



# Strategies for coping with household food insecurity in Chipinge District, Zimbabwe.

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## Abstract

*This paper is a partial response to the problem of food insecurity in rural areas in Zimbabwe. As such, the study examined the strategies applied in coping with household food insecurity in the Chipinge District of Zimbabwe. Data was gathered through key informant interviews, focus group discussions and observations. Furthermore, the Coping Strategy Index was employed to evaluate the coping mechanisms adopted by 120 randomly sampled participants. Thematic content analysis was used to analyse qualitative data. The findings showed that intake of less favoured food was employed more than any other coping mechanism followed by intake of less food by the household head responsible for food preparation. These strategies were followed by decrease in the amount of food given to adults, withdrawal of meals, getting assistance from friends and relatives, remittances, maternal buffering, migration and sale of assets. These coping strategies ranged from insurance or reversible, irreversible to distress or “exhaustion” strategies. The adopted coping strategies were based on the severity of household food deficit, the choices offered by available household resource endowment and access to external interventions. This study recommends that household heads should have access to informal education through extension amenities with the view of improving the application of contemporary farming methods to increase production.*

**Key words:** Household; coping practices, food insecurity, sustainability, Zimbabwe

## 1. Introduction

In recent years, the international focus is directed towards household coping and poverty reduction strategies (Makoti & Waswa, 2020; Wabwoba et al., 2020). This is in response to widespread failure of adopted coping strategies in developing economies (Jyoti *et al.*, 2019). The worldwide increase in hunger incidences and undernourished people is an indication of the failure of household coping strategies. The global estimates indicate that 905 million people are chronically underfed with inadequate nutrition for an active and health well-being (WFP, 2021). Wabwoba et al., (2020) notes that the adoption of irreversible and distress coping strategies resulted in increase of undernourished households.

Africa has the highest number of hungry people, although it has one of the largest percentages of working people involved in food production (WFP, 2021). Sub-Saharan Africa’s food insecure population is estimated to increase from 12% in 2015 to over 34% in 2030 (Makoti & Waswa, 2020). Household food deficit is projected to increase in most dry areas, where one individual in every five, has insufficient food for a healthy well-being (Wabwoba et al., 2020). Rising food costs (Makoti & Waswa, 2020) and famine (Maxwell, 1995; Grobber, 2014) are forcing households to adopt erosive coping strategies which further expose them to poverty and food deficit. Furthermore, population growth derails the efforts made to improve food security in Africa (Makoti & Waswa, 2020). The magnitudes to which households are affected by food deficit largely depend on their susceptibility and coping response available



to them. Omonona *et al.* (2007) posit that in the face of food deficit, households in Sub-Saharan Africa search for quick remedies which further entrench the vicious cycle of poverty.

Food deficit is recognized as an imperative determinant of a person's dietary status (Babatunde *et al.*, 2007; Shetly, 2015). Households face food deficit when availability of food is uncertain or limited, or when its capacity to obtain sufficient food through socially acceptable methods is restricted (Skalicky, 2006). Household food deficit is complexly associated with poverty (Tshediso, 2013; Oyebanjo *et al.*, 2015). ZimVAC (2020) estimates that over 6 million people in Zimbabwe are hungry, which is slightly below half of the nation's total population of roughly 14 million; over 65% of the people live under the poverty datum line. The comparatively expensive prices of grains, meat, and vegetables cause low income households to depend on unsustainable coping strategies. These strategies further aggravate poor school performance, chronic sickness, age-related and psychosomatic challenges (Siligman *et al.*, 2010; Shetly, 2015).

Households adopt several coping mechanisms to reduce the impact of food deficit. Coping strategies are a bundle of activities that households 'choose' in order to survive during trying times (Grobber, 2014). The variety of adopted household coping mechanisms often exposes the severity and intricacy of food deficit (Omonona *et al.*, 2007; Wambua, 2013). For instances, adoption of coping strategies such as decreasing the number of mealtimes, paternal and maternal buffering, borrowing outside affinity or kinship linkage, borrowing from relatives and friends may not be unusual. However, these strategies are rescindable and do not incapacitate household in their future endeavour to recover from food deficit. In contrast, severe coping mechanisms such as avoiding food the entire day, migration and the sale of productive assets show deteriorating household economic and food situations and can weaken future household food security status (Selepe *et al.*, 2015). Thus, informed by the failure of adopted coping strategies, this current study sought to assess the nature and the factors which inhibit the success of these strategies in Chipinge District.

