions to family have led to increased mobility for women. Women can now perform both indoor and outdoor activities with more freedom and they can also take part in some non-traditional activities. As one female said:

The females didn't used to go out in our village previously, but now they do go out and participate in every type of work.... Some of them go to the sewing centers and work with sewing machines. But most of them work at home, in fields, etc. and practice kitchen gardening so that they can grow vegetables at home and do savings.... And then some females keep buffalos, etc. and they sell their milk to help in the family's system. And others keep poultry as well. So the uneducated women do this while those who are educated do teaching in schools and go to the city for jobs as well. So they work according to their education level, so now the female has really gone forward. (Participant No. 12)

An unexpected finding reported by all except two participants was a change in gender roles that occurred because the males had started sharing some of the female's responsibilities of child care and caring for the cattle. The men became more involved because they saw how helpful it was for the women to participate in Cos. The women were able to obtain credit and receive vocational training. This encouraged the men to help out so the women could remain involved and continue to reap benefits that helped the entire family. One female participant explained:

Because of females' participation in the recovery activities, there has been a change in the life of the males as well. So you see, males have to take care of their kids and cattle when their females are out to attend the Cos' meeting or training. (Participant No. 12)

Another female participant said:

I always attend the Co meetings with great interest...when it is meeting, I leave my kids with my mother-in-law or husband, whoever is at home. So they take care of my kids and they also give fodder to my cattle. (Participant No. 24)

According to all the female participants and most of the male participants (15/17), women's involvement in reconstructing their houses also led to changes in family dynamics because the responsibility for the design of and material used in the houses shifted from the males to the females. This empowered the females, as they felt more confident on one hand and also won the trust of their male relatives to perform the tasks traditionally considered male tasks. As explained by one female participant who supervised the reconstruction of her house:

I used to supervise the whole process of reconstruction of my house. I did it myself, mostly. One day, [Earthquake Reconstruction and Rehabilitation Authority] ERRA officials came and they found a few problems with our pillars. So when my husband came and I told him that, see, they have told us that these rings are wrong, so he said alright, it is up to you, if you want to take them off, do it. The expense is ours. So I told the masons and they took them out and put all those rings back again. So I meant to say that if I had not learned it through training, I could never understand what was wrong with the rings in the pillars and how it could damage the house in case of another earthquake. And I was there all the time to see the whole process of reconstruction. My husband only had to buy the material. I did the rest of the work with my own supervision. (Participant No. 17)

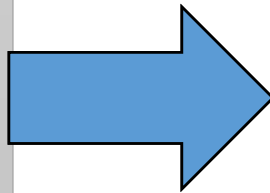
As seen in these quotes, there were many positive changes in gender relations as a result of women's involvement in the recovery process: the men were more cooperative and supportive, they trusted the women's abilities to play an effective role in domestic affairs and also recognized and appreciated women's contributions. In addition, women were also able to work in non-traditional sectors; they saw improvement in their household

management skills and they were able to utilize time efficiently. Women were also determined to move ahead and do more for their families.

Empowerment in Personal and Family Life

Encouraging factors

- Participation in trainings and credit and saving schemes of Cos.
- Participation in community welfare projects NGOs, INGOs & CoS.
- Female taking more interest in the activities of CoS.
- Availability of social support for child care and caring for cattle.
- Taking the role of the head of family.
- Participation in reconstruction of houses.



Changes due to empowerment

- Increased Self-confidence.
- Financial independence and increased livelihood opportunities.
- Financial contribution to the family's economy,
- Changes in gender role and relations.
- Increasing involvement and control over domestic resources and household affairs.
- Changes in family dynamics by winning the trust, respect, recognition & support of males & other family members.
- Increased mobility for females leading to females working in non-traditional sectors.

Figure 7-1: Model showing women's empowerment in personal and family life due to participation in recovery.

The study was conducted seven years after the earthquake and participants seemed confident that the changes that had been made in the immediate aftermath would continue to exist, that there was little chance of men and women reverting to their previous roles. This was due to the fact that although it had been seven years since the earthquake, they still reported changes in gender roles and relations. The women's contributions to their family's recovery, particularly their financial contributions, have shifted their gender identities from passive family members to active and contributing, thereby enhancing their sense of self-worth.

7.2 Collective Empowerment

Collective empowerment refers to “the process whereby individuals work together to achieve a more extensive impact than each could have had alone” (Rowland, 1997, pp.15). Collective action may be locally focused (e.g., groups acting at a village or neighborhood level) or be more institutionalized (e.g., the activities of national networks) (Rowland, 1997). The collective empowerment dimension is very closely related to the personal dimension, since without empowerment at a personal level it is very hard for an individual to be active collectively. Participation in the group may, in turn, feed the process of personal empowerment and vice versa (Rowland, 1997). In this section, I will analyze those elements of empowerment which were experienced and expressed by female participants due to their membership in Cos. (please see Figure 7-2 for a model of collective empowerment.)

The continued presence and good performance of females' Cos in Langarpura contributed to the collective empowerment of women in Langarpura. Some of the contributions of these females' Cos included the successful completion of a variety of different recovery projects including water tank construction, opening a sewing center, laying water supply pipelines and introducing solar geysers. Women were increasingly involved in the decision-making process at the higher level, especially through their representation at meetings with local support organizations (LSos), NGOs and government organizations. Even the male members of the community admitted that more women are involved in the decision-making process at the community level than before. In the words of a male participant:

To tell you the truth, it was not considered important at all before the earthquake to involve women in the decision-making process. Only the males used to be involved and they used to take the decision. But the prominent work that has been done by the community organizations after the earthquake, that is done by females. See, we got the water tanks constructed here. So that is because females have been involved in this whole process of recovery. So the females have played a major role in that. And that is because more female organizations were made at the community level. There will be around 10 organizations in our community and neighborhood right now. They started to give loans. See, a change has come. There is a place, Khari, up there in the mountains. There used to be totally illiterate women who did not know anything. They did not know how to sign. They did not know how to count money. But those females have played such a main role in the recovery that I cannot tell you. So I should rather say that females themselves have taken a lot of interest in the recovery projects. They have reached the organizations themselves and compelled them to involve them [the women] in the decision-making. They have opened the sewing centers plus they have also constructed water tanks. They have laid pipelines. Here in Langarpura, females' Cos have even introduced solar geysers. So the females are far ahead of us, the males. (Participant No. 43)

Due to their increasing involvement and knowledge about disaster preparedness and their positive role in disseminating information, females have also been involved in the community decision-making process about disaster preparedness, which is another beneficial impact of their participation. One female community leader confirmed the above views of the male participants and told me about her active participation in a meeting about disaster preparedness as head of a females' Co:

I have attended quite a few workshops on disaster preparedness as head of my Co. One of them was organized here in Malsi, in which we were told that if there is an earthquake again...what do you have to do?

