

THE GENDER DIMENSIONS OF ENVIRONMENTAL CHANGE: A CASE OF RURAL MEN AND WOMEN IN ZIMBABWE

A CONCEPTUAL FRAMEWORK ANALYSIS

Dorcas Shumba

Institute of Development Studies, School of People, Environment and Planning Massey University

1. Introduction

This paper aims to look at the concept of gender within the context of unfolding environmental irregularities. Gender is used in this study to target the most vulnerable groups of people based on their rights and opportunities to access resources. Gender is used as such because it is believed to be a primary way of resource distribution within the political economy (Schultz et al. 2001) as anchored by cultural norms and values. Based on access to resources, the most vulnerable people are those who are poor as they possess the most limited capacity to cope with exposure (Blaikie et al. 1994). Women due to gender inequalities also instituted in cultural norms and values are believed by this study to constitute the poorest of the poor. Resultantly, they are also believed to be more vulnerable to environmental irregularities in comparison to men.

The setting in which the exposure units in this study are situated are the rural areas. This study takes interest in rural areas because rural areas in Zimbabwe are vulnerable places which are characterised by marginalisation, remoteness as well as a series of poverty incidences (Moyo 2007). To this effect, the subsistence of rural people in Zimbabwe occurs within vulnerable places in which the rural people themselves are vulnerable people. However, owing to social difference, vulnerability in the rural areas is not evenly distributed; it cuts across age, gender, class, ethnicity and so forth. Based on gender, men and women though exposed to the same environmental shocks, experience vulnerability differently as has been previously alluded to. Nevertheless, women themselves are not a homogenous unit as they are further differentiated by non gendered identities such as age, class and ethnicity meaning that they among themselves also experience environmental irregularities differently. However, when considered as a group, they more often than not are more vulnerable than men. To this end, when examined within a social framework, vulnerability does not only have to take account of the variability of natural phenomena. It is also crucial to break down the causal structure of vulnerability into sub-elements such as, social difference, geographical setting, historical processes, economic and socio-cultural factors which shape risk while also recognising how different groups of people in society experience risk and mitigate hazards (Bohle et al. 1994).

The next section will explore the key elements which are noted as being contributory to vulnerability in this study. It is important to look at the current causes of vulnerability as this helps to target the current vulnerable groups (Downing et al. 2005) while also mapping the evolution of vulnerability to successive hazards (Bohle et al. 1994).

2. Environmental Change and the Causal Structure of Vulnerability

It is often argued that environmental changes are transforming the earth's natural support systems (Barrow 2003). These transformations are said to be impacting negatively on ecosystem services (Leichenko and O'Brien 2008) and presenting global challenges for people (Matthew et al. 2010). Environmental changes take place as a result of influences which are either natural or human-induced (Harbel et al. 2004), but human drivers have in recent times been argued to be the most prominent in transforming the earth's environment (Wilk 2002). It has been therefore said that when environmental

change impacts negatively on ecosystem services, the consequences inevitably become social (Salih 2001).

Moreover, owing to social differences, the effects of environmental change are said to be felt differently by different people in accordance to their pre-existing differences (Salih 2001; Rahman 2003; Matthew et al. 2010). Based on the multi-dimensions of social difference such as age, gender, class and race (Vogel 1998), social differentiation and dynamics are thus critical in influencing who is affected by what environmental changes and how? (O'Brien and Leichenko 2003; Rahman 2003). The differential vulnerability of social actors is as a result, a central concept through which different social groups can be helped to recover from environmental stress (Downing 1991; Downing et al. 2005)

In an attempt to demonstrate differential vulnerability to environmental change, this study will focus on one of the multifarious aspects of social difference which is gender. Commonly in rural areas¹, men and women are often said to experience as well as cope differently with exposure to environmental shocks (Harnmeijer and Waters-Bayer 1993). Although both men and women in these geographic domains are in frequent contact with the environment, women's contact surpasses that of men (Reardon 1993; Masika 2002; Dankelman 2010), because women (unlike men) are not only in contact with the environment in their productive roles² but in their reproductive³ roles as well. Additionally, due to gender inequalities women often have less access to productive resources as well as less control over how these resources are utilised. Thus when confronted with environmental change they more often than not have less capacity to cope (Vogel and O'Brien 2004; Eriksen and O'Brien 2007; Matthew et al. 2010).