## **2. Materials and Methods**

### **2.1 Study area**

The study was carried out in Chipinge District of Zimbabwe. Purposive sampling method was employed to choose Chipinge District because the area has one of the highest proportion of households which are food insecure (ZimVAC, 2020). Figure 1 shows the location of the study area.

### **2.2 Study participants**

The study population comprised household heads staying in Chipinge District not less than two years before the commencement of this research. Household heads were selected due to the essential responsibilities they perform in sourcing, preparation and sharing of household food. Abu & Soom (2016) posit that the best individual to inquire about coping strategies is the person who is responsible for food preparation and making sure that household



members consume the food. The household heads who provided the data used in this study were approached by two qualified research assistants after securing participants' permission to participate in the in-depth interviews and focus group discussions. A sample of 120 household heads was used.

### **2.3 Sampling procedure and techniques**

Data were gathered through household surveys from 120 households. Simple random sampling was employed to choose household heads. The sampling procedure ensured that all household heads had an equal opportunity of selection and the selection of one household head was independent to the selection of another household head. Furthermore, the sampling procedure and techniques avoided the selection of influential and dominant community members. Each household head was given a number between 1 and 6 000. A list of 120 random numbers was generated and the household heads assigned those numbers were considered in the sample.

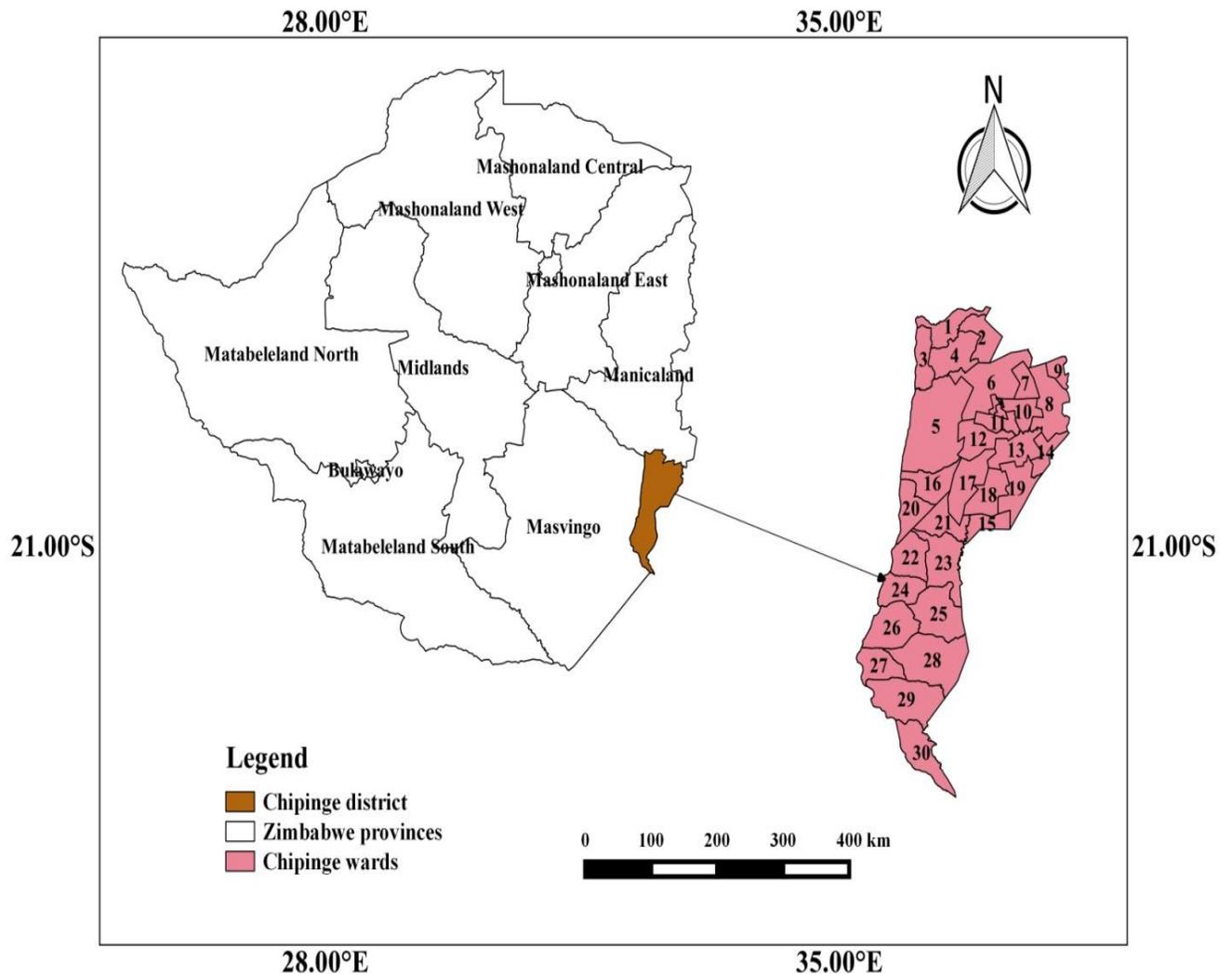


Figure 1: Zimbabwe district map showing the location of Chipinge district

#### 2.4 Data collection methods

Key informant interviews (KII), Focus group discussions (FGDs) and observation were employed to gather both qualitative and quantitative data between April and June 2017. These methods were utilized in combination with numerous Participatory Rapid Appraisal (PRA) techniques such as proportional piling exercises and pair wise ranking. These techniques were triangulated to improve the reliability and validity of the results. FGDs and KIIs were designed for this research and these comprised of questions designed to get participants' views on strategies employed by households to address food deficit in Chipinge District. Five FGDs, each constituting between 8-10 participants were conducted in various settings where community meetings were convened. All the FGDs were moderated by the principal researcher with the help of two research assistants who were responsible for taking notes. Each FGD lasted



