A Case Study of Borana Women's Risks and Aspirations Isiolo County, North East Kenya

1. Introduction

There has been evidence of change in the arid and semi-arid lands (ASAL) of East Africa. This change is apparent environmentally, climatically (e.g. CDKN, 2012) and socially (e.g. Galvin, 2009). These changes are contributing towards increased urbanization (e.g. Wawire, 2003; HPG, 2009) that has presented women with both new opportunities and constraints.

This report has two aims. First, it aims to establish what the potential disasters that Borana women in the ASAL region might expect to encounter based on urbanisation experiences globally. Second, it asks whether Borana women are able to achieve their long-term personal aspirations in spite of the recurring need to cope with risks. This is so that humanitarian organisations can better tailor disaster preparedness programmes for women in the East African ASAL region and understand contemporary changes.

2. Literature Review

Urbanisation in sub-Saharan Africa

By 2021, predictions suggest that 50 million people in Africa will migrate from rural to urban areas, which will concentrate more people into smaller areas (Parnell and Walawege, 2011). In sub-Saharan Africa, from the late 1960s to early 1990s, people commonly migrated to urban centres for 'pull' factors, such as attracting young males in the search of livelihood opportunities, often to supplement the rural family (Potts, 2006). Usually urban migration occurred as a gradual, circular process with migrants returning home once they had earned enough money. However, from the 1970s, in conflict counties like Sudan, Angola, Sierra Leone (Pantuliano et al., 2012) and Zimbabwe (Potts, 2006) urbanization has been less about economic opportunities and more about safety and security from armed conflict as well as natural disasters.

Today, some sub-Saharan African countries are experiencing counter-urbanization due to reduced economic opportunities in urban areas including Mali and Côte d'Ivoire (Beauchemin and Bocquier, 2004). However, other countries, particularly in southern Africa are experiencing slow urbanization. In East Africa, there have been no clear urbanization patterns: for example, the capital cities of Kenya and Tanzania have experienced high in-migration but smaller urban areas have had mixed urban migration experiences (Potts, 2009).

Urbanisation in ASAL East Africa

Traditionally pastoralists migrate between rural areas to find pasture for livestock. However, pull factors for rural to urban migration have been the perceived opportunities that towns have, namely employment opportunities (Galvin, 2009). Additionally, urban areas present migrants with a better chance of access to health, education, social services and famine relief (Galvin, 2009), which is the same for sub-Saharan Africa generally (Njoh, 2003).

Urbanization has been identified as a strategy to cope with drought, conflict and other stresses due to environmental, political and socio-economic changes in many rural pastoral communities (Fratkin, 2001, HPG, 2009; Omolo, 2010; Wawire, 2003). Other stresses include drought-induced food insecurity; loss of family members during conflict; diminishing livestock numbers due to

diseases; family pressure for an outside income due to an inability to support parents or children; and the day-to-day grind of rural life such as finding and carrying fuelwood and water.

Additionally, in East Africa, governments and NGOs have encouraged pastoralists to adopt sedentary lifestyles as it was thought to be more economically stable and environmentally friendly. Sedentarisation mainly occurred through privatization and commercialization of previously common pool resources (Fratkin, 2001; Galvin, 2009). However, population growth of both humans and herds has increased pressures on resources (Fratkin, 2001); as well as this, due to limited access to land these resources have degraded further through overexploitation (McPeak and Little, 2005). Therefore, there has been an increased susceptibility to the effects of drought. Consequently, the effects of modernization has contributed to pastoralists' decisions to migrate to urban centres for waged labour, famine relief and livelihood diversification. However, living in an urban area can bring new risks to migrants.

Urban Risks

The IPCC (2007) defines disaster risk as "the likelihood over a specified time period of severe alterations in the normal functioning of a community or a society due to hazardous physical events." However, urban risks can be viewed as a continuum from chronic to disaster risk (see Table 1). In urban areas, the build up of the adverse effects of hazards on humans and materials can mean chronic risk/small disasters become major disasters. Therefore, it is argued that the different risks should not be separated as all the levels are highly intertwined (Satterthwaite, 2006).