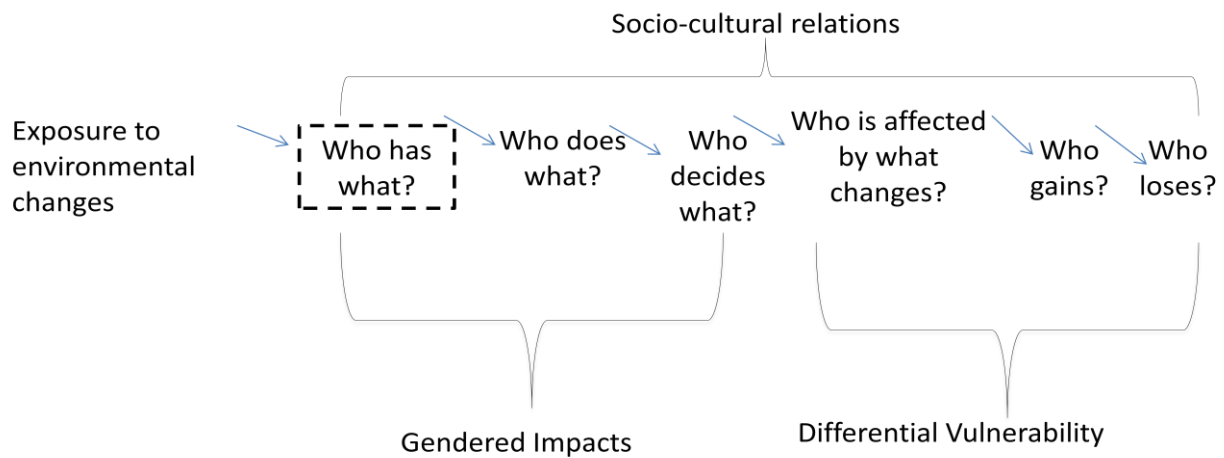
Other than gender however, the other underlying determinants of vulnerability are; socio-economic (Liverman 1990; Ribot et al. 1996; Eakin and Luers 2006), historical (Blaikie et al. 1994; Wisner et al. 2004; Miller et al. 2010) and geographical (Susman et al. 1983; Liverman 1990; Cutter 1996; Shepherd 1998; Bird and Shepherd 2003; Kasperson and Kasperson 2005; Narayan et al. 2009) conditions of a society and these will be included also in the framework as recognized factors of analysis when seeking to understand vulnerability. Albeit they contribute immensely towards vulnerability, history and geography will be used in this framework as baseline data. For instance, history will explain why the exposure units are sensitive to environmental shocks while geography will familiarise us with the physical setting in which the exposure units are located thereby showing us where vulnerable people are found. However in order to understand who in these places is vulnerable, the aspect of access to assets as determined by socio-cultural relations will be explored. To be precise, gendered relations between rural men and women will be investigated, showing us; who does what? who has what? who decides what? who is affected by what changes? who gains? who loses? (Rahman 2003), ultimately bringing us closer to understanding that environmental change is felt far from evenly. The sequence of social vulnerability as hypothesised by this study is presented in the diagrammatic structure below.

¹ Mostly in Third World Countries

² Work done by both men and women for pay in cash or kind, for women in agricultural production this includes work as independent farmers, peasant wives and wage workers. Women perform productive roles alongside reproductive roles. Women's productive roles are often looked down upon as they are said to be of marginal importance to the economy. <http://www.ilo.org/public/english/region/asro/mdtmanila/training/unit1/groles.htm>

³ Childbearing/rearing responsibilities, and domestic tasks done by women, required to guarantee the maintenance and reproduction of the labour force
<http://www.ilo.org/public/english/region/asro/mdtmanila/training/unit1/groles.htm>

Diagram 1: The sequence of Social Vulnerability



A rationalisation for taking on this study in the given context will be undertaken in the following section.

3. Research gaps

This study brings together three important research gaps within the Zimbabwean context:

- (1) Research gap on the gendered impacts and differential vulnerability of environmental change
- (2) Voice gap of the rural people regarding their experiences and perceptions of environmental changes
- (3) Policy gap on the social impacts of environmental changes

The three gaps are concurrently discussed in the passage below.