1½ hours whereas each IDI took between 45 minutes and 1 hour. Acoustic copies of the study discussions were acquired with the aid of a recorder after permission was sought from the respondents. The transcribed notes of the principal interviewer and research assistants were then paralleled with the recorded voices. This assisted in evaluating and guaranteeing the consistency of the data gathering process. Furthermore, over twenty household-based in-depth interviews were conducted with selected household heads. Interviews were carried out in local Ndaou language. Completed consent forms were acquired from the respondents prior to the carrying out of interviews. The KII and FGDs revolved around deliberations on the participant's views on the strategies adopted to address household food deficit in the study area.

## 2.5 Data analysis

For qualitative data, the acoustic records were transliterated word for word in Ndaou language and interpreted into English for ensuing data analysis. The transcriptions were read numerous occasions and matched with printed records acquired throughout the data gathering process. The process of coding and examination of the transcriptions were carried out by hand with the assistance of Microsoft Word. Thematic content analysis was used to analyse qualitative data. This analytical method involved classifying and sorting repeated themes or discrete elements of meaning emanating typescript of the transcriptions. Speech marks from the respondents that defined the several sub-themes and themes articulating the opinions rose regularly in discussions and the interviews were selected. Data validity was measured and enhanced through data triangulation and the presentation of quotation marks from numerous diverse respondents to support the study results.

Universal coping strategy questions were adopted, authenticated and contextualized using FGDs. The severity of identified coping mechanisms was gathered by requesting the participants to categorize the coping mechanisms they employed based on their lived experiences. A scale with variables ranging from very severe (4), severe (3), moderate (2), and less severe was used. The method used for scoring revealed the effectiveness or the severity of each identified strategy. In designing the CSI, a number of simple questions were established to gather preferred household coping strategies. The following steps were followed in the construction of the coping strategies:

*Step -1:* The initial focus group discussions were used to identify the list of locally relevant coping mechanisms in Chipinge District. These were grouped into Dietary change, temporary measures aimed at increasing household food availability, temporary measures to reduce food consumption at the household level and the management of food deficit.

