Research Article



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Perceived causes and consequences of food insecurity in rural Zimbabwe: Using a decolonised methodology

Tatenda Sukulao

Midlands State University, School of Social Work, Zimbabwe

Wilberforce Kurevakwesu

Midlands State University, School of Social Work, Zimbabwe

Ansley, N. Tshugulu 🕩

Midlands State University, School of Social Work, Zimbabwe

Anesu, A. Matanga 🕩

Midlands State University, School of Social Work, Zimbabwe

Noel, G. Muridzo (PhD)

Midlands State University, School of Social Work, Zimbabwe

Abstract

This study investigates perceived causes and associated effects of food insecurity in Kotwa, Mudzi district, Zimbabwe. The study comes at a time when the majority of Zimbabweans are food insecure due to the recent El Niño-induced drought and the situation is worse in rural agro-based communities. We made use of decolonised qualitative methodology through the Ubuntu research approach. We collected data from 11 participants and 3 key informants through dialogue and task approaches. Data were analysed through advanced manual analysis which emphasises the use of native languages in data analysis to ensure that cultural aspects reflected in the data are not lost. In line with the perceived causes of food insecurity, participants

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Corresponding Author: Tatenda Sukulao (MSW); Midlands State University, School of Social Work, Corner Grant and Chinhoyi Street, Harare, Zimbabwe. sukulaotatenda@gmail.com
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highlighted a lack of adequate rainfall, high temperatures, poor soils, laziness and dependence, as well as poverty and unemployment as the causes of food insecurity. The consequences that were reflected include poor physical and mental health, domestic violence, child marriages, crime, and family disintegration. We then recommended, among other recommendations, that there is a need to assist rural agro-based populations with resources and knowledge to produce food despite adverse climatic conditions, and the revival of traditional food insecurity practices like the *Zunde raMambo* to ensure that communities can rescue households that are food insecure, and not wait for external intervention. Moreover, the government of Zimbabwe should urgently refocus its efforts on addressing food insecurity because it is a threat to national development as it affects well-being and productivity whilst also incubating a host of social problems.

Keywords: Climate change, food insecurity, Ubuntu research approach, rural communities, Zimbabwe

Introduction

Food insecurity is a significant problem for many households in Africa (Adeyanju et al., 2023). Food security is seen by the World Food Programme (WFP) as a state of food availability, accessibility, utilisation, stability, and sustainability for all individuals (WFP, 2022). However, this is a pipedream in Africa, threatening peace and security due to associated dire consequences on well-being and productivity (Mukwedeya & Mudhara, 2021). According to the Food and Agricultural Organisation (FAO), in most African countries, food insecurity has been brought by, inter alia, endless conflicts, economic woes as well as droughts, and most recently, climate change (FAO, 2023). From 2019 to 2022, the coronavirus disease (COVID-19) even worsened the situation, and the conflict in Ukraine further aggravated the situation. Russia and Ukraine supply most parts of Africa with wheat, and as such, the war affected food production and prices (FAO, 2023). Since the onset of the COVID-19 pandemic and the ongoing global economic recession, FAO (2023) estimates that there was a 150 million increase in people suffering from chronic hunger throughout the world.

The World Bank (2022) estimates that 140 million people in Africa suffer from severe food insecurity, with at least one in five going to bed hungry every day. Due to a lack of climatic event resilience and over-reliance on food imports, sub-Saharan Africa has become particularly vulnerable to climate change in terms of food availability and pricing (Kemoe et al., 2022). Some of the countries that are acutely food insecure are those to the South of the Sahara and include the Democratic Republic of Congo where 16.6 million people are in perpetual hunger, Malawi, Central African Republic, South Sudan, Burkina Faso, and Zimbabwe (Global Network Against Food Crises, 2020). This pervasive state of acute hunger and malnutrition in some sub-Saharan African countries suggests limited progress towards achieving some of the targets of sustainable development goals (SDGs)—particularly SDG 2 (Zero Hunger).

The Government of Zimbabwe (GoZ) is aware that food insecurity is consistently growing in Zimbabwe, particularly in rural communal areas—and Mudzi district has been one of the most affected areas (Magweta, 2024). According to the World Food Programme (WFP), food insecurity is pervasive in Zimbabwe because of inflation, fluctuating exchange rates and food prices, droughts and the recent El Niño event to the extent that more than 1.7 million people in urban areas and nearly all people in communal areas are food insecure as of 2024 (WFP, 2024). This is a situation that was predicted by the 2023 Global Hunger Index, yet the government of Zimbabwe did not prevent food insecurity from becoming a gross reality. The situation is also exacerbated by the fact that around 42% per cent of Zimbabwe's population is languishing in extreme poverty, and to make matters worse, more than 27 per cent of children have stunted growth in Zimbabwe (Chineka & Kurevakwesu, 2021; WFP, 2024).

The WFP (2024) argues that Zimbabwe's 2023-2024 farming season was erratic, with dry conditions negatively impacting the national planting area for food and other crops. Crop condition and growth were negatively affected by the persistent dry spells due to El Niño. In most parts of Zimbabwe, crops failed. Yields declined by close to 90 per cent compared to previous farming seasons (WFP, 2024), and this becomes more of a problem for people in rural

areas because their main economic activity is farming—despite some diversifying to artisanal gold mining (Kurevakwesu & Mabeza, 2023). According to WFP (2024), the number of people facing food insecurity and those employing crisis and above-crisis food-based coping strategies has increased since January 2024. According to the United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA), Zimbabwe has been consistently affected by El Niño since 1982, leading to disruptions in rainfall, droughts, and crop failures (UNOCHA, 2024). The recent dry spells in 2024 worsened the situation, with an estimated 6 million people facing food insecurity from 2024-2025 (UNOCHA, 2024). This drought will significantly impact food security and nutrition, worsening socio-economic vulnerabilities, especially in rural areas. Moreover, the drought in Zimbabwe is exacerbating water shortages, affecting 2.6 million people out of a population of 15 million (UNOCHA, 2024). The El Niño-induced drought leads to health issues, including increased diarrheal diseases and malaria risk (UNOCHA, 2024).

In line with the above, this study investigates factors responsible for food insecurity and associated effects in rural Zimbabwe. This is because food insecurity has detrimental effects on the welfare and health of people, yet its amelioration seems not to be a priority for the Zimbabwean government. To make matters worse, food security is a fundamental human right as espoused in the Universal Declaration of Human Rights (UDHR) and the International Covenant on Economic, Social and Cultural Rights (ICESCR). At the local level, the Constitution of Zimbabwe and the National Development Strategy (Zimbabwe's socio-economic development blueprint) recognise the need for food security and that it should be prioritised if the welfare and development of Zimbabweans are to be recognised. Various scholars including Estrellas (2023), Peng and Berry (2019), Kowalski and Kowalski (2022), Ayala and Meier (2017), Kimani-Murage et al. (2023) and Tura (2019) acknowledge that having access to at least a sufficient quantity of food could be viewed as the most fundamental of all human rights.