Nature of Event	Everyday/Chronic Risk	Small Disaster Risks	Disaster Risk
Frequency	Everyday	Frequent (often seasonal)	Generally Infrequent
Scale	1-2 people killed, 1-9 injured	3-9 people killed, 10 or more	Potential to be large: 10+
		injured	kill, 100+ seriously injured
Impact on all	Main cause of premature	Probably significant and	Can be catastrophic for
premature death and	death and serious injury (e.g.	underestimated contribution	specific places and times,
serious injury/illness	alcoholism, violence,	(e.g. expected annual	but low overall (e.g.
	malnutrition)	droughts, flooding)	drought and flooding
			worsening due to climate
			change)

Table 1: The continuum of risk: comparing risks in urban areas (adapted from Satterthwaite, 2006)
 Image: Comparing risks in urban areas (adapted from Satterthwaite, 2006)

Risk can further be defined as vulnerability to a specific hazard (Wisner et al., 2004). In the ASAL of East Africa, the main natural hazards are drought, flooding and diseases, which are all thought to be changing in nature due to climate change (CDKN, 2012). Urban areas, particularly smaller towns, are likely to suffer from drought's effects, especially due to rising food prices (Quarantelli, 2003). Subsequent hazards of drought can include famine and fires from prolonged dry conditions (Cross, 2001). Additionally fires can be human-induced by the use of stoves in confined spaces and can be severely destructive, particularly in slum areas. Other human-made hazards include violence, industrial hazards, traffic accidents, and water and air pollution (Loretti and Tegegn, 1996).

Factors of vulnerability include a person's age, sex, caste, location and the type and frequency of hazard exposures (Wisner et al., 2004). Cannon (2008) describes vulnerability as reduced levels of five interrelated components: livelihood strength and resilience; well-being and base-line status; self-protection; social protection; and governance. In developing countries there are several characteristics that increase vulnerability to hazards in urban areas (Quarantelli, 2003; Pelling, 2003; Satterwaite, 2003). Primarily, the urban concentration, centralisation and densification process

means that there are a higher number of people and assets in a smaller space. Urban areas in developing countries can concentrate poverty, which can manifest as slums or informal settlements. These areas can reflect a lack of urban governance, especially in a lack of enforcement of building regulations to increase safety. Urban areas have a greater chance of environmental risks from such issues as larger volumes of waste to deal with. This can be a problem as waste is often dumped where people live on land illegally, which cannot be protested due to squatters lack of political rights.

There can be greater urban risks if infrastructure (e.g. transport, water) is not maintained or improved. Continual poor infrastructure can lead to acceptance of everyday hazards, which means there is less willingness to sort problems. If disastrous events occur then resilience to everyday hazards will be reduced, perpetuating vulnerability. The unplanned nature of many developing countries' urban areas is exacerbated by an often rapidly increasing populations, which makes providing services even more difficult. Additionally, external factors including the impacts of climate change, changes in rural land use and extra-urban processes can increase urban risks (Quarantelli, 2003; Satterwaite, 2006).

Many people will cope with all levels of risk. Whilst coping mechanisms may be an adequate response for one-off hazardous events, exposure to multiple events is likely to increase a person's vulnerability with each subsequent hazard and is not sustainable in the long-term. The concern here is that, as Figure 1 shows, the outcome of repeated coping with little recovery between events is destitution and household collapse, therefore coping can lead to long-term risks. The challenge is, therefore, to identify better ways to respond to short- and medium-term risks that also reduce the impact on long-term risks.

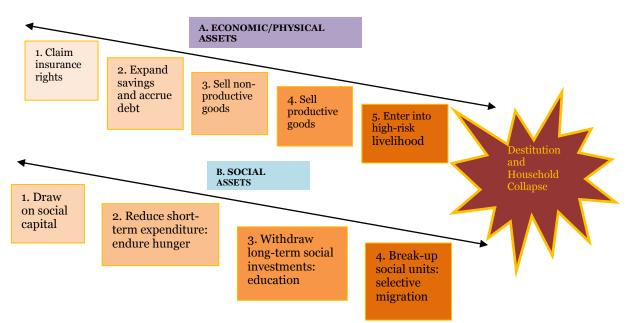


Figure 1: The Coping Cascade: Coping and erosion of household sustainability (Source: redrawn based on Pelling 2009, cited in Pelling 2011, p.35)

Urbanisation and Vulnerability

In this regard, although urbanization can present opportunities to reduce risks, it can also serve to increase or change them. Globally, the most commonly cited problem with rural to urban migration is that of economic constraints. Despite many migrants going to urban areas to find a long-term job

this is often not achieved. In turn, this can hinder a migrant's well-being and ability for selfprotection during natural hazards. Distance from livelihood opportunities is one of the major factors for reduced income opportunity (Pantuliano et al., 2011). A saturated jobs market from increased population numbers migrating to urban areas can also reduce access to secure livelihoods (Quarantelli, 2003). Additionally, many migrants do not have the business acumen necessary to work in the workplace. This is largely due to limited or no formal education in rural areas as most skills are practical, learnt informally and agriculturally based (Agesa and Agesa, 1999).

