



# CLIMATE CROWD

Community-driven solutions to help people and nature in a changing climate

## WARD 9, TSHOLOTSHO DISTRICT, MATABELELAND NORTH ZIMBABWE SUMMARY REPORT

SEPTEMBER 2022



Tsholotsho district in Matabeleland North Province of Zimbabwe (Fig. 1) is an agro-ecological region with low and erratic rainfall (<500mm per year) and high temperatures. It falls in the [Kavango Zambezi Transfrontier Conservation Area](#), which spans Botswana, Namibia, Angola, Zambia, and Zimbabwe. Tsholotsho's two principal rivers (Manzamnyama and Gwayi) are seasonal. Hardwood trees such as teak (*Baikiaea plurijuga*) dominate the Kalahari sands that cover 70% of the district, while acacia species and grassland areas cover the black basalts on either side of the Gwayi River. Wild animals like elephants, buffaloes, lions, kudus and other species from the adjacent Hwange National Park compete with people for space and resources, leading to livestock disease, mortality, and human-wildlife conflict.

### ABOUT

[Climate Crowd](#) is a bottom-up, community-driven initiative. Working with communities and local organizations in more than 30 countries, we collect data on climate impacts on communities, analyze the data, present the data back to the communities, and work with them to develop, fund, and implement on-the-ground solutions that help people and nature adapt to a changing climate.

### BACKGROUND

When people live adjacent to protected areas, how they respond to climate change affects nature's balance. In Zimbabwe, we worked with the Organization of Rural Associations for Progress and the Department of Agricultural Technical and Extension Services to survey how people experience climate change and its impacts on biodiversity. We conducted this Climate Crowd survey in November 2021 in Ward 9, Tsholotsho district of Matabeleland North Province. We interviewed 43 respondents (24 females, 19 males), including farmers, traditional leaders, teachers, and religious leaders. In this rural area, communities depend mainly on rain-fed agriculture. The climate affects the harvests that people rely on and the well-being of their livestock.

### STUDY AREA

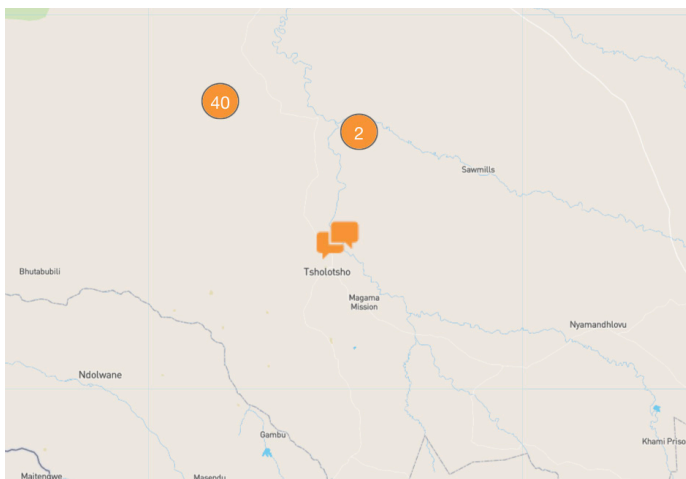


Figure 1: Tsholotsho District Map showing the location of target ward 9.

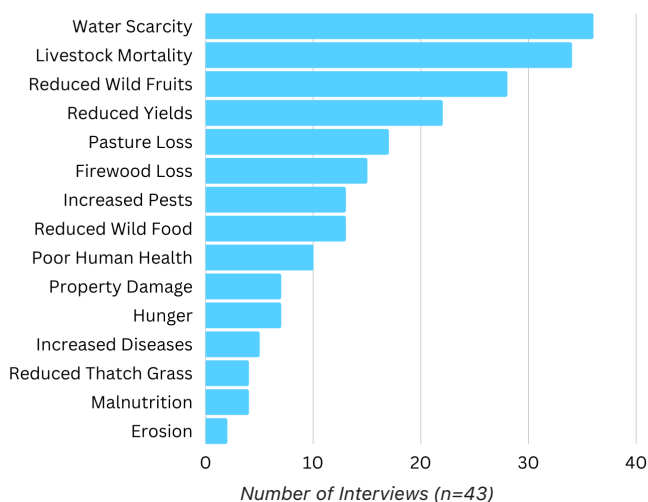
### REPORTED CHANGES IN WEATHER AND CLIMATE (n=43)

When the respondents were asked about the observed weather and climate changes:

- 41 reported a decline in rainfall.
- 34 observed hotter temperatures/heat waves.
- 18 noted changes in seasonal timing.
- 13 observed changes in drought and flooding.
- 7 reported a loss of water source(s).