3.1 Vulnerable people, Silent voices

The Zimbabwean environmental policy context takes into account the sensitive and vulnerable ecosystems and the impacts of human use and development pressure upon them (Environmental Management Act 20:27) but does not incorporate the sensitive and vulnerable human systems and the impacts of environmental irregularities on their livelihoods. Several other Acts in Zimbabwe oversee the protection of the environment, for instance, the Natural Resources Act (Chapter 150), Forest Act (Chapter 125), Atmospheric Pollution Prevention Act (Chapter 318), Parks and Wildlife Act (Act 14 of 1976) and the Water Act (2000). None of these acts however have provisions for the differential impacts and differential vulnerability of environmental irregularities. Zimbabwe is also part of a number of global multilateral agreements for instance, the UNFCCC ratified in 1992, and the UNCCD in 1997. Although the latter was ratified with the intention of addressing land degradation and desertification- issues that are most pertinent to rural people (MET 2004), its implementation remains a rhetoric (Frost 2001). Again, with regards to the former, Zimbabwe's National Climate Change Policy is still implied rather than stated (Frost *ibid*). According to reports in the media⁴, the

⁴ http://www.herald.co.zw/index.php?option=com_content&view=article&id=41371:climate-change-policy-long-overdue&catid=41:business&Itemid=133\\

policy is nonetheless expected to be released by the end of 2012. All things considered, there are currently no provisions in the existing environmental policy framework with regards to the impacts of environmental change on the livelihoods of rural men and women.

Regarding gender related policy, Article 14 of the GoZ Report on CEDAW identifies rural women as a vulnerable group. However, their vulnerability is only stated in as far as their disempowerment is perpetuated by discriminatory traditional practices (GoZ 2009). The report does not take into account their vulnerability to environmental stresses. Nevertheless, the Ministry of Women's Affairs, Gender and Community Development in its Report on the Progress of the Beijing Platform for Action (1995), does recognise the challenges faced by women farmers as a result of environmental irregularities due to climate change, land degradation, deforestation and drought (MoWAGCD 2009). Regardless of this acknowledgment, the reality is that tackling the struggles of rural women is regarded a mammoth task due to the complexity of their struggles (Getecha and Chipika 1995). First and foremost, rural women encounter environmental challenges both daily and episodic in their productive as well as reproductive roles. For instance, with no alternative entitlements, rural women often cannot find substitutes for the diminishing wood stocks and they time and again have to walk extra miles while carrying firewood on their heads, often with children on their backs. Secondly, the legal structures and local support systems which are meant to offer support to rural women, often act in antagonism by reinforcing discriminatory traditional practices which suppress women. Moreover, these discriminatory traditional practices support the intensification of rural women's work burdens while concurrently stripping them of power and control over essential resources which would otherwise improve the quality of their lives (Sweetman 2008). Thus when confronted with environmental changes, rural women often have very little capacity to cope as compared to men. However, while poverty constraints both men and women, the structure of their poverty differs because of discriminatory traditional practices which posit an unfair advantage upon men. Although the statutory law in Zimbabwe is gender impartial, its dual existence alongside customary laws often makes it hard to implement gender sensitive policies because customary practices are enforced predominantly at household level (Thabethe 2009). It is again for this reason difficult to advocate for gender equity or even large shifts in gender relations within villages and kinship groups, let alone households (Toumlin and Quan 2001).

It is however noteworthy to note that discriminatory traditional practices are not only peculiar to rural women but also extend to urban women, though to a lesser extent. According to Getecha and Chipika⁵, the struggle for rural women against discriminatory traditional practices is similar to that of the urban women in that, there is virtually no difference between a woman who has limited resources and cannot get collateral based on these grounds and that who has the resources but cannot use them at freewill because they are controlled by her husband. To this effect, all women in Zimbabwe both rural and urban have culture as a circumscribing force. Urban women are however better off than rural women because urban areas are more multicultural and diverse allowing for customary practices to be moderated by co-existing cultures. Again, urban women are more educated, have better livelihood opportunities, are better travelled and more exposed to the ideologies of gender rights and so they often have room to claim and defend their rights. Conversely, rural women seldomly challenge their position due to the fact that discriminatory traditional practices are more deeply entrenched in rural areas (Jacobs 2002). Moreover, rural women are poorer and for that reason they often do not sit and think about contesting and bargaining for their rights as they are often preoccupied with issues regarding what to eat, where to get firewood and where to fetch water. Against the given challenges, this study believes that there is need for policy formulation which is exclusively targeted towards fighting the patriarchal hegemonic structures which are responsible for the unfair treatment of women in general.