For those that do find more secure work, migrants often earn less than their equivalent urban counterparts (Stites and Akabwai, 2012; Potts, 2006). To overcome this many migrants balance multiple informal jobs, which are low skilled and low paid. Reduced income means that many migrants do not have enough money to afford the perceived benefits of living in an urban area including education, health, water and latrines. Pantuliano et al. (2011) found that in some of Sudan's urban areas, services actually cost more in unplanned areas occupied by the poor.

Urban areas are sometimes considered safer than rural areas for disaster risks, particularly those areas prone to raiding and violence. However, due to economic insecurity, there is increased likelihood of personal insecurity through an inability to afford accommodation (Stites and Akabwai, 2012). For many migrants, accommodation is the same cost as food and leaves little left over for other amenities (Potts, 2006). As a result, much personal insecurity is heightened by sleeping rough and being at risk of crime and physical abuse. Cramped conditions of squatters can lead to increasing social insecurity: for instance, tensions can rise, leading to violence within and between households (Pelling, 2003).

Deterioration of health has been identified as another hazard of urban areas. Despite the closer proximity to healthcare services, many migrants are unable to afford healthcare (Stites and Abakwai, 2012). In rural areas, many people are subsistence farmers but in urban areas buying food is more commonplace, which can contribute to both increasing poverty and hunger and malnutrition as people may go without adequate sustenance. Additionally the cramped conditions of many migrants and poor infrastructure for waste disposal can mean that urban areas are at more risk of communicable diseases like typhoid and diarrhoea (Pelling, 2003).

Urbanization and Women's Vulnerability

There is inconclusive evidence to say if women are more likely to be represented in disasters, however, individual case studies indicate that this is the case (Pelling, 2007). The view of women as vulnerable is upheld by the fact that often during disasters more women are killed or affected than men. This is true of the 1991 cyclones in Bangladesh (Ikeda, 1995) and the 2004 Asian tsunami (Nishikiori *et al.*, 2006), among others. Additionally, Quarantelli (2003) argues that women are more likely to be represented in disasters simply as there are more women than men in most developing countries. It is also argued that it is common for women to prioritise their family's needs over their own, thus increasing their disaster risk (Oxfam International, 2005).

Urbanisation, rather than reducing vulnerability, can simply cause many women's vulnerability to change. This is not to deny that urbanisation can be positive and has meant many women are able to achieve their aspirations and have a better quality of life due to, amongst other things, better access to education and other services that are often denied to women in rural areas. This is especially pertinent in countries such as Kenya where it is more favourable to educate sons over

daughters (Agesa and Agesa, 1999). However, in developing countries, it is not necessarily the case that all women benefit from migrating.

Tienda and Booth (1991) found that the effects of urbanisation depends on a woman's marital status and that just because a woman may earn more money, it does not mean that she has more control over resources within the household. In general, being single in both Africa and Latin America presented women with more opportunities and an improvement in social position, whereas married women remained subordinate doing informal jobs and became increasingly disempowered through a loss of social networks. For women in both continents, benefits of urbanisation may be limited due to persistent gender hierarchies and a continuation of doing low skilled jobs alongside domestic chores that can lead to an increase in a woman's workload.

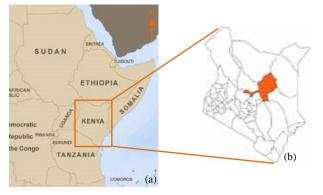
For single women not all studies suggest that urbanisation is positive. For example, Stites and Akabwai (2012) found that females who migrate alone are at risk of living with strangers and cramped conditions, increasing their risk of obtaining communicable diseases. Additionally, when there are few formal employment opportunities women are more at risk of sexually transmitted diseases, including HIV/AIDs, due to pursuing more risky livelihoods such as prostitution. This could reduce their well-being and ability for self-protection and eventually could prevent women from being able to work, thus increasing their disaster risk.

Additionally, personal risks could increase through domestic violence and sexual assault. In urban areas these have been reported to become more common, presenting women with the higher chance of being repeatedly in chronic risk situations. This is partly blamed on men having easier access to alcohol, which can increase their violence levels (Stites and Akabwai, 2012).

