Changing Diets, Varying Food Consumption Patterns, and Food Security among Recent Zimbabwean Migrants in Windhoek, Namibia

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Abstract

In Zimbabwe, decades of economic and political challenges have generated significant out-migration to neighboring countries including Namibia, perceived by many Zimbabweans as being more politically and economically stable than their home country. While numerous studies have documented these movements, few have interrogated the food security of migrants in host countries, where they are likely to face food security challenges. This study thus sought to investigate the changing dietary and food consumption patterns of recent Zimbabwean migrants in Namibia and the impact on household food security. The researcher collected data from 35 Zimbabwean migrant households in Windhoek through in-depth interviews. Study results show that deteriorating economic conditions and food insecurity were the major drivers of migration from Zimbabwe. The pre-migration diet of most migrants was mixed, consisting of both traditional and Westernized foods. The major food security challenges were: non-availability of foods that migrants consumed while still in Zimbabwe; poor quality of some substitute foods; increased food expenses through importing foods from the home country; and shortage of time to prepare some foods. While most migrant households reported improved household food security compared to the pre-migration period, numerous food challenges remained. Many worried that the changing diet and the consequent increase in the consumption of over-processed foods could have negative health outcomes, hence impacting on their food security as well.

Keywords: migration, poverty, food security, dietary changes, food consumption patterns

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INTRODUCTION

International migration is a global phenomenon. In 2023, approximately 184 million people were living outside their country of nationality globally (World Bank, 2023). While migration happens in all parts of the world, much of the international migration literature disproportionately focuses on the movement of people from the Global South to the Global North (Freier and Holloway, 2019). However, as Leal and Harder (2021) point out, close to a third of global international migration occurs between countries in the Global South. In Africa, people move between countries due to socio-economic disparities, political conflicts, governance issues, and environmental challenges (Fofack and Akendung, 2024). In Zimbabwe, large-scale out-migrations have been fueled by deteriorating economic conditions arising out of political disagreements in successive elections post-2000. For a brief period, from 2009 to 2013, the inauguration of a Government of National Unity (GNU) temporarily stabilized the economy and bought the country a period of relative political stability, slowing down emigration from the country. However, that relative stability did not last, as subsequent elections were heavily disputed. A coup d'état in 2017 also engendered political and economic uncertainty and increased emigration. While many Zimbabwean migrants settled in South Africa (Crush et al., 2012), some moved to other countries within the region and even to Europe and North America. Many also settled in Namibia, being drawn there by the country's relative political stability and economic viability (Kiwanuka and Monson, 2009).

The migration flows from Zimbabwe have been mixed in that they consist of refugees, asylum seekers, as well as migrants of different ages, genders, and other dynamics, such as people emigrating in response to governance and economic issues (Crisp and Kiragu, 2010; Crush et al., 2012). Zimbabweans of different socio-economic backgrounds are forced to migrate in search of better livelihoods. Arriving in a foreign country like Namibia without jobs and other means of stable livelihoods, most of the migrants are vulnerable to poverty, homelessness, hunger, and food insecurity. Questions of food security in the migration discourse thus become important. The centrality of food security in the migration discourse is a result of the fact that international migration and food security are intimately linked (ActionAid, 2017). On the one hand, food insecurity can be viewed as a trigger for migration where household members migrate as a coping strategy (Crush and Caesar, 2017; Carney and Krause, 2020). On the other hand, food insecurity may be a result of migration (ICMPD, 2022) where migrants may be disproportionately affected by food insecurity as the result of their migrant status. There is also a proliferation of literature that deals with the impact of migration on the food security of households in the migrants' areas of origin (Crush and Tawodzera, 2023). This literature largely lauds the positive role of remittances in shoring up household food security.

What is lacking, however, are studies that interrogate the food security of migrants in their host countries, particularly in the Global South, where South-South international migrations receive less attention. The few studies in this regard are only

of an exploratory nature. In a study carried out in South Africa, Crush and Tawodzera (2016) indicate the vulnerability of Zimbabwean migrants to food insecurity due to precarious employment and low incomes. More recently, Ramachandran et al. (2024) examined the food security of female Zimbabwean migrant households in South Africa during the COVID-19 pandemic and found the majority of these households living with food security precarity that was worsened by the pandemic.

In the same vein, Orolunrana and Odii (2024) found that migrants' food security was affected by low earnings, xenophobia, and reduced access to their preferred foods. They note that more studies are needed to capture migrants' experiences regarding food insecurity. This is particularly important, given the observations by Osei-Kwasi et al. (2022) that migrants largely live in environments where the foods they were accustomed to consuming back home are not easily accessible or available, forcing them to shift to other less-suitable substitutes. Achieving Zero Hunger, as envisaged in the United Nations (UN) Sustainable Development Goal (SDG) 2, therefore requires an in-depth understanding of dietary changes of vulnerable migrants.

Given the above context and the identified knowledge gaps, the study sought to investigate the modifications to dietary and food-consumption patterns of recent Zimbabwean migrants in Windhoek, Namibia and the impacts of these changes on their household food security. The research had three main objectives: (a) to establish the common foods consumed by the migrants prior to leaving their country; (b) to ascertain the current diets and consumption patterns and determine the causes for the changes; and (c) to assess the impact of the changing diets and consumption patterns on the food security status of the urban migrant households. The next section discusses the theoretical framework underpinning the study.