⁵ Getecha, C. and J. Chipika (1995). *Zimbabwe Women's Voices*. Harare, Zimbabwe Women's Resource Centre and Network (ZWRCN).

Overall, the existing policy trends show irregularities and gaps in the Zimbabwean policy setting, particularly with regards to the social impacts of environmental changes. As a signatory to Agenda 21 of the UNCED in 1992, reaffirmed by its attendance at the WSSD in 2002, Zimbabwe commits itself to the principle of sustainable development. In reaffirming its commitment, the President of the Republic of Zimbabwe in his speech at the WSSD conference said that land was at the heart of sustainable development in Zimbabwe and that through equitable agrarian reforms the government aspired to resolve the problems of poverty in order to reduce the vulnerability of the poor. Notwithstanding the fact that the majority of the poor people in Zimbabwe⁶ access land through communal tenure, these people due to their increased production on increasingly degraded lands and constant reliance on the environment are the ones who are much impacted on by environmental irregularities; and yet they are often omitted from policy. The voices of the rural people are also often omitted from environmental literature which is documented focusing mainly on calculations of land degradation and loss of vegetative cover and in recent times, projections of climate change and climate variability. However, it has been suggested that, understanding environmental change is best done through exploring the daily experiences of local people - whose sum choices amount to global proportions vis-à-vis a sheer reliance on scientific predictions - whose findings isolate micro-realities, resulting in skewed results. To this end, in order to reach the much desired state of sustainable development, there is need to delve into issues of environmental criticality, that is, the situations in which the rate of environmental irregularities are precluding the continuation of current human-use systems, human-well being as well as their societal capabilities to respond (Kasperson and Kasperson 2005), while at the same time looking at issues of social difference. For instance, looking at the effects of environmental change in light of gendered differences and differential vulnerabilities will enable policy makers and relevant state and or interest groups to reach out to the most vulnerable groups of people. With a majority population which is rural, over half of which is women (Frost 2001) there is need therefore for Zimbabwe to include the gendered dimensions of environmental change in environmental policy as well as to make provisions for the most vulnerable groups of people.

Based on this study, an investigation into the differential vulnerability of rural men and women based on gender will give a cross-sectional analysis of how the livelihoods of rural men and women are precluded by environmental irregularities, not only that, but how the trajectories of their respective vulnerabilities are influenced by factors other than exposure to external shocks. The differential responses of these men and women are also a crucial aspect of this study as these can characterise the types, numbers and effectiveness of coping responses undertaken as well as the structural constraints which shape their response strategies (Kasperson and Kasperson 2005). As will be demonstrated by the proposed conceptual framework, the concept of differential vulnerability will be based on the gendered impacts of environmental change as intercepted by (1) differences in access to assets (resource bundles)⁷, (2) differences in proneness to harm as well as (3) differential capacities to cope with exposure within the given geographical and historical contexts. Through unpacking these issues, the researcher hopes to inspire a better understanding as well as the incorporation of the issues into policy, planning, and practice.