3. Context

Due to an arid climate and a history that is similar to other ASALs of East Africa, Isiolo County, North East Kenya (Figure 2) was considered an ideal research location. Isiolo County has a population of 143,000 of which 71.6% are below the Kenya poverty line. The county is characterised by a confluence of tribes including: Borana, Somali, Turkana, Samburu and Rendille (traditional pastoralists) and the Meru (agro-business). However, for cultural consistency, this study considers just Borana as they are the largest tribe; despite this, Borana have many attributes similar to other pastoralists of East Africa.

Figure 3 indicates the locations of the three research sites and Table 2 shows the diverse characteristics of Isiolo, Garbatula and Tana.



SAMBURU ISIOLO IPIA MERU

Figure 2: Locating Isiolo County in Kenya, East Africa (Source: (a) Exploring Africa, 2012; (b) USAID, 2011a; edited by author)

Figure 3: A map to show the research sites in Isiolo County (Source: USAID, 2011b; edited by author)

Characteristic	Isiolo	Garbatula	Tana
Location Type	County capital, large urban area	Rural town, small urban area	Rural village
Accessibility	Easy: Major tarmac roads from	Medium: Part tarmac, part dust	Difficult: remote location,
	Nairobi	track	dust track
Institutions	Multiple schools – primary, secondary and colleges.	Multiple schools – primary and secondary	One primary school.
	County courts		
Health care	Several hospitals available	One hospital	Minimal: Only health care provided by KRCS outreach programme.
Population	A mixture but more Borana	Mostly Borana tribe, some	Mostly Borana, few
Characteristics	than other tribes	Somalian refugees	Somalian refugees
Religion	Islam and Christianity	Islam, some Christianity	Islam

Table 2: Characteristics of the study sites in Isiolo County

4. Methods

For the purposes of this report, there are two conceptual approaches to disasters - coping and adapting. Adapting includes long-term livelihood security and finding alternatives to be better protected against risks. If someone does not adapt then they are likely to employ crisis coping in order to overcome risks.

Semi-structured interviews and focus groups were the methods used to collect data for this report. Two age categories were considered: youth (16-24) and older women (over 25s). Qualitative methods were considered most appropriate as it allowed for nuanced insight into the women's lives. Additionally, qualitative methods were considered more appropriate due to the short time frame to collect data.

Convenience sampling was adopted to recruit Borana women for the study. As Kenya Red Cross Society volunteers were well known in the communities, they were able to recruit further by snowball sampling, reducing the time needed to gain participants' trust.

In order to gather data the participants were asked to visualize their future and to then identify barriers to them achieving their aspirations. Subsequently, the women were then prompted if they would be affected by risks not initially identified. Finally, the women were asked how they would overcome the barriers, if at all. In order to analyse the data manual qualitative content analysis was used.

5. Results

Women's Aspirations

Life aspirations of women from village to town changed from more traditional to modern (Figure 4). In Tana, more women aspired to improving household well-being, educating children and increasing petty trading. In Garbatula and Isiolo, more women aspired to owning businesses, such as hotels and flat rentals, and professional careers such as becoming teachers, lawyers and engineers. When disaggregated by age this trend is likely to be due to increased numbers of youth attending educational institutions in town areas, which is likely to change aspiration by increasing awareness of alternative career opportunities.

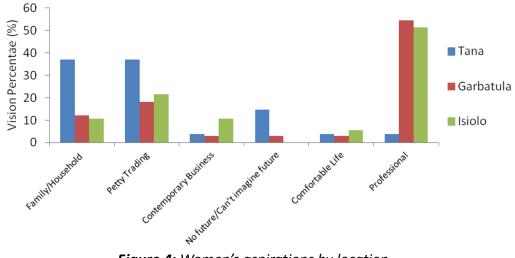


Figure 4: Women's aspirations by location

Identifying and Overcoming Risks to Achieve Aspirations a) Financial Risks

Prior to prompting, from rural to urban areas, concern about financial risk increased. Overall, in all locations the majority of people felt that they would be affected by financial barriers. The only exception to this was a small minority of older women in Tana perceived themselves not to be at financial risk. This could reflect that those in urban areas and youth are more exposed to and reliant on the monetary economy.