*Step -2:* This stage comprised the counting of frequencies of adopted strategies. A seven day and a year recall periods were used. Negash (2000) notes that longer recall period usually provides less reliable data about favoured coping strategies due to mental lapse. A likelihood of recollection predisposition remains, since data was collected for a recall period that stretched for a year for some few coping strategies. However, a sizeable sample assisted in



maintaining the validity of the data gathered. Furthermore, the KII assisted in clarifying some of the gap that remained unclear during the focus group discussions.

*Step -3.* Coping severity: (Classifying of the coping mechanisms). The identified coping strategies were “weighted” differently and household heads were asked question pertaining to the severity of each identified coping strategy. The frequency answer was multiplied by the weight that reflected the severity of each coping strategies.

*Step -4:* Scoring: Combining frequency and severity for analysis

To conduct an analysis of the CSI results, two critical information were required. The first was the means of scoring the relative frequency; and the other involved the method of scoring the weight, resulting from the step 3 above. This can be summed up using the following formula:

$$CSI = \sum_{i=0}^k F_i S_i \dots\dots\dots (1)$$

Where  $F_i$  = frequency of the  $i^{th}$  coping strategy adopted in the past 7 days;  $S_i$  = severity weight attached to the  $i^{th}$  coping strategy and  $k$ = represented the total number of coping mechanisms.

**3. Results**

A number of household coping strategies were identified during focus group discussions. Consumption of less preferred foods, asset disposal, skipping of day time meals, hunting and gathering, food donation, maternal buffering, decreasing the quantity of food given to children, borrowing food and money, remittances and migration were the specific coping strategies that were identified.

**3.1 Consumption of less favoured food**

The intake of less preferred food was the most common strategy in Chipinge district. Household heads revealed that they consumed foods that were less favoured and cheap as a way of saving existing food. The strategy was used by 67 % of households between 4-7 days per week. Less than a quarter (22 %) of the households consumed less preferred foods 2-3 days per week. Furthermore, this coping strategy was also used by 7 % of households once per week and 4 % of households never relied on this strategy. Participants concurred that the adoption of this coping strategy reflected increasing food security concern among households in Chipinge district.

**3.2 Skipping day time meals**

The state of food deficit is witnessed in the propensity of households towards minimising food taken per day. Participants revealed that several families eat inadequate meals each mealtime. Observations exposed that food was of much inferior value and of a more restricted assortment than normal. Evidently, this severe strategy was used mostly by the low-income households, and generally at certain periods of the week. This coping strategy was adopted by 65 % of households 4-7 days per week. Nineteen percent of respondents skipped day time meals 2-3 days per week and 11% of respondents only depended on this coping approach once per week. Furthermore, it was



noted that 5 % of participants never adopted the coping strategy. This coping strategy was further divided into 3 classifications, depending on the frequency of family food consumption as described below.

### 3.3 *Only 'consume two meals per day'*

The results revealed that 36 % of the households consumed two meals per day. In numerous cases, these meals comprised of breakfast in the morning and supper during the evening. A research conducted in Nigeria exposed comparable findings, where, 73 % withdrew daytime meals in order to address household food deficit (Omonona *et al.*, 2007). This study also revealed that when households decrease the amount and quantity of food consumption, members become susceptible to health complications.

### 3.4 *Consume food in the morning or at night*

Respondents further indicated that they consumed food in the morning or at night. However, this coping strategy was adopted by households that were facing severe food deficit. Nearly 70 % of the households adopted this coping strategy 3-7 times a week while another 30 % used it 1 to 2 days in a week. The coping mechanism was more severe than consuming two meals per day. This coping strategy could not be relied upon over prolonged period without resulting in severe health challenges.

### 3.5 *Spending the whole day without consuming food*

The results further indicated that 43 % of the respondents spend the whole day without eating food (21% adopt the strategy often 3-6 times per weeks, and 22 % used the strategy 1 to 2 times a week). However, there were no cases where households reported continuous use of this strategy, all the times. Withdrawing day time meals to address household food deficit was a coping strategy also adopted by households in Kenya, where above 29 % of the households do not consume food during the whole day (Wabwoba *et al.*, 2020). Nevertheless, it was one of the most severe temporary household coping mechanisms. Spending the whole day without eating food was adopted in order to guarantee that available food was shared among household members. Focus group discussions revealed that the decrease in the number of mealtimes extended the availability of food stock. However, the coping strategy resulted in health challenges such as undernourishment among household members.

