

**AN ANALYSIS OF THE COPING STRATEGIES ARISING OUT OF FOOD  
SHORTAGES IN ZIMBABWE: A CASE OF CHITSE AND KAMUTSEDZERE  
WARDS OF MT DARWIN DISTRICT FROM 2007-2008**

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**ABSTRACT**

Since the turn of the millennium Africa remains the poorest, technologically underdeveloped, debt ridden, and economically marginalized from the rest of the world. Drought, disease, civil conflict and poor governance have exacerbated the situation. Developing countries are particularly vulnerable to climatic change, economic decline, HIV and AIDS, and political instability. In fact, food shortages have become the order of the day in many households in both urban and rural areas in developing world. When the food shortages that characterized Zimbabwe reached their peak in 2007 and 2008, the rural communities in Chitse and Kamutsenzere wards of Mt Darwin District, in response, were often seen employing a variety of coping strategies in order to minimize the risk and severity brought about by the famine and successive droughts. It is, therefore, the purpose of this paper to identify factors that led to the food shortages being experienced in both wards as well as examining the coping strategies that were employed by the communities in both wards in response to the food shortages they were experiencing. In addition the paper will proffer policies that can be put in place for people to be able to cope with future or potential food crises.

**Key Words:** food shortage, coping strategies, drought, Zimbabwe

**INTRODUCTION**

Since the turn of the millennium, Africa remains the poorest, technologically underdeveloped, debt ridden, and economically marginalized from the rest of the world. Drought, disease, civil conflict and poor governance have exacerbated the situation. It is now widely recognized that food shortages are a reality and both urban and rural households face substantial effects as a result, affecting the developing world on its wide range of livelihoods which contribute as well to the GDP of a country

at large; making development susceptible to food shortage uncertainties. Individuals and communities at large have, at varying degrees, had to cope with the food shortages. Developing countries are particularly vulnerable to climatic change, economic decline, HIV and AIDS, and political instability. And such underlying factors have had a negative impact on the accessibility of food amongst people, and in most cases, rural dwellers are the ones who are exposed to new and many cases of unfamiliar conditions. Chitse and Kamutsenzere wards of Mt. Darwin District, just like many parts of Zimbabwe, have been affected by droughts and famines. Many households have experienced poor harvests in successive farming seasons, massive economic decline, deepening political crisis, effects of the HIV and AIDS pandemic, all culminating to cause as well as exacerbate the food shortages. Therefore, it is the purpose of this paper to interrogate these problems and identify the coping strategies adopted by rural communities in the face of hardships.

## **BACKGROUND ISSUES**

A survey of the literature on the problem reveals that a lot has been written pertaining to the issue of food shortages by various authors and organizations, in areas such as, the causes, scale, responses and interventions and many other issues, while a lot has been written extensively on the area of coping strategies by organizations such as FAO and SIRDC, and various authors from Zimbabwe and beyond. According to the FAO report on State of Food and Agriculture in Zimbabwe (2002), the high temperatures and low erratic rainfall patterns that are characteristic of natural region four and five, in which the area of study is located, are the major cause of droughts that have been common in recent years, as these are unfavourable to crops, since they cannot sustain the scorching heat of the sun as well as the low rains. In his book, *Famine in Zimbabwe 1890 – 1960*, J Illife made some highlight on the history of droughts and famines and subsequent coping strategies that were employed by the people. Referring to the 1861 drought, he notes that a missionary observed people going about the country gathering wild fruits, and this continued up until harvesting time. Some had to travel 80 to 100 miles with a few beans in their hands to exchange with corn. Also during the famine of 1896, he also note that the Chief Native Commissioner decided to withdraw aid to the people, citing that people could still survive on fruits as they were sufficient enough to keep them alive (Illife ,1990)

Michael Bourdillon and Angela Cheater (1982) emphasised how, at times, people can fail to utilize coping strategies as some of them fail to alleviate the impact of drought and famine, referring to the 1982 to 1984 drought, most local coping strategies were inadequate, particularly vulnerable groups like women and children were at most risk. The same view is echoed by the Zimbabwe Vulnerability

Assessment Committee's Interim Rural Food Assessment Report 2007, which says that combined effects of cyclones and dry spells, in most cases, erode most of the local coping strategies, which the communities have. The report pointed out that areas that lie in natural farming region four and five are deficit producing areas and people in these areas exploit these coping strategies way before the actual famine or drought, to compensate production shortfalls, thus diminishing the food sources. If this is repeated over time, then coping will be more difficult for most households (ZimVAC, 2007).

