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Kyoto University
Understanding Women's Vulnerability Factors to Natural Hazards in Afghanistan

Marina HAMIDZADA and Ana Maria CRUZ

Synopsis

Disaster management is a global challenge. However, women and men are not affected equally by disasters due to unequal opportunities in disaster management. A review of relevant academic literature shows that women become more vulnerable than men during disasters. This study tried to understand the barriers and factors which make Afghan women more vulnerable to natural disasters through the use of Focused Group Discussions (FGD). Data collection for this study includes a literature review, analysis of disaster statistics from the Afghan National Disaster Management Authority (ANDMA), interviews with non-Government Organizations (NGOs) and government officials, and a series of focus group discussions with men and women. The main findings from this study show that the contributing factors to vulnerability are lack of education, health facilities for women, insecurity and the socio-economic structures. Generally low education level and no income and traditional roles of women at home are the main factors that make Afghan women more vulnerable in disasters.

Keywords: Women in Disasters, women’s role in Disaster Management, Focused Group Discussions

1. Introduction

Disaster management is a global challenge. However, women and men are not affected equally by disasters due to unequal opportunities in disaster management education based on gender stratification in male-dominant societies (Ozden, Ozer, Naside, Isik, 2015; Eric Neumayer, Thomas Plümper 2007). Lack of inclusion of women in disaster management and decision making is a bigger challenge in developing countries. The recent United Nations global conferences on development, including UNISDR as well as regional preparatory conferences for the Fourth World Conference on Women, have all acknowledged that sustainable development policies that do not involve women and men equally, will not succeed in the long run (Women and Environment, Beijing platform, UNWOMEN 2014). Afghanistan is a landlocked country to which according to ANDMA (2007) natural disasters like earthquake, flooding, landslides, and drought usually affect 80% of the population. Afghanistan is located in a zone of high-seismic activity. 70% of the territory is at risk of earthquakes. Figure 1 is showing all natural hazards in Afghanistan which affect most of the country. Extreme winter conditions and avalanches affect about 63% of the country. Flooding and mudslides are common particularly in the spring when the snow starts melting.
From 1954 to 2006, the country has experienced 118 large-scale disasters (UNDP, NDMP Report 2010), with a total number of 22,000 fatalities estimated and around 11 million people affected. In recent decades, natural disasters and conflict have resulted in huge problems of food insecurity and population migration from the worst hit areas. With almost three decades of conflict, the vulnerability of the people has been heightened. According to UNDP HDR report, Afghanistan ranks among the lowest in the world in human development (173 of 177 countries) and human poverty indices (3-poorest). Thus, poverty and human deprivation are predictably experienced by the majority of the population. Women and children, particularly young girls, are disproportionately affected by disasters. Wakefield (2005) found that widespread poverty, overall insecurity, and harmful traditional practices affect women disproportionately. According to the author this also seriously limits their access to services, opportunities, and resources that are needed for the full development of their human potential and exercise of their rights. One of the main sectors which is affected by existing traditions and insecurity is education. Due to lack of female teachers and bad security, most of the girls cannot go to school and thus they are marginalized from all decision making and key activities. According to IOM (acronym description) survey, the number of women victims of disasters in Afghanistan are usually higher than male victims. Furthermore, their survey found that most of the female victims are between 18-59 years old. Differences between urban and rural areas are notable, see Figure 2.

According to National Action Plan for Women of Afghanistan (NAPWA 2007), Afghan women have one of the lowest literacy rates in the world and the worst disparity with men. The literacy rate of Afghans between 15-24 years old is 34% and can be broken down into 50% literacy for men and only 18% for women.

Disaster risk is widely recognized as the consequence of the interaction between a hazard and the characteristics that make people and places vulnerable and exposed. Identifying, assessing and understanding disaster risk, in particular, understanding why women are more vulnerable is critical to reducing it. The relationship between hazard, exposure and vulnerability is shown in Figure 3.