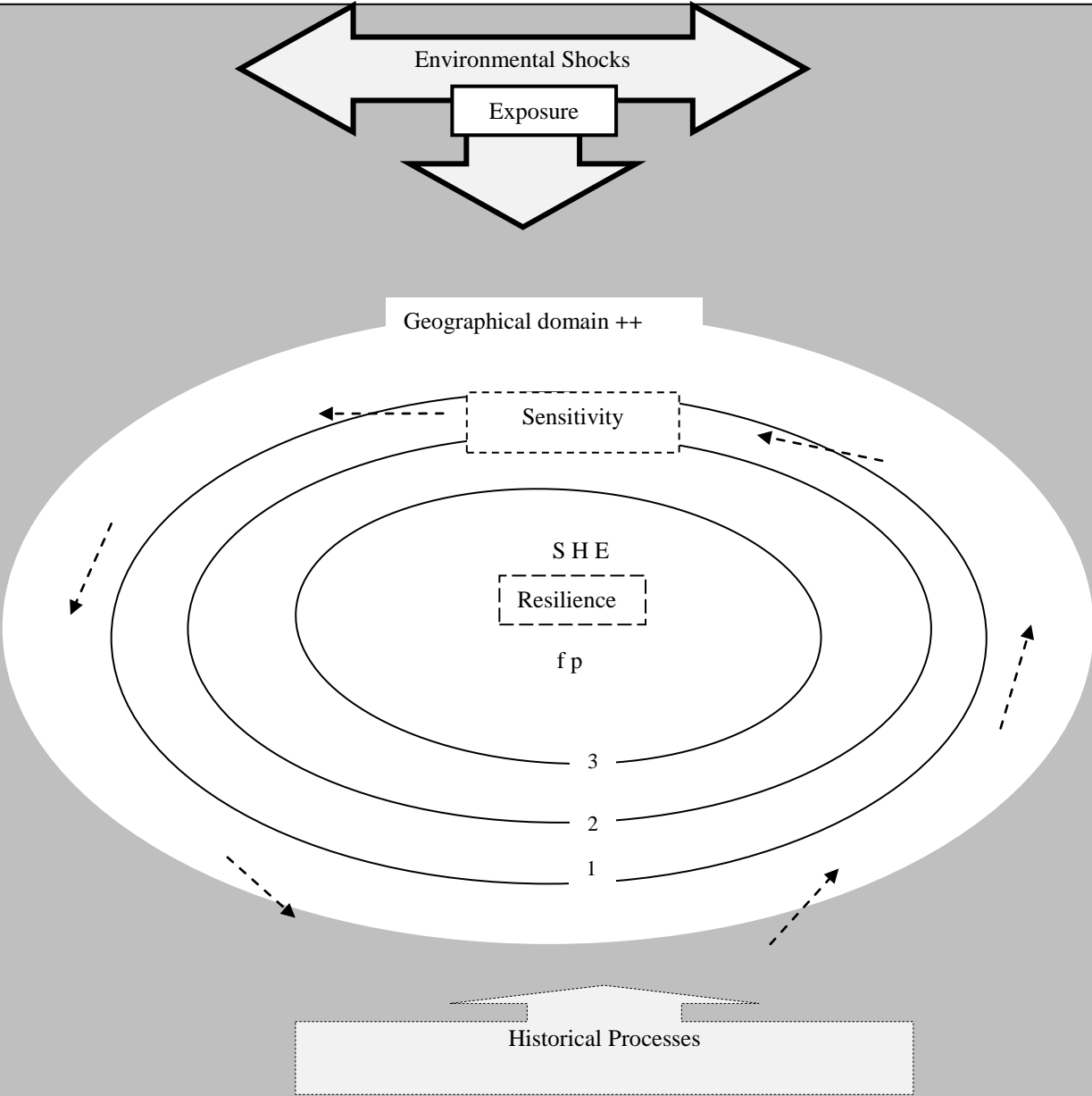
Drawing on the above elements therefore, the proposed conceptual framework for the study is presented below:

⁶ Most of the poor people in Zimbabwe are found in Rural Areas Moyo, S. (2007). Land Policy, Poverty Reduction and Public Action in Zimbabwe. Land, Poverty and Livelihoods in an Era Of Globalisation. A. H. Akram-Lodhi, S. M. Borras and C. Kay. London, Routledge.

⁷ Assets buffer vulnerability

4. Conceptual Framework: Differential Vulnerability to Environmental Change Based on Gender

Figure 1
(Rural Area)



Legend
 ++ = Components of geographical domain (remoteness, marginalisation)
 _____ Gender Neutral
 - - - - - Non Gender Neutral
 1= Culture
 2= Social relations
 3= Political Economy
 S H P F E = Assets (Social, Human, Physical, Financial, Environmental Capital)