Amartya Sen (1981) brought in the concept of food entitlement, which is the command by households and individuals over food, and is central in many of his writings on the causes of famine. He emphasized that people do not necessarily starve due to an insufficient supply of food, but because they possess insufficient command over, or access to, food. Pointing out that people have several ways by which they command or have access to food, i.e. through trading, producing, selling labor, or through inheritance. These are, however, crucial to coping with food shortages as most coping strategies are based food on entitlement.

In a research by Zimbabwe Environmental Research Organization on adaptation to climate change, it highlighted two important steps in coping. First is the maintaining coping response where households attempt to secure their immediate needs as far as possible without depleting capital and productive assets. Basically, there would be exchange and borrowing within the community. The second stage would be depletion of household assets, which often leads to long term consequences as it undermines long term capacity to cope with poverty (Mharadze, 2009).

Another important issue in relation to coping strategies is the ties analysis which emphasizes that when the limit of reciprocity is reached, whereby people reciprocate in informal exchanges in various goods, households can become particularly vulnerable unless alternative strategies to cope can be found. During the research, study ties or links amongst people proved to have been very crucial and important for coping to be successful.

In terms of methodology, since the main aim of the analysis was to expose various strategies that were employed by individuals and households in the community in coping with food shortages, it was imperative to obtain qualitative information which will show behaviors, attitudes, and mechanisms that were employed. Basically, the analysis surveyed individual's households, chiefs, village heads, humanitarian aid workers, and government officials. It covered everyone in the community to ensure the success of the research, though it proved difficult to reach all villages as

mentioned earlier. The research employed several participatory rural appraisal (PRA) techniques to collect information. This included focus group discussions, in depth interviews, key informant interviews, transact walks, and questionnaires. At the same time, however, both qualitative and quantitative instruments were used.

**Table.1 Sample Size and Distribution**

<b>Date</b>	<b>Chitse</b>	<b>Kamutsenzere</b>
04/08/09	7	
05/08/09	4	
06/08/09	4	
07/08/09	8	5
10/08/09	4	4
11/08/09		8
12/08/09		6
<b>Total</b>	<b>27</b>	<b>23</b>

### **Focus group discussions**

These were done once during the research with the major key informants and World Vision employees from the Mt. Darwin Relief Office. It was mainly used to extract information in a participatory manner, so that both the researcher and the participant’s perceptions and views were encompassed. The PRA techniques encourage the people to provide answers, even to sensitive questions in voluntary and frank manners. The technique is appropriate for children as well as it made it possible for them to provide answers in illustrations and discussions in local languages. The Focus Group Discussions was one of the methods used to facilitate dialogue and exchange of information.

### **In depth interviews**

The in depth interviews were done with members of the community of Chitse and Kamutsenzere who were amongst the worst affected by the food shortages. These were selected randomly while some were selected during the focus group discussions. Personal interviews were carried out with some of the key informants, such as chiefs, village heads, and household heads, with the aim of getting information and verifying it.

### **Participatory observation**

One of the researchers had an opportunity to attend a workshop upon invitation by World Vision in Mt. Darwin at Pfura Development Center, and the agenda of the workshop was *Humanitarian Accountability During Food Crises*. Here, the researcher had the opportunity to meet most of the key informants and people who live and work in the area. These people and key informants provided vital information on research.

### **Questionnaires**

The use of questionnaires provided respondents with ample time to think over their responses and some of them wanted to remain anonymous, thus it provided an atmosphere that initiated people to give honest opinions. It composed of open and closed ended questionnaires, of which close ended was for easy coding and interpretation of information provided, while open ended questionnaires made respondents to respond in their own words. The respondents explained the effects of the crisis, how they coped, and how their livelihoods were affected by the food shortages. Though it was a useful tool for collecting data, it had its own shortfalls as the researcher realized that in most cases it called for interview back up in order to validate the data collected. Thus, it could not be solely relied on.

### **The Background to Food Shortages in Zimbabwe**

This section serves to systematically provide information about the background of the food shortages through the provision of a historical perspective of the food shortages in Zimbabwe and the factors that caused or exacerbated the food shortages. This is imperative in that one would be able to understand the responses that people made in trying to cope with the crisis, first, by understanding the factors that led to the crisis. Information is both in qualitative and quantitative form with a focus on climate, economy, political and health (HIV and AIDS) issues in respect to the area prior and during the two year period.