What things do you have to keep together? How to help the other people? And we had to see that the sickle, pail and the things like that should all be at one specified place, but they said that we will all keep them at a central place which was too far from our village. So we didn't agree to it. We said that if the central place is at a distance of half a kilometer from our home and the earthquake comes.... Who will go running from here to get those tools and bring them here? Till then the people would have died. So I said that from my point of view there should be such a system that at every village level there should be a central place that every person should know about. And if God forbid anything happens so he should be able to figure out that we can get those tools from that particular place. (Participant No. 19)

Women's participation in recovery and their performance of the tasks that are traditionally considered the responsibility of males can change society's perception of their capabilities (Alam & Rahman, 2014). The results of this study support this proposition: more than two-third of the female participants (26/31) agreed that their participation in community organizations aiding the recovery process has inspired a change in gender stereotypes. Females are now considered active and powerful members of their community rather than weak, vulnerable and dependent. In the words of one female participant:

Female has become a factor after the earthquake. She has obtained an importance, even if she has got it to the minimum extent. Still, the importance of the women has been admitted. That woman is also a member of this society. She also thinks. She should also have a share in every important matter. She should also be asked what type of life she wants. How does she want to help us? So I think it is because of the contributions and the achievements of females in Langarpura. Now, every female and every male say that they [females] should move ahead and, more specifically, they should move ahead of what they were before. (Participant No. 12)

Civic consciousness, a form of social consciousness that co-exists with the concept of citizen, mainly refers to the perception of a citizen's qualification or status with equal civic rights and obligations (Huddleston and Kerr, 2006, p. 2). Participation in recovery has enabled the female participants to gain "civic consciousness," making them aware of their rights and obligations as members of their communities and encouraging them to fight for their rights. A female participant explained how women were making efforts to secure basic rights for their female community members and themselves:

There were many workshops and trainings about gender by different NGOs and our own Cos in collaboration with other organizations. So in those workshops they have been telling the females that both males and females are equal partners of life and they are equal parts of the society. Like Allah has created them equal. If a male can do something... the females can also do an equal amount of work and also ...the females are not given their due rights. The trainers explained in a very good manner what the female rights were. The importance of willingness of the girl for her marriage, her right in the property and what are her own personal rights. She has the right to be alive, to eat and to survive, and they also told us that many females who are stuck in problems and they suffer so much, they don't know that they should raise their voice against whom. So we have got awareness for sure, and we are now working with the NGO and we have made a forum for the female rights. That is for females only that they should get awareness, and they should be knowledgeable about their rights. (Participant No. 23)

The female participants have developed civic consciousness and that has enabled them to identify discriminatory practices against women and challenge the existing social norms in Langarpura. Women have become aware of their rights. They also started advocacy movements to protect women's and other social rights in their communities. One outcome of these advocacy movements was the establishment of women's rights organizations for the first time in Langarpura. This further contributed to the collective empowerment of the local females. These organizations started working to protect

women's rights and were successful in their respective communities. In one instance, a husband threw acid on his wife, an incident that in the past would not have commanded any attention and would likely have gone unpunished. But because the local women's right organizations has gained the power to protect women's rights and interests, it ensured that the woman received treatment and that her husband was penalized, as they took up the case with the local law enforcement officials. As explained by one female participant:

Last month in Kori Pathika, a female was burnt with acid by her husband. So this was also a contribution of our female rights organization that she was admitted to the [Combined Military Hospital] CMH, her father had admitted her over there. Her treatment was not going on well. So our own forum took up the case and brought it to the limelight and you can say that they took it to the level of the President and Prime Minister and all her treatment was done for free. And that person [her husband] was not coming under control at that time so we put pressure on the police as well, so he was arrested and fined for 700,000 rupees. And then he was also sent to the jail for seven years.... This was all because of our females' right forum. (Participant No. 24)

Other important example of the successful protection of women's rights by a Co was when a females' Co successfully handled a case of domestic violence:

There was a mishap in our village a few months back. A man had severely beaten his wife and young son and his wife had fainted because of physical torture. So when the members of our females' Co learned about it, we took strict action against it and we called a meeting of the community leaders. That person was brought to the meeting and he had to apologize to his wife and son and also the entire community for his misdeed. He also paid for the treatment of his wife and son and pledged that he will never torture them again. (Participant No. 29)

Similar results have also been reported by Ganapati (2012), who found that participation in emergent women's networks in Turkey helped women gain civic consciousness, thereby allowing them to fight for their rights.

Females' Cos have successfully advocated for education, which is also evidence of their collective empowerment. The head of a local Co told me about a case where a Co confronted a male schoolteacher who had been drawing a salary even though he had been skipping work for 15 years:

We have only one boys' middle school here in our village and there were three male teachers in that school. One of them used to be permanently absent and he didn't come to his duty for the last 15 years although he was receiving his salary regularly.... So our boys were really suffering since the rest of the two teachers could not manage to teach them all the subjects properly.... So we discussed this matter in our monthly Co meeting and decided to take the issue to our local support organization [LSO] level. After discussing it there, we took permission from the LSO and went to the education department to complain about the teacher.... The education department issued a warning to that teacher and ordered him to join his duty within three days, otherwise he was threatened to be terminated. So that teacher joined back his duty and he has been coming regularly since then. We still keep an eye on him and he is really careful now. (Participant No. 14)

This participant said that the feeling of collective empowerment made female participants anticipate more community cooperation and less resistance in the future endeavors of the Co, because the Co had performed well and proven its strength:

Interviewer: Do you think that if you start another scheme in the future, will the people again oppose you or will they let you do it?