### 3.6 **Hunting**

The FGDs revealed that households reduced cash expenditure on food through activities such as hunting, gathering, fishing and petty trading. It was noted that over 45 % of households relied on these food procurement activities 4-7 times during the week. About 31 % of households acquired their food supplies from such activities 2-3 days per week and 22 % also used this coping mechanism once in a week. About 2 % of the food secure respondents never adopted this option. Participants revealed that although the level of reliance differed, the entire household relied on off-farm activities.



### 3.7 Food donations

The study revealed that 49 % of the households relied on receiving food from well-wishers 4-7 times per week during the lean season. About 35 % of the households received food from well-wishers 2-3 times per week, and 12 % of the participants also relied upon the coping mechanism once per week. Furthermore, this study also noted that 4 % of households never adopted this coping strategy. These figures showed that reliance on donations was also one of the common coping strategies and this shows the dire state of food security in Chipinge district.

Participants revealed that this strategy was common among neighbouring households due to social cohesion and cultural determinants. Cultural norms compelled households to assist each other in times of food deficit.

### 3.8 Maternal buffering

This was also another strategy used by mothers to cope with household food insecurity. Maternal buffering is a situation where a mother consciously limits her own food consumption in order to safeguard food for her children (Omonona, 2007). Maternal buffering was adopted by 17 % of households 4-7 days per weekly and 24 % of respondents employed this coping option 2-3 days per week. About 5 % of households relied on this option only once per week and 54 % of respondents never adopted this coping option. During the focus group discussions one respondent said:

*“Sometimes I give my children the last portion of the food available. My children keep on asking me “mummy where is your own food?”, and I continue telling them that I have consumed my share. I subdue my appetite to safeguard that the children feed. Instead of kids spending the whole day without eating food, I rather prefer to withdraw my food”.*

Participants revealed that the adoption of motherly buffering as a protracted strategy perpetuate the inter-generational transmission of malnourished children as famished mothers conceive malnourished children. Nevertheless, respondents expressed their willingness to use this coping option any time it was necessary and did not anticipate their husbands to employ the same strategy. This coping strategy was not common among male participants. The probable explanation was that in most households, women were responsible for preparing food and the person who prepared food consumed after all other members were served. Figure 2 shows the common coping strategies in Chipinge District.

### 3.9 Decreasing the amount of food given to kids in the family

This strategy was also adopted by few households in Chipinge District. This current study noted that 38 % of households relied on this strategy 4-7 times per week and 36 % of respondents also employed this option 2-3 times. About 21 % of households relied on this coping option once during the week and 5 % of respondents never reduced the amount of food given to children. One respondent retorted that:

*I told my household not to anticipate food in the morning and lunch. I am only able to serve them supper. When the household learnt not to eat in the morning and lunch, they eventually got used*



The study revealed that very few households resorted to this coping strategy because the children's food security was considered a priority. Table 5.1 below shows the frequency of distribution of coping strategies in Chipinge District.

**Table 5.1 Frequency of distribution of coping strategies in Chipinge district**

Coping strategy	Most of the times	Sometimes	Rarely	Never
Consumption of less preferred foods	67	22	7	4
Skipping of day time meals	65	19	11	5
Hunting, gathering, fishing and petty trade	45	31	22	2
Food donation	49	35	12	4
Decreasing the quantity of food given to children	38	36	21	5
Borrowing food and money	33	19	3	45
Migration	18	9	3	70
Maternal buffering	17	24	5	54
Asset disposal	17	6	5	72
Remittances	8	4	1	87

### 3.10 Borrowing either food or money

Borrowing food or money was a commonly-stated practice in Chipinge district. Households with more assets used secured borrowing strategies on the surmise that unsecured borrowing had greater costs. Borrowing food or money was adopted by 35 % of respondents 4-7 times per week, 19 % of respondents relied on this coping option 2-3 times per week. About 3 % of households utilised this coping option once per 7-day period and 43 % of respondents never adopted this mechanism. One participant retorted that:

*I am facing critical food deficit and I normally rely on friends and relatives for food assistance. They usually lend me money which I use to buy food. When I get the money, I pay back the credit.*

