

Contents lists available at ScienceDirect

## International Journal of Disaster Risk Reduction

journal homepage: www.elsevier.com/locate/ijdrr

# Assessing vulnerability and coping capacities of rural women to drought: A case study of Zvishavane district, Zimbabwe



Alice Ncube<sup>a</sup>, Precious T. Mangwaya<sup>a</sup>, Abiodun A. Ogundeji<sup>b,\*</sup>

Disaster Management Education and Training Center for Africa (DiMTEC), University of the Free State, 205 Nelson Mandela Drive, Bloemfontein 9300, South Africa <sup>b</sup> Department of Agricultural Economics, University of the Free State, 205 Nelson Mandela Drive, Bloemfontein 9300, South Africa

#### ARTICLE INFO

Keywords: Drought Vulnerability Coping capacity Women

#### ABSTRACT

This study analysed the vulnerabilities and coping capacities of rural women to drought in Zvishavane district in Zimbabwe. The study utilised quantitative research approach in which a structured questionnaire was used to collect data from the sampled households. The result revealed that low and erratic rainfall, lack of alternative livelihood options, lack of land and property ownership amongst others were identified as some of the indicators of vulnerability among rural women in Zvishavane. Despite the vulnerabilities surrounding them, rural women are not passive victims of drought. They have developed and adopted drought coping strategies such as; purchasing food stuffs from neighbouring communities and stocking it for consumption in dry periods, selling or trading their small livestock for grain, cultivation of drought resistant crop varieties, skipping meals and reducing meal portions and initiation of market gardens to supplement their harvests. Various institutions such as Non-Governmental Organisations (NGOs), the government and religious organisations are also providing necessary support to these women. In order to mitigate drought impacts on rural women, interventions such as; boosting of irrigation activities, inclusion of women in programme implementation and drought mitigation planning, diversification of livelihoods, establishment and promotion of drought buffers and social networks are needed. In addition, reforms aimed at correcting the imbalances in land ownership and rectification of gender discrimination and imbalances from past practices and policies are some of the important policy options that should be looked into.

#### 1. Introduction

The world has become more prone to drought during the past 25 years and climate projections indicate an increase in the severity and frequency of droughts in most parts of the world World Meteorological Organisation WMO and Global Water Partnership GWP [48,49]Climate change is projected to increase the frequency, intensity and duration of droughts with negative impact on rural communities especially in Sub Saharan Africa where communities mainly depend on rain-fed subsistence farming activities [34]. This impacts negatively on economies and food security of the region. Zimbabwe is one of the countries in Southern Africa that is prone to drought resulting in livelihoods depletion due to crop failure, loss of livestock and water resources. The loss of livelihoods translate into food scarcity, water scarcity, malnutrition and mass migration of people either to urban areas or internationally. Drought impacts vary in individuals, in households and in communities due to differing levels of vulnerabilities and coping capacities [23,45,47]. Drought disasters are products of the social, economic, political and environmental conditions that shape the lives of

those being affected [47]. Rural African women are affected by drought more than other groups of people due to among other reasons their position in the household [17].

[41] noted that, rural women in Africa contribute 70% in agricultural activities but they have the least capacity and resources to cope with the impacts of drought and climate change. Rural women are vulnerable to drought due to gender stereotypes and customary laws that shape African societies [12]. They suffer more during periods of drought than their male counterparts because of the gender roles assigned to them. In most rural African societies, productive and reproductive roles are divided along gender lines [39,41]. Women are assigned reproductive roles such as taking care of the family (especially children and the elderly), food production and processing, weeding of crops, water and fuel (firewood or coal) supply for household use [2]. Due to the gender roles assigned to them, women are usually the first to experience the hardships associated with drought [36].

Women input all their energy into ensuring that their families and communities have food and are well fed, clothed, have access to adequate clean water, and they take care of the general upkeep of the

\* Corresponding author. E-mail addresses: ncubea@ufs.ac.za (A. Ncube), preciousmawanza@gmail.com (P.T. Mangwaya), ogundejiAA@ufs.ac.za (A.A. Ogundeji).

https://doi.org/10.1016/j.ijdrr.2018.02.023

Received 29 March 2017; Received in revised form 7 February 2018; Accepted 14 February 2018 Available online 21 February 2018 2212-4209/ © 2018 Elsevier Ltd. All rights reserved.

household yet they are assigned an inferior rank due to gender stereotypes in the African culture [14]. They have little access to land or property ownership, limited involvement in decision making, limited access to technologies, inadequate skills in the production sector, limited access to finance and critical information [14,46]. As such, women have the least capacity and resources to cope with the impacts of drought and climate change [41]. It is against this background that the study sought to assess the vulnerability and coping capacities of rural women in Zvishavane district in the face of the recurrent drought in the area. The focus area is wards 15 (Indaba) and 16 (Mhototi) in Zvishavane district.

Vulnerability especially for the rural women is influenced by gender dynamics [19]. The gender dynamics are due to community culture which has a socio-economic impact on the women resulting in them being more vulnerable [36]. The Zvishavane rural women are a good example of women who are subjected to cultural regulations that restricts them from owning land, and other entitlements though they are involved in food production and family care. In most African households women are not supposed to have occupations but rather they must take care of children and perform household chores that are not remunerated, while men are seen as the household heads that have to fend and provide for the families [33]. This cultural norm has successfully worked for many years, however the challenges occur when the husband passes away then the woman become vulnerable [24].