The occurrence of droughts and famines has been common in the history of Zimbabwe. Historical texts by authors like John Illife show that food shortages experienced by the region in the late 19<sup>th</sup> century were later worsened by rinderpest, which led to a massive loss of livestock, and left people experiencing massive food shortages and the responses during the pre-colonial period involved people exchanging grain and livestock, collecting wild foods, and migration. Warfare and diseases have played a pivotal role in exacerbating conflicts. The earliest food shortages experienced in the area were the 1904 and 1911 droughts, though they were nationwide. The impact of the 1911 drought

was largely felt due to the unavailability of, despite people, having the money to purchase grain (Illife 1990). This culminated with poor infrastructure, as seen by poor road networks, that most traders could not reach the remote parts of most areas. Later on the office of the Chief Native Commissioner introduced the *food for work* program, which was highly popular.

Zimbabwe, Southern Rhodesia, by then experienced two major droughts in the early and the late 1920's, which Phimister said were worsened by the collapse in cattle price and changes in the beef market in the first half of the decade and was later worsened by the *East Coast Fever*, which resultantly led to massive quarantines, destocking and prohibition of animal movement (Phimister 1978). Around the mid 20<sup>th</sup> century another famine was experienced, which the Native Commissioner for Mt Darwin arguably said was the worst ever. There was virtually nothing to talk of concerning the summer crop and maize had to be imported from outside the country, whilst most people had to trade their livestock for grain. Weinrich (1975) blamed the colonial policies, for instance the Land Husbandry Act of the 1950's, for affecting the capacity of local people to produce enough food as well as reducing the number of cattle owned by the people, resulting in almost 45% of the communal households not owning any livestock by the mid 1950's. The policy also led to influx of people into the reserves and disorientation of local people from communal subsistence farming since the whites desperately needed labor in their industries, leading to a serious reduction in food production. Riverine agriculture was banned, which most people relied on and, in the case of Mt. Darwin, it was mostly practiced along Ruya River with a lot of supplementary food being produced there.

The 1960's was a good decade as far as agriculture is concerned, and the people had large food stores. The situation, however, changed in the 1970's, but the impact was less as people had stored some grain from the concluding years of the previous decade and the food for work initiatives of that time were majoring in the construction of small dams that people could use for irrigation purposes. Immediately after independence, there were good harvests, but this was not going to be for long as the whole region was hit by a devastating drought, which required major relief efforts with close to two million people in Zimbabwe living on handouts during the period. During this drought, most coping strategies were eroded with women and children being at most risk. Michael Bourdillon and Cheater (1982) asserts that before independence in 1980, 50% of the households in the country had no cattle at all, which was a further decline in ownership of cattle from that of the 1950's when it was just at 45%, but after the drought the figure declined to 48%, and, by the end of the 1982-1984

drought, the figure rose sharply to 54% of the communal households in Zimbabwe not owning cattle at all. This was due to the fact that a lot of cattle died as a result of the drought.

The 1991–1992 droughts that struck Southern Africa were of huge proportions and needed wide response. Virtually, there were no harvests to talk of from the farming season in most parts of Zimbabwe, with the rains poor and erratic, characterized by higher temperatures. About 4 to 5 million people were in need of food aid in Zimbabwe. Failure of the Structural Adjustment Programs adopted at the beginning of the decade also made an impact both on the economy and the welfare of the people as it reduced government's commitment to offer free social services to the people. At the turn of the millennium, the region suffered from the devastating effects of *El Nino* and *Cyclone Eline* which, not only worsened the vulnerability of the country to poverty alone, but the whole region as well, as most of the planted crops and livestock were affected by the dry spells and were swept away by the floods, leaving millions of people across the region homeless without food.

In 2002 and 2003, some parts of the region experienced another drought. For Zimbabwe it coupled with economic instability emanating from the worsening relations of Zimbabwe with the Western countries after Zimbabwe pursued a controversial land reform program that gave land to the landless black majority of Zimbabwe, taking it from the white minority during the year 2000.

The worsening relations of Zimbabwe with the west coupled with IMF and World Bank's decision to stop granting Zimbabwe *balance of payments* coupled with the targeted sanctions imposed on the top government officials by the European Union and its allies, which all culminated in the incapacitation of the Zimbabwean economy, which largely had an effect on food accessibility capacity for most people and, as each year passed by, so was the worsening of the food situation in Zimbabwe.