THEORETICAL APPROACH

Unlike South-South migrations, there are many studies on South-North migrations and food security. Ahmed et al. (2023), for example, carried out a scoping review on articles on the food security of international migrants during the COVID-19 pandemic years (2020–2022). Of the 46 papers reviewed, only six where about Africa, while the majority were about South-North migrations in the United States of America (USA) and Canada, focusing on migrants from Asia, Africa, and Latin America. This highlights the predominant focus of international migration and food security studies on South-North movements.

In the Global North, many of the studies on international migration and food security have been carried out within the healthy-immigrant framework. This framework can be traced to the work of Markides and Coreil (1986) who noted that Mexican immigrants in the USA exhibited better health outcomes than African Americans. They concluded that there was a foreign-born advantage, wherein immigrants arrive with certain advantages that local poor populations may not have. Other studies focusing on low-income Mexican migrants in the USA have also reported the presence of this healthy immigrant (Markides and Eschbach, 2005),

also indicating better health outcomes among the non-native-born arrivals. These advantages are largely attributed to the selective nature of migration where healthier and better-resourced migrants are motivated to move than less-healthy and poorly resourced ones (Taylor et al., 1999; Singh and Siahpush, 2001). Hence, during the initial period of arrival, migrants exhibit better health and food security outcomes than the low-income local population, owing to their background factors. Such advantages, however, are predicted to decline with time, such that the health and food security outcomes of the migrants would eventually mirror those of the local population (Teitler et al., 2017).

But why would the health and food security outcomes of the migrants ultimately decline? First, the decline may occur due to acculturation (Vu et al., 2020). As immigrants adapt to their new environment, they often adopt new dietary practices, leading to a nutrition transition from traditional diets to highly processed foods, potentially decreasing their health and food security outcomes (Vu et al., 2020). Second, dietary changes may also occur due to the inability of migrants to access foods that are culturally appropriate (Carney and Krause, 2020). Third, the food environment in the host country may be fundamentally different to that of the immigrants' country of origin, affecting the availability of healthy foods (Osei-Kwasi et al., 2022). This is important, as immigrants may settle in areas considered food deserts or food swamps (Berggreen-Clausen, 2022). Fourth, immigrants may face economic integration challenges, including unemployment and low-income levels and this will limit their access to healthy foods, consequently impacting negatively on their food security (Aguilera and Massey, 2003). Fifth, immigrants may lack social support and networks that are critical to providing information and resources necessary to maintaining food security (Karnik and Peterson, 2023). Migrants will therefore likely face health and food security challenges the longer they stay in their host country.

Several authors have questioned the validity of the healthy-immigrant paradox hypothesis. John et al. (2012) argue that the empirical testing of hypothesis rarely yields consistent results. Hadley et al. (2007) studied the food security of West African refugees in the USA and found that refugees who had been in that country for less than one year were twice more likely to be food insecure than those that had been in the country for at least three years. The conclusion that one can draw from such studies seem to be that a longer duration in the host country tends to protect against food insecurity, in opposition to the premise of the healthy-immigrant paradox hypothesis. In a scoping review of low- and middle-income country immigrants in high-income countries, Berggreen-Clausen (2022) suggests that newly arriving immigrants are likely to display worse outcomes because of challenges they face in accessing fresh foods, traditional foods, and healthier foods as well as other challenges related to low incomes and lack of social support structures.

While there is much discourse on South-North migration and food security, very little is known about South-South migrations and the food security of recent

migrants in their host countries. Not much is known regarding how migrants adapt to the changing food environments, how they access food, the challenges they face, and changes they have to make to adapt to a new environment. The need for a study that explores the changing dietary and food consumption patterns of recent migrants and the impacts of these changes on household food security is therefore self-evident.

RESEARCH METHODOLOGY

This section details the methods used to collect data from Zimbabwean migrants in Windhoek, Namibia to fulfill the study objectives. The researcher collected data for the study over a two-week period in November and December 2022.

The study areas: Havana, Soweto, One-Nation, and Okuryangava

The study was carried out in the Greater Katutura area, a low-income residential area in the City of Windhoek. Katutura incorporates some of the largest informal settlements in the city. The fact that Katutura is a low-income residential area means that it attracts newly arriving migrants, the majority of whom generally have little financial resources on arrival. The choice of Katutura as the study area was therefore strategic, as it made it comparatively easier for researchers to locate study participants there than would have been the case in other parts of the city.

Sampling

Zimbabweans are in Namibia as a result of economic, social, and political reasons. The majority of Zimbabweans in Namibia self-settle among the Namibian population. Identifying these migrants is therefore difficult. To locate Zimbabwean migrants in Windhoek, the study focused on Katutura, a low-income area where the majority of the migrants were residing. We randomly chose Okuryangava as a starting point and established contact with two Zimbabwean migrants who were engaged in the informal trade business in the area. These became our first starting points for the study. Having interviewed these participants, we then asked them to refer us to other Zimbabweans in the area. These subsequent respondents were in turn asked to refer the next respondents in a snowball sampling process. This process was repeated until a sufficient sample was identified and interviewed in an area. We then moved to the next area where the process was repeated until the survey was completed in the four selected areas.

The snowball sampling process provided both an efficient and cost-effective method of locating participants, allowing participants to use their local knowledge and networks to identify other participants. The drawback, however, is that as a non-probability sampling strategy, it is impossible to determine the possible sampling error (Sharma, 2017). Hence, the results of this study may not be taken as being representative of the experiences of all the Zimbabwean migrants in Windhoek. The

results, however, provide an in-depth understanding of the food-related behaviors, needs, and experiences of the migrants, information critical to informing policy.