**Fig. 1** Afghanistan hazard map
Source: Afghanistan National Disaster Management Plan 2010

**Fig. 2** Number of disaster victims by gender in Kabul and Mazar.

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**Fig. 3** Relationship between hazard, exposure and vulnerability
Source:“Kyoto University, HSE 2017”

2. Objective:
The main objective of this study is to better understand the barriers and factors which make Afghan women more vulnerable to natural disasters through the use of Focused Group Discussions (FGD). The main aim is to understand the needs of women survivors (i.e. disasters victims) and the consequences of disasters for them. Furthermore, the study will help us to better understand the possible threats, challenges, and opportunities for planning the prevention and mitigation engendered policy for Afghanistan.

3. Background

A review of relevant academic literature shows that women become more vulnerable than men during disasters (WHO, 2011; Erikson, 2014; Enarson, 1998; UNISDR, 2009) and this vulnerability arises from disaster itself, as well as from other factors and conditions that originate from women’s general position in society (plan international, 2013; Dominique Reyes and Leilanie Lu, 2015).

Women have often played leadership roles or taken the lead in promoting environmental decisions, particularly powerful role in influencing sustainable consumption decisions (Beijing Declaration and platform for action, fourth world conference on women). Women's participation and leadership are essential to every aspect of that approach.

Data from recent disasters around the globe shows that the number of female victims in natural disasters are twice than male victims. Enarson in 2005 in a study on the Aceh, Indonesia earthquake, showed that the number of female victims is two times more than the number of male victims. According to another study by plan international in 2013, women and children are 14 times more likely to die in a disaster situation specially in patriarchal belief societies, and it has also been observed in many cases in developing countries.

Vulnerability occurs when there is differential access to resources due to economic, social, geographic, demographic, cultural, institutional, governance and environmental factors (Birkman, 2006; Reyes and Lu, 2015). According to several studies, there are some main causes or issues that make women more vulnerable including education, economic condition, and culture.

Educational issues:

Women are more vulnerable because they have less access to education and information that would allow them to manage disaster risks (WHO, 2011). In some cases, education and training are aimed for men. In this case, women may be reliant on men and their assessment of the risks during a crisis, regardless of whether men have the necessary knowledge or capacity (Eriksen, 2014). Generally, as education level rises, support for equal education opportunities for women also rises (Asia Foundation, 2016).

Income/ economic conditions:

Women tend to have lower incomes and are more likely to be economically dependent than men. In times of food scarcity and drought, women will often give priority to their husbands—his nutritional needs will be met before hers (Neumayer and Plümpe 2007). Single women and mothers tend to be poorer relative to men and may not have the necessary resources to respond to and recover from disasters (Enarson, 1998). The Asia Foundation (2016) carried out a survey in 2016. They found that the respondents felt that women should not be allowed to work outside of their homes because of insecurity in the country and other reasons. This means that women’s contribution to the household income is very low, and in the case of single mothers and widows, it makes them more vulnerable.

Cultural issues:

Women are particularly vulnerable because they have fewer resources in their own right and under their own control. They have no permanent place in decision making systems and they suffer traditional, routine and gratuitous gender -biased oppression. (Gokhale 2008)

Cultural issues can make women more vulnerable in disaster situations. Enarson (1998) writes that women’s vulnerability to disasters is also shaped by traditional gender roles, power and privilege and secondary responsibilities such as child care. In many cases women don’t have the courage to escape without taking permission and guidance from their husbands or other elders (Parkinson 2014). Furthermore, women have
additional responsibilities such as child care, feeding and caring of house that arise from their roles as mothers. Thus, women face greater risks in disasters compared to men (Ozden, Ozer, Naside, Isik, 2015; Gokhale, 2008).