Most of Africa's economies are sensitive to climate, as most of its population live in the rural areas which are heavily reliant on natural resources for survival. Developing countries, like Zimbabwe, are particularly vulnerable to harsh weather conditions. Erratic rainfall has been one major problem. Vogel (2002) highlights that, as a result of the exposure to such extreme weather conditions, the severity has far reaching consequences across all sectors in both rural and urban areas as it exacerbates already existing risks.

The study area reveals that the Chitse and Kamutsenzere wards are located in Mt. Darwin District, which is located 156 kilometers north of Harare. It is found along altitude 16 degrees south and 31

degrees east in Mashonaland Central Province of Zimbabwe. Its climate is characterized of agro – ecological region four and five, which receives rains averaging between 450 mm–650 mm, while the northern lowveld has high rainfalls, but the topology and poor soils make it unsuitable for arable agriculture whilst, at the same time, it is subject to floods, especially in Kamutsenzere where the altitude starts to fall below 900 meters below sea level. It is characteristic of dry summer spells and short rainy seasons and that rains were coming late in the second half of the rain season, which is usually between October and February. Farming is usually semi-extensive, with livestock being kept and drought tolerant crops being cultivated. The soils are sandy, loam, and red clays. In Chitise, the terrain is usually characterized of granite outcrops. The population stands approximately at 192,010 people, according to the 2002 national census. The communities in both wards are largely communal farming communities with some households, mainly in Kamutsenzere, engaging in cotton production at their homesteads where some are provided assistance by various cotton agencies. Both wards produce maize, which is the staple crop, and other crops, like groundnuts and round nuts. In terms of education, most households have at least some form of education and generally women’s education is lower than the men’s (Chengeta, 2009).

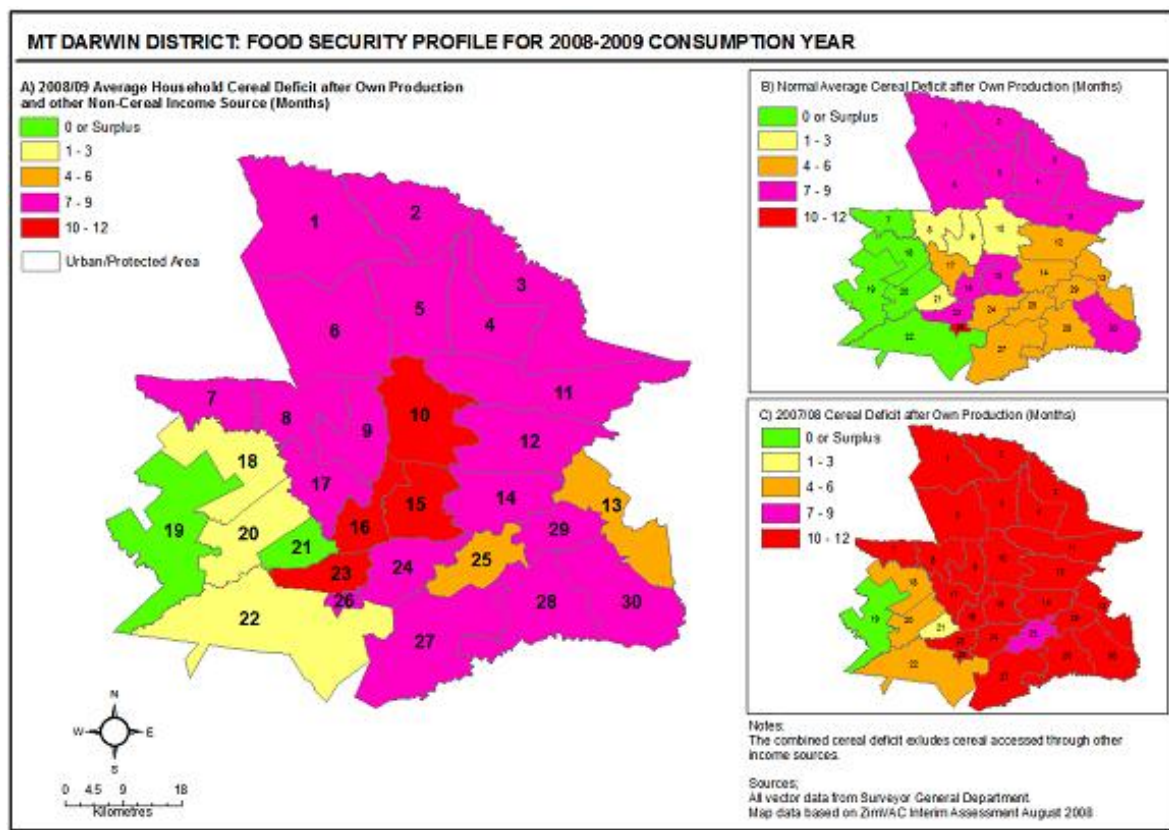
Chitise and Kamutsenzere have been more vulnerable to the effects of weather as they are mostly located in the drought prone region while their communities rely on rain fed agriculture, which Vogel preferred to view as risky (Vogel, 2002). In a survey carried out, it showed that close to sixty percent of villages in both wards were experiencing critical food shortages owing to weather related factors for the past eight years. (Makano, 2009; Clive, 2009). In which Chitise (ward 16) and Kamutsenzere (ward 6) are in the most severe range of cereal deficit months after their own production. Chitise (ward 16) is found to be in the range of 10 - 12 months, while Kamutsenzere (ward 6) is in the 7 - 9 months range for the 2008-2009 consumption years. (Makano, 2009; Clive, 2009).