FGDs revealed that despite the fact that participants borrowed from friends and relatives, the practice was considered shameful and disgraceful. In light of this, one participant pointed out that:

*I can't borrow food from a neighbour. I rather opt to borrow cash from a neighbour or relative. It's not respectful to borrow food from friends and relatives.*

Participants revealed that before the severe period, most poor households got food and money from neighbours, friends and relatives. This coping strategy was suggestive of resilient social linkages among households in Chipinge district. Also, participants reported that informal credits from local merchants were also available. However, the debtors were requested to pay back the credit with very high interest at a future period, ordinarily after subsequent harvest. For instance, participants recounted that one bag of grain usually attracted two bags after reaping. It was a typical example of how a temporary coping strategy exposed household to further vulnerability, with respect to longer-term livelihood options. One participant reported that:



*since the last time that I borrowed money from money lenders, I have not been able to secure sufficient food. When I failed to pay back the loan, all my cattle which used to provide draught power were confiscated.*

Borrowing was viewed as a severe coping strategy that left a number of families with an onus to pay back the credit. The study also noted that families' access to loans improved their security status in the interim period but affected household food status in the long term. Households which had the chance to obtain loans could not build their capability to harvest more food because the loans were used to procure food. However, with insufficient income to pay back, in some households the credit resulted in migration and selling of productive assets.

### 3.11 Remittances

Abu and Soom (2016) define remittances as cash sent from outside and within the nation. Cash or food transfers play a significant role on the economies and livelihoods of several states, contributing to trade and industrial growth (Ellis, 2000). Using a recall period of one year, the study revealed that 8 % had relatives and friends from outside their households who frequently supported 4-7 months per year. About 4 % employed this strategy 3-4 times per year and 1 % used this strategy 1-3 times per year. It was noted that 87% of the household never used this coping strategy. The study also revealed that more female household heads (53 %) got more remittances than male headed households. Also, despite the prevailing food scarcity 10 % of the households reported giving food assistance to other family members outside the household. These results do not agree with other studies (Babatunde *et al.*, 2007; Mendoza, 2008) in emerging states, which shows that transfers are an important component of family income.

On the contrary, for the few households that received remittances, this study clearly demonstrates the significance of family ties in the livelihood of rural households in Chipinge District. One participant who had children who migrated to South Africa pointed out that:

*Were it not for my kids who migrated to South Africa, my family could have famished a long time ago. These children have made me endure ...rarely do three months pass without one of them sending groceries or money. That is how we are managing.*

While households with migrant members had an average monthly income of US \$120.00, the recounted averages for non-migrant families was much lower, at US \$55.00. Though remittances were critical for a number of reasons, interviewees reported using over three quarters of the funds to meet their food requirements. Very few households reported saving remittances for precautionary purposes and this revealed the deteriorating financial circumstances in the study area.

## 4. Discussion

Households in Chipinge district used temporary consumption coping mechanisms to reduce the impact of food deficit. These coping strategies were fall-back options used whenever habitual options were disturbed. Adopted coping options were not mutually exclusive, but rather, comprised a mixed approach, embracing both food



compromising and financial domains. Adopted coping mechanisms were ineffective in reducing food deficit. Preferred coping options were detrimental to prospective rural livelihoods in Chipinge district. This is an indication of poor resilience to food deficit. The results show that households minimize hazards and manage food deficit in order to ensure minimal level of sustenance. Furthermore, deprived households also resorted to disposal of productive assets if food deficit persisted. Babatunde *et al.* (2007) and Oyebanjo *et al.* (2015) categorise asset disposal into numerous stages, with liquid assets disposed of first and fecund assets later. Finally, household members embark on distress migration, which reflects failure to manage the food deficit. When fecund assets are sold, it becomes more challenging for a household to restore a pre-crisis food status.