There were several types of financial risks identified. Examples include: concerns about being impoverished in the future through losing goats to disease, drought or bandits; an inability to afford further education to achieve aspirations; maintaining multiple jobs reliant on the environment that had low returns; and for petty traders, worry about their customer-base migrating during drought and conflict periods, thus reducing their income source. Although not anticipated, it was apparent that women were more concerned about risks such as income security and day-to-day living, over disaster risks.

For all locations, the majority of women did not feel that they had the personal capacity to overcome financial risks. However, although it was minimal (<30%), urban women had marginally more confidence in their personal capacity to overcome financial risks than those in rural areas.

b) Socio-cultural Risks

A number of women identified socio-cultural risks (e.g. lack of familial support, domestic violence) as a barrier to their future, more so than disaster risks. Older women perceived themselves to be slightly more at socio-cultural risk than youths but there was little difference in location. Their higher socio-cultural risk identification could be due to the large number of widows and divorcees having an increased recognition of the need for support into older age. For example, one divorced older Tana woman said *"my brother was assisting me but now he has died, and also my children are orphans as they do not have a father"*. It was apparent from interviews that divorce was becoming more commonplace and, as a result, the women had fewer social networks. However, another woman identified a lack of social capital despite being married, based on her prior experience: *"I am not single, I am married. I wanted to sell goats but my husband refused"*.

Unlike older women, youths' responses tended to focus less on personal experience and more on the effects of socio-cultural risks. For example there were concerns about not being able to formally work and be a mother and the threat of early marriage preventing achievement of aspirations. By location, the youth in Tana and Garbatula considered themselves more at socio-cultural risk then youth in Isiolo. This may be due to effects of urbanisation as urban youths are perhaps more empowered though the visibility of courts, information sources and education and therefore have greater sense of social security.

However, socio-cultural risks were not readily identified, which could be a reflection of the constraints of the methods chosen. The controversial nature of social-cultural issues such as polygamy, domestic violence and female genital mutilation may explain why fewer women identified them compared to the less controversial identification of financial risks. An alternative explanation could be that women's lower identification of socio-cultural risks may be because women are more concerned for their family's future needs over their own (Oxfam International, 2005). For example, high numbers of women identified that in their future they would like to secure an education for their children, which would require financial resources.

Of those who perceive themselves to be at social-cultural risk, marginally more women in urban areas had confidence in their personal capacity to overcome the social challenges. When disaggregated by age the youth in all locations had more confidence in their personal capacity to overcome social-cultural issues than older women, particularly in the rural areas. This result could show that the perception of capacity to overcome social-cultural risks is dependent on both location and age.

c) Drought Risks

After prompting, the majority of women perceived themselves to be at risk of drought. Typical responses included that "*drought would mean less livestock and no more income*" and "*when there is drought food is expensive*". Drought was a particular concern for older women as over 75% thought that they would be affected. In Garbatula, youths were the only group where more women perceived themselves not to be at risk of drought or did not respond to the prompt. There was no pattern by location, which could indicate that regardless of area-type women living in the ASAL perceive themselves to be at risk of the effects of drought; this supports Quarantelli's (2003) observations that small towns are not free from drought's effects.

Confidence in personal capacity to overcome drought varied dependent on age rather than location. In general, older women were more confident that they would be able to overcome future droughts by coping or adapting. Confidence to overcome drought was less for urban youths. This could suggest that those who have had access to education are more likely to understand the difficulties of coping/adapting to drought. Alternatively, it is also likely that as older women will have experienced many previous droughts they feel that they will be able to cope in future situations.

d) Other Disaster Risks

Although flooding, health and violence hazards were not perceived as major risks, more women recognised them as risks in urban areas. For instance, the only interviewees that perceived flooding as a risk were in urban areas. For instance, in Garbatula one participant identified that *"flooding would affect infrastructure"*. It was expected that women would have perceived health as more of a risk, especially in Tana where there are few health facilities. Conversely, it may be that more women identified health hazards in urban areas due to their proximity, but not necessarily access, to

medical facilities increasing their health risk awareness. The few who identified violence as a problem had usually experienced insecurity before: *"security and bandits would affect: they have previously taken livestock."*

Another explanation for the generally low risk perception could be due to the level of understanding that the women have of hazards. For instance, those who have had access to education, which is more likely in urban areas, may feel that they comprehend the hazards and therefore perceive themselves to be less at risk. On the other hand, women in rural areas with limited education levels and reduced information sources, could simply be ignorant of or do not grasp all local hazards and their likely effects.