From information obtained through questionnaires, 65% of the respondents confirmed that the weather conditions they were experiencing of late are no longer what they used to be in the past. They noted that since the turn of the millennium, the rains were generally coming late and in worst cases, around mid-December, and ended early, around the end of January. In fortunate circumstances, there will be heavy downpours (*torrential floods*) mostly characteristic of Kamutsenzere. During focus group discussions most of the participants blamed the dry spells as the reason for crop failure. Chief Dotito also echoed the same sentiments. Highlighting the absence of winter rain, *Mavhurachando*, August rain, *Gukurahundi*, and September rain, *Bumharutsva*, which he last experienced in the late 80’s, but



alluded that these were very vital in preparing the land and early planting (Dotito, 2009). The rains were relevant in that they would be used to plant many other crops. For instance, September rain is the one used to plant rapoko, which is planted before maize, while other crops, like round nuts and ground nuts, could be sown as well.

Chitse ward counsellor Nancy Ravu (2009) noted that the impact of climate was heavy, especially on their livelihoods, which included household level of production, income generating projects, and access to food on the markets. Most people in Chitse and Kamutsenzere who were depended on selling their labor at nearby farms were affected, also, by the unfavorable weather conditions, which were affecting production output at the farms.



Source: World Food Programme, 2009 Report.

Fig. 1 above is a food profile showing the number of months a household would be without food after consuming all the food harvested from the previous season (2007 – 2008), the higher the number of months the higher the risk of food insecurity in that area.

Even though there were other nationwide socio-politico-economic stressors touted as the major causes of poverty in Zimbabwe since the worsening of the country’s economic and international relations with the west since the concluding years of the 20<sup>th</sup> century, the successive climatic instability and unreliability account for the poor crop production for the past eight years, laying the foundation for the food crisis that has been a characteristic of Zimbabwe.

Table.2 Table below shows the number of applicants registering for food assistance in non-drought years compared to those seeking in the 2007 - 2008 in both areas.

Ward Area	Ward Population	Average No of applicants in non – drought years	Average no of applicants during the 2007/08 drought years	Average % of applicants in non drought years	Average % of applicants during 2007/08 drought years	
Chitse	5789	1256	4568		21.6	78.9
Kamutsenzere	6342	1364	5224		21.5	82.3

Source: World Vision, Mt Darwin Relief Office Report 2008

Most people had poor harvests from the 2006-2007 and the 2007-2008 farming seasons, which laid the benchmark for the shortage of food during the period since most households rely on output from their plots as the major source of food. In Mt. Darwin District, most households, for the past two seasons, had harvests that could not sustain them for more than five months on average, let alone in Chitse and Kamutsenzere it was below and above three months, respectively.