4. Focus Group Discussions in Gender Studies

Several studies have highlighted the usefulness of FGDs for feminism and postmodernism research studies. FGDs are a good tool to find a range of responses which provide a greater understanding of the attitudes, behavior, opinions or perceptions of participants on certain issues (Madriz 2003). FGDs allow for good group dynamics and help the researcher capture shared lived experiences (Madriz 2003). FGDs create data from multiple voices instead of one individual (Madriz 2003). According to Madriz (2003) women’s gathering and sharing with other women have the potential to result in actions and movements that promote social change. Thus, in this study we use FGDs to explore barriers and other factors that make women more vulnerable to natural disasters.

5. Methodology

Data collection for this study includes a literature review, analysis of disaster statistics from the Afghan National Disaster Management Authority (ANDMA), interviews with non-Government Organizations (NGOs) and government officials, and a series of focus group discussions with men and women.

We collected qualitative data through a series of FGDs in two local communities in Kabul and Mazar Provinces. In Kabul province, District 13, we conducted a total of four FGDs, two for women and two for men. In Kholm district of Mazar province, we conducted one women and one men FGDs. In addition we organized two FGDs for Disaster Risk Management staff in Kabul and Mazar. We choose the most vulnerable district of Kabul city, “District 13” as an urban area since there are many unplanned houses built on the flood prone area. As a rural area we selected Kholm District of Mazar Province, because of its location in a high hazard area, located in the middle of the mountains, on the banks of the Khulm River. This river is known as a natural river, as it dries up due to local use (i.e. agricultural and daily activities) within its basin boundary and does not reach Amu Darya watercourse, the biggest river of middle Asia.

6. Findings and Discussion:

In total eight FGDs were conducted in Afghanistan in January 2017. In addition, interviews and meetings with officials of ANDMA were conducted in Kabul and Mazar. The participants of FGDs were chosen from previous studies of IOM and ANDMA. In the FGDs a representative from ANDMA was present to introduce the research team to the local communities.

By conducting FGDs, we were able to identify and understand the barriers, and factors which make Afghan women more vulnerable to natural disasters. These are:

Exposure and vulnerability:

1- Factors that are contributing to higher mortality and vulnerability of women before and during the time of a disaster

Results from the women groups: Women groups in urban area indicated that lack of early warning system in their community and the lack of awareness raising sessions are the main factors that intimidate their lives. They showed interest to have training sessions for themselves, their children and the children’s teachers. Usually at the time of flood, teachers are sending children to their home putting their lives in a big risk. In rural areas, not having dedicated trainings for women for disaster preparedness is the main challenge for them. Taking care (e.g. carry) of children, house belongings and food at the time of disaster, although is on voluntary basis as indicated by women, is recognized as big threat for them.

Urban community does not have an early warning system. As a consequence, there is a higher vulnerability of women to flood during the day, when their husbands are not at home to help them. Also in rural areas, those women that are working
on the field are more exposed to disasters than those that are at home. Their agriculture fields do not have flood protection measures.

Additionally, Women in rural and urban areas don’t have access to transportation for evacuation. Especially at the time of disaster, they cannot be carried out to a safer place, neither can the needy and pregnant women be taken to the clinics and health centers.

**Results from the men groups:** Men groups in both urban and rural areas received some raising awareness sessions and trainings from UN agencies and NGOs. They indicated that there wasn’t any special sessions for women (In Afghanistan both gender cannot participate at the training in the same room, and the trainer for female group should be a female). Lack of awareness sessions for elders of community is also another gap. As in rural areas, women are not allowed to go out of home without elders or their husband’s permission. According to the men’s group, in rural areas the lack of safe drinking water specially at the time of disaster, have caused illness of many women and children.

The Men’s groups also identified another challenge which is the lack of female staff in DRM agencies. Although a few number of female staff are working for some NGOs, the number is still not sufficient and responsive to assist female members of community before and after disaster, and to conduct raising awareness sessions. Lack of access to female doctor is another factor for high mortality of women in rural areas. Men also think that lack of drainage system and channels in the fields are big threats for women.

