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Zimbabwe, Food Security

**Weather Crisis: Zimbabwe**

Zimbabwe is a landlocked country located in Southeast Africa. With a population of 15.4 million, the country is unevenly split (CIA).  According to UNICEF, 61.4% of the populace lives in rural areas, while 38.6% live in urban environments. (UNICEF, 2019) With most of Zimbabwe residing in rural areas, it comes as no surprise that Zimbabwe is a significant producer of crops.  They grow various grains, such as maize, sorghum, and wheat. (CIA) But what may come as a surprise is that even though the majority of Zimbabwe’s population lives in rural areas and farming is prevalent throughout the country, Zimbabwe is starving.

To better understand Zimbabwe’s food insecurity issues, it is good to know the composition of a family, how they live, what they eat, and collective problems the population faces. A typical family in Zimbabwe consists of four people in a rural and five people in an urban environment, depending on the census. (ILO,2019) The typical family makeup is a mother, a father, and two or three children. Families are headed by the men, and the households are headed by the women. (ILO,2019) A standard dwelling that a Zimbabwean family lives in is different depending on which area they reside. In rural areas, dwellings consist of brick or mud for the walls and base and sticks with thatch or metal for the roofs. (Housing-Zimbabwe) Urban areas tend to consist of buildings made up of bricks for the base and walls and metal for the roofs. (Housing-Zimbabwe) It is also important to point out that families living in rural environments commonly live in small villages consisting of 100 people or less. (ILO, 2019) In average families', men are the workers. Zimbabwe’s primary industries are mining, agriculture, tourism, and the SME sector (small, medium-sized enterprises.) (ILO, 2019) People in rural communities tend to work more in mining and agriculture, and people living in urban environments tend to work in all four industries. (ILO, 2019) The average monthly living wage of a family is 225 to 262 USD. (Rural Zimbabwe, 2022) This wage is especially vital for workers in rural areas because it barely covers their basic living expenses. Rural areas and villages face the most struggle. UNICEF estimates that most people who live in rural areas are in poor health, lack education, and suffer from a lack of nutrition and clean drinking water. (UNICEF, 2019) People in urban environments tend to fare better, but conditions in lower-income areas tend to replicate that of those in rural areas. (ILO,2019) Healthcare in Zimbabwe is virtually nonexistent in rural communities, and urban areas are very poorly funded and ill-equipped with proper medical staff and medical facilities. (ILO, 2019) Facilities and infrastructure as a whole are lacking in Zimbabwe. With rising inflation and costs, it is hard to properly manage the utilities. Systems such as sewage and telephones are heavily outdated, and the power source tends to be very unreliable. (Pushak & Briceño-Garmendia, 2011) Due to the record-high inflation, there is no way the government can see fit to replace these systems. (ILO,2019) People in urban areas have access to local food markets, although due to the current economic and weather conditions, these markets are not properly stocked and often suffer from food shortages. (Ap News, 2024) Families, especially in urban environments, get their food through these markets. People in rural areas tend to live off their land and grow their own crops. (CIA) As mentioned before, the main crops grown are maize, rice, and sorghum. Maize tends to be the staple of most dishes and typical family diets. One common and popular dish made by families in Zimbabwe is Sadza. Sadza is made up of stiff maize that is almost similar to porridge but has a thicker texture. (Sadza Ne Nyama: A Shona Staple Dish) Still, to this day, the significant barriers that Zimbabwean families face are food insecurity, horrible inflation, and underpaid wages.