The economic situation played a part in the poor harvests that resulted, as there was failure by the responsible authorities to supply the market with farming inputs. Shortage of farming inputs has been a major blow to the community. This led to most communal farmers planting later than they had scheduled. Most crops were affected by lack of fertilizers that were not always available on the market (Bwoni, 2009). Another dimension on the issue is of corruption that has been, or is a characteristic of the Zimbabwean economy, which, for years, has seen farming inputs only being accessed only by those connected to higher ranking political officials, and those with a stronger financial muscle. Interestingly, the inputs, despite not being accessed on the open market, have at many a times been available on the parallel market, popularly known as the *black market*. The farm mechanization and input support scheme, which was aimed at supporting all farmers in 2008, saw

only a few politically linked and well up households benefiting from the program, a program which could have assisted a lot of poor communal farmers in the area.

In Kamutsenzere, according to one communal farmer, whenever she received some inputs from OLAM, a prominent cotton marketing and processing agency, she was forced to divert some inputs, especially fertilizers, towards her maize crop because she could not access inputs on the market (Kazimbiri, 2009).

Table. 3 Mt Darwin. District Household Cereal Production - 2007/2008 Agricultural Season

Average Contribution of 2006/07 Own Cereal Production to 2007/08 Household consumption (in months)	Average most likely contribution of other incomes to 2007/08 household Cereal consumption (in months)	Average Cereal for consumption months)	Household Access the 2007/08 year (in months)
4	2	6	

Source: ZIMVAC Report May 2008

The availability of food on the market at affordable prices is a key determinant of food security in many rural districts; anything that reduce maize availability and increase its price without improving rural income will worsen the lives of rural people. The availability of food on the market remained critical, though the situation reached extreme proportions in 2008. Most wholesalers in Mt. Darwin and Bindura had nothing to distribute for the better part of last year and had to go as far as Tete, Harare, South Africa, and Botswana to buy commodities, which made food even more expensive to a lot of people in the community (Nota, 2009). High staple prices at informal markets that sprouted at Mt. Darwin Center and Madondo Business Center effectively reduced household's ability to access adequate quantities of food.

January 2007 inflation was at 27,000% and, by March 2008, it was at 215,000 % showing a faster and disproportionate increase, which continued to erode the purchasing power of the local currency, hence translating, also, to inability of the rural households to purchase various goods on the market (Wikipedia, 2009). As inflation skyrocketed, so were the prices of food on the market. One farmer in

Kamutsenzere, referring to her situation when she sold her cotton from the 2007-2008 seasons, received quite a huge amount of money on cheque, which she says she never got a chance to fully utilize by the time she managed to access the cash. It was no longer capable of buying anything meaningful, as she had anticipated (Kazimbiri, 2009).

As the Zimbabwean dollar crumbled as a result of rising inflation, most commodities became expensive in much of 2007 and 2008. While in 2008, most goods were sold illegally in foreign currency. Mrs. Nyika from Kadombwe village in Kamutsenzere, who earned her income from clay pot making, was a victim of the economic meltdown; in 2008, people could not buy her pots since a few people were willing to part ways with their hard earned cash on non-food items (Nyika, 2009).

The prevalence of HIV and AIDS in Zimbabwe has had a negative impact on people as it constrained households and livelihoods at any given time. HIV/AIDS has affected many people and has left many people facing food accessibility challenges (Clive, 2009). It reduced the household asset base; as in most cases people would sell their livestock, property, farming implements or even the harvest from the previous season in order to buy expensive medication for instance the Anti Retroviral Therapy and many items that are needed.

HIV and AIDS patients were also unable to employ various coping strategies, like selling labor, due to physical inability. Excess adult mortality has led to loss of breadwinners and most of the households in the sample were female headed. While at the same time, death of a bread winner has meant permanent loss of income, dropping out of school, and the situation would even be worse with the death of a mother.

It is difficult to separate Zimbabwe's 21<sup>st</sup> century problems from the political crisis that dominated events at the end of the 20<sup>th</sup> and the beginning of the 21<sup>st</sup> centuries. The food situation in Zimbabwe was and is amidst a politically challenged environment. Zimbabwe's international relations worsened since the country launched its controversial land reform program in the year 2000, the illegal targeted sanctions from the western countries, and the refusal of the Bretton Woods Institutions, like the IMF and the World Bank to issue balance of payment support to Zimbabwe, pushed the country into serious economic problems that led to the shortage of basic commodities in the country.

