

INTERSECTIONAL ANALYSIS OF THE GENDERED IMPACTS OF EL NIÑO-INDUCED DROUGHT ON WOMEN'S LIVELIHOODS IN MAYOVHE, KARIBA RURAL DISTRICT, ZIMBABWE

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ABSTRACT

This study examined the intersectional impacts of the El Niño-induced drought on women's livelihoods in Mayovhe, Kariba Rural District, Zimbabwe. The study investigated how age, marital status, disability, education, and socioeconomic status influenced women's vulnerability and resilience under drought conditions. A mixed-methods research approach was adopted, employing structured questionnaires, interviews, focus group discussions, and key informant interviews. The study achieved an overall response rate of 94%, demonstrating strong reliability of the findings. Results revealed that drought significantly increased women's workload, food insecurity, economic vulnerability, educational disruption, and exposure to gender-based violence. The findings further established that women relied on diversified livelihoods, community support networks, climate-smart agriculture, and water conservation practices as coping mechanisms. However, limited access to productive resources, extension services, climate information, and financial support constrained effective adaptation. The study recommends strengthening gender-responsive climate adaptation policies, scaling climate-smart agriculture interventions, improving women's access to productive assets, and expanding social protection mechanisms.

Keywords: climate change, El Niño, gender, food security, livelihoods, climate-smart agriculture

INTRODUCTION

Climate change remains one of the most significant threats to livelihoods, food security, and sustainable development globally. Women in rural communities are disproportionately affected because of their central role in agricultural production, water collection, household food security, and caregiving responsibilities. In Zimbabwe, recurring El Niño-induced droughts have intensified livelihood vulnerabilities, particularly among women dependent on rain-fed agriculture.

The 2023/24 El Niño-induced drought resulted in significant crop failures, water shortages, livestock losses, and declining household incomes across many rural communities. Despite increasing recognition of gendered climate impacts, limited studies have examined how intersecting factors such as age, marital status, disability, education, and socioeconomic status shape women's experiences during drought events.

This study applies an intersectional lens to understand how multiple social identities compound vulnerability and resilience.

OBJECTIVES

- (1) To examine the socioeconomic and environmental factors shaping women's experiences during El Niño-induced drought.
- (2) To assess the impacts of drought on women's livelihoods, food security, and wellbeing.
- (3) To identify coping strategies and resilience mechanisms adopted by women.
- (4) To evaluate the effectiveness of existing climate adaptation interventions.
- (5) To propose gender-responsive recommendations for drought management.

METHODOLOGY

The study adopted a mixed-methods research design guided by the pragmatist paradigm. Data were collected through interviews, focus group discussions, observations, and structured questionnaires.

Purposive and stratified sampling techniques were used to select participants representing different age groups,

marital statuses, disability categories, and socioeconomic backgrounds.

Quantitative data were analysed using descriptive statistics, while qualitative data were analysed through thematic analysis.

Table 1: Response Rate

Target Group	Number Targeted	Number Responded	Response Rate (%)
Government authorities	8	8	100
Disabled women	5	5	100
Older women (60+)	10	8	80
Focus Group Discussions	10	10	100
Total	33	31	94

RESULTS AND DISCUSSION

Demographic characteristics

The study involved **121 respondents**, of which **98% were female** and **2% male**, reflecting the gender-sensitive focus of the research.

Table 2: Gender distribution

Gender	Frequency	Percentage (%)
Female	118	98
Male	03	02

The age distribution showed that the majority (26%) were between 25–30 years.

Table 3: Age distribution

Age Group	Frequency	Percentage (%)
Less than 25	24	20
25–30	31	26
31–35	18	15
36–40	16	13
41–45	11	9
46–50	12	10
Over 50	09	07

Most respondents (65%) had lived in Mayovhe for over 18 years, strengthening contextual validity.

Intersecting factors shaping women's experiences

The study found that women's experiences during drought were shaped by:

- Age
- Marital status

- Disability
- Education
- Socioeconomic status

Younger women were more vulnerable to school dropout, early marriage, and exploitation, while adult women carried the heaviest caregiving burden.

Single women faced heavier economic burdens, while disabled women faced mobility constraints and exclusion.

Impacts of El Niño-induced drought

Table 4: Major drought impacts

Impact	Description
Food insecurity	Reduced harvests and meal frequency
Increased workload	Longer distances for water and firewood
Economic vulnerability	Job losses and reduced incomes
Educational disruption	School dropouts
Gender-based violence	Increased domestic violence
Migration	Labour migration
Psychological stress	Anxiety and depression

Food insecurity was the most dominant impact, with many households reducing to **one meal per day**.

The drought also increased:

- Child marriages
- School dropouts
- Domestic violence
- Mental stress
- Migration to Zambia for piece jobs

These impacts were significantly more severe among poorer, single, older, and disabled women.

Coping strategies and resilience mechanisms

Women adopted several adaptation strategies:

Table 5: Coping Strategies

Strategy	Description
Livelihood diversification	Poultry, crafts, trading
Fishing	Food and income source
Cross-border labour	Piece jobs in Zambia
Water harvesting	Small dams, wells
Climate-smart agriculture	Mulching, zero tillage
Community support	Food aid and social welfare

Livelihood diversification emerged as the most common coping mechanism.

Climate-smart agriculture practices such as mulching, zero tillage, and drought-tolerant crops were identified as critical resilience pathways.

Effectiveness of existing interventions

Government and NGO interventions provided important support, including:

- Food aid
- Educational support
- Agricultural extension
- Climate-smart agriculture training

However, challenges included:

- Corruption in food aid distribution
- Limited resources
- Inadequate climate information
- Poor irrigation infrastructure

These interventions largely provided short-term relief rather than long-term resilience.

CONCLUSION

The El Niño-induced drought had significant gendered and intersectional impacts on women's livelihoods in Mayovhe. The intersection of age, disability, marital status, education, and socioeconomic status intensified vulnerability and constrained adaptive capacity.

The findings show that drought impacts extend beyond agriculture to social wellbeing, education, and household dynamics. Women's resilience depended heavily on access to resources, social protection, climate information, and diversified livelihoods.

Strengthening women's resilience requires integrated, gender-responsive, and intersectional climate adaptation strategies.

RECOMMENDATIONS

- Strengthen gender-responsive climate adaptation policies.
- Scale up climate-smart agriculture technologies.
- Improve access to irrigation and water harvesting systems.

- Expand women's access to land, finance, and extension services.
- Strengthen livelihood diversification programmes.
- Improve climate information dissemination.
- Enhance social protection systems.
- Promote women's inclusion in drought planning and decision-making.

CONFLICT OF INTEREST

The authors declare no conflicts of interest regarding the publication of this paper.

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