Participant: Now they would not oppose us because now all of them are getting water from the water supply scheme that our Co has completed. They are all using it, and then we have a big strength now. We

are 30 females in our Co. I don't think we will have to face their opposition to the extent we did in the beginning. (Participant No. 23)

In this manner, participation in Cos, village organizations (Vos) and the LSo enabled the females to solve their long-existing problems such as water supply, thus giving them a role in the decision-making process at their community, village and union council levels. This not only helped the women of Langarpura to recover from the Kashmir earthquake, it empowered them by making them aware of their rights and giving them the means to obtain those rights. This argument is also supported by the findings of Ganapati (2012), who reported that participation in civic networks empowered women after the earthquake of August 17, 1999 in Turkey. Briceno (2002) also found that before the cyclone in Orissa in 1999, women in India would rarely come out and interact in response to social issues or interact with outsiders. However, this changed after the cyclone since women's involvement and participation in relief and recovery empowered them by enabling them to interact in response to social issues, which enhanced their self-esteem and their status within their families and society (Briceno, 2002).

7.3 Conclusion

The results of this chapter show that participation in the recovery process affected female participants' personal, family and community lives and that most of the impacts of participation were positive. These impacts have contributed to the empowerment of the female participants. An important finding of this study was that economic independence and contributions to family finances have empowered women. As a result, gender roles and relations have changed, leading to increased involvement of women in domestic decision-making and more support and trust from the family, particularly from the males. This has enabled women to enter some non-traditional fields such as working with NGOs. Interaction with other community members, exposure and knowledge gained through participating in Cos and training sessions have also resulted in increased mobility for female participants. The collective empowerment of female participants resulted in their involvement in the decision-making process at the community level. It reduced community members' resistance to women's participation, and led to the development of civic consciousness among female participants and their active involvement in advocacy

movements to challenge discriminatory practices against women. Hence, the Kashmir earthquake has proved to be a window of opportunity for initiating a process of “social transformation” in Langarpura (Delaney & Shrader, 2000). However, this process of empowerment has just begun. A lot of improvement is still needed to establish gender equality in Langarpura.

Collective Empowerment

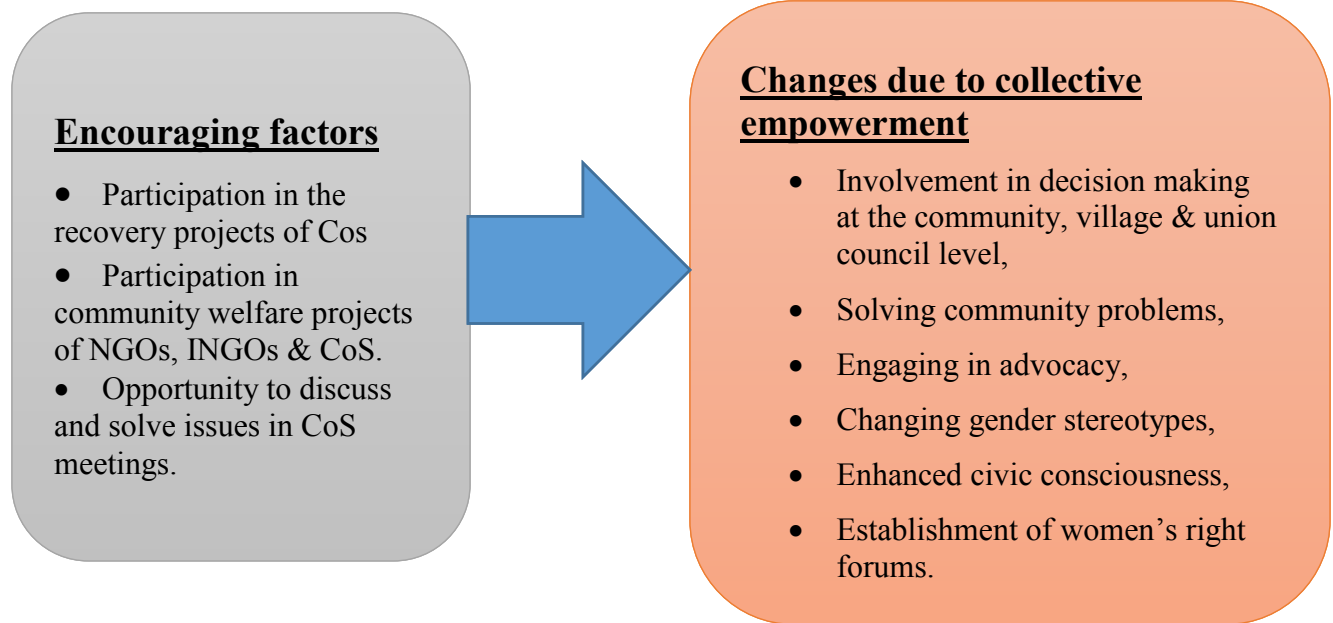


Figure 7-2: Model showing women's collective empowerment due to participation in recovery.

Chapter 8: Conclusion

My study examined women's participation in the recovery process in the rural communities of Union Council Langarpura, Azad Jammu and Kashmir (AJK), and the impact of that participation on the women's lives. The objectives were:

- To analyze how women have participated in the recovery process;
- To identify the factors that influenced women's participation in the recovery process;
- To examine how participation in the process of recovery after the Kashmir earthquake has affected the lives of women in the rural communities of Union Council Langarpura, AJK and;
- To make recommendations for how to involve women in recovery and empower women through the recovery process.

The study results show that women in Langarpura have played very important roles in the recovery including reproductive, productive and community roles. A variety of factors have influenced women's participation in recovery (please see Figure 8.1). These factors included the role of social capital including bonding, bridging and linking social capital, the role of Kashmir earthquake itself, the culture of Langarpura, and the role of social activists. Participation in the recovery process has significantly contributed to the resilience of the female participants and their respective communities through improvement in material, relational and subjective well-being (please see Figure 8.1). Participation also empowered the female participants in their personal, family and community lives. These results show that participation in the recovery process produces significant changes both in the gender identities of females themselves as well as in the perception of communities about the role and importance of women in the recovery process.