Sample size

The researcher conducted 35 in-depth interviews with recent Zimbabwean migrants in Katutura who had arrived in Namibia from 2018 onwards. The rationale for focusing largely on recent migrants was because we envisaged that recent migrants would be generally exposed to shock in terms of dietary changes and also face difficulties in accessing employment and other challenges that had a negative impact on food security. Because Katutura consists of different sub-areas, the study sampled from these areas captured any diversity that may result from them living in these different sub-areas. Thus, the participants came from the following areas: Okuryangava (10); Havana (10); Soweto (10); and One-Nation (5).

The research team interviewed 16 males and 19 female participants as informants from the 35 households. The ages of the participants ranged from 22 to 56 years and their household sizes varied from single-person to four-person households. The occupations of the participants were as follows: traders/vendors (9); unemployed (5); domestic workers/chars (4); taxi drivers (2); agricultural workers (2); shop assistants (2); general construction workers (2); hairdressers (2); bookkeeper (1); self-employed electrician (1); teacher (1); barber (1); self-employed plumber (1); general hand (1); and mechanic (1). The participants were relatively educated, with only two having completed a Grade 7 qualification only. The remainder had attained the following educational status: ordinary level (24); advanced level (4); post-high-school diploma (2); and undergraduate degrees (2).

Data collection

The research team collected data from the identified households using an in-depth interview guide. At each household, a respondent, knowledgeable about household food consumption, was selected by the household to be the informant. Where households were hesitant to do the selection themselves, the researchers randomly selected a respondent through the aid of a dice. Each interview took between 40 to 60 minutes and researchers took notes and recorded the interviews with the consent of the respondents.

Data analysis

The research team analyzed the qualitative data gathered from the respondents thematically. This involved identifying themes and patterns in the data to tell a coherent story. The first step in the data analysis involved listening to the recorded interviews to familiarize themselves with the collected data. The researchers then transcribed the interviews, which was followed by the data coding to generate main themes. Continuous engagement with the data resulted in sub-themes being added.

The write-up process then followed, which entailed a simultaneous engagement with the data, linking the various themes and sub-themes in the analysis. Researchers used direct quotes from the participants to allow for the voices of the participants to be heard, as well as lend authenticity to the households' food security experiences.

STUDY RESULTS

This section presents and discusses the results of the study. While the study specifically focused on the dietary and consumption changes and the impact on household food security, it is deemed prudent to provide brief migration histories of households, as the migration histories lay the groundwork for understanding much of the dietary and food security experiences of the households in their host countries.

Migration histories

At the heart of most of the migrations to Namibia were the challenging economic and political situations in Zimbabwe that made it difficult for households to construct livelihoods. One participant, a 25-year-old male who migrated in 2019, gave a concise description of the situation in Zimbabwe before he left the country:

> I left the country because of the economy. I graduated from university with a finance degree and never worked in a formal job for even a single day in the country. Imagine graduating and celebrating and everyone is looking at you with hope. They are looking forward to you helping in the family. Then you start applying and you do not get a response – not even one. You are okay and have hope for a month; then it turns into many months and a year. Midway through the second year after university, I decided to leave. So, I came here to try my luck. (Participant 12, 27 November 2022, Havana, Windhoek).

While Zimbabwe has a good education system (Garwe and Todhlana, 2023) and churns out thousands of graduates every year, employment opportunities are very limited. Many of the graduates find it difficult to penetrate the shrinking job market (Jengeta, 2020). The majority either remain unemployed or get engaged in self-employment (Jengeta, 2020). A 32-year-old female participant who left the country in 2018 confirmed this by saying:

> I never thought I would leave Zimbabwe. I always wanted to stay in the country. I tried to make it work in Zimbabwe, but I failed. I am an electrician. I really never got stable employment. It was a series of short-term jobs and long periods of unemployment. I had no choice, but to leave. It was either I left, or we would struggle all the time or even starve. You cannot borrow all the time … at times, there is even no-one to borrow from. (Participant 16, 29 November 2022, Havana, Windhoek).

Other people moved out of the country because of the declining economic conditions, despite having been in employment. According to Madebwe and Madebwe (2017), the economic conditions of Zimbabwe continued to deteriorate after 2000 following the fast-track land reform program. The high inflation rate, sky-rocketing food prices, and other escalating costs pushed even working households into extreme poverty (Mlatsheni and Zvendiya, 2023). As one participant pointed out, the economic conditions worsened to a point where it ceased to make sense to go to work:

> In all honesty, I never dreamed that I would be here in a foreign country trying to make a living. I am 53 years old, and I should be at home with my family and grandchildren. But I am here. From 2003 or so, things were getting tough. But the years 2007 and 2008 were very tough. The salary was just a salary in name. It did not buy anything. After the elections of 2008 I left the country. I never resigned but just left and went to Botswana. It did not work out well there, so I came here. (Participant 34, 06 December 2022, One-Nation, Windhoek).