From the literature that we reviewed, it is clear that food insecurity is a result of numerous interrelated and frequently overlapping economic, social, and political factors. Hall et al. (2021) postulate that one of the primary drivers of food insecurity in Africa is high population growth. The growing African population is creating a high demand for food, at a time when the production of food is failing to meet nutritional requirements across the continent—despite agricultural output increasing yearly (Myeki et al., 2022), with Subsaharan Africa having the least growth (Bjornlund et al., 2020; Djoumessi, 2022). Molotoks et al. (2020) note that nations with slower-than-expected population growth rates are expected to have better food security, whereas those with faster-than-expected population growth rates are likely to experience the worst consequences across Africa and throughout the world.

Another factor responsible for food insecurity is climate change (Adesete et al., 2023; Giovetti, 2020; Mirzabaev et al., 2023). An excessive or insufficient amount of rainfall can diminish or completely ruin agricultural production, affecting food security. In Zimbabwe, Scoones (2020) highlighted that the disastrous impacts of the El Niño-induced drought combined with Cyclone Idai in 2020, put nearly 5.5 million people at risk of starvation. Without a doubt, the season was a complete failure, yielding around 780,000 tonnes of maize—more than a third less than the expected output (Scoones, 2020). This has also been the case in the 2023 to 2024 agricultural season where nearly 60 percent of all crops were written off due to the El Niño event—resulting in widespread food insecurity (WFP, 2024). Moreover, due to erratic weather patterns, Southern Africa has experienced multiple floods and droughts, affecting food production throughout the region (WFP, 2024).

On another note, poverty and unemployment are determinants of food insecurity (Bartfeld & Men, 2020; Chakona, 2022). Mabli et al. (2023) note that households with persons who are unemployed or have low salaries are more likely to experience food insecurity. People who are struggling financially find it difficult to acquire food, and this is particularly the case in impoverished nations (Vedantu, 2023). Farrington (2021) argues that job loss in a family—worse if a breadwinner loses a job—is associated with increased family food insecurity and poor child nutrition. In a study conducted by Haini et al. (2022), unemployment rates were found to have a negative association

with food security in developing nations where high levels of unemployment affect access to quality food.

The COVID-19 pandemic also had a debilitating effect on food security throughout the world. Wolfson et al. (2021) state that food insecurity, a condition associated with limited or unpredictable availability of sufficient nutritious food for an active and healthy life rose considerably during the COVID-19 era. Thomas (2022) stressed that COVID-19 resulted in a rise in food insecurity as it decreased food availability, cost, cultural limits on the techniques of food acquisition, and the utilisation of food on the individual level. COVID-19 lockdowns disrupted food supply chains in sub-Saharan Africa by impeding the movement of smallholder farmers, agricultural inputs, and food items (Chineka & Kurevakwesu, 2021; Kurevakwesu, 2021a; Onyeaka et al., 2022). According to the Government of Zimbabwe (2020), food insecurity was a persistent issue in Zimbabwe before COVID-19, and the onset of the pandemic worsened the situation, particularly for the urban populace as they depend on food supplies from rural smallholder farmers who could not travel to urban markets (Mavhunga, 2021; Shoniwa, 2022).

In our literature search, some of the effects of food insecurity that came out include poor mental and physical health and poor academic performance among school-going children (Mavuka et al., 2024). Food insecurity and poor mental health are strongly correlated (Myers, 2021; Liebe et al., 2022; Kirubanandan, 2022). Food insecurity is associated with high risks of mental illness, anxiety and depressive disorders, suicidality, mood disorders, and sleep deprivation (Wolfson et al., 2021; Liebe et al., 2022). Research indicates that food insecurity causes significant anxiety and stress, which exacerbate pre-existing mental illnesses—even though having a chronic physical or mental illness can be a precursor to food insecurity (Thompson et al., 2018; Puddephatt et al., 2020). According to Smith et al. (2022), persons who are food insecure are more prone to suffer significant depressive episodes than people who are food secure. Psychosocial stressors brought on by food insecurity include social stigma from using unethical means to obtain food, uncertainty about where to get food, feelings of loneliness and guilt,

and strain in families due to the inability to feed one's family (Ayano et al., 2020). Kurevakwesu and Mabeza (2023) even noted that food insecurity and its associated causes have pushed rural people to shift from agriculture to artisanal gold mining in Zimbabwe—something that has affected food production and led to environmental degradation, despite improving livelihoods and the rural economy.

It is incontrovertible that food insecurity is a major determinant of poor physical health (Beyene, 2023; Kurevakwesu, 2021b; Sultana et al., 2023). Food insecurity often leads to a diet of poor quality, which is linked to the problem of maintaining a healthy weight by raising the risk of being underweight and vulnerable to malnutrition due to inadequate food intake, or overweight due to consuming unhealthy but less expensive food (Smith et al., 2022; Thomas, 2022). Poor physical and developmental health outcomes, such as dietary deficiencies (Maynard et al., 2018), stunted growth in children (Ke and Ford-Jones, 2015), obesity (Pourmotabled et al., 2020), developmental deficits (Myers, 2020), disability, and chronic diseases (Ayano et al, 2020)—have all been linked to food insecurity. Furthermore, Beyene (2023) found a connection between food insecurity and reduced adherence to antiretroviral therapy, as well as losses in physical health, a weakened immune system, a drop in viral suppression, an increase in the incidence of serious illness, and a higher mortality rate among HIV-positive individuals. For people with chronic illnesses like HIV/AIDS, food insecurity is a cause for concern because associated medication for such illnesses works well with adequate nutrition (Kurevakwesu, 2021b). This then becomes a concern in Southern Africa where there is the highest number of people on anti-retroviral therapy worldwide (Kurevakwesu, 2021b).

Akanbiemu's (2017) study revealed that children in families with restricted food availability had markedly greater rates of stunted growth in comparison to those from households with access to healthy food. According to Gassara and Chen (2021), children in Sub-Saharan Africa have stunted growth as a result of household food insecurity, which is a significant public health concern in the region. Gassara and Chen (2021) also found that stunting, dietary diversity and household food insecurity are significantly correlated in

Sub-Saharan Africa—something that was also corroborated in a Zimbabwean study by Lukwa et al. (2020). For school-going children, food insecurity affects academic performance (Mavuka et al., 2024). According to a study done in Georgia, USA, Raskind et al. (2019), found a correlation between food insecurity and students' performance. Congruently, Tamiru and Belachew (2017) found out that normal physical growth among children is hampered by inconsistent availability of food in households, which also negatively affects children's cognitive development, academic performance and social relationships. Moreover, the absence of food has a detrimental impact on students' social and psychological well-being, which lowers their self-esteem and eventually impairs their academic performance (Ifeoluwa, 2019).

In Zimbabwe where the majority of the population is impoverished, it therefore becomes important to understand how food insecurity has worsened the situation towards coming up with practicable recommendations. To make this possible, we conducted our study through the methodology explicated in the following subsection, and our study was based on the following research questions:

- **1.** What are the perceived factors responsible for food insecurity in Kotwa, Mudzi District, Zimbabwe?
- **2.** How are people in Kotwa, Mudzi District affected by food insecurity?