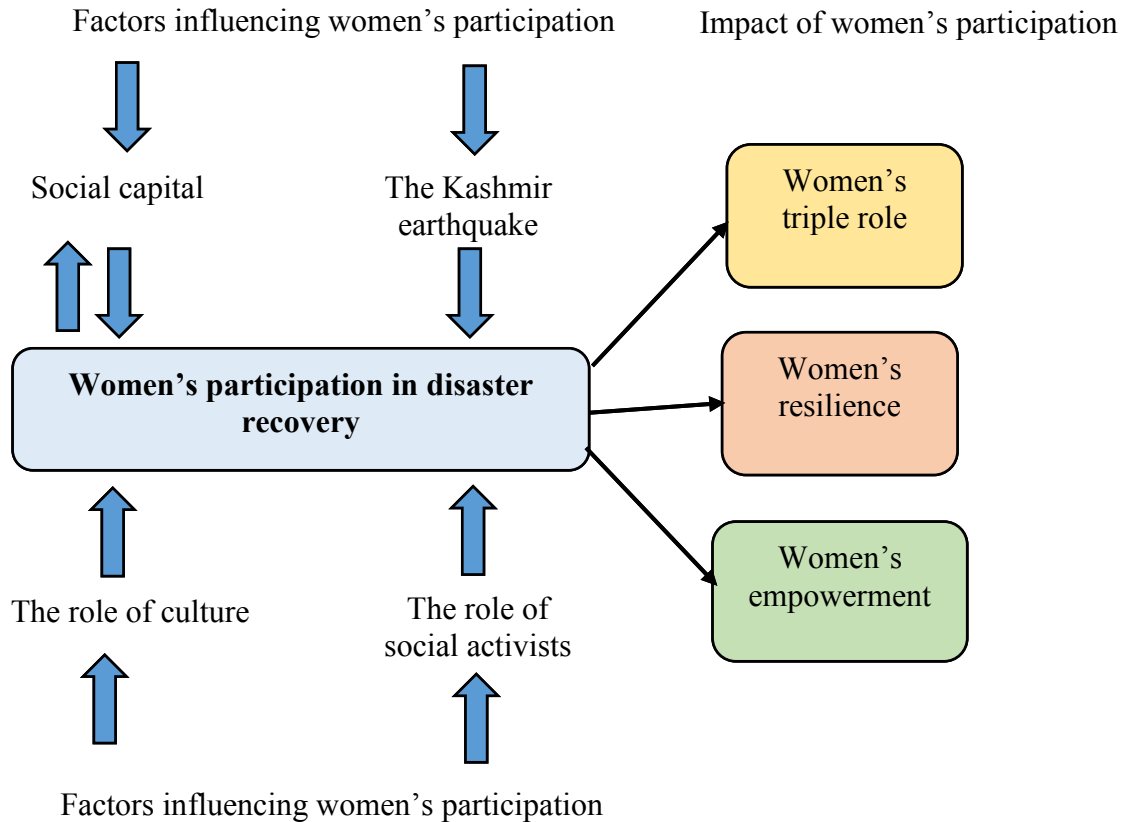


Figure 8-1. Conceptual Model showing the interaction of the major findings of this study.

8.1 Major Contributions

This thesis included the results of a case study based on the examination of women's participation in disaster recovery in a remote area of Pakistan called Union Council Langarpura. Union Council Langarpura is located in the state of Azad Jammu and Kashmir. The results of this study contribute to the field of feminist geography from a disaster perspective. This is the first study to focus on women's participation in disaster recovery in Pakistan, an area of study that has received no attention anywhere in the world. The focus is on the Kashmir earthquake. This is also the first study to focus on women's roles in disaster recovery and analyze these roles in reproductive, productive and community spheres.

The first significant contribution of this study is the identification, analysis, and documentation of factors influencing women's participation in disaster recovery. Although

the need for detailed research on factors facilitating participation in disaster recovery has been underscored in disaster research (see, for example, Chandrasekhar, 2012), little is known about the factors and decision processes that lead to participation or non-participation in disaster recovery (Chandrasekhar, 2012). Among these factors, the role of social activists in encouraging women's participation has also been reported by Drolet et al. (2015). The rest of the factors identified in this study, however, are new and have not been reported by any other study. These factors include the role of the Kashmir earthquake, loose purdah restrictions and the role of social capital.

The second contribution of this study is its finding that participation in recovery contributed to both individual and community resilience (please see Chapter 6), thereby confirming that participation in disaster recovery contributes to making local people resilient in the face of future disasters (Chandrasekhar, 2012; Olshansky, 2006). In this manner, this study answers the call for research to identify factors, characteristics and processes that contribute to the development of individual and community resilience (Luthar and Cicchetti 2000; Buikstra et al. 2010). This study used the three-dimensional model of well-being formulated by Sumner (2010) to describe the impacts of participation in the recovery of women's lives and to establish relationships between different dimensions of well-being and the components of individual and community resilience. Although disaster researchers are increasingly recognizing the need to undertake scholarly research on how disasters affect human well-being and resilience (Armitage et al., 2012; Dominey-Howes, Gorman-Murray & McKinnon, 2013), there have been no detailed and systematic studies focusing specifically on disaster resilience and well-being. To my knowledge, this is the first study using Sumner's three-dimensional model of well-being (2010) to establish the relationship between disaster resilience and well-being. Therefore, a unique contribution of this study is that it introduces the three-dimensional model of well-being (Sumner, 2010) to the field of disaster research and links social well-being to disaster resilience.

The third contribution is the identification of social capital as one of the most important factors encouraging women's participation in recovery, a finding that had not been reported until now. It was found that all three forms of social capital (bonding,

bridging and linking) played an important role in women's participation in recovery (please see section 5.1). Although there have been some propositions regarding the positive role of social networks in mobilizing citizens to participate in recovery decisions (Berke et al., 1993), until now no one had studied in detail the role of social capital in encouraging women's participation in recovery.

Participation and social capital are considered to be interrelated concepts. The participation of different stakeholders in recovery, particularly local people, is considered to build social capital and local resilience, helping people to cope better when disasters do occur (Chandrasekhar, 2012; Claridge, 2004; Ganapati, 2012; Ganapati, 2009; Olshansky, 2006). However, there has been little research on how participation and social capital impact each other (Claridge, 2004). Therefore, the fourth contribution of this study is its new finding that social capital was built as a result of women's participation in recovery, because the number of social networks increased (community organizations (Cos) and village organizations (Vos) in the case of Langarpura) as did membership in the networks. The networks constituted the structural component of social capital (Hooghe & Stolle, 2003), while the cognitive component of social capital, i.e., trust (Hooghe & Stolle, 2003), was also developed as a result of women's participation in disaster recovery (please see section 6.1.4.2 for details). Therefore, this study makes an important contribution to the scant literature about the factors responsible for the formation of social capital (Ganapati, 2012; Ganapati, 2009) by identifying that community participation, particularly women's participation in recovery, can contribute to social capital formation.