These challenges are at the forefront of suffering in Zimbabwe. Compounding these challenges is weather. In 2018-2019, Zimbabwe was hit with a detrimental drought. This drought resulted in substantial crop failures across the country. The Zimbabwean government labeled the event as a “State of National Disaster.” (Displacement Tracking Matrix 2021) Unfortunately, things got worse for Zimbabwe. On March 15, 2019, an unprecedented cyclone struck resulting in heavy flooding, destroying homes, farms, and livelihoods. (Ap News 2024) In horrible irony, they were hit with another drought almost six months later.  Still, Zimbabwe continues to experience on-and-off droughts destroying millions of dollars worth of crops. (Usaid, 2023) More recently, Zimbabwe faced a drought on April 3, 2024, called “El Nino”. (Usaid,2023) The Zimbabwean government as a result declared a state of national disaster and applied for 2 billion in economic aid. (Ap News, 2024) At the time of writing this, Zimbabwe still struggles with the effects from “El Nino.” The UN estimates that ‘El Nino” has caused more than half of the countries harvests for 2024 to be destroyed.  (*Zimbabwe Faces Worsening Food Crisis Due to El Niño Droughts*, 2024) To note the historical climate of Zimbabwe is subtropical climate with dry winter and hot summers. (*World Bank Climate Change Knowledge Portal*, n.d.) Zimbabwe is prone to droughts and extreme weather and has been amplified with global climate change. (*World Bank Climate Change Knowledge Portal*, n.d.)

The extreme weather in Zimbabwe has resulted in families not being able to earn a livable wage and obtain food to adequately nourish themselves. These conditions brought on by extreme rain shortages combined with a weak economy make for a perfect sprouting ground for terrorists and small militias which could exacerbate Zimbabwe’s food insecurity issues.  The lack of food in rural areas lends itself to forced migration to urban environments in search of food. Reason would suggest that a populace of people moving from a rural area to an urban area already stressed with food insecurity will not only intensify food insecurity issues in Zimbabwe but accelerate it. Zooming out to the larger world, Zimbabwe is also competing for limited economic funding with higher visibility conflicts such as the wars in Israel and Ukraine. While the geopolitical landscape locally and abroad combined with weather issues are not easily controlled, a potential controlled solution does exist that could mitigate food insecurity issues for the Zimbabwe population.

My proposal is targeted at helping Zimbabwe fight its battle with the extreme weather. During my high school agriculture studies, I was introduced to a company/program called Harvestplus. Their goal is to genetically modify crops to put nutrients in the crops that a specific country is missing in their diet. For example, Harvestplus has already done some work in Zimbabwe by genetically modifying maize to have Vitamin A, a vitamin lacking in people of Zimbabwe. However, I propose to take these modified crops a step further by modifying them to be more drought-tolerant and severe weather-resistant. We could genetically modify these crops to store more water in the roots while minimizing water loss for the plant. By genetically modifying these crops, people across Zimbabwe, especially in rural areas, would still be able to have food on the table at the end of the day despite the weather. This program could be funded and headed by organizations like Harvestplus, which is already in the region, and could further help other neighboring countries such as Mozambique and Zambia. Partnerships and funding from other NGO’s could further make this solution a success. The government and communities across the nation could provide specific data on particular crops to better aim research. Although my proposal would greatly help the severe weather problem, there are a few challenges in my proposal. For example, the distribution of new crop seeds would be complicated. Zimbabwe is a large country made up of mostly vacant land. Finding every farmer who grows crops and having them grow this new seed would be hard. To combat this challenge, we could implement geospatial mapping to locate the farms. Another setback could be cultural bias from the farmers to produce this crop and not trust the research. However, if this new crop was first introduced in larger urban environments the impact would be greater. Hopefully a favorable buzz would thus ensue and thus influence rural farmers.  Another weakness is that my proposal has not been replicated on a mass scale anywhere in the world. Researchers have been fighting this issue for years now and have had very little success in implementing such a solution. Although the challenges may be overwhelming, I believe it can be done.  Despite these negatives, if what I proposed was to work, I feel that it could be the model for other countries suffering similarly.

In conclusion, Zimbabwe is suffering. Between the economic struggles of being able to buy food and grow food due to the extreme and unpredictable weather, food insecurity is at an all-time high. I am a big believer that something can be done, and things are being done. Incredible organizations like Harvestplus and UNICEF work tirelessly to provide the essentials and care to those who need it. But with dedicated young people like us at Florida Youth Institute and Global Youth Institute with an eagerness to help and provide solutions, there might just be a future for Zimbabwe to win its battle against food insecurity.

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