As the above participant shows, it is difficult to separate economic triggers of migration from the political ones, because in Zimbabwe's case, the two are closely linked. The political climate in the country had a severe impact on the economy, which in turn affected people's buying power. In other cases, people migrated as a result of political persecution or fear of being persecuted in the future. Ranga (2015), for example, documents the migration of teachers from the country because of political persecution and violence. However, the participant who reported running away from political persecution in this study also indicated that the political system may have been manipulated by his enemies to target him:

> I was not into politics, but things did not work out well for me. I resigned from my work in 2012 and got a retrenchment package. I used the money to build my home in the village. But some people started a rumor that I got the money from opposition people and trouble started. So, before the elections in 2013, I left. I did not want to be a victim because a lot of people were being harassed, and I was targeted. (Participant 24, 03 December 2022, Soweto, Windhoek).

While this participant migrated out of fear of political persecution, his experience also raises another angle, that of the intertwining of political and social issues, which result in the migration of those at risk of being persecuted. In a study of the experiences of Zimbabwean migrants in Limpopo, South Africa, Mupondi and Mupakati (2018) also allude to this phenomenon, where only a few migrants from the country predicated their movement on political persecution, despite the increase in secondary data ascribing much movement from the country due to the rise in political intolerance and violence. They argue that this anomaly may be a result of the fact that periods of extreme political violence in Zimbabwe coincided with periods

of acute economic challenges, to the extent that most participants see their economic challenges as taking precedence over political ones in determining their movement (Mupondi and Mupakati, 2018).

The economic conditions in Zimbabwe during the past two decades or so have affected livelihoods negatively, with many households struggling to acquire sufficient food. Thus, some participants pinpointed food challenges as central to their migration. A 30-year-old female hairdresser underscored the role of food shortages as a driver for her migration to Namibia:

> As a single mother, I struggled to look after myself and my two children. We could not afford enough food. I was always crying and asking the Lord what would happen to us. I could not take it anymore in Zimbabwe. A friend who came here a few years ago, invited me to come [to Namibia]. I stayed with her when I arrived in 2020, and she treated me well. Now I am living on my own and working for my children. (Participant 27, 04 December 2022, Soweto, Windhoek).

In their study exploring youth migration and the food security nexus among Zimbabwean youths in Cape Town, Sithole and Dinbabo (2016) report similar findings, pointing out that some of the youth migration to South Africa had been triggered by food insecurity. While the study reveals a variety of motivations for the participants' movement to Namibia, one theme is common: the need to search for better livelihoods and improve the well-being of their households. It is also true that for many of the participants, a number of triggers worked simultaneously, albeit with varied gravity, to compel them to migrate. But food is a central theme that runs through most of the interviews with the study participants.

Common foods consumed and consumption patterns prior to migration

In Zimbabwe, the foods that are consumed range from traditional (or cultural) foods to Westernized (or modern) diets. Rocillo-Aquino et al. (2021: 8) define traditional foods as those foods "that have been handed down from one generation to the next in terms of knowledge, techniques or practices used in their preparation or in the choice and use of the raw material, which is generally local, as well as the culture that produces it." Muyonga et al. (2017) opine that the traditional African diet generally comprises small grains, such as millet and sorghum, starchy stems, root tubers, wild fruits, fish, game meat, and other plant-based derivatives. Modern or Westernized diets, on the other hand, typically consist of highly processed energy-dense foods (Baker et al., 2020). In Zimbabwe, it is not possible to speak of households consuming a typical traditional diet because of the nutrition transition, which has seen the increase in the consumption of wheat, rice, and other exotic foods (Chopera et al., 2022). Most of the dishes are thus a blend of traditional and Western-influenced dishes.

The interviews with participants showed a wide array of foods consumed by the immigrants prior to their movement. The majority pointed out the consumption of the country's traditional dishes consisting of pap (*sadza*) with different relish dishes. The following interview extracts are illustrative of the main foods consumed prior to emigration:

> I grew up eating *sadza*; and so, our main dish consisted of that meal. We would generally have beef or chicken as relish. Pork meat is not my favorite, so we rarely had a dish with pork. I love vegetables a lot, so I would always have covo, rape or *rugare* with my *sadza*. But not cabbage, it is not my favorite. (Participant 32, 05 December 2022, One-Nation, Windhoek).

> Breakfast was usually tea with bread or traditionally made bread (*chimodho*). In the rainy season, we could make bread from green mealies or just substitute green mealies for bread. If it was after the rain season, we could eat a lot of *mbambaira* (sweet potatoes) during breakfast as well. During the day we could nibble on anything that would be available, even left-overs from yesterday. In the evening, it was mostly *sadza*. But my dad likes traditional brown rice; and so, we could have rice instead of *sadza*. Sometimes a cup of tea before we went to sleep, but only when things were fine. We also had *maputi* (popcorn) anytime we wanted, as we had a lot of maize and groundnuts. (Participant 22, 02 December 2022, Havana, Windhoek).

The above narratives indicate beyond doubt the fusion of tradition and modern foods. The foods that participants residing in urban areas in Zimbabwe reported consuming mirrored more modern diets: more processed foods, rice, bread, and fizzy drinks. In contrast, those participants from rural areas generally reported the consumption of more traditional foods:

> We ate many things back there. There were pumpkins, sweet potatoes, and yams for breakfast. We grew a lot of these foods in the village. Then there is a big avocado tree at home and when [it was] in season, we had these avocadoes. Then we had bananas, especially the small, sweet bananas. We would eat these throughout the day whenever we felt like we wanted to. We kept chickens, goats, and turkeys. Meat was not a problem, but we also grew many varieties of vegetables. I ate healthily those days, unlike what I am doing now. (Participant 26, 03 December 2022, Soweto, Windhoek).