Gender roles and responsibilities are socially constructed and therefore they are imbued with power relations [13]. Rural women's vulnerability can be determined by the community and the household composition, for instance dependency ratios, sex of the household head, ownership and control of assets, social networks, social capital and levels of education. The control of assets (land, finances and livestock and farming implements) for rural women is an important factor that determines their vulnerabilities and their coping capacities as these assets are important for their day to day survival [4]. With lower coping capacities comes higher levels of vulnerability. Vulnerability to any hazard for instance drought is strongly linked to the capacity of individuals or households to prevent, mitigate or cope with such events. Poverty is mainly viewed as a gauge of lack of access to resources and income opportunities, but it has other aspects of social positioning such as geographical location, age, gender, class, ethnicity, community structure, community decision making processes, and political issues that determine poor people's vulnerability [50].

Analyzing drought vulnerabilities and capacities is crucial because drought is a hazard that starts slowly thereby providing time for planning and addressing the underlying vulnerabilities and for strengthening the coping capacities within a social group. According to [20], an understanding of these vulnerabilities and coping capacities enables governments and disaster management planners to enhance drought mitigation, preparedness and response activities. As such, an understanding of rural women's drought vulnerabilities and coping capacities is imperative in improving drought management planning. In addition, in order to help women, we need to understand the indicators of vulnerabilities of women to drought and their coping capacities.

While many intervention have been targeted at men as community leaders in the past and considering the level of contribution of women to agricultural production, a strategic targeting of innovation to women in communities will improve their contributions to community development and promote welfare. Understanding the gender differential impacts of drought and the existing coping strategies that must be strengthened and supported at the community level is therefore imperative. This study set out to identify the indicators of vulnerabilities of rural women to drought impacts, analyse their coping strategies the role of institutions in enhancing women's coping capacities and in vulnerability reduction. Knowledge about women vulnerability and coping responses to drought will guide tailored intervention measures, as well as better inform policy design (better response to crisis) to ensure continued sustainability of rural women in drought affected areas.

#### 2. Literature: vulnerability factors and coping capacities

Analyzing vulnerability to drought is a complex task [45,20]. The complexity of the task results from the nature of the hazard i.e. it is difficult to understand, it lacks a universal definition, and its onset cannot be defined [45]. Despite the difficulties, a vulnerability profile is fundamental in drought management planning. In order to have a better understanding of the vulnerabilities in a community, it is essential to understand the micro and macro contexts of people's livelihoods [20,32,40]. A drought vulnerability profile should be able to address questions such as.

- i. How diversified and drought resistant are the local livelihoods?
- ii. How powerful is the asset base of the livelihoods?
- iii. What are the claims of the vulnerable groups to those groups that are less vulnerable? [20].

The sustainable livelihoods (SL) approach is a model which has been developed by various institutions and researchers to have a better understanding of how vulnerability arises among the poor and to identify poverty reduction strategies [40]. This study will use the [5] sustainable livelihood framework in analyzing vulnerability to drought since it is a framework that helps to address the above questions and it is people-centric. The vulnerability indicators of rural women to drought that need to be analysed include; access to resources, ownership of farming land, access to government and NGOs support systems, alternative income sources, availability and access to institutions and support organisations and the extent of natural resource dependence. According to [7], being without employment exacerbates dependency on locally based resource extraction sources. In most African societies livestock is an important asset that represents wealth and dignity [28]. Livestock ownership increases agriculture productivity and reduces poverty and vulnerability [31].

The coping capacities of rural women will depend on a number of factors such as their ages, levels of education, marital statuses and ownership of resources and other tough measures such as cutting down on the number of meals per day. [9] observed that, with old age comes less production, decreased cognition abilities and a slower pace of learning new knowledge and skills. Education is considered a contributor to enhanced capacity because; it enables people to make logical decisions on livelihood strategies. It facilitates access to information and technology and it makes people able to easily understand new knowledge and skills to improve their livelihoods [29]. Married women have the obligation to cultivate their husband's land although they normally do not have control on the proceeds [14]. Marriage in the rural context guarantees secure access to land for as long as the woman remains married to the men who is the sole land owner [15]. When there is scarcity of food due to drought some communities resort to cutting down the number of meals a day. Women usually opt to skip meals so as to feed the children and the older persons in the household. It was discovered that, when food is scarce, only the younger children feed during the day while the rest of the household skip meals until in the evening [10]. and [29] also observed that most households used this strategy as a way of coping with drought [30]. also noted that, communities in Marsabit in Kenva, reduced number of meals and meal portions to cope with the 2011 drought and food scarcity.

### 3. Material and method

#### 3.1. Study area

Zimbabwe, is in southern Africa between the Zambezi and Limpopo perennial rivers. It is bordered by South Africa to the south, Botswana to the west and southwest, Zambia to the northwest, and Mozambique to the east and northeast. Zimbabwe is divided into five agro ecological regions (I-V) based on varying soil types, rainfall patterns and Download English Version:

# https://daneshyari.com/en/article/7471462

Download Persian Version:

https://daneshyari.com/article/7471462

Daneshyari.com