The fifth contribution is the new finding that women's participation in recovery leads to women's empowerment. The results of this study show that participation has empowered female participants in Langarpura in all three dimensions including personal, collective and within close relationships. Hence, it can be asserted that the Kashmir earthquake opened a window of opportunity for social transformation in Langarpura through women's participation in disaster recovery which also confirms the proposition of Birkmann et al. (2010), Christoplos (2006), Horton (2012), and Thurairajah (2008). This contribution will help us understand the concept of women's empowerment both as a process for successful and sustainable recovery and as an outcome to improve the position

of women themselves in Pakistani society. Hence, this study contributes to the extremely scarce literature on measures necessary to make Pakistani women less vulnerable to disasters and also enhance their capacities to effectively prepare for, respond to and recover from the adverse impacts of future disasters.

8.2 Policy Implications

The results of this study can be used to evaluate the impacts of disaster recovery projects of governmental and non-governmental organizations, particularly those focusing on women in Langarpura, in Pakistan, and internationally. In this manner, governmental authorities can improve disaster recovery projects initiated by the same or other organizations when future disasters occur in Langarpura. This will increase the potential for maximum benefit to the lives of the marginalized sections of the affected population, particularly women. For this purpose, the results of this study shall be shared, in separate presentations, with governmental and non-governmental organizations and with community members (please see Section 3.8 for details).

The finding that social capital played a key role in encouraging women's participation in disaster recovery has important policy implications. Governmental organizations and non-governmental organizations (NGOs) working in other disaster-stricken areas of AJK, Pakistan and internationally can use this finding to support the development of policies encouraging the formation and strengthening of social networks in the form of family, neighborhood, village and community-based organizations. Policies should also be devised to involve social networks in disaster recovery projects through community-based recovery since community-based recovery will encourage women's participation and help foster more effective, equitable and gendered disaster recovery. Besides, keeping in view the importance of social capital for disaster resilience, it is important to develop and implement policies encouraging active community participation, particularly, women's participation in disaster recovery. These policies should be implemented in areas where social capital and resilience are needed.

The findings of this study also imply that aid organizations can increase women's involvement in recovery after a disaster by designing and implementing their projects in a

manner which is culturally acceptable to the local communities. In this regard, as the results of this study revealed, the role of social activists can be very influential because social activists can act as a bridge between the local people and aid organizations. They can establish a relationship of trust between the aid organizations and local people and help convince the local people to allow their females to participate in recovery.

The results of this study with respect to the resilience and empowerment of women in Langarpura also have important policy implications as they can be used to identify factors encouraging or hindering women's empowerment and resilience in AJK, Pakistan and internationally. Particularly, the fact that participation greatly contributed to the resilience for the female participants indicates that in order to enhance women's resilience, it is necessary to implement programs and policies that promote active participation of women and their equal rights in disaster management (Miles, 2015). In this context, the results of this study revealed that there is a strong link between the impacts of women's participation in recovery and their well-being and resilience. The concepts of resilience and well-being are increasingly being discussed in various policy arenas and are also being included as basic components in new policy frameworks in a growing number of countries including the United Kingdom, Canada, France and Sweden (Armitage et al., 2012). This brings us to another policy implication of the results of this study: that elements contributing to the material, relational and subjective dimensions of well-being can be used as a criteria to improve the resilience of disaster-affected communities. For this purpose, as this study identified, active community participation is an indispensable means of enhancing community and individual well-being, thereby adding to community and individual resilience. Hence, the results of this study imply that active community participation, particularly women's participation in post-disaster recovery, can be used as an effective measure of operationalizing resilience in disaster-affected communities by targeting the material, relational and subjective dimensions of community well-being.

The results of this study also have important policy implications for disaster management at the national level in Pakistan. The National Disaster Management Authority (NDMA) should develop and implement policies encouraging the involvement of local communities, particularly women in disaster recovery. This can be done by

encouraging the establishment of both male and female community organizations in disaster-prone communities and allowing the active involvement of these community organizations in disaster recovery programs implemented or supervised by NDMA. Another strategy of involving women in recovery would be to ensure that NGOs and other aid organizations working in disaster affected communities give equal priorities to women in their projects through gender-inclusive and gender-specific programs and incentives. Training sessions can also be arranged with the local people to raise awareness among them regarding the importance of women participation in recovery. All these measures would highly facilitate the government of Pakistan to meet the objectives of the Sendai Framework for Disaster Risk Reduction. Specifically, the priority four of Sendai Framework emphasizes the need to empower women through their involvement in disaster recovery in order to utilize this window of opportunity for building back better thereby creating disaster resilient communities (United Nations, 2015).

The fact that women's participation in recovery in Langarpura empowered them suggests that government authorities and NGOs should actively involve women in post-disaster activities, as such empowerment leads to social transformation. In this manner, the post-disaster phase can be effectively utilized not only to facilitate sustainable and gendered disaster response and recovery, but to provide a window of opportunity for long-term women's empowerment and resilience, paving the way for social transformation.

8.3 Future Research Directions

A common critique of case study research is that its findings are not generalizable. However, in contrast to quantitative studies that aim for statistical generalizations, the findings of case study research can be used for analytical generalization, i.e., from specific "result" to broader "theory." This theory can then be tested in other contexts for the external validity of the results (Chandrasekhar, 2012). There is a strong need to replicate similar studies in other parts of Pakistan as well as internationally, in a variety of post-disaster contexts, in order to test and validate the findings of this study and facilitate analytical generalization and theory building. Specifically, further studies need to be conducted to examine the role of women in reproductive, productive and community spheres in the post-disaster recovery process in other areas of Pakistan as well as internationally. More studies

should be completed in other countries to examine factors that influence women's participation in disaster recovery. More research needs to be conducted to identify other factors that influence the formation of social capital in different post-disaster scenarios in various parts of the world. Studies related to the influence of culture, particularly purdah restrictions on women's participation in recovery, should also be conducted in other areas.

Another potential study can focus on the differences between recovery of those areas in AJK, Pakistan and other parts of the world where there was more women's participation in recovery activities and those areas where women had little or no participation. Such a study will help us understand whether the same factors influence women's participation in disaster recovery in other areas of AJK and Pakistan. Such a study will also help us compare the impacts of women's participation on the recovery and reconstruction process and highlight the importance of women's contributions to the recovery of their respective communities in different regional and disaster contexts. It will also help us understand the relationship between community participation and the successful and timely completion of some recovery projects and the failure or delay of others.