Some study participants also indicated that they would consume traditional drinks and foods like samp, *mahewu* (non-alcoholic beer), *rupiza* (grounded peas), *hohwa* (wild mushroom), *ishwa* (winged termites), and *chimodho* (traditional bread). These

foods are popular in different parts of the country and not necessarily universal across the Zimbabwean society. A participant had this to say:

> I ate a lot of samp in Zimbabwe. In my home area, we mix the crushed maize with groundnuts or beans. This is the food I liked most that we could eat anytime we wanted. There were no restrictions like with other foods, because there is plenty of it. The groundnuts were big and tasty and not the GMOs [genetically modified organisms] that we are eating now. We also ate *rupiza*, which was made from peas. (Participant 26, 03 December 2022, Soweto, Windhoek).

One of the participants indicated that there were foods that they consumed specifically in certain seasons. These included *derere* (okra), *mufushwa* (dried vegetables), *matemba* (dried *kapenta*), and *manyanya* (a tuber). The first two are vegetables that are dried during the rainy season and are stored for consumption during times of need in the dry season. The third is a tuber that households dig up to supplement their relish during times of need. When prepared well, this tuber is known for having a flavor or taste that approximates meat. The participants said:

> We ate *mufushwa*, especially during the dry season when there was little water for watering the gardens. During the rainy season, we would dry most vegetables, even cabbages, in preparation for the dry season. We could also dry *derere* and consume it in times when relish would be a challenge. (Participant 29, 04 December, One-Nation, Windhoek).

> In my home area we eat *manyanya*. They are very tasty if you prepare them well. I grew up eating them. We also ate *hohwa* a lot. You know, mushroom grows in the bush; it just grows there, and we would pick it up and cook. If we got plenty, we could dry it and store [the rest] for later. (Participant 14, 28 November 2022, Havana, Windhoek).

There were special foods that participants pointed out as foods in their diet that were consumed on special occasions. Shipman and Durmus (2017) maintain that although food is considered an intake of nourishment to survive, it also embodies a people's social and cultural meanings. Some participants indicated that there are foods that are prepared mostly on occasions such as weddings, holidays, and cultural gatherings or for visitors. One participant indicated that if a visitor came to their place, they would make it a point to slaughter a chicken:

> It is customary in my culture to slaughter a chicken for a visitor. It does not matter that the visitor is rich and can buy their own chicken. When they visit,

> we show them our appreciation of their visit by killing a chicken. (Participant 31, 05 December 2022, One-Nation, Windhoek).

Sometimes a special occasion demands that an abundance food be prepared. On occasions such as weddings, households go out of their way to prepare many of the foods that they rarely prepare on a daily basis. This includes preparing salads and meals with many courses. On graduations and birthdays, food is prepared with extravagance, and this is the same at cultural gatherings.

Current diets and consumption patterns of migrant households

There are many studies that have been carried out in the Global North that show that migrants tend to adopt the foods and food habits of the countries that they settle in after immigration (Vu et al., 2020). This may be influenced primarily by the fact that migrants may find it challenging to access the food that they were used to consuming before migration. Researchers asked Zimbabwean migrants in Windhoek to indicate the foods that they were consuming after migration. The majority indicated a predominance of highly processed foods, mirroring a diet more Westernized than before their migration. They identified the following foods:

> In the morning, I usually eat cereals. I like cornflakes, though I can also have Weetbix. I can eat these for breakfast every morning, unless I run out of milk. I eat my lunch at work – a bunny-chow or a burger. There is a tuck-shop close to my workplace where I buy [the food]. If I have money, I buy a Coca Cola; otherwise, I bring my own diluted juice from home. For supper, I eat rice or spaghetti, but my husband likes *sadza*; so, most days I have to cook *sadza* too. (Participant 8, 25 November 2022, Okuryangava, Windhoek).

> We have tea in the morning. It is usually bread and butter. If we can afford, we may have eggs as well or sausage. In fact, it's usually sausage [rather] than eggs, as eggs are very expensive. Since the bird flu a few months ago, the eggs are very expensive. I sometimes buy chips at work. There is no time to cook; so, I buy [food] from a fish and chips [shop] close by. When I come back home, it depends on whether I am tired or not. If I am tired, I bring chips and fish, and that will be our dinner. If I am not tired, we can cook something, maybe rice or *sadza*. (Participant 22, 02 December 2022, Soweto, Windhoek).

Most of the foods that the above participants indicated consuming are highly processed. A common thread is that they buy their lunch at work, usually due to inadequate time to prepare meals, since they will be at work most of the day. Hence, it becomes easier to purchase ready-to-eat food from the various food places in the city. As participant 22 points out, even preparing food for supper depends on whether they are not tired. If they are, then supper will consist of takeaway food. This

is supported by another participant who indicated that it saves time to purchase food from the several restaurants, fish-and-chips shops, and other street vendors that sell ready-to-eat food:

> Life here is very fast. You wake up in the morning, and there are many things to do. In the construction industry, work is intense, such that you do not find enough time to prepare your own meals. I leave home before 5:30 a.m. every morning and come back around 7 p.m. When I leave, I have no time to prepare, and I am not hungry at that time, anyway. When I come back, I am too tired to cook. So, I purchase most of my food ready to eat. (Participant 4, 24 November 2022, Okuryangava, Windhoek).