Methodology

Approach and design

To have a deeper appreciation of the factors responsible for food insecurity and associated effects in Kotwa, Mudzi (a communal area in Zimbabwe)—from the standpoint of participants—we made use of a decolonised methodology (cf. Khupe & Keane, 2017; Mugumbate, 2022). A decolonised methodology subscribes to most of the processes of mainline/traditional research but goes a step further as it promotes research which is in synchrony with African cultural values—allowing the collection of realistic and in-depth data which is pregnant with cultural meanings. We made use of the Ubuntu

research approach (URA) which is informed by the notion of Ubuntu (Kurevakwesu & Chizasa, 2020; Kurevakwesu & Maushe, 2020), and recognises the values and realities of research participants by involving them in the process of developing knowledge about themselves and their environments (Konadu-Osei, 2022; Mugumbate, 2022). As such, URA is methodologically collaborative, ontologically relational, epistemologically co-creational, and philosophically compassionate (Mugumbate, 2020). We had to use the local language (Shona) to obtain consent and gather data in line with local customs, traditions, beliefs and knowledge systems.

Congruently, we used the African Research Methodology (ARM) as the research design because it highlights the value of comprehending and respecting regional cultures, customs, and knowledge systems in research (Mugumbate, 2022). ARM assisted us in gaining more nuanced and culturally sensitive knowledge of food insecurity since food insecurity issues are intricately linked to cultural practices, beliefs, and traditions in African societies. Khupe and Keane (2017) postulate that the ARM design incorporates ongoing active community interaction during the research process. When it comes to research on food insecurity, incorporating community members at every stage of the process guarantees the elicitation of findings which are applicable, significant, and beneficial.

Study domain and population

This study was conducted in Ward 10, Mudzi District in Mashonaland East Province in Zimbabwe. Mudzi District's Ward 10 is made up of 8 villages. Given the need for relevant and rich data, we targeted community members residing in Kotwa as participants, together with representatives from the Department of Social Development (DSD), World Vision and traditional leaders as key informants. Recent census data from the Zimbabwe Statistics Agency (ZimStat), states that Mudzi district, which houses Kotwa, has a total population of 158 478 people (UNICEF & ZimStat, 2023). Kotwa is the district capital of Mudzi district and it lies around 220 kilometres north-east of Harare, the capital of Zimbabwe. It is close to the Zimbabwe-Mozambique border. Most of the people in Kotwa depend on agriculture, yet in the past

decade, the area has progressively received low rainfall. The major crop that is grown in the area is cotton. Kotwa receives around 450 millimetres of rainfall annually. Due to the high levels of poverty in the area, there has been high emigration from the district. With the recent El Niño event and the worsening situation in the district over the past years, we believed that people in Kotwa were better placed to provide rich, and significant findings.

Sampling procedures

We collected data from 11 participants (community members) and 3 key informants. The sample size for participants was determined by the principle of data saturation (a priori semantic saturation) in line with the guidelines provided by Saunders et al. (2018). The 3 key informants who were purposively selected (a traditional leader, a Social Development Officer and an officer from World Vision)—helped us in recruiting the 11 participants purposively. This was because we needed participants who could provide the richest data. Of the 11 participants that we selected using purposive sampling, 5 of them were male, whilst 6 were female. All the participants were between 36 and 79 years of age. In terms of education, 6 participants had secondary education, 3 had primary education, and the other 2 did not attend formal education. Moreover, all the participants were communal farmers. All 11 participants were from different households, and 8 were married (2 had more than 1 wife), whilst the other 3 were single (either divorced or widowed).

Data collection

In data collection, we used the dialogue and task approaches to collect data. The dialogue and task approaches were used to collect data from the primary participants, whilst the dialogue approach was used for key informants. The dialogue approach is when the participant(s) and the researcher have a conversation (Mugumbate, 2022). The dialogue approach was chosen because it fosters a complex discussion which allows participants to express themselves whilst also asking questions. In line with the task method, we collected data whilst participants were doing their daily activities i.e., cooking, cutting or styling hair, knitting, farming, or fetching water (cf. Mugumbate, 2022). This method of data collecting lessens reactivity—a

situation where participants twist responses because of the researcher's presence or the context of the study. We did this to collect data in natural settings and this ensured the collection of accurate data. We made use of dialogue guides (Verlinden, 2023; Hurst, 2023) which carried questions related to the factors responsible for food insecurity and associated effects.

Ethical considerations

Permission to conduct the study was obtained from Mudzi Rural District Council, and ethics approval, from the Midlands State University's School of Social Work Departmental Research Ethics Committee (MS 110124). In tandem with the decolonised methods that we adopted, we were guided by various research ethics in conducting the study. These include (1) the total agreement technique which ensures that everyone involved in the study agrees to be part of the study (Mugumbate, 2022); (2) the local language approach which emphasises the use of local languages in communicating with participants; (3) the San method which is centred on co-producing knowledge, respect, honesty, compassion, and fairness.

Rigour

To strengthen the trustworthiness of the findings, we borrowed Reviere's (2001) Afrocentric elements of rigour: *ukweli*, *utlulivu*, *uhaki*, *ujarnaa*, and *kujitoa*. *Ukweli* or "truth" (Swahili) encourages researchers to reduce bias and authentically present the findings (Chilisa, 2014). *Utulivu* or "justice" necessitates the need for researchers to foster harmonious relationships with and between participant groups rather than fabricating, highlighting, or maintaining divisions (Chilisa, 2014). As such, we followed the community's moral guidelines throughout the study, respected each participant's privacy, and treated them all with dignity. We also made sure that everyone's views were reflected equally. On the other hand, *uhaki* or "harmony" necessitates a study protocol that is equitable to all participants, and whose implementation takes into account everyone's well-being (Chilisa, 2014). *Ujarnaa* or "community" demands that the researcher rejects the idea that they are separate from the participants and refrain from assuming that they are. This helps capture the actual interest of the community. Lastly, *kujitoa* or

"commitment" prioritises dedication and the application of knowledge over the necessity of objectivity and dispassion.

Data analysis

Advanced manual data analysis (cf. Mugumbate, 2022) was employed in this study. It is closely related to Braun and Clarke's (2006) thematic analysis and includes reading, listening, comprehending, organising, and colour-coding data, as well as developing themes and categories and producing meaning units. In advanced manual analysis, data is analysed using the native language to ensure that the cultural aspects reflected in the data are not lost (Mugumbate, 2022). As such, before reading and comprehending the data, we transcribed it and came up with dialogue transcripts (in Shona) which we then analysed independently—through a deductive approach. After independent analysis, we collectively discussed the independent themes we had developed as we came up with one set of themes which we iteratively refined whilst adding meaning units. We then translated the themes and meaning units into English. The results are then presented in the following sub-section.

Findings

Perceived factors responsible for food insecurity

On the perceived factors responsible for food insecurity in Kotwa, the themes that we developed were: (1) the lack of adequate rainfall, (2) high temperatures, (3) poor soils, (4) laziness and dependence, and (5) poverty and unemployment.

Lack of adequate rainfall

Most participants indicated that Kotwa receives low rainfall, which greatly affects their food security status. One of the participants said,

...droughts have become more frequent... and growing enough food to sustain ourselves is becoming difficult. Our crops always fail and we struggle to feed our families... many families are left without enough to eat... this was not the situation in the past. We used to do well... (Participant 3).