Another important area of study is whether and how women's participation in disaster recovery contributes to their resilience in other disasters in different parts of Pakistan and globally. Particularly, the findings of this study with respect to women's resilience and the resilience model devised in this study could be used as a basis to further analyze the impact of women's participation on their well-being and resilience in different post-disaster contexts internationally. The results of such studies will enhance our understanding of the concepts of public participation, well-being and disaster resilience and also help establish and further analyze the relationship between these contexts. Studies also need to be carried out to identify other factors influencing the determinants of well-being and resilience in the post-disaster context. Such studies can help the governments in disaster-affected countries to achieve the goals of the Sendai Framework for Disaster Risk Reduction (2015), which emphasize the need to learn from recovery and reconstruction programs in an attempt to increase resilience to disasters (Sword-Daniels et al., 2015).

Women's empowerment is often considered an important aim of disaster risk reduction programs since disasters are considered to provide a "window of opportunity" for social transformation by changing gender roles and relations. Another direction for future studies can be to identify what other factors empower women in addition to their active participation in disaster recovery. For example, studies can be conducted on the impact of disaster recovery projects of NGOs and governments on women's empowerment in Pakistan and internationally. Identifying the factors that lead to women's empowerment can help make post-disaster recovery a window of opportunity for empowering women and social transformation.

8.4 Final Words

The long-term recovery process after the Kashmir earthquake is still going on in Langarpura, although most of the organizations have now left the disaster-affected areas. Since physical reconstruction has been completed in most areas, the remaining organizations are now focusing on social recovery through community participation. Some of the NGOs and government organizations such as the Agha Khan Rural Support Program (AJKRSP) are still interacting with communities to encourage the establishment and work of various types of community organizations including Cos, Vos, and local support organizations (LSos). In an interaction with the representative of a government organization and a local community welfare organization in August 2018, I learned that females' Cos are still successfully operating in Langarpura and these Cos have also started many other recovery and community welfare projects. It is also interesting that the Fizza Organization has recently removed its male president and elected a female to replace him. Being the first female president of a local support organization (LSo) in any Union Council in Langarpura, this woman is a symbol of social transformation and a source of inspiration for many other women in the area. A very promising outcome of this social transformation is that females have also started taking part in political activities and for the first time in the history of Langarpura, two females are preparing to run for the upcoming local government's elections, an initiative that will lead to radical changes in Langarpura and open new avenues of development and progress for women.

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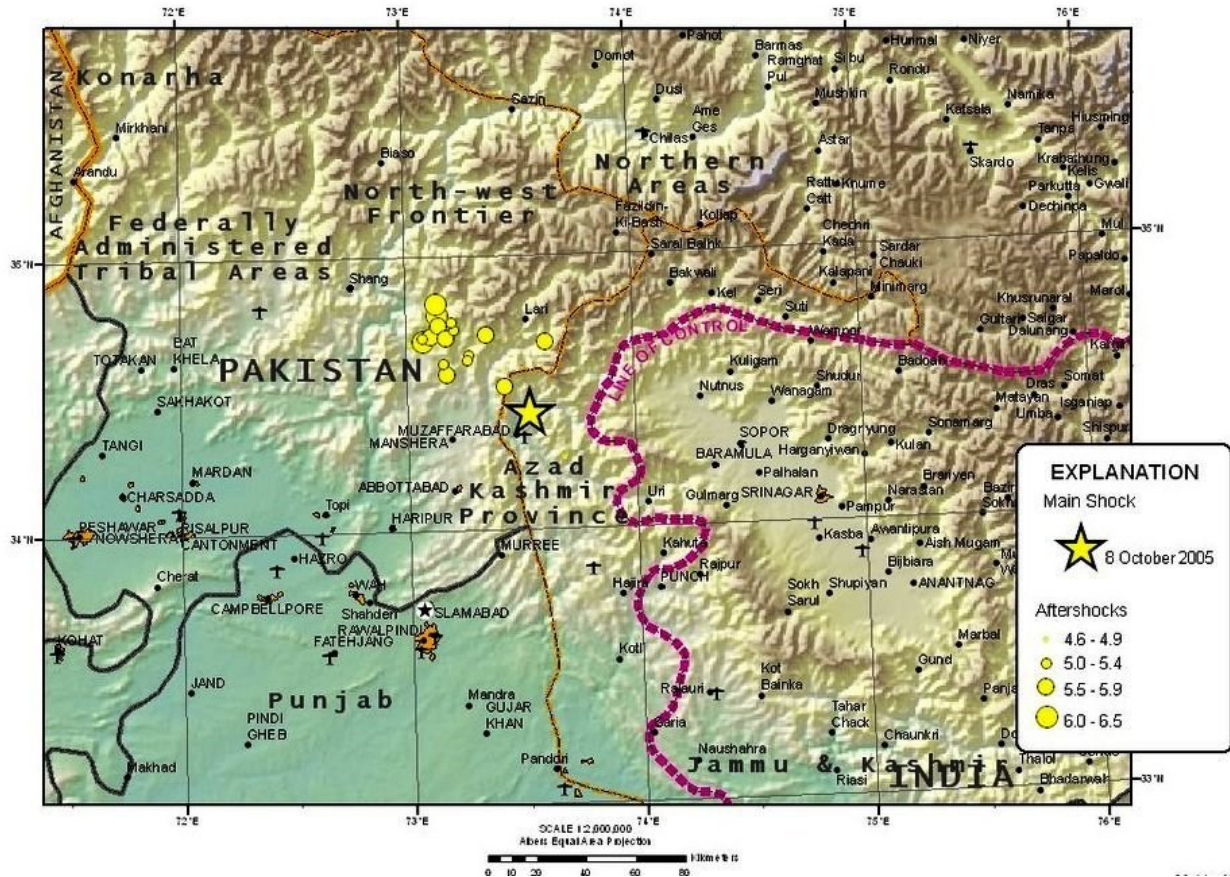
Appendices

Appendix 1: Economic Cost of the Kashmir Earthquake (WB-ADB, 2005)