Another participant, a 32-year-old taxi driver, shared a similar sentiment, emphasizing the intensity of his work schedule in determining what he eats and when he eats. For him, a proper diet is only possible on his day off:

> I am used to eating anything here. I start work very early in the morning. To make my first trip at 5:30 a.m., I have to leave here at 5 a.m., so that I can pick up the taxi from the owner's house in Eros. Then I start my trip and only finish work at 9 p.m. So, most of my food, I eat on the road. (Participant 1, 23 November 2022, Okuryangava, Windhoek).

For participants who have the time to prepare their meals, their diets are determined by the foods that they purchase. One participant indicated that the diet is monotonous because it does not change – the result of always buying food that is cheaper:

> The diet is the same every day. It's tea and bread, *sadza* or rice and meat every day. There is no variety. Although I like noodles, but after two or three days, I do not want them anymore. I don't know, maybe if I had enough money, I would go to the city and buy something different. (Participant 11, 27 November 2022, Havana, Windhoek).

The presence of fast-food outlets has also seen some of the migrants eating out more often than in the pre-migration period. One participant indicated that she often eats out to have access to the variety of foods that restaurants serve:

> On my days off work, I usually go with my husband and child to restaurants in the city so that we can experience the different foods that the city has to offer. When we were in Zimbabwe, we had no money to eat out. Now we can afford to go out once in a while. I like seafood, so we usually go to Ocean Basket at the mall. It's a bit expensive, buy we enjoy [the food] there. (Participant 16, 29 November 2022, Havana, Windhoek).

Another participant pointed out that the presence of many street traders selling *kapana* (braai meat) in her area meant that they could prepare just rice or *sadza* at home and then buy *kapana*. Thus, although the food consumption patterns of Zimbabwean migrants are shaped by choice, they are also determined by time constraints and the need to buy cheaper foods and make savings.

Foods that migrants have challenges accessing and consuming less

When people migrate to a new country, the possibility that they will experience challenges in accessing certain foods is high. Study participants indicated that there are foods that they are unable to find or are different from what they usually consumed in Zimbabwe. This was the case with most traditional foods. One of these key foods was *dovi* (peanut butter). Participants indicated that peanut butter is integral to many meals that they prepare: consuming it in porridge, spreading it on bread, and on dried vegetables, dried meat and other dishes. Many of the participants complained that the peanut butter that they purchase in shops does not taste the same. One participant had this to say:

> I love porridge made from maize meal and mixed with peanut butter. When I go home, I always bring some, but it does not last. I am then forced to purchase from the supermarkets here. It is not the same taste, as the one from the shops is almost tasteless, like there is no salt in it. I have tried adding salt, but it does not improve it. Maybe the peanuts are not well-roasted and so the taste is different. (Participant 2, 23 November 2022, Okuryangava, Windhoek).

While these migrants had an option to purchase from traders that sell their home products, the challenge was that they were always in short supply. During the period when COVID-19 was at its peak, travel restrictions meant that there was either little supply or no supply at all. The second challenge was that those who sell the Zimbabwean peanut butter put a premium on it so that it becomes largely unaffordable to those of a very low-income status. The sellers justify their exorbitant prices claiming that they pay a lot of money to import the peanut butter. This, however, makes it difficult for some migrants to consume foods that they want:

> Peanut butter from Zimbabwe is expensive. They [traders] buy it for less than US$1 (N$19) in Zimbabwe and then they sell it here for between N$30 and N$40. That is too much for 375 grams. But there is nothing you can do; if you want it, you just have to buy [it]. (Participant 8, 25 November 2022, Okuryangava, Windhoek).

Thus, for migrants to access the food they require from home, they have to pay more than their counterparts back in Zimbabwe. When resources are minimal, this means that the migrants have to do without it, and some may resort to buying the

local variety that they are not used to; hence, it impacts negatively on their food security. Some foods that were difficult to access and acquire were *mbambaira* (sweet potatoes). Most interviewees indicated that sweet potatoes are a part of their diet, serving as a substitute for bread at breakfast and can also be consumed as a snack. While some varieties of sweet potatoes were available on the market, these were not firm and were also less sweet:

> I have stopped buying sweet potatoes here. It is a waste of money. When they are raw, they look very good and appetizing. You only realize when you start cooking them that they are not good – they start losing shape very quickly and are watery. You end up eating [them] with a spoon like you are eating mashed potatoes. The taste is not okay – there is nothing sweet about them. (Participant 35, 06 December 2022, One-Nation, Windhoek).

Study participants indicated that some traders bring the sweet potatoes from Zimbabwe using the cross-border buses. The supply, however, was irregular and unreliable. The sweet potatoes are therefore a commodity in demand, with few suppliers failing to satisfy the market. Like the peanut butter, the *mbambaira* is also said to be expensive, as traders capitalize on shortages to drive the commodity price upwards.

Namibia is known for its fish industry where a variety of fish species (e.g., mackerel, tuna, hake) are sold on the market. But most Zimbabwean migrants grew up eating fresh-water breams from Lake Kariba on the Zambezi Valley. Some participants indicated that they missed the Kariba bream. While they are adventurous and try other fish varieties, many still look for the fresh-water breams. Thus, some traders bring the dried breams from Zimbabwe to sell among the Zimbabwean community in the country. A participant had this to say:

> I occasionally buy the bream from the Zambezi region. It is better, but not like the Kariba bream. Once in a while when I find someone selling the dried Kariba bream, then that makes my day. (Participant 32, 06 December 2022, One-Nation, Windhoek).