Coping mechanisms related to compromising quantity and qualities of food intake were identified as initial steps considered for lessening the negative impact of food deficit at the family level. More severe coping options comprising pecuniary compromises were used when household food deficit situation worsened. A research done in marginal areas of Bangladesh revealed similar findings where households compromised the amount and frequency of food consumption. However, a number of studies (Babatunde *et al.*, 2007; Ziaei *et al.*, 2015) found that compromising food intake has negative ramifications on household well-being. These results also concur with Zakari (2014) who noted that consumption of less preferred and cheap foods is usually one of the immediate mechanisms used by families grappling with food deficit. The findings of the study also corroborate Mjonono (2008) who exposed that about 61 % of households in Umbumbulu District of Kwazulu-Natal, 75 % in Ethiopia (Mengistu & Haji., 2015), and 60 % in Kenya (Wabwoba *et al.*, 2020) utilized this coping mechanism to address household food deficit. Like other preceding studies (Babatunde *et al.*, 2007; Oyebanjo *et al.*, 2015; Nyikahadzo *et al.*, 2016), this study also concludes that consumption of less preferred foods could not address household food deficit in the long term because stored food continues to deplete. Thus, policy insight derived from these findings point to the need for establishing long-term coping options which contribute to asset building.

In terms of severity, skipping of day time meals were roughly comparable to consumption of foods that were less favoured. If more than a modest drop of food was involved, most participants preferred skipping day-time meals, so that they got content when they eventually eat. The way in which skipping of day time meals was done varied extensively among household in Chipinge district. A future study would need to distinguish between constant skipping of meals and redistribution that favours some household individuals to the disadvantage of other members. This remains a grey study area that deserves to be explored in prospective research on strategies devised to address household food deficit. Households depending on less preferred foods eat a diet that is insufficient for living an active and healthy life. Skipping of day time meals helped household members to get the best out of existing food for moderately protracted period although household members went through underfeeding. At the early stage of food scarcity only adults skipped day time meals. As food shortages prolonged, children were compelled to skip and decrease food as a surviving mechanism.



Adopted coping strategies were helpful for food insecure households in sustaining basic consumption, but insufficient to guarantee food security. Food insecure households depended on diverse food sources such as wild meat and fruits. Kabui (2012) posits that the collection and consumption of wild foodstuffs is considered as an early notice of a looming disaster or deprivation. This study corroborates Quandt *et al.* (2004) who posit that obtaining food through hunting, gathering and petty trade resulted in greater household food security among the Latino migrant workers. Zakari (2014) also confirms that poor households involved in hunting and gathering eat more vegetable foods and were more food secure. These findings concur with earlier studies which revealed that wild foods harvested by households embody a common coping mechanism vital in reducing the impact of food crisis in South Sudan (Kabui, 2012; Gupta *et al.*, 2015). Studies from Lesotho, Malawi, Mozambique and Zambia proved that owing to an increase in costs of basic foods, protracted famines and insufficient yields and reliance on wild foods increased in order to address household food deficit (WFP, 2021). However, although this study did not address the healthy implications of consumption of wild foods as a coping mechanism, studies in Ethiopia reveal that this may be linked to the spread of ailments such kwashiorkor and other well-being challenges (Mengistu & Haji, 2015).

Chipinge district faced chronic food insecurity and thus perpetually relied on food donations from relatives, government and NGOs. Although acquiring food on loan was considered a least austere coping option, similar studies (Kabui, 2012; Echendu *et al.*, 2015; Abu and Soom, 2016) show that this can have lasting erosive impacts on household food security, particularly if utilised regularly. Inadequate earnings to pay back the credit result in migration or peddling of productive assets. FGDs revealed that whilst reliance on donations rise with the severity of food deficit, food secure households did not rely continuously on food aid. The major explanations raised for few households that avoided reliance on donations included opinions that they were not at risk or that the support was inadequate; and insufficient access to information about existing food donation schemes. Furthermore, food donations led to the preferences for maize which does not perform well in Chipinge district. The tradition and habit of consuming drought resistant crops had been seriously affected. Furthermore, many households developed dependency syndrome. This situation has negative effects on the sustainability of food systems in the study area. This study corroborates Shetly (2015) who provided understanding into how food aid has played a critical role among households perceived to be at risk of severe food deficit.

Maternal buffering was also one of the methods used to address food deficit in Chipinge district. However, there was no justification why other household members besides the mother could not use the same coping strategy. Unlike Echendu *et al.* (2015) who found paternal buffering in Southern Nigeria, there was no observed evidence emerging in this research to suggest that other members apart from mothers employed this coping strategy. Thus, paternal cushioning was consequently an exception rather than an imperative among the respondents and any female respondent whose husband employed this strategy was considered privileged by the rest of the participants.