This concurred with what other participants said, for instance,

...food insecurity in our area is chiefly attributable to insufficient rainfall... and the problem is growing every year. Yes, we receive some precipitation in our area, but it is not sufficient to support our crops... but this year the situation is severe compared to past years... The visible state of our crops, all wilted, serves as a clear indicator that food insecurity has escalated this year... look at what I am harvesting now... I am harvesting these wilted plant stalks for my cattle... (Participant 7).

Even key informants confirmed the submissions above as one of them stated,

...food insecurity is caused by lack of adequate rainfall. Most of the community members fail to plant because the rains here are unpredictable... This affects food production leading to food insecurity. Inadequate rainfall affects agricultural production and leads to water stress... it also affects livestock and dairy production, limiting animal-based protein sources... this year, rains were scanty, the region is too dry and we have an increase in food insecure households in this ward (Key Informant 2).

It is clear from the findings above that Kotwa relies heavily on rain-fed agriculture for food production, and when the rains are insufficient, crops fail, leading to food insecurity.

High temperatures

Participants also identified high temperatures as another cause of food insecurity in Kotwa. One participant was heard saying,

...Our area is very hot and this is the reason why we are food insecure. The scorching heat affects crops, affecting yields... In the past few years, heat waves have become more frequent... affecting agricultural productivity, and we struggle to produce enough food to meet our needs. This year was the hottest for me... and it is

disheartening to see our efforts go to waste due to the extreme temperatures (Participant 4).

It was also highlighted that,

High temperatures have disrupted our traditional farming practices... The heat shortens the growing season as crops mature faster, affecting yields. This has also affected our animals... causing dehydration and even death in severe cases. Livestock serves as a source of income and food here, and these temperatures have exposed us to food insecurity (Participant 9).

A key informant also added that,

...most of the community members are grappling with crop failure due to wilting. We have noticed that the high temperatures have disrupted our traditional farming calendar... Maize tends to mature faster due to the heat... affecting yields. This mismatch between traditional practices and the altered climate exacerbates food insecurity as residents struggle to adapt to the changing conditions... livestock has also been affected. We have water streams close by, but due to extreme heat, they are dry... (Key Informant 1).

The study findings show that the region has experienced an increase in temperature over the years, leading to adverse consequences for agricultural production and overall food security. Combined with low rainfall, it is clear that climate change is affecting food production in the study area.

Poor soils

Poor soils were also blamed for food insecurity in the study area. One participant echoed the following,

...we experience food insecurity due to the poor soils. The soil in the area is very poor, lacking essential nutrients for crops... Most fields have sandy and loamy soils and even if it rains, the soil does not

hold water and nutrients easily wash away... No matter how hard we work, yields are always disappointingly low (Participant 6).

In support of the above another participant added,

...our soils require a lot of manure or fertilisers for good yields. We do not have easy access to fertilisers because they are expensive... worse, water is scarce and I still remember, I once applied fertilizer on maize and a dry spell came... I nearly lost the maize because the fertilizer drained water from the plants... Without proper resources and support, food production will remain an issue in this area... causing food insecurity... (Participant 10).

Poor soils were also stated by key informants. One key informant said,

...the soils here are severely depleted of nutrients, making it difficult for community members to achieve good yields. Attempts to grow crops are often met with displeasure due to low yields. This directly contributes to food insecurity as the productivity of crops is significantly affected... (Key Informant 3).

The study has shown that poor soils are a significant cause of food insecurity in the ward as they affect food production.

Laziness and dependence

Participants indicated laziness as a contributing factor to food insecurity in the study area. This is shown in the responses below.

There are cases in our community where food insecurity persists because some people are not willing to put in the necessary work. They may not invest enough time and effort into sustainable farming practices or exploring alternative income sources, which ultimately affects their access to food... Yes, in as much as climate is an issue, some people tend to relax and wait for external support (Participant 9)

Another participant also added,

Some struggle with food insecurity due to a lack of motivation and effort to engage in income-generating activities. Laziness prevents them from exploring opportunities that ensure food security for their families. Most of our community members now heavily rely on donor aid from World Vision and other NGOs. Donor funding has also promoted laziness and it is causing food insecurity in some way (Participant 11).

Key Informant 1 also shared the same sentiments,

...in certain instances, food insecurity is linked to a lack of initiative. Some community members are not proactive in seeking opportunities, training, or utilising available resources. We have so many cases of criminal acts like theft in search of food. The young people nowadays are very lazy and they do not want to work. They just want to eat what they have not worked for... (Key Informant 1).

The study revealed that some of the community members in the ward lack motivation and the drive to look for job opportunities and training to better equip them for employment and self-help initiatives—they have become heavily dependent on external support.

Poverty and unemployment

The study findings show that poverty and unemployment are some of the causes of food insecurity in Kotwa. A participant said,

...poverty prevents us from accessing nutritious food. Many of us cannot afford to buy enough food, especially during times of price increases. We eat what is available. It is a daily struggle to put food on the table, and poverty keeps us trapped in this cycle... Most are not formally employed; we just look for piece jobs here and there... (Participant 5).

Another participant also indicated that,

...we struggle to afford quality seeds, fertilisers and agricultural equipment. Without proper resources, we cannot invest in meaningful farming, resulting in low yields and this affects food security. Sometimes we receive fertilisers from the government, but then we do not have other resources... my neighbour has a son who is in the UK and he drilled a borehole for them which they use for irrigation... they are okay when it comes to food... (Participant 8).

In support of this view, a key informant argued,

...poverty and unemployment are significant underlying causes of food insecurity here. Limited income and livelihood opportunities make it difficult for households to meet their basic needs, including food. I interact with community members daily, and I see how poverty affects food security. Also, community members lack the financial means to adopt modern farming practices or invest in irrigation systems (Key Informant 3).

The study revealed that poverty and unemployment are key underlying factors that contribute to food insecurity in Kotwa. They restrict access to food and affect food production.

Perceived effects of food insecurity in Kotwa

From the themes that we developed, the perceived effects of food insecurity in Kotwa include (1) poor physical and mental health, (2) domestic violence, (3) child marriages, (4) crime, and (5) family disintegration.

Poor physical and mental health

Participants highlighted that food-insecure community members tend to suffer from poor physical and mental health. This is shown by the responses provided below.

...I have noticed a decline in my physical strength and endurance because I don't have enough food to fuel my body properly. I am more susceptible to illnesses, and I often feel drained... on top of that, I am HIV positive and whenever I have enough food, I even gain weight, but with what is going on now, my CD4 count has gone high... I have to ration the food that I get from the government and I cannot even have a garden because there is no water... (Participant 7).

Another participant also indicated,

...it is easy to see a food insecure household... community members who are food insecure can easily be seen by their physical appearance... as we were roaming around, how many people did you see who were as physically fit as those from other parts of the country? We are in a very sorry state... (Participant 1).

Signs of poor mental health have also been noted among food-insecure households, as expressed below.

...due to lack of food, we are hopeless, and at times I am always frustrated... when in social fora, I have noticed that I have low self-esteem... I feel I cannot express something meaningful at a community meeting... The stress associated with food insecurity has affected me greatly... Imagine being in a position where every day you are worried about what your children are going to eat... I do not know if we will be alive next year if this continues... worse, there is no one to help us besides the few that we get from the government... (Participant 4).