2- **Factors that are contributing to higher mortality of women after disaster:**

**Results from women’s groups:** in rural area lack of transportation is a big challenge for women after disaster as well, since all the ways are full of mud and the local old transportation cannot enter to the community for weeks. This situation sometimes threatens the life of women and children. Besides this, women are not receiving special women’s urgent need kits. Lack of safe drinking water is another threat for women and children who are the most vulnerable groups. The only drinking water source in this community is the river. Sometimes bringing drinking water from other communities is another burden on women’s shoulders. In rural area after disasters, many diseases are appearing. Not having any hospital around the community and especially presence of female doctor is a big challenge for women.

**Results from the Men’s groups:**

lack of evacuation centers is a big threat for women in rural areas, they should stay (sometimes for nights) on the hill near to their community. The emergency kits and other assistance tools are not arriving soon. They mentioned that sometimes delay in distributing the emergency kits are threatening the needy women and children lives. Finally, men group in rural area said that poverty is big challenge of their lives. Usually floods are taking away all house belongings and agriculture products on the fields.

7. Discussion and analysis

Based on the FGDs limited access to education and trainings on disaster management, limited access to health facilities and basic human need like safe drinking water, lack of female doctor, nurse and teacher and lack of flood prevention measurement (retaining walls and drainage system) are big challenges for community. But beside these challenges and limited resources the rural community succeed to established a basic early warning system, using their phones. As Enarson indicated local women in rural area have some environmental knowledge and awareness. By making good contact with the community on the other side of mountain through mobile phones, rural women and men established a basic early warning for themselves. They usually announce this in the mosques so everybody can receive alarm sooner. Presence of some educated women in urban area is their strength to have potential female teachers at the community and to ease the training and raising awareness process. In addition, in rural and urban areas presence of young educated men group will help the community to have potential trainers.

In rural areas, opposite of gender division in Afghanistan, women are participating in reconstruction of their houses with their husbands.
Furthermore, according to their house caring job, women are usually participating in the agricultural daily activities on the field beside their husbands.

**Government official’s FG:**

In general, government employees in rural and urban area explain the same challenges and threats which community people highlighted. In the FG of government officials, the stakeholders (i.e. NGOS and UN agencies) also participated. They also mentioned their usual support and coordination with government as well as several training sessions conducted for the community. Their support to government for the development of DRR policies and strategies was also mentioned. On the other hand, although Ministry of Women Affairs in Afghanistan with the technical help of GIZ developed the gender standard for disaster risk management in Badakhshan, Afghanistan in 2010, there is still a need for gender mainstreaming in all kinds of disasters in Afghanistan.

Disaster Risk Management Offices staff in Kabul and Mazar expressed their concern towards managing all disasters in recent years, since the government doesn’t have enough resources to prevent disasters. They also indicated that the construction of buildings in high hazard zones without permits and illegal squatting over the mountains and hills are the main cause of having a high number of victims at the time of disasters.

8. Conclusion:

In Afghanistan many factors are contributing to vulnerability of women.

The main findings from this study show that the contributing factors to vulnerability, which have been mentioned by the gender standard in disaster risk management of Afghanistan2010, is still applicable in this study. These factors include: lack of awareness and skills, insufficient preparedness and early warning systems, remoteness and poor connectivity to villages, absence of mitigation capacity by public authorities and lack of public services in hazard prone? areas. The study shows that lack of education, health facilities for women, insecurity and the socio-economic structures strengthen the vulnerability of women. Generally low education level and no income (i.e. house finances managed by husbands) and traditional role of women at home are the main factors that make Afghan women more vulnerable to natural disasters, in the case study areas. As highlighted in the FGDs. These findings confirm the (Enarson, 2007; Erikson, 2014; Parkinson, 2014) findings on women’s vulnerability in disasters due to limited education and knowledge.

Both urban and rural FGs stressed the need for flood management systems (e.g. building of flood channels, retaining walls) and their agreement to take some raising awareness sessions within their communities. The presence of female trainer and female employee of DRR is imminent.

Lastly, it has been evidenced that the government is playing active role in post disaster cycles, but not in pre disaster cycles.

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