



Climate Vulnerability and Capacity Analysis

Zimba District, Mankubu Zone

MAIN LIVELIHOODS AND RESOURCES

Livelihoods: Farming, gardening, selling of animals, molding bricks, temporary farm employment, fishing

Natural resources: Rivers, forests, which are often cut down for charcoal production

CURRENT AND FUTURE CLIMATE CHANGE TRENDS

- Mean annual temperature is increasing (2° c between 2040-2059)
- More frequent extreme weather events: heat waves, thunderstorms, floods.
- Rainfall seasons less predictable and shorter. Rainfall decreases in September-November and increases in January - March
- More extremely wet periods, severe flooding and flash floods.
- More frequent, longer, and severe droughts, dry spells



HAZARDS IN ORDER OF IMPORTANCE

1. Drought
2. Strong winds
3. Increased temperature

The world must come together to confront climate change. If we do nothing, we will face more drought, famine and hunger.

Barack Obama

VULNERABILITIES IDENTIFIED BY EACH GROUP

Group	Vulnerability Faced	Capacities and Strategies Used
Older People	<ul style="list-style-type: none"> • Water scarcity has reduced crop yields and prompted the community to venture into gardening during summer period • Drought has led to lower incomes, poor market values, low livestock value • Hunger • Disease • Dropping out of school • More flooding has led to increased loss of livestock/ reduced income, reduced yields, and increased poverty 	<ul style="list-style-type: none"> • Molding bricks for sale • Gardening • Temporary farm employment • Sale of thatching grass (by women) • Migration to rain-stable places • Illegal mineral mining in the Chilobe area • Sale of livestock to buy food
Women	<ul style="list-style-type: none"> • Floods have led to a loss of income from crops and animals. • Drought is connected to reduced yields and low incomes. • Reduced yields also due to reduced hectare ploughed. • The affected families have resorted to making basins and ripping. • Gardening has been affected. This is the source of income for most women in the community 	<ul style="list-style-type: none"> • People, especially women, grow vegetables • Use conservation farming • Piece work (Menial labor) • Sell livestock • Burn charcoal. • The use of early maturing varieties • Use of manure to enrich soils • Preserve and store some maize stovers and groundnuts haulms for supplementary feed
Men	<ul style="list-style-type: none"> • Flood and drought impact crop/livestock production impacting livelihoods, food security, and access to school • Loss of income can also then cause a lack of funds to feed livestock • overgrazing means low crop yield /production and low-income generation • Garden activities have reduced because of limited access to water 	<ul style="list-style-type: none"> • Employing climate smart agriculture • Use of ridges • Building strong houses to withstand strong winds • Selling fish
Young Women	<ul style="list-style-type: none"> • Dry spells have led to losing livestock, crop failure • Increased livestock diseases • No forest regeneration which has led to lower incomes • Strong winds have led to low yields and no income in charcoal/firewood collection. 	<ul style="list-style-type: none"> • Selling livestock • Piece work in nearby farms • charcoal-making • Collecting/selling firewood • Gardening to deal with dry spells • Strategies around flooding are focused on making ridges and relocating livestock to higher grazing land • Strategies for winds are focused on planting trees and reinforcing structures before the rainy season when strong winds are more common • Some reported that there are women participating in sex work for additional income
Young Men	<ul style="list-style-type: none"> • Increased temperature • Soil erosion from overgrazing • Rivers drying up from overgrazing 	<ul style="list-style-type: none"> • Men try to receive income from mining and selling precious gems • There is more work sought from brick working and moulding bricks as people cannot rely on selling animals • Some people have resorted to stealing • School children are staying home from school to cope with hunger and malnutrition

Impacts: Extreme events, droughts and existing land use practices have resulted in:

Ecosystem degradation: Streams and dams in Mankubu dry up by August, causing the community to rely heavily on boreholes. The natural springs have been tempered by unplanned agricultural activities and clearance of the forest reserve. Due to increased demand for land, grazing land has decreased as community members are settling and farming in the periphery of the rangelands. The pastures have reduced due to overgrazing resulting from increased cattle population.

Crop loss: Strong winds tend to uproot trees and crops, and so the most affected are the aged (above 60 years) and female and male youths who use forests as an alternative source of livelihood and have limited diversified livelihood sources. Trees are becoming scarce due to mass charcoal production, and women have to venture further to find firewood, leading to security issues.

Scarce arable land: Agricultural land is now scarcer, in some extreme cases, residents pay chiefs/headmen for land to be given.

Loss of Biodiversity: Impacts of unsustainable livelihood activities in Mankubu has led to the near extinction of certain tree species used to carve stools, mortars & pestles. These artisanal products are often sold for cash, and the proceeds are used for everyday household sustenance. Wild tubers/seeds are also hard to find due to increased loss of biodiversity. Previously they used to depend on wild tubers and seeds for food supplements such as Nongwe, sy oolwe, Gololo, bbonga and Mubbiti.

Barriers to overcoming current and future climate change impacts and vulnerabilities

Cultural and traditional beliefs: It was discussed in the Focus groups that residents in Mankubu may have a lack of understanding about how cultural and societal norms play a role in their failure to adapt to new strategies.

General lack in knowledge: Some of the barriers noted include a lack of adequate agricultural knowledge for correct crops and livestock, a general lack of technical knowledge on tree planting that prevents residents from planting new trees in the area to mitigate heat stress, and the women report that a barrier they face is in a lack of inputs for planting grass seed.

Geographical landscape: The underlying rock in the area makes it difficult for drillers to reach underground water.

Lack of resources: Lack of resources for construction/ agricultural investments, lack of tree planting inputs, and a lack of adequate resources to construct dams/ drill boreholes. In addition, resources are needed for the provision of the needed Met. Department service. Also, because land is now expensive, it attracts payment to local leadership.

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