Category	US \$ M
Relief	1,092
Death and Injury Compensation	205
Early Recovery	301
Restoration of Livelihoods	97
Reconstruction	3,503
Total	5,198

Appendix 2: Location and aftershocks of the Kashmir Earthquake

M7.6 Northern Pakistan Earthquake of 8 October 2005



Source: United States Geological Survey (USGS). <http://quake.usgs.gov>

Appendix 3:.Focus Group Guide

- The status of women in the community and their problems before the Kashmir earthquake particularly, with respect to access to education, livelihood opportunities, freedom of participation in vocational trainings and earning activities and participation in decision-making process.
- Any changes in women's situation after the Kashmir earthquake with respect to education, health, employment and participation in decision-making process.
- Views about the various recovery projects, their importance and impacts on the community. A comparison of the different projects and how successful these projects were.
- How the community members, particularly women have participated in the recovery process? The nature of their participation, their role in the recovery and the particular sectors in which they were involved (e.g. projects focusing on the recovery of education sector, health or the reconstruction of infrastructure). The attitude of men toward women's participation in the recovery.
- The impacts of participation in the recovery process on their community the significance of these impacts and whether these impacts and changes are positive or negative.
- Any problems the female members of the community are facing now and suggestions for their solution.

Appendix 4: Interview guide for interviews with key informants

- Describe your role in this NGO and for how many years have you been working with this NGO.
- Describe your experiences during the Kashmir earthquake as part of this NGO.
- Are there groups of people who suffered more than others because of the Kashmir earthquake?
- Please tell me in detail about your NGO's projects which have been/ are being conducted in this union council to help the community to recover from the Kashmir earthquake.
- What is your perspective on women's involvement in the recovery projects?
- What were the techniques you used to encourage women to participate in your projects?
- What difficulties did your NGO face in involving women in your projects?
- How did your NGO overcome those difficulties?
- What was the reaction of the community toward your initiative of involving women in your projects? (Follow-up questions e.g. reaction of male community members).
- Which factors contributed to encouraging women to participate in recovery projects?
- What is your opinion about the impact of women's participation in the recovery on the community as a whole?

Appendix 5: Interview guide for interviews with the community members

- Which rural community do you belong to? (Age and duration of residence in the community).
- The experience of the Kashmir earthquake: for the community, for the participants and their family.
- Who helped you to start recovering from the impacts of earthquakes? Were you consulted/involved in any project during the relief or recovery phase? (How were you involved, and who encouraged or decided about your participation/involvement? What was the reaction of your family, particularly males?)
- Did you get any training during any recovery project? (Follow-up questions e.g. the reason for not getting any training, if trained the purpose and agency of the training, the reaction of family, particularly males).
- How was your experience of training? (Follow-ups e.g. were you trained by men or women? Was there any part of the training which was problematic for you? Was any part of the training too short or too long? Did you have any problems in your interaction with the trainers? Was the training helpful? Why or why not? How did you utilize your training?).
- Did your participation in training and its utilization bring about any changes in your life? (Follow up: What are these changes? Are they short or long-term? Positive or negative? What has been the response of husband/male heads of the family and neighbors to these changes?)
- How are you involved with the community and women's organizations in your community? How do you feel about their role in the recovery? What is their contribution in women empowerment?
- What are the other ways that you have participated in the recovery process? Describe your experience of participating in the recovery. Which factors facilitated your participation in the recovery? What were the challenges/barriers to your participation in the recovery process?
- Are you satisfied with the present role of women in the recovery in your community? Is there anything that you think should be changed?

Appendix 6: Information letter for interviews.

Department of Earth & Atmospheric Sciences

IMPACT OF WOMEN'S PARTICIPATION IN DISASTER RECOVERY ON THEIR LIVES. A CASE STUDY FROM PAKISTAN

August, 2012.

Dear residents of the Union Council Langarpura:

I would like to interview you to learn about your experience and perspectives regarding the participation of women in the recovery process after the Kashmir earthquake in your union council and the impact of this participation on their personal and community life. This interview will provide me valuable information which will be used for my PhD study on the impact of women's participation in disaster recovery on their lives. I plan to conduct a total of 30 interviews for this study and the results of your interviews will be combined with those of the interviews from other participants for the final analysis and writing of a PhD thesis. I am the principal investigator in this study while this study is being supervised by Dr. Tara McGee. My general findings from this study will be shared with the community in a formal presentation at the end of my study while another presentation will be given to government departments and local and international NGOs helping in recovery in Langarpura. A copy of the data collected in Langarpura shall be kept with Dr. Tara McGee at the University of Alberta, Edmonton, Canada.

Your participation is voluntary and any information you provide during interview will be treated confidentially by me, my research assistants and my supervisor Dr. Tara McGee. The interview may take 1-2 hours to complete. No personal information will be given out with the study's final results. You may decline to answer any questions during the interview. The only possible risk associated with this study is that participants may feel emotional discomfort while discussing their sufferings during the Kashmir earthquake. Information you provide will only be handled by me, my research assistants or Dr. McGee. To ensure confidentiality of the information collected during the interviews, data will be secured in a locked cabinet and only I will have access to it. I will also encrypt the data files in my laptop that contain the data collected for this study. Information will be kept for more than ten years after the completion of my research so that I might be able to conduct follow-up studies in future. However, upon your oral or verbal request sent to me before the final analysis, your information will be removed from this study.

At the beginning of the interview, I will explain the purpose of my study and then I will ask for your written or oral consent to use the information you provide during the interview. I will make an audio recording of your oral consent and of your conversation during the interview. These recordings will be transcribed by me and the transcript will only have your initials and date of interview as its title. I will share this transcript with Dr. McGee. You can ask for a summary of your interview transcript to check it for accuracy and you can also request for a one-on-one meeting to discuss it with me. Please tick the related box in your informed consent form or inform me before starting the interview if

you want the summary and second meeting. Your contact information will be stored separately at a secure location from the information you provide me in the interview.

Questions that may be asked at the interview will be based on an interview guide and may include:

- Your experience of the Kashmir earthquake and that of your family and community.
- Details about your involvement in recovery from the Kashmir earthquake.
- Details about the impact of your participation in the recovery projects on your personal and community life.
- How are you involved with the community and women's organizations in your community?
- Any challenges you faced while participating in recovery projects.