Alternatively, a low risk perception of some disaster risks may suggest that women are not considering the long-term indirect effects of hazards on themselves. For example, in rural areas it is usually men that migrate with livestock and who are more at risk of death from tribal clashes; however, women could be affected indirectly through a reduced household income and reduced social capital as a widow (Omolo, 2010).

For the few that identified other disaster risks, most did not feel that they had the personal capacity to overcome them and if they felt they could, they usually identified coping rather than adapting mechanisms. For instance, in terms of violence, regardless of location, most women identified temporary migration; this suggests there is limited choice when the hazard occurs. Older women had limited belief in their personal capacity to overcome health barriers. Due to lack of confidence in personal capacity to overcome health risks it is likely that many women feel that health is not something they can have control over, through reasons including lack of finances and old age; additionally, many women identified coping by relying on social support, mainly from family.

6. Discussion

Regardless of location, it was evident that women are unlikely to be prepared for some disasters through a lack of awareness. This is of particular concern as it is predicted that flooding will worsen in the ASAL (CDKN, 2012). It is therefore recommended that humanitarian organisation need to educate women to raise their awareness about changing nature of disaster risks. Further, for the best possible future outcomes, it is recommended that men should be equally educated about disaster risks, as in the long-term it will help to protect themselves and their women. Although older women had more faith in their ability to overcome drought, this could both be a challenge and an opportunity. Experiences can help teach younger women what to expect during drought situations; however, in the long-term, older women's continuous coping may mean that they are not positively adapting for droughts that may become more frequent and intense. Therefore, to encourage change, it is considered important that women and men are concurrently educated about adaptation rather than coping mechanisms.

At present, there is little evidence that indicates women are in a favourable position to cope with future hazards. The women's recognition of financial risks is of key importance as it reflects that women are concerned about everyday risks such as having enough money for purchasing food over considering disaster risks that only *may* occur in the future. Financial risks were identified chiefly as livelihood insecurity. In particular, in all areas most women indicated a reliance on customers who migrate when hazards such as drought occur. Therefore, these women's livelihood resilience during hazards will be lowered; women's recognition of crisis coping in the event of drought situations also supported this. With more intense and frequent hazards predicted, repeated coping means that

women, already with little economic security, will have fewer assets on which to survive in future events. This could mean that many are at risk of destitution, as shown in the coping cascade in section 2.

The women's socio-cultural risks, such as female genital mutilation, early marriage and domestic violence were expected to have been identified more. Socio-cultural risks are important because it can directly lead into financial risks. For instance, in patriarchal societies it is rare for women to have control over household finances. However, this was difficult to investigate and so there is likely to be information omitted. Consequently, it is recommended that this area needs to be further researched as currently the results are inconclusive and incomplete.

As it stands, most of the women's long-term aspirations will not be achievable due to continual crisis coping where the few resources they have are consistently used to overcome everyday and disaster risks. Positive adaptation would ultimately allow women to save financial resources for the longer-term. For example, some women identified harvesting rainwater so that they could water crops during drought. Alternatively, women could diversify their livelihoods to reduce reliance on the environment. If women's capacity to adapt their livelihoods does not increase, they may not be able to overcome disaster risks in the long-term nor be able to achieve their aspirations.

7. Conclusion

This report found that the most common reason for urbanisation is perceived economic opportunities; it also found that urban risks in different global locations are usually comparable. Migration can provide many opportunities for women, particularly for young women in being better able to access education services. However, migrating does not mean that vulnerabilities to hazards are reduced, rather that they can change in nature. Additionally, in urban areas, vulnerability to hazards can be increased, particularly if women, and migrants more generally, are unable to secure long-term employment. Although it was unable to be proven in this research, it was found that urban areas can provide security for disaster risks such as conflict and drought but can increase a woman's personal risk of disease and domestic violence through such things as easier access to alcohol for men.

The findings have shown that regardless of location women perceive themselves to be more affected by everyday risks, rather than disaster risks. In the long-term, this is important for two reasons: first, if women do not have financial resources than they are unlikely to be able to adapt and so will ultimately be at long-term disaster risk through continual crisis coping. Secondly, repeated crisis coping and a lack of financial resources means that women will be unable to achieve their aspirations and will continue to suffer from everyday or chronic risks like poverty.

Following the findings, the report has several recommendations:

1) Raise women's and men's disaster risk awareness.

2) Educate women and men about adaptation rather than coping mechanisms in order to reduce disaster risks and increase financial security.

3) Further investigate socio-cultural risks and the links between socio-cultural and financial risks.

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