Among one of the most sought-after foods by Zimbabwean migrants in Windhoek is Mazoe Orange Crush – a Zimbabwean cordial that is made from oranges. While some supermarkets in the city occasionally sell the juice, some argue that it is not original. Hence, most of the migrants prefer to purchase from informal traders who bring it straight from Zimbabwe. While it is sold for around US$2.50 in Zimbabwe (approximately N$47), informal traders sell it for between N$60 and N$80 per 2-liter bottle. One participant revealed why they prefer to purchase from the traders:

> I buy my Mazoe from traders that come with it from Zimbabwe. The variety that is sold here is not authentic. It does not taste the same. And some is made

> in Zambia and not Zimbabwe. So, they are different. I prefer the original one. (Participant 20, 02 December 2022, Soweto, Windhoek).

The majority of Zimbabwean migrants grew up in areas where avocadoes are grown by most households, and hence, cheaper and easier to access. Interviewees complained that the avocadoes in Windhoek are small and very expensive. Many of these avocadoes are imported from South Africa and resultantly are sold at a premium. Many of the migrants thus cannot afford them. Some only consume what is occasionally sent from home. Some participants pointed out that they missed eating these foods and only indulge in this delicacy when they are back home in Zimbabwe.

Like the Kariba bream, one of the difficult foods for Zimbabwean migrants to access in Windhoek is dried *kapenta*. In Zimbabwe, dried *kapenta* is a regular relish. However, most participants indicated that in Windhoek, *kapenta* was expensive and also difficult to find:

> I do not remember the last time that I ate dried *kapenta*. It is one of my favorite foods, but it is difficult to get here. If you get it, they sell [it] in very small packets. If you are a family of four people, then you will need two or three packets to suffice. For N$10 a packet, if you buy three packets, then that's N$30 and you may as well buy meat. (Participant 26, 03 December 2022, Soweto, Windhoek).

While the increased consumption of rice is often associated with the nutrition transition, it does not necessarily mean that most African households did not consume rice frequently. Rather, their consumption was usually centered on the brown rice that many households in the rural areas would produce themselves. A few of the interviewed households reported that they grew up eating brown rice, as opposed to the white rice or the parboiled rice that is now dominating in food shops. The absence of brown rice in Windhoek therefore means that they only consume it when they travel back home. In some cases, migrants are duped by informal traders selling substitute products. Their desperation to access traditional foods may be exploited by dishonest traders who have no regard for any negative consequences resulting from consuming the wrong foods. One participant said:

> Some two years ago, I was duped by a fellow Zimbabwean. I asked him if he knew someone who sells mice, and he indicated that he did. I gave him N$50 and he brought the mice at the bar when we were drinking. I, however, did not eat them but carried them home. In the morning, I realized that these may not be mice, but rats. They were big – very big. When I confronted him, he said he had just bought them from a passer-by, but I suspect he was lying. I just threw them all away, but I never got my money back. (Participant 24, 03 December 2022, Soweto, Windhoek).

Besides the foods discussed above, some migrants indicated that they use different ways to access Zimbabwean foods. One of the most common methods is to ask their friends and relatives in Zimbabwe to send whatever foods they want through cross-border transporters (*omalayitshas*) and through regular buses that ply the Namibia-Zimbabwe route. These transporters charge a transportation fee, depending on the contents and weight of the transported package.

Impact of changing diets and consumption patterns of food security

Diets and food security are closely linked, as food (in)security is an outcome of what is consumed by the households, both in terms of quality and quantity. The types of foods that one consumes determine whether one can be considered food secure. Several health outcomes are also an indicator of food security. Ford (2013), for example, opines that there is a relationship between household food insecurity, diet, and a number of health-related diseases such as diabetes, obesity, and heart diseases. Migrants, because of their precarious employment, are likely to have low incomes, less access to food, and hence, also likely to have higher levels of food insecurity in comparison to the local population.

While the healthy-immigrant paradox argues that newly arriving migrants may exhibit better food security and health outcomes than the local population, there was little evidence in this survey that this was the case. Rather, Zimbabwean migrants indicated that they were at risk of food insecurity. When asked about their current household food security situation in comparison to their situation prior to emigration from their country, a majority of the participants indicated that their situation had improved. According to one participant:

> When I left Zimbabwe, I was struggling, unable to put food on the table. A whole mechanic failing to buy basic foodstuffs. Here I am better because whenever I get a piece job and complete it, I am able to buy enough food for my family. (Participant 34, 06 December 2022, One-Nation, Windhoek).

Another participant indicated that moving to Namibia saved her sanity and gave her options at a time when she was running out of options. Had she remained in the country, she believed that she could have gone into depression or even resorted to death by suicide:

> I am grateful that I was able to come here. Even though I still face many challenges with my family, I am certain that we are now better than we were before. Our children are going to school, and even though we cannot give them all they want, we are at least trying. In Zimbabwe, we had reached a dead-end, and it was pitiful. Imagine working and your salary [is] not [sufficient for] buying anything. (Participant 16, 29 November 2022, Havana, Windhoek).

There were also other participants who emphasized that migrating gave them hope, even though they have not attained what they left Zimbabwe for. They acknowledged that the challenges they currently face are better than what they would be facing, had they remained in Zimbabwe. One participant said:

> I do not regret coming here. I wish I had come here sooner rather than when I did. I wasted my time thinking that things would improve. But they never did. Here we can struggle, but it is better because at the end of the day, you can put food on the table. That is what matters. (Participant 17, 29 November 2022, Havana, Windhoek).