### IMPACTS OF CLIMATE CHANGE ON COMMUNITY LIVELIHOODS

About 84% of the respondents reported water scarcity as a significant problem in their community. They believe it is caused by less rainfall, extremely high temperatures, drought, and later rainfall, with rains lasting for shorter periods.



Most perennial water bodies and some boreholes have dried up or broken down, leaving community members and livestock without enough water.

Other critical impacts of climate change affecting livelihoods as reported by survey respondents include:

- Poor harvests caused by rapid changes in rainfall distribution, intensity, timing, and temperature increase (51% of respondents).
- More -- sometimes fatal -- pest and disease infestations in livestock linked to higher temperatures (79 % of respondents).
- A decline in pasture leading to poor livestock health and animal deaths (40% of respondents).
- Fewer wild fruits to eat and sell (65% of respondents).
- Less firewood (35% of respondents).
- Deteriorating human health (23% respondents).

## COMMUNITY RESPONSES TO CLIMATE CHANGE

To cope with water scarcity, some people have drilled wells/ boreholes (33% of respondents), constructed dams (14%), or walked long distances to fetch water (28%). NGOs and other donor agencies have helped drill boreholes, and dams have been constructed by community members. Those who travel three kilometers or more for water are often women who encounter wildlife, criminals, and threats to their health.



### WANT TO LEARN MORE?

Visit the Climate Crowd [website](#) to explore and download interview data, view [project pages](#), and read more summary reports like this on our [publications page](#).

[wwfclimatecrowd.org](http://wwfclimatecrowd.org) [climatecrowd@wwfus.org](mailto:climatecrowd@wwfus.org)

***“The surge in churches linked to a modern lifestyle and technological advancement coupled with loss of cultural heritage have all led to changes in climatic patterns”***

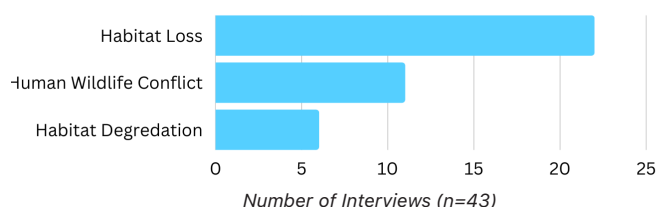
***Female Traditional Healer/ Farmer (75)- Tsholotsho***

More than half, 58% of the respondents, are trying to improve crop yields by adopting conservation agriculture practices to cope with climate change. When subsistence harvests are poor, 47% of survey respondents reported purchasing food, if affordable. Those who don't have this option rely mostly on donor aid.

About 77% of respondents also farm more drought-tolerant crops, such as small grains, instead of maize. Other households have altered their crop planting time (19% of respondents) and farm in different locations (9%). The decline in pasture has forced some families to move their livestock to a different grazing area (21% of respondents). At the same time, 23% of respondents reported that widespread deforestation lead to community members needing to walk long distances to fetch firewood. Community members have also responded to climate change impacts by selling assets (12% of respondents), migration (33%), and trade (21%). According to 40% of respondents, schooling is often abandoned as parents and guardians struggle to feed their families. Most children only complete primary education and don't proceed to the secondary level.

## IMPACTS OF RESPONSES TO BIODIVERSITY

Activities to cope with climate change impacts can adversely affect nature by degrading land, destroying habitat, reducing vegetation, causing or worsening soil erosion and river siltation, and impacting microbial organisms, eventually affecting biological diversity. Survey respondents reported indirect impacts such as increased habitat loss (51% of respondents), human-wildlife conflict (26%), and habitat degradation (14%) caused by expansion for farming, competition for pasture and water, and encroachment and resource extraction.



Respondents reported direct impacts on biodiversity in the form of species mortality (53% of respondents), phenological changes (19%), and range shifts (7%) as a result of low rainfall, seasonal changes, and intensive heat.