Interestingly, the decade long political rivalry between Zimbabwe African National Union Patriotic Front (ZANU PF) and the Movement for Democratic Change (MDC) reached its climax in 2008 as

the country went for the polls on the March 27 that, controversially, failed to produce a clear winner for the presidential race. As the country geared up for the 'runoff' that was to be held on the 30<sup>th</sup> of June, the political situation got tense and, subsequently, led to the government's suspension of all the humanitarian operations, amid suspicion that the civil society was interfering in political activities by campaigning for the opposition Movement for Democratic Change, and using food aid as the campaigning tool.

The food situation got worse as most people, at the time, heavily depended on aid, and their food reserves were already depleted. As for Chitse and Kamutsenzere, a total population of 11,564 people were in urgent need of food by May 2008 and it was estimated to rise by 35% by the end of June for the whole district. Only 5 wards in Mt. Darwin, out of the rest, were declared food secure by the time of the suspension (Makono, 2009). C-SAFE, a consortium comprising of World Vision, CARE, and CRS, also echoed the same sentiments. Considering that both wards were part of the wards that were in the WFP's Vulnerable Group Feeding, Institutional Feeding and Schools Feeding Programs that fed thousands of vulnerable people in the community and primary school children, it, however, points to the fact that the suspension was mistimed, ill-informed, and miscalculated as it plunged the country deeper into food crisis at a faster rate, such that by the time the suspension was lifted, the situation was already out of control.

After the June Election runoff, the three major political parties entered into a fresh round of negotiations in order to formulate an all inclusive government that saw ZANU PF and the two MDC formations once again coming to the same table to try to re launch talks that started in 2007. From the time of the signing of the memorandum of understanding in mid September 2008 to the installation of the all inclusive government in February, the political parties underwent through a number of deadlocks that stalled the formation of an all inclusive government, something that Richard Lee, the World Food Program Chief outlined as the major reason for the suffering that the country was facing, as the country needed a fully functioning government to solve the crisis as well as to address the food shortages that the country was experiencing (World Food Programme, 2009).

Interestingly, the research hinted earlier that Mt. Darwin District is a cotton growing area, together with its surrounding districts of Rushinga, Guruve, and Centenary. Most of its people have created a better livelihood out of growing the cash crop and, to some, it was profitable to grow cotton alone and later on buy food. It is interesting to note that one way of ensuring that one is always food secure is by growing food crops. A balance should always be maintained between growing food crops and

cash crops. From the research, some of the people who were classified as food insecure in 2008 by World Food Program had good produce from their cotton from the 2007-2008 farming season, but, despite receiving a lot of money from the cotton sales, they were still in poverty. Reasons being that they had not planted enough food crops hoping that, as usual, they will buy food from income accumulated from cotton production. The food accessibility problems associated with these people were as a result of their inability to access money from the banks which was a common feature over the period and the effects posed by inflation, which quickly reduced the value of their money. At the end of the day, they were unable to purchase food, despite having received a lot of money from cotton production.

### **THE COPING STRATEGIES**

Basically the coping strategies employed by the people in both wards during the two year period were basically the same, but there were differentiated in terms of frequency, as seen by some coping strategies being used more often in either of the years. Most of the coping strategies that were employed in 2007 were meant to secure their immediate needs without depleting their assets. In late 2007 and much of 2008, reductive coping responses were employed when people reduced their food consumption as well as their spending. While in 2008, following the poor harvests and subsequent suspension of humanitarian aid operations, depletion of household assets was common as people were more desperate than before.

This coping strategy is one of the most interesting of all the coping strategies because it is one that people have exploited and has gone for centuries as hinted earlier in the literature surveyed. People have always resorted to the forest by eating wild plants and fruits provided by nature, which acted as a buffer to climate induced crop failure, though it was rather disturbing to note that people were seen employing negative coping strategies by consuming fruits or plants that were harmful to their health, especially in 2008 when the situation got desperate to the extent that people ate anything.

Mt. Darwin is one area that is endowed with indigenous fruits like *masawu*, baobab fruit *mauyu*, etc. These fruits were one of the major sources of survival as people consumed them at a time when there was virtually nothing to eat. Masawu could be processed into various products. It could be grounded to make flour for baking bread, it could be brewed to make beer, or even traded to buyers from the surrounding urban markets like Bindura, Mazowe, and Harare, where they are highly popular. The same was for the baobab fruit, which was grounded into fine powder, which would be mixed with water to make a sour dish.