4.1 Rationalisation

The rationalisation for these variables is that; (1) culture as a way of living is practiced in every place and it is that which determines how people interact with each other. For instance, in rural Zimbabwe, customary practices are seen as being discriminatory to women (Getecha and Chipika 1995; Bentzon et al. 1998; Hellum et al. 2007; Tsanga 2007; Mudenge 2008; Kanyenze et al. 2011). Rural areas as the epitome of traditional customs are often too submerged in deep customary beliefs and are also characterised by male domination. Resultantly, the structures responsible for dispensing resources and or justice (both formal and informal) are rooted in patriarchal ideologies which are often gender biased (Tsanga 2007). In an instance where the late Vice President of Zimbabwe, Joseph Msika was asked why women lacked land rights, his response was that, "Because I would have my head cut off by men if I gave women land...men would turn against the government" Msika is also said to have added that, giving wives land or even granting joint titles would 'destroy the family' (Jacobs 2000). Such sentiments show that there are underlying cultural norms and values that deter the social wellbeing of women, let alone their economic advancement. Culture as the manual which influences behavioural norms subsequently governs (2) social relations. Likewise, social relations assign, who does what? and determine who has what? as imposed by those with the upper hand. Social relations thereby influence the distribution of resources (Blaikie et al. 1994; Downing et al. 2005; Adger and Brown 2009; Matthew et al. 2010), contributing towards who is affected by what environmental changes? who gains and who loses? (Rahman 2003). Moving forward, each place is characterised by a (3) political economy in which modes of production and consumption come into being. Assets are the basis of production and consumption and are disseminated through processes of exchange (Swift 2006). The weaker actors are usually victims of unfair processes of exchange and hence their access to assets is usually obstructed. Additionally, in the political economy the productive roles of the weaker actors are trivial, based on the capitalist ideology. Based on this premise, formal work corresponds with productive work while informal and or subsistence work corresponds with unproductive work. In rural Zimbabwe for instance, though women in the communal sector are major food producers (FAO 1995; Mutopo and Chiweshe 2012) their work is considered to be marginal to the country's economy which is male dominated (Kanyenze et al. 2011). The political economy is thus a product of fundamental social relations through which men dominate the factors of production, means of reproduction as well resource allocation and distribution.

As previously alluded to, resource bundles (assets)⁸ are embedded in the political economy whereupon they determine people's welfare (Chambers and Conway 1992; Narayan et al. 2000a; Narayan et al. 2000b; Narayan and Petesch 2002; Carter and Barrett 2006; Mutenje et al. 2010) and act as a buffer for vulnerability (Moser 1998; Bebbington 1999; Ribot 2009). There is thereby a correlation between assets and resilience whereby lack of assets results in increased sensitivity to environmental shocks and access to assets results in increased resilience. For this reason assets are used as the central indicator for assessing vulnerability in the conceptual framework. These livelihood assets are written in the conceptual framework as; S, H, P, F and E standing for; social capital, human capital, physical capital, financial capital and environmental capital. Typically in rural areas as demonstrated by the conceptual framework, all the other assets or resource bundles are found in short supply except human capital and the shared capitals; environmental capital and social capital. For this reason the principal capitals found are presented in upper case letters as 'S', 'E' and 'H', while the less dominant capitals are presented in lower case letters as 'p' and 'f'.

⁸ In this study assets will generally be measured as per individual based on gender, however shared assets such as environmental capital and social capital may be considered collectively.

To justify these assumptions:

High Supply Capitals

- i. Social capital being the social networks governed by intra and inter relations of reciprocity and trust, are found in all places. Because social capital is composite; being primarily divided into state, private or civil functions and further into auxiliary categories based on each function, it is for this reason difficult to consider it in terms of its numbers as compared to its overall efficiency based on the quality of social life within a given space. Drawing on the quality of social life, it is important then to note that in some cases, the intended social benefits may be impeded by certain social relations and or unfair exchange rates making it difficult for beneficiaries to gain (Ellis 1998). When this happens, the resulting failures make it impossible to talk about sustainable development in its entirety (social, economic and environmental sustenance) (Serageldin and Steer 1994). This is because social capital not only determines the social benefits of access to resources and the social costs of lack of access thereto, it also determines how resources are produced and consumed and most importantly how resources are managed within the political ecology. All in all however, social capital can both drive and constrain social and biophysical vulnerability to environmental changes.
- ii. Environmental capital is said to be in high supply in the conceptual framework because, rural people are said to rely most on common goods⁹ for their welfare and subsistence (Cavendish 1999; Narayan et al. 2000a; Khan 2001). However the way men and women access these common goods largely depends on their roles and status in society. Nevertheless, environmental capital is highly susceptible to environmental irregularities and it is for that reason the only capital which is directly hazard dependent. Those who closely rely on environmental capital as their main source of livelihood are resultantly vulnerable to environmental changes, more so when they do not have an assortment of resource bundles to fall back on. Because rural women interact directly with the environment and because rural women are often poorer, they are considered to be disproportionately and adversely affected by the effects of environmental change in comparison to men (Masika 2002).
- iii. Human capital is also considered to be in relatively high circulation in rural areas because it is said that poor people have labour as an abundant capital (Narayan et al. 2000b). However, other related human capabilities such as skills and training may not be as substantial in numbers¹⁰ and may be disproportionally distributed. In most cases these capabilities are highly skewed in favour of men as is the case in rural Zimbabwe (Getecha and Chipika 1995; Mudenge 2008). Men thereby have better livelihood opportunities (Zuwarimwe and Kirsten 2010), which makes it easier for them to diversify into off-farm income generating opportunities as an escapism from environmental irregularities.