Participant 9 also shared similar views that food insecurity results in poor mental health:

...I developed poor mental health a few months back when I could not afford to purchase enough food to cater for my family. I was mainly worried about my children. It led to sleepless nights and worry. It was very hard for me to maintain a positive mindset when I could not feed my family. It affected my mood and how I responded to my wife when we conversed... (Participant 5).

This was also expressed by key informants, and one of them argued,

During my interactions with individuals experiencing food insecurity, I have noticed a strong correlation between their nutritional status and health. The lack of consistent access to nutritious food not only affects their physical health but also their mental health as it leads to feelings of anxiety, depression, and a diminished sense of self-worth... (Key Informant 1).

The findings show that poor physical and mental health are significant consequences of food insecurity in Kotwa. On top of that, domestic violence is bound to happen as expressed by Participant 5 above.

Domestic violence

Domestic violence was also identified as a consequence of food insecurity in the study area. One participant aired that,

...two weeks ago, we had a case where the wife was harassing her husband because he was failing to provide food for the family... such cases are prevalent in this area and whenever parents fight or have altercations, you will hear that it has something to do with food... There is a husband who bashed his wife because the bucket of mealie-meal he had purchased the previous week had depleted... if food is always there, such acts of violence will be minimal... (Participant 2).

Participant 9 also pointed out that,

...the scarcity of food puts pressure on families, and some resort to violence. This is common among young couples. They argue and fight because of food and its insecurity. I have seen that most young people get married without any form of income, and fail to feed their

families... They then resort to domestic violence when they have related arguments... (Participant 8).

Key Informant 2 summed up what other key informants said as he stated,

...I have seen instances where partners, overwhelmed by the pressure of food scarcity, resort to abusive behaviours as a means of asserting control. Food insecurity acts as a catalyst for domestic violence, perpetuating cycles of harm and trauma... I think it is also because of the stress, hopelessness, humiliation and frustration that the failure of a father figure to feed their family brings... (Key Informant 2).

The study has shown that there is a significant relationship between food insecurity and domestic violence in Kotwa. The scarcity of food generates a sense of desperation, frustration and heightened tension, leading to bouts of violence.

Child marriages

Child marriages were also revealed as a consequence of food insecurity in Kotwa. This is evidenced by the quotes below.

...when families struggle to provide enough food for their children, they may feel compelled to marry off their daughters at a young age... They see it as a means to secure their daughters' future. I have also witnessed cases where young girls are getting married at an early age in search of greener pastures. Some young girls are being easily convinced into early marriages because of the lack of adequate food at home... We also had a case where parents married off their daughter to a wealthy man to ensure their survival... the father even confessed at the traditional court... (Participant 9).

Participant 1 also indicated that, "...I have also noticed a rise in child marriages in our area due to food insecurity. Young girls prefer to get

married early than to stay in their homes where there is no food to eat...' (Participant 1).

A key informant then said,

Child marriages have become distressingly prevalent and one of the underlying factors is food insecurity. Families struggling to secure food see child marriage as a means to reduce economic strain... We have had numerous cases where we had to take drastic measures because it was clear that a family is after something... yet they will be putting young children at risk... (Key Informant 1).

The findings of the study prove that child marriages can be attributed to food insecurity. Families facing food poverty see child marriage as a way out.

Crime

Findings also show that food insecurity results in crime. This is shown in the responses below.

...food insecurity has increased crime here... I have noticed instances where people steal crops or livestock out of desperation, to feed their families. We have seen an increase in burglary, theft, and even conflicts over limited food resources. People are stealing from other people's gardens and there are always such stories every day... (Participant 6).

Another participant also said,

...lazy people and those who struggle to provide food for their families engage in illegal activities to meet their basic needs. I have witnessed cases where individuals steal from their neighbours' gardens or even break into homes to find food... and the cases are rising (Participant 3).

A key informant then expressed that,

...The lack of access to adequate food and the desperation caused by hunger drives individuals to engage in illegal activities... We have heard of incidents involving food hoarding, stealing of crops, and even conflicts arising from competition over limited food... (Key informant 2).

The study findings show that food insecurity drives community members into criminal activities in search of a means of survival.

Family disintegration

Family disintegration due to emigration as a consequence of food insecurity was also noted as expressed by some participants as follows.

...food insecurity has led to separation of family members. Parents and guardians are migrating to urban areas and neighbouring countries in search of better opportunities to feed their families, whilst leaving their children behind. All my brothers left for South Africa because we could not have enough food here... they left their wives and they remarried there and we lost touch with them... (Participant 2).

Another participant said,

...some family members, especially young adults, are leaving their homes and migrating in search of work to support their families. We are very close to the border of Mozambique. Some family members leave in search of work in Mozambique and some travel frequently to Mozambique so that they purchase clothes and groceries for resale... some go, and we never hear of them again... (Participant 6).

The key informant supported the above verbatims by stating that:

Food insecurity has disintegrated families... We are very close to the border of Mozambique and many people visit the country in search of cheaper groceries. Children are left behind without anyone taking

care of them. This separation strains relationships and can lead to a breakdown in communication and loss of parental guidance and support... this is getting worse as droughts get the better of us every year... (Key Informant 1)

Findings reveal that family disintegration is also a consequence of food insecurity in the study area.

Discussion

From the study findings, it is clear that one of the key issues perceived to be responsible for food insecurity in Kotwa is climate change. This was expressed as participants highlighted that there is a lack of adequate rainfall and high temperatures—which were said to be worsening yearly. Other factors highlighted in the study include poor soils, laziness and dependence, poverty and unemployment. These findings are supported by FAO (2023) which states that droughts, and more recently, climate change are primarily responsible for climate change. However, as is the case in Ukraine and other parts of the world where conflicts have affected food production and availability, there are no conflicts in Zimbabwe. Still, the severity of food insecurity in the country as expressed by the participants can match war zones (FAO, 2023). This is primarily because of the recent El Niño-induced drought and climate change (Adesete et al., 2023; Giovetti, 2020; Mirzabaev et al., 2023; Scoones, 2020; WFP, 2024). The WFP (2024) reports that in the 2023 to 2024 agricultural season, nearly 60 per cent of all crops were written off due to the El Niño event resulting in widespread food insecurity. Poor soils, laziness and dependence, and poverty and unemployment were the other issues mentioned. However, from the findings, these seem to be secondary issues. In terms of poverty and unemployment, households with unemployed persons are more likely to experience food insecurity, and this is corroborated by (Bartfeld & Men, 2020; Mabli et al., 2023; Chakona, 2022). Most of the participants argued that they are struggling financially, which affects food availability.

Moreover, since most of the participants are communal farmers, adverse weather conditions affect their work and also render them unemployed and unproductive. What it then means is that unemployment and poverty can both be causes and consequences of food insecurity as explained by Vedantu (2023). One coping strategy that has been progressively adopted by agrobased rural communities in the wake of droughts and climate change is artisanal gold mining (Kurevakwesu & Mabeza, 2023). However, despite the study not focused on coping strategies, it is clear that this was not much of an option for people in Kotwa because they complained of unemployment and poverty problems that could have been lessened by income diversification (Kurevakwesu & Mabeza, 2023). On top of this, water shortages were also reported and even during task-based data collection, we realised that people walk long distances to secure safe drinking water. Only a few households have solar-powered boreholes, and for most of the people in the area, it is nearly impossible to have a garden exacerbating the situation. This shortage of safe drinking water leads to health issues, including increased diarrheal diseases and malaria risk (UNOCHA, 2024).