Any questions you may have about this study may be directed to Shehla Gul at telephone number 780-901-3195 & 92-334-9065230 (email sgul@ualberta.ca). Questions about your rights as a research participant may be directed to the University of Alberta Research Ethics Office at telephone number (780) 492-2615. Comments and questions about this interview process as part of my PhD program can be directed to my supervisor, Dr. Tara McGee at the University of Alberta (780-492-3042, Email: tmcgee@ualberta.ca).

Shehla Gul, Principal Investigator and Graduate Student

Department of Earth & Atmospheric Sciences. 1-26 Earth Science Building

University of Alberta, Edmonton, Alberta, Canada. T6G2E3

Appendix 7: Informed Consent Form

Informed consent form for the case study on the impacts of women's participation in disaster recovery on their lives, Langarpura, AJK, Pakistan.

Principal Investigator: Shehla Gul, PhD student, Department of Earth & Atmospheric Sciences, University of Alberta. Tel: 780-901-3195(Canada) & 92-334-9065230(Pakistan). email:sgul@ualberta.ca.

- Do you understand that you have been asked to participate in a PhD research study?

Yes/No

- Have you received and read a copy of the attached Information Letter about this study? Yes/No

- Do you understand the benefits and risks involved in participating in this research study? Yes/No

- Were you given an opportunity to ask questions about this study?

Yes/No

- Do you understand that you are free to refuse to participate, or to withdraw from the study at any time, without penalty, and that your information will be withdrawn at your request? Yes/No

- Would you like to have a second one-on-one meeting with me to discuss the preliminary results of your interview? Yes/No

This study was explained to me by the principal investigator: **Shehla Gul**

I agree to take part in this study:

Signature of Research Participant

Date: _____

Printed Name

I believe that the person signing this form understands the risks and benefits of taking part in this study and voluntarily agrees to participate.

Signature of Principal Investigator

Date:

If you have any questions about this study you can contact Shehla Gul at telephone number 780-901-3195 in Canada and 92-334-9065230 in Pakistan. Questions about your rights as a research participant may be directed to the University of Alberta Research Ethics Office at telephone number (780) 492-2615.

Appendix 8: Ethics approval, August 29, 2012

Notification of Approval

Date: August 29, 2012

Study ID: Pro00028827

Principal Investigator: Shehla Gul

Study Supervisor: Tara McGee

Study Title: Impact of women's participation in disaster recovery on their lives. A case study from Pakistan

Approval Expiry Date: August 28, 2013

Approved Consent Form:

Approval Date

Approved Document

8/29/2012

INFORMED CONSENT FORM

Sponsor/Funding Agency: University of Peshawar, KPK, Pakistan

Thank you for submitting the above study to the Research Ethics Board 1. Your application has been reviewed and approved on behalf of the committee.

A renewal report must be submitted next year prior to the expiry of this approval if your study still requires ethics approval. If you do not renew on or before the renewal expiry date, you will have to re-submit an ethics application.

Approval by the Research Ethics Board does not encompass authorization to access the staff, students, facilities or resources of local institutions for the purposes of the research.

Sincerely,

Dr. William Dunn, PhD
Chair, Research Ethics Board 1

Note: This correspondence includes an electronic signature (validation and approval via an online system).

Appendix 9: Ethics approval, August 20, 2013

Notification of Approval (Renewal)

Date: August 20, 2013

Amendment ID: Pro00028827_REN1

Principal Investigator: Shehla Gul

Study ID: MS1_Pro00028827

Study Title: Impact of women's participation in disaster recovery on their lives.
A case study from Pakistan

Supervisor: Tara McGee

Sponsor/Funding Agency: University of Peshawar, KPK, Pakistan

Approved Consent Form:	Approval Date	Approved Document
	29/08/2012	INFORMED CONSENT FORM

Approval Expiry Date: August 19, 2014

Thank you for submitting this renewal application. Your application has been reviewed and approved.

This re-approval is valid for one year. If your study continues past the expiration date as noted above, you will be required to complete another renewal request. Beginning at 30 days prior to the expiration date, you will receive notices that the study is about to expire. If you do not renew on or before the renewal expiry date, you will have to re-submit an ethics application.

Sincerely,

Dr. William Dunn

Chair, Research Ethics Board 1

Note: This correspondence includes an electronic signature (validation and approval via an online system).

Appendix 10: Ethics approval, August 13, 2014

Notification of Approval (Renewal)

Date: August 13, 2014

Amendment ID: Pro00028827_REN2

Principal Investigator: [Shehla Gul](#)

Study ID: Pro00028827

Study Title: Impact of women's participation in disaster recovery on their lives.
A case study from Pakistan

Supervisor: [Tara McGee](#)

Sponsor/Funding Agency: University of Peshawar, KPK, Pakistan

Approved Consent Form	Approval Date	Approved Document
	29/08/2012	INFORMED CONSENT FORM

Approval Expiry Date: August 18, 2015

Thank you for submitting this renewal application. Your application has been reviewed and approved.

This re-approval is valid for one year. If your study continues past the expiration date as noted above, you will be required to complete another renewal request. Beginning at 30 days prior to the expiration date, you will receive notices that the study is about to expire. If you do not renew on or before the renewal expiry date, you will have to re-submit an ethics application.

Sincerely,

William Dunn, PhD
Chair, Research Ethics Board 1

Note: This correspondence includes an electronic signature (validation and approval via an online system).

Appendix 11: Ethics approval, August 11, 2015

Notification of Approval (Renewal)

Date: August 11, 2015

Amendment ID: Pro00028827_REN3

Principal Investigator: Shehla Gul

Study ID: Pro00028827

Study Title: Impact of women's participation in disaster recovery on their lives.
A case study from Pakistan

Supervisor: Tara McGee

Sponsor/Funding Agency: University of Peshawar, KPK, Pakistan

Approved Consent
Form:

Approval Date	Approved Document
8/29/2012	INFORMED CONSENT FORM

Approval Expiry Date: Wednesday, August 10, 2016

Thank you for submitting this renewal application. Your application has been reviewed and approved.

This re-approval is valid for one year. If your study continues past the expiration date as noted above, you will be required to complete another renewal request. Beginning at 30 days prior to the expiration date, you will receive notices that the study is about to expire. If you do not renew on or before the renewal expiry date, you will have to re-submit an ethics application.

Sincerely,

Anne Malena, PhD
Chair, Research Ethics Board 1

Note: This correspondence includes an electronic signature (validation and approval via an online system).