There were, however, other participants who indicated that they were facing significant challenges related to food security while in Namibia. Their major issue was that of the high cost of rentals. They indicated that they were spending more on rentals than on food items. The rentals were so high, that it left them with very little money for food. They thus periodically resorted to buying cheap food that they did not like:

> I came here to work and save so that I can go home and start a business. But for the past four years, that has not been possible. Instead, I seem to be working for rentals only. At the end of the month, I cannot even afford to eat out at the restaurants. I end up buying the cheaper foods that are even dangerous for my health. Some of the fizzy drinks that we buy are laced with many chemicals, [so] that it is just a health hazard to us. But we have no choice. (Participant 30, 05 December 2022, One-Nation, Windhoek).

The fact that some migrants resorted to eating foods that they did not want is an indicator of food insecurity. While the participants preferred Mazoe Orange, they ended up buying some cheaper alternatives whose health implications they do not know. Hence, others argued that the health problems that they currently experience are a result of some of the foods they were consuming. As one participant pointed out, the fact that one gets sick because of inappropriate food, defeats the very purpose of having migrated to Namibia in the first place. The little money one makes will also end up paying increasing medical bills resulting from the consumption of poor foods:

> I was once a strong person, lifting heavy things with ease. As a mechanic, you need to be strong, but now I am weak. I suspect that it is these foods that we are eating that are causing all this. Some of the foods we eat are like poison. Unfortunately, we will die because of this food, instead of doing better. (Participant 32, 06 December 2022, One-Nation, Windhoek).

One participant pointed out that she had gained a lot of weight since she came to Namibia. She attributed this weight gain to the consumption of junk foods. She argued that this would not have happened were she consuming proper foods. Hence, for some migrants, their food security situation has been bad because of the foods they were consuming. Ultimately, their health situation will be affected negatively.

DISCUSSION

Zimbabwe generates significant migration streams, largely triggered by a persistent, challenging socio-economic and political environment. While many studies underscore the critical role of political persecution in triggering large-scale emigration, many of the interviewed migrants highlighted the dire economic situation in the country as a trigger for migration. Thus, food insecurity acted as a major migration trigger. These study results validated the arguments made by Carney and Krause (2020) that in environments of economic distress, food insecurity compels household members to emigrate.

The study findings have established that it is difficult to talk of the pre-migration diets of Zimbabwean migrants as being completely traditional or fully Westernized. This finding validates the assertion by Chopera et al. (2022) that, because of the nutrition transition, most Zimbabwean households survive on consuming a blend of traditional and Westernized dishes. In moving to Namibia, most migrants, however, reported experiencing significant changes to their diets. These changes center primarily on four issues. The first concerns the non-availability of foods that migrants consumed while still in Zimbabwe. Migrants reported having challenges accessing foods such as *traditional mahewu* (a non-alcoholic beer), *rupiza* (grounded peas), *hohwa* (wild mushroom), *ishwa* (winged termites), *matemba* (dried *kapenta*), and *manyanya* (a tuber). The second issue centers on the poor quality of some substitute foods acquired in their new environment. This was the case with foods such as *dovi* (peanut butter), *mbambaira* (sweet potatoes), *kapenta*, Mazoe Orange Crush (a cordial) and some types of fish, especially fresh-water breams. Most migrants found the taste of locally available substitutes unappealing and hence opted to do without these foods.

The third issue is about the increased food expenses for those households that go to great length to acquire food from their home country. Study results indicate that some migrants were willing to pay more to acquire food from traders or pay more to *omalayitshas* to bring traditional foods from Zimbabwe. This substantially increased migrant households' food costs, potentially having negative impacts on household food security. The fourth issue was about limited time to prepare some foods. Most migrants indicated spending more time on the job, resulting in most consuming more foods outside their homes, and drastically reducing consumption of foods such as beans, or offal that are critical to maintaining food security.

Results regarding the food security outcomes were rather mixed, with most households indicating that household food security had significantly improved, while

others pointed out the food challenges they were encountering, including possible negative outcomes in terms of their health. Coming from a country experiencing serious economic challenges, the majority of interviewees could afford to buy most food as and when required, contrary to the pre-migration situation where shops in Zimbabwe could run out of food stocks at any time. Food challenges, however, related to accessing foods that were traditional and appropriate, hence, necessitating drastic changes in foods consumed. Surviving on some substitute foods reflects unfulfilled food needs, resulting in a degree of food insecurity. For some migrants, failing to access the foods they want also affected them negatively, as they felt that they were getting out of touch with their traditional food regime. They also argued that failure to access some foods means that they were losing on some health benefits, and this could impact negatively on their health as well as on their longevity.

CONCLUSION

This study highlighted important food security issues, focusing on food availability, food access, food choices, and cultural appropriateness. The theoretical framing underpinning this study argued that migrants generally exhibit a foreign-born advantage, wherein they arrive with certain advantages that the local poor population may not have. The results from this study were, however, different. Recent migrants were experiencing numerous economic and social challenges that had negative impacts on their food security. Many struggled to get employment and were saddled with high rentals and also took time to understand their new food environment, much to their detriment. Ultimately, they were neither better resourced nor healthier than the local population in Windhoek. Thus, the theoretical supposition that the migrants would be better off than locals did not hold true, as many struggled to afford adequate and culturally appropriate foods. Migrants, therefore, remain vulnerable to food insecurity, despite most having migrated to improve their livelihoods.

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