The perceived consequences of food insecurity that were exposed by the participants were poor physical and mental health, domestic violence, child marriages, crime, and family disintegration. We tried to confirm the findings with the 'In-depth Analysis of Zimbabwe 2022 Population and Housing Census Data' by UNICEF and ZimStat (2023). Mudzi district (where Kotwa is a part), ranks number 84 out of 90 districts in terms of poverty, ranks number 88 out of 90 in terms of teenage marriages, is number 86 out of 90 districts in terms of lack of access to drinking water services, has some of the highest number of people emigrating to other districts or neighbouring countries, and has one of the lowest school net attendance ratios in Zimbabwe (UNICEF & ZimStat, 2023). The findings concur with past studies which found a strong correlation between food insecurity and poor mental health as it predisposes people to anxiety and depressive disorders, suicidality, mood disorders, and sleep deprivation (Kirubanandan, 2022; Liebe et al., 2022; Myers, 2021; Wolfson et al., 2021). Even Smith et al. (2022) corroborate this as they argue that food-insecure persons are more prone to depressive episodes than food-secure people. The study findings also show that psychosocial stressors like social stigma and social isolation are common among food-insecure households.

Poor physical health was mentioned by the participants and this is an undeniable fact because food insecurity affects diets increasing the risk of being underweight and vulnerable to malnutrition due to inadequate food intake (Smith et al, 2022; Thomas, 2022). Disconcertingly, one participant highlighted that she is on anti-retroviral therapy, and her health is fast deteriorating due to food insecurity. What she expressed relates to arguments put forward by Beyene (2023) who confirmed that food insecurity affects adherence to antiretroviral therapy, as well as physical health, immunity and viral suppression, increasing the incidence of serious illness, and mortality among HIV-positive individuals. This is happening at a time when a large part of Zimbabwe's population is on anti-retroviral therapy (Kurevakwesu, 2021) necessitating the need for urgent and spirited efforts from responsible authorities to rescue affected families. This situation can be worse for children as it leads to stunted growth and affects child development, school attendance and school performance (Gassara & Chen, 2021; Lukwa et al., 2020; Mavuka et al., 2024; Raskind et al., 2019). This makes food insecurity a major public health concern that needs urgent attention.

Participants also mentioned domestic violence, child marriages, crime and family disintegration as consequences of food insecurity—issues that have become prevalent in Zimbabwe (Kurevakwesu, 2017; Kurevakwesu et al., 2022). These are developmental problems for Zimbabwe, and efforts to abate them are seemingly futile. With the influence of the key drivers of food insecurity expected to gradually increase, it means that these effects will continue to be menacing. However, in Africa, the amelioration of food insecurity might remain a pipedream, considering that African countries, despite having the capacity have their priorities set elsewhere and they wait for foreign intervention on these issues (Kurevakwesu & Mukushi, 2018). This threatens development, peace and security due to associated consequences on well-being and productivity (Mukwedeya & Mudhara,

2021) stultifying prospects of realising local and international development targets.

Recommendations

In line with the study findings, we made the following recommendations.

- 1. Food security has to be highly prioritised at the national policy level and the Ministry of Finance of Zimbabwe should allocate adequate funding to this cause. We understand that several initiatives have been instituted by the government to address food insecurity, but from the findings of this study, it seems the interventions are falling short necessitating a change in the current modus operandi.
- 2. Rural people in Zimbabwe need assistance with resources and knowledge to produce food despite adverse climatic conditions. Such initiatives include the provision of alternative water sources for irrigation and knowledge on the production of drought-resistant crops. This will ensure that their capacity to produce food is not affected, reducing the chances of food insecurity.
- 3. In communities where rains have become progressively low over the years, there is a need to find income diversification initiatives. One such activity that has been embraced in other areas around the country is mining, which is however dependent on the presence of abundant mineral resources in the affected area.
- 4. Traditional food security practices like the *Zunde raMambo* need to be revived and supported across Zimbabwe. Such a practice allows community members to collaborate and work together to produce food which is stored and given out during times of crisis. This will ensure that communities will have the capacity to rescue households that are food insecure, and not wait for external intervention.
- 5. Food insecurity should be seen as a threat to the amelioration of persisting social problems in Zimbabwe i.e., child marriages and domestic

- violence. If any notable progress is to be made in arresting these and other social problems, then food security has to be made a key priority.
- 6. In pursuit of the Sustainable Development Goals, the government of Zimbabwe, through all line ministries and departments, should urgently refocus its efforts towards ensuring that the country is food secure in the coming years. This is because food insecurity is a threat to national development as it affects overall health, well-being, and productivity whilst also incubating a host of social problems.

Conclusion

This qualitative study provides valuable insight into the perceived causes and consequences of food insecurity through a decolonised research methodology. The adoption of the decolonised approach was vital in centering local voices and moving away from externally-imposed top-down frameworks something that is championed by Kurevakwesu (2023). The findings of this study highlight the complex nature of food insecurity, driven by a range of interconnected factors. The causes of food insecurity that came out from the research were a lack of adequate rainfall, high temperatures, poor soils, laziness and dependence, together with poverty and unemployment. The participants revealed that poor physical and mental health, domestic violence, child marriages, crime, and family disintegration are some of the perceived consequences of food insecurity. Given these findings, we underscore the need for policy interventions and development programs that are responsive to the priorities and capabilities of rural communities. Moreover, there is a need for the government of Zimbabwe to allocate enough resources and prioritise this issue since it is the most prevalent social problem in Zimbabwe at the moment, and its presence is a major developmental and public health issue.

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The authors declare that they have no conflict of interest.

ORCIDs

Tatenda Sukulao, https://orcid.org/0000-0003-4699-6213
Wilberforce Kurevakwesu, https://orcid.org/0000-0003-4167-3052
Ansley Tshugulu, https://orcid.org/0000-0001-7186-666X
Anesu Aggrey Matanga, https://orcid.org/0000-0002-0796-9661
Noel Garikai Muridzo (PhD), https://orcid.org/0000-0002-3295-0305

References

- Adesete, A. A., Olanubi, O. E., & Dauda, R. O. (2023). Climate change and food security in selected Sub-Saharan African Countries. *Environment, Development and Sustainability*, 25, 14623–14641 (2023). Retrieved from https://doi.org/10.1007/s10668-022-02681-0
- Adeyanju, D., Mburu, J., & Ejima, J. (2023). Assessing food security among young farmers in Africa: evidence from Kenya, Kenya, Nigeria, and Uganda. Retrieved from https://agrifoodecon.springer.com
- Akanbiemu, F. A. (2017). Household Food Insecurity and Child Nutritional Status: Pattern, Causes and, Relationship. Retrieved from https://link.springer.com
- Ayala, A., Meier, B.M. (2017). A human rights approach to the health implications of food and nutrition insecurity. *Public Health Review*, 38, 10 (2017). https://doi.org/10.1186/s40985-017-0056-5