⁹ Common goods are typically in the form of natural resources such as forests, woodlands, common grazing land, lakes, rivers

¹⁰ Rural populations are usually noted for being predominantly illiterate

Low Supply Capitals

- i. While poverty is usually measured in monetary value, it is said the poor rarely speak about income (Narayan et al. 2000b), because they rarely have a steady income, let alone savings. Again rural income is not constant because it is said to be prone to several flaws such as seasonality, outcome of farm production as well as market prices (Ellis 1998). Over and above, financial capital is not an abundant capital in rural areas. When considered in terms of gender, although rural women contribute immensely towards crop production (Jacobs 2000; Mudenge 2008), they often do not have much say over the proceeds from the sale of produce because men as the heads of house control the income expenditure. (Chitsike 2000; Mudenge 2008). While rural women have been noted to engage in income generating activities such as; poultry rearing, vegetable and fruit vending, brewing and selling beer as well as brick making (which is done jointly with men sometimes) (Pankhurst 1991) their husbands can at best demand and control their income (Jacobs 2000) and at worst totally disengage from household expenditure responsibilities. As a result, though not abundant, financial capital in its available form is unfairly accessed by rural women resulting in their vulnerability as they are in most cases left with lesser capacity to cope with environmental irregularities.
- ii. In terms of privately owned capital (physical capital), rural people typically own land and land produce, farm machinery and equipment as well as livestock, poultry and any other such domesticated animals. However in light of the recent economic turmoil in Zimbabwe, cases of asset attrition have been noted as being commonly on the increase (Chimhowu 2009). In order to survive, rural people have been selling their asset stores, often at low prices – signs of exchange failure, which result in the poor becoming poorer. When considered in terms of gender, women usually have not much say or control over how household resources are acquired, utilised or dispensed of. Following our gendered model of sensitivity, in the event of environmental irregularities those with less access to and or less control over assets are likely to be more vulnerable as they will find it the hardest to recover from environmental shocks (Wisner et al. 2004)

4.2 Discussion

It has nevertheless been said that, though capitals are essential for a sustainable livelihood they do not always have to be present in equal quantities as one kind of capital can contribute to the increase of other capitals (O'Leary 2007). In order to reduce vulnerability however, large stocks of one kind of asset may be inconsequential. The more assets that people command in the 'right mix', the greater their capacity to buffer themselves against environmental shocks (Kasperson and Kasperson 2005). Over and above, this study recognises that the available capitals have to be evenly distributed within the community so as to enable equal opportunities for societal responses to environmental irregularities. In addition, equality within the social space, would also be a step towards achieving sustainable development (Masika 2002). In light of this, the distribution of resources in both spaces is what will determine who is more vulnerable within these spaces. Unequal distribution will result in a winners and losers situation resulting in the disenfranchised becoming powerless¹¹ and thereby more vulnerable to environmental shocks. In rural Zimbabwe for instance, customarily women do not own land (Jacobs 2000; Paradza 2001) and compared to their male counterparts, they generally have weaker property rights and tenure security (Gaidzanwa 2011). Consequently, due to their circumstance of being rooted in places that are fixed in deep cultural ideologies which yield to a state

¹¹ The inward side of vulnerability which represents the inability to cope with external pressures, the outward side of vulnerability is consequently - exposure

of 'powerlessness', rural women often cannot challenge their position and are again for this reason more likely than men to be vulnerable to impacts of environmental change.