This study also confirmed that a mother in charge of food preparation tends to experience food insecurity first before allowing her children and the husband to starve. These results concur with Kabui (2012) who revealed that maternal buffering was a common strategy in Kenya during the famine periods. However, this study contradicts Mengistu & Haji (2015) in Southern Ethiopia who noted incidences where people in charge of food preparation got precedence at the expense of other family members during a famine. The difference could be a result of the fact that famine in Ethiopia was linked to political instability and each household member prioritized personal safety at the expense of collective household security.

Borrowing either money or food was a commonly-stated coping strategy. Local traders extended temporary loans to deprived households. Nevertheless, borrowing money to purchase food can result in lasting indebtedness. The results showed how a temporary coping option can put a family in a more susceptible situation with respect to protracted coping options. The problem related to this coping strategy was that money creditors participated in the process of borrowing and lending. The creditors compelled the borrower to pay high amount of interest charges. Alternatively, many of the participants sought help from informal kinships. Some previous research reveal that kinship ties have enfeebled considerably, due to the impact of urbanization (Dercon *et al*, 2005; Abu and Soom, 2016; Wabwoba *et al.*, 2020). To the contrary, this study confirmed the existence of family ties among households in Chipinge district. These ties played a vital role as a source of fall-back mechanism in times of food deficit. Thus, an attempt to address food deficit in the study area should be built upon functional kinship ties. The results are consistent with Grobber (2014) and Gichuhi (2015) who noted that households which depend on loans are prone to irreversible household food insecurity statuses.

The results also revealed that participants relied on migration in order to address household food deficit. However, a number of similar studies (Dercon *et al*, 2005; Mengistu & Haji, 2015; Abu and Soom, 2016) posit that migration does not guarantee household food security. Migration has ramifications for the asset status of household members left behind. In Chipinge district, seasonal migration has relatively little contribution in reducing household deprivation. Most migration took place from rural villages to nearby farms and Chipinge town. Though migration took place in search of better life, it was also a reaction to food shortages. In the initial phase of household food crisis men migrated and women and children followed depending on the severity of household food deficit. For the family members who remained, working as casual labourers was their main priority. In contrary to these findings, Mengistu & Haji (2015) argue that household of-farm employment is the major source of rural income. Gichuhi (2015) also argue that the importance of salaried employment diminishes with greater levels of family earnings. The differences in findings between this current study and earlier studies (Mengistu & Haji, 2015; Gichuhi, 2015) could be a result of the fact that rural employment prospects are readily available in rural Kenya and Ethiopia. However, in Chipinge unemployment is estimated to be over 90 % (ZimVAC, 2017).



The sustainability of preferred coping measures is shaped by accessibility to a variety of assets. The study revealed a strong positive link between the number of resources possessed by a family and the magnitude to which they were food insecure. One opportunity observed in the study area was the revitalisation of community-based coping approaches (such as *Humwe*), pursued by stakeholders. Community-based approaches have capacity to raise income and build household assets (Mengistu & Haji, 2015). These approaches may be important in addressing food deficit at the household level. Stakeholders conceived coping options that focus attention on equity and assets. Furthermore, the adopted coping approaches varied over period depending on household food deficit condition, the nature of catastrophe and resilience capacity. Some of the coping strategies used were more detrimental than others. Thus, intervention strategies should identify alternative coping measures which ensure food provision throughout the year.

## 5. Conclusion

This study revealed that households often change food intake from favoured foods to inexpensive and less favoured alternatives. Participants chose to reserve future food security by decreasing immediate food intake, or through other strategies, long before it was ready to sell its productive resources. Household also attempted to increase food supplies through temporary coping mechanisms that were not viable over an extended period. Furthermore, households managed food shortfall by limiting the food available to its members through a bundle of measures. In the light of this research, it is suggested that attempts to increase access to credit by households and the preferment of off-farm activities as alternate livelihood options should be promoted by both non-governmental organizations and local government structures in Chipinge District. Households should have informal education through provision of extension facilities with the intention to improve their use of contemporary farming production methods and easy access to better technologies to improve production.



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