- Ayano, G., Tsegaye, L., & Solomon, M. (2020). Food insecurity and the risk of depression in people living with HIV/AIDS: a systematic review and meta-analysis. Retrieved from https://www.ncbi.nlm.nih.gov
- Bartfeld, J., & Men, F. (2020). Policy And Economic Factors That Affect Food Security. Retrieved from https://www.irp.wisc.edu/resource/policy-and-economic-factors-that-affect-food-security/
- Beyene, S.D. (2023). The impact of food insecurity on health outcomes: empirical evidence from sub-Saharan African countries. *BMC Public Health* 23, 338 (2023). https://doi.org/10.1186/s12889-023-15244-3
- Bjornlund, V., Bjornlund, H., & Van Rooyen, A. F. (2020). Why agricultural production in sub-Saharan Africa remains low compared to the rest of the world a historical perspective. *International Journal of Water Resources Development*, 36(sup1), S20–S53. https://doi.org/10.1080/07900627.2020.1739512
- Chakona, G. (2022). Household Dietary Patterns and Food Security Challenges in Peri-Urban South Africa: A Reflection of High Unemployment in the Wake of Rising Food Prices. Retrieved from https://link.springer.com
- Chilisa, B. (2014). Indigenous research is a journey. *The International Journal of Narrative Therapy and Community Work*, 2, 41-44.
- Chineka, T. S. and Kurevakwesu, W. (2021). Challenges for child welfare and development during the COVID-19 pandemic in Zimbabwe. *African Journal of Social Work*, 11(4), 209-215
- Djoumessi, Y. F. (2022). New trend of agricultural productivity growth in sub-Saharan Africa. *Scientific African Journal*, 18(22), 12. doi.org/10.1016/j.sciaf.2022.e01410
- Farrington, S. M. (2021). Job Loss and Food Insecurity during the COVID-19 Pandemic. Retrieved from https://www.iza.org/publications/dp/14273/jobloss-and-food-insecurity-during-the-covid-19-pandemic
- Food and Agriculture Organization of the United Nations (2023). Livelihood-based Coping Strategy Index. Retrieved from https://data-in-emergencies.fao.org

- Gassara, G., & Chen, J. (2021). Household Food Insecurity, Dietary Diversity, and Stunting in Sub-Saharan Africa: A Systematic Review. Retrieved from www.ncbi.nlm.gov
- Government of Zimbabwe (2020). National Development Strategy 1, January 2021-December 2025: Towards a Prosperous and Empowered Upper Middle-Income Society by 2030, Ministry of Finance and Economic Development, Harare
- Haini, H., Musa, S.F.P.D., Pang, W., & Basir, K. H. (2022). *Does unemployment affect the relationship between income inequality and food security?* Retrieved from https://www.researchgate.net
- Hall, C., Jennie, I., Mardiarmid, T. et al. (2021). *The Impact of climate and societal change on food and nutrition security: A case study of Malawi*. Retrieved from https://doi.org/10.1002.fes3.290
- Ifeoluwa, P.H. (2021). Food Insecurity in Higher Education Institutions And the Role Of Philanthropy In Enabling Quality Education. Retrieved from https://africaphilanthropynetwork.org
- Ke, J., & Ford-Jones, E. L. (2015). Food insecurity and hunger: A review of the effects on children's health and behaviour. Retrieved from www.ncbi.nlm.nih.gov
- Kemoe, L., Baptista, D. M. S., Farid, M., et al. (2022). *Climate Change and Chronic Food Insecurity in Sub-Saharan Africa*. Retrieved from https://www.elibrary.imf.org/view/journals/087/2022/016/article-A001-en.xml
- Khupe, C., & Keane, M. (2017). *Towards an African education research methodology: decolonising new knowledge*. Retrieved from https://africasocialwork.net
- Kimani-Murage, E., Gitagia, M., Osogo, D., Mutoro, A. & Paganini, N. (2023). A Human Rights- Based Approach to Food Security in Kenya and South Africa. Berlin: TMG Research.
- Kirubanandan, S. (2022). The power of food security on mental health: Can this be one of the missing puzzle pieces to solve our silent pandemic? Retrieved from https://medcitynews.com

- Konadu-Osei, O.A. (2023). *African ubuntu can deepen how research is done*. Retrieved from https://theconversation.com
- Kowalski, J., & Kowalski, A. (2022). The realization of the human right to food: preliminary remarks on assessing food security. https://doi.org/10.31743/ppe.13009
- Kurevakwesu, W. & Mabeza, T. (2023). Implications of income diversification in Irisvale farming community, uMzingwane District, Matabeleland South, Zimbabwe. *Journal of Social Development in Africa*, 38(1), 7-38
- Kurevakwesu, W. & Mukushi, A. (2018). Charitable work in a developing region: Why humanitarian work is mostly in the hands of foreign organizations in Africa. *African Journal of Social Work*, 8(1), 56-62
- Kurevakwesu, W. (2017). The social work profession in Zimbabwe: A critical approach on the position of social work on Zimbabwe's development. *Afro-Asian Journal of Social Sciences*, 8(1), 1-12
- Kurevakwesu, W. (2024). United we stand, and divided we fall: A call to action for the decolonisation of social work in Africa. *International Social Work*, 67(5), 1275-1278. https://doi.org/10.1177/00208728231196364
- Kurevakwesu, W. (2021b). Strategies of coping with the effects of HIV and AIDS in Chinamhora communal lands, Goromonzi Rural District, Zimbabwe. *African Journal of AIDS Research*, 20(1), 70-78. https://doi.org/10.2989/16085906.2021.1872665
- Kurevakwesu, W. & Maushe, F. (2020). Towards Afrocentric social work: Plotting a new path for social work theory and practice in Africa through Ubuntu. *African Journal of Social Work*, 10(1), 30-35
- Kurevakwesu, W. & Chizasa, S. (2020). Ubuntu and child welfare policy in Zimbabwe: A critical analysis of the National Orphan Care Policy's Six-Tier System. *African Journal of Social Work*, 10(1), 89-94
- Kurevakwesu, W. (2021a). COVID-19 and mental health services delivery at Ingutsheni Central Hospital in Zimbabwe: Lessons for psychiatric social work practice. *International Social Work*, 64(5), 702-715. https://doi.org/10.1177/00208728211031973