All of the discussed variables are structured within a certain geographical domain, as seen in the framework. The geographical domain featured in this study has its own components i.e. remoteness which in this study pertains to physical isolation and marginalisation which in this study pertains to the fragility of the physical condition. The geographical domain featured in the conceptual framework is reflective of the rural areas in Zimbabwe. To this end, rural areas in Zimbabwe are typified by patterns of uneven development both spatially and socially which are pronounced more in the marginal agro-ecological zones i.e. zones III, IV and V (Cousins et al. 1992). The majority of rural people are found in these low ecologically productive zones (Zinyama 1992; Phillips et al. 1998), making their vulnerability almost guaranteed as it is believed that vulnerability is increased or decreased by the general ecological potential (Swift 2006). The positioning of rural people in these low ecologically productive zones has its roots in historical processes¹². Historical processes, are thus determinants of vulnerability (Miller et al. 2010) as it is said that most people are vulnerable due to historical reasons which consigned them to areas with poor resource endowments (Blaikie et al. 1994; Wisner et al. 2004). To this effect, history is in most cases distinguished by power struggles and through which certain groups emerge winners and others losers. Based on this study, although historically both native men and women in Zimbabwe were subjected to colonial subjugation (Mangiza and Helmsing 1991; Otzen 1995; Maposa et al. 2010; Kanyenze et al. 2011), women were in turn also subjected to native male subjugation (Kachingwe 1986; Folbre 1988) thus suffering a double jeopardy; that of being black and a woman. In post-colonial times, though free from colonial oppression, rural women in Zimbabwe like in many parts of Africa remain victims of male oppression and subsequently unequal work burdens, unequal access to assets and are marginalised from political and economic opportunities (Dankelman and Davidson 1993; Peters and Peters 1998; Buckingham-Hatfield 2000; Whitehead and Kabeer 2001; Wanyeki 2003). Resultantly, wedged between poverty and environmental degradation, rural women are said to be the most affected by environmental changes as each new day presents before them daily challenges¹³ (Dankelman 2002)

Overall, vulnerability is an intricate and multidimensional concept which encompasses an interplay of dynamics as is demonstrated in the above conceptual framework. When considered in terms of gender, vulnerability cannot be analysed in isolation of the social relations which shape how men and women access resources. In the event of environmental shocks therefore, though men and women receive equal exposure of environmental shocks, women are likely to be more sensitive to the shocks than men due to their burdensome roles and marginal statuses which inhibit the way in which they access assets. Again, based on their differential access to assets, men and women are likely to have different coping strategies for shielding themselves against environmental shocks. Based on their livelihood assets, women may have more compromised coping strategies than men, making them more vulnerable to successive environmental shocks. In spite of their shared struggles, women are not a homogenous unit. They among themselves have a different command over assets, which means that they often do not experience environmental change in a uniform manner (Jackson 1993; Dankelman 2002). Without a doubt gendered vulnerabilities are yet again mediated by other non gender-identities such as class, race, age and so forth (Pincha et al. 2007).

¹² The Land Apportionment Act of 1930 imposed by the British colonialists which displaced natives settlers onto poor agro-ecological zones

¹³ For instance increased resource depletion results in longer hours spent by women in search for water and biomass

5 Summary

In summing up this conceptual framework, the key points to note are:

- 1 Vulnerability is a function of exposure, sensitivity and resilience
- 2 Exposure is non gendered, however sensitivity and resilience are gendered which gives rise to gendered impacts of environmental change based on who has what? who does what? who decides what? and consequently a differential vulnerability based on who is affected by what changes? who gains and who loses?
- 3 History and geographical location can determine vulnerability but are used in this study to provide background information for the study's exposure units
- 4 Due to the fact that the study chiefly draws on social vulnerability, access to assets as influenced by socio-cultural relations will be central to determining differential vulnerability between men and women in rural Zimbabwe
- 5 Lack of access to assets results in increased sensitivity while access to assets results in increased resilience. Assets are thereby a crucial element which can be used to buffer exposure units against vulnerability.
- 6 Policy instruments in Zimbabwe need to capture the gendered dimensions of environmental change, particularly since over half of Zimbabwe's population lives in rural areas which are highly sensitive to the negative impacts of environmental irregularities. Of the total population in the rural areas, the majority are women and they are believed by this study to be the ones that bear much of the environmental burden in their productive as well as reproductive roles.

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