- Kurevakwesu, W., Dzoma, F., Mundau, M., Magocha, J., Chizasa, S. & Takangovada, M. (2022). Towards the creation of a developmental welfare state in Zimbabwe: An inside perspective on the Department of Social Development. *Social Work/Maatskaplike Werk*, 58(2). http://doi.org/10.15270/58-2-1037
- Liebe, R.A., Adams, L. M., Hedrick, V. E., Serrano, E. L., Porter, K. J, Cook, N. E., & Misyak, S.A. (2022). *Understanding the Relationship between Food Security and Mental Health for Food-Insecure Mothers in Virginia*. Retrieved from www.ncbi.nlm.nih.gov
- Lukwa, A.T., Siya, A., Zablon, K. N., Azam, J.M., & Alaba, O.A. (2020). Socioeconomic inequalities and malnutrition among under-five children: within and between-group inequalities in Zimbabwe. Retrieved from https://www.ncbi.nlm.nih.gov
- Mabli, J., Monzella, K., Franckle, R. L., Lavalle, P., & Delgado, M.S. (2023). Food Insecurity Transitions and Changes in Employment and Earnings. Retrieved from https://www.elsevier.com/open-access/userlicense/1.0/
- Magweta, R. (2024). *Hope amidst El Nino drought*. Retrieved from https://hopeelnino.com
- Mavhunga, C. (2021). Zimbabwe's Food Insecurity Escalates During COVID-19 Lockdowns. Retrieved from https://www.voanewsa.com
- Mavuka, A., Gwenzi, D.G., Shoko, S., Nyamhanza, N., & Kurevakwesu, W. (2024). The myth of universal education in rural Zimbabwe: Evidence of challenges faced by pupils with albinism. *International Journal of Educational Development*, 110, 103131. https://doi.org/10.1016/j.ijedudev.2024.103131
- Maynard, M., Meyer, S.B., Perlman, C.M. et al. (2018). Experiences of Food Insecurity: Among Undergraduate Students: You can't starve yourself through school. Retrieved from https://www.researchgate.net
- Mirzabaev, A., Bezner Kerr, R., Hasegawa, T., Pradhan, P., Wreford, A., Cristina Tirado von der Pahlen, M., & Gurney-Smith, H. (2022). Severe climate change risks to food security and nutrition. *Climate Risk Management*, *39*, 100473. Retrieved from https://doi.org/10.1016/j.crm.2022.100473

- Molotoks, A., Smith, P., & Dawson, T.P. (2020). Impacts of land use, population, and climate change on global food security. Retrieved from https://onlinelibrary.wiley.com/doi/full/10.1002/fes3.261
- Mugumbate, R. (2022). Over 60 African research methods and techniques. Retrieved from https://africasocialwork.net
- Mugumbate. R. (2020). *Research Methodology*. Retrieved from https://africasocialwork.net
- Mukwedeya, B., & Mudhara, M. (2021). Factors influencing livelihood strategy choice and food security among youths in Mashonaland East Province, Zimbabwe. Retrieved from https://www.sciencedirect.com
- Myeki, L. W., Bahta, Y.T., Matthews, N. (2022). Exploring the Growth of Agricultural Productivity in AFRICA: AFäre-Primont Index Approach. Agriculture 2022, 12, 1236. Retrieved from https://doi.org/10.3390/agriculture12081236
- Myers, C.A. (2020). *Food Insecurity and Psychological Distress*: A Review of the Recent Literature. Retrieved from www.ncbi.nlm.nih.gov
- Onyeaka, H., Tamasiga, P., & Guta, A.T. (2022). Food insecurity and outcomes during COVID-19 pandemic in sub-Saharan Africa (SSA). Retrieved from https://agricultureandfoodsecurity.biomedcentral.com
- Peng, W., & Berry, M. (2019). Food Security, Nutrition and Health. Retrieved from https://www.sciencedirect.com/topics/food-science/food-security
- Pourmotabbed, A. L, Moradi, S. et al. (2020). Food Insecurity and Mental Health: a systematic review and meta-analysis. Retrieved from https://www.cambridge.org
- Raskind, G.I., Haardorfer, R., & Berg, J.C. (2019). Food insecurity, psychosocial health and academic performance among college and university students in Georgia, USA. Retrieved from www.ncbi.nlm.nih.gov
- Reviere, R. (2001). Toward an Afrocentric research methodology. *Journal of Black Studies*, 31(6), 709-727

- Saunders et al. (2018). Saturation in qualitative research: exploring its conceptualization and operationalization. Retrieved from https://pubmed.ncbi.nlm.nih.gov
- Scoones, 1. (2020). Why is there food insecurity in Zimbabwe? Retrieved from https://www.future-agricultures.org
- Shoniwa, B. (2023). Public-Private-Community Partnerships (PPCPs) as a mechanism in enhancing food security during the COVID-19 pandemic in Zimbabwe. *Journal of Public Administration and Policy* 26(2), 199-212. Retrieved from https://doi.org/10/1108/PAP-12-2021-0065
- Smith, J., Ker, S. Archer, D., Gilbody, S., Peckham, E., & Hardman, C.A. (2022). Food insecurity and severe mental illness: understanding the hidden problem and how to ask about food access during routine healthcare.
- Sultana, N., Rahman, M.M., Khanam, R. *et al.* (2023). Food insecurity and health outcome nexus: empirical evidence from the informal sector enterprises in Bangladesh. *BMC Public Health* 23, 722 (2023). Retrieved from https://doi.org/10.1186/s12889-023-15655-2
- Tamiru, D., & Belachew, T. (2017). *The association of food insecurity and school absenteeism:* systematic review. Retrieved from https://agricultureandfoodsecurity.biometrics.com
- The World Bank. (2022). Putting Africans at the Heart of Food Security and Climate Resilience. Retrieved from <a href="https://www.worldbank.org/en/news/immersive-story/2022/10/17/putting-africans-at-the-heart-of-food-security-and-climate-resilience#:~:text=At%20least%20one%20in%20five,Crises%202022%20Mid%2DYear%20Update.
- Thomas, L. (2022). *Food Insecurity and Depression*. Retrieved from https://www.news-medicinal.net
- Thompson, C., Smith, D., & Cummins, S. (2018). Understanding the health and wellbeing challenges of the food banking system: a qualitative study of food bank users, providers and referrers in London. *Journal of Social Sciences and Medicine*, 221(34), 95-101

- Tura, H. A. (2019). Achieving zero hunger: implementing a human rights approach to food security in Ethiopia. *Third World Quarterly*, 40(9), 1613–1633. Retrieved from https://doi.org/10.1080/01436597.2019.1617630
- United Nations Office for the Coordination of Humanitarian Affairs. (2024). Zimbabwe: Drought Flash Appeal May 2024- April 2025 (May 2024). Retrieved from https://www.unocha.org/publications/report/zimbabwe/zimbabwe-drought-flash-appeal-may-2024-april-2025-may-2024
- UNICEF & ZimStat (2023). *In-depth Analysis of 2022 Population and Housing Census: District Profiles: Mudzi District.* Harare: UNICEF & ZimStat
- Verlinden, N. (2021). *The Interview Guide: 7 Key Elements*. Retrieved from https://www.aihr.com
- Wolfson, J.A., Garcia, T., & Leung, C.W. (2021). Food Insecurity is Associated with Depression, Anxiety, and Stress: Evidence from the Early Days of the COVID-19 Pandemic in the United States.
- World Food Programme. (2024). Zimbabwe. What the World Food Programme is doing in Zimbabwe. Retrieved from https://www.wfp.org/countries/zimbabwe#:~:text=In%20urban%20areas%2 https://www.wfp.org/countries/zimbabwe#:~:text=In%20urban%20areas%2 cc//www.wfp.org/countries/zimbabwe#:~:text=In%20urban%20areas%2 cc//www.wfp.org/countries/zimbabwe wfp.org/countries/zimbabwe wfp.org/countries/zimbabw