Women and children were mostly involved in the collection of indigenous and wild plants, but, with time, men also joined the act. This might ironically been due to the fact that *masawu* could be brewed into beer, thus was highly popular (Chibendi, 2009). In 2007, people were mostly involved in trading these two wild fruits. The level of innovation amongst people pertaining to ways in which these fruits could be consumed was lower in 2007 than in 2008, as people had some other food sources, meaning that innovation was driven by desperation and deprivation as seen in 2008. Of interest was also the observation made by the District Social Welfare Officer concerning the unusual and short consumption period of *masawu* and the baobab fruit *mauyu* in 2008, as compared to 2007, which he believes has been caused by the acute shortage of food. The fruit quickly became the only food available to most people, especially during the time of suspension of aid agencies when there was nowhere people could get food (Chengeta, 2009).

When people had fully exploited the wild fruits and plants afforded by nature, out of desperation, they resorted to wild plants like *kasongo*, *munyanya*, *pfumvudza*, *mudyandawadza*, wild beans, *chiriri*, and kraal flower *zvidyahurudza*, etc. *Munyanya* and *pfumvudza* are roots which are eaten by wild pigs. In order to consume them, they were boiled for longer hours. All of these foods had side effects. Chief Chiswiti pointed out that a lot of cases were heard of people who fell ill as a result of consuming these wild plants and, in most cases, people would often have their legs and stomachs swollen or lumps would appear behind their ears. At the same time, wild beans resulted in an outbreak of diarrhoea. *Mudyandawadza* which was consumed as porridge would often make people fall drunk after consuming it (Chiswiti, 2009). One major thing to note is that people have always supplemented their diets with fruits, either grown at the homestead or those that are found in the forests. Thus, this coping strategy is one that people will always quickly resort to.

Both Chitse and Kamutsenzere have been on various aid programs since independence with aid organizations like Red Cross and World Vision having a long history in the area, as far as provision of aid is concerned. By March 2008, both communal areas in Chitse and Kamutsenzere and a host of many other wards in Mt. Darwin District were being fed regularly at an enormous cost to the aid agencies. Nearly 80% of people in the sample from both wards benefited from claims from the Vulnerable Group Feeding Program by World Food Program, which was implemented by World Vision, which estimated that by March 2008, Mt. Darwin District had about 89,832 people being food insecure, unlike in 2007 when the figure was 42,675 people (World Vision, 2008a)

As time progressed to the period after the lifting of the suspension of the aid agencies, the numbers increased by 70% to the extent that even those who relied on remittances from the urban areas were being put on the program, unlike in 2007 when they were viewed as economically advantaged, no remittances were being sent home, as those in the urban areas were also facing challenges. The year before, the Vulnerable Group Feeding Program was only carried out during the farming season, meaning twice from January 2007 to March 2007 and from September 2007 to March 2008, when the harvests will have been depleted, with people awaiting for new harvest.

One interesting thing to note is that in 2007, people relied more on remittances from the urban areas largely because, unlike in 2008, people accessed money easier, and the money often would maintain its value for a longer time than in 2008, when the country's economy was in an ailing state with access to cash being a problem and prices of basic commodities rising on a daily basis. Even WFP in 2007 only assisted those areas with total crop failure, but in 2008 the case was totally different with almost all wards in Mt. Darwin receiving assistance as the situation had gone beyond being drought induced, but had other strong links with a variety of stressors like the collapse of the economy.

There were two major programmes in both wards, the supplementary schools feeding and household food assistance, which saw food being donated to a number of schools to motivate school children to go to school in both years. In Chitse, Sosera Primary School was under the program, while Kamutsenzere Primary School was also under the same program. In the year 2008, more schools were being placed under the program, with a 35% increase being recorded by World Vision (World Vision, 2008).

In communal areas, food distribution centers were established and in each month a distribution was carried out, where households were given food depending on family size. A food pack comprised of maize (10kgs), beans (5kgs), or peas in some cases, and cooking oil (2 liters) per individual. There was a sharp increase of beneficiaries in 2008 in comparison with number of beneficiaries in 2007. In 2007, the total number of beneficiaries was 34,564 people, while in 2008, despite World Vision intending to target 89,832 people, their follow up survey revealed that they fed 138,020 people (World Vision, 2008).

One interesting issue about aid assistance was the impact that came as a result of the suspension of their operations from June to mid August, as hinted earlier. People were deeply in need of food aid as their granaries had run out, so the lifting of the suspension by the government came as a big decision



in ensuring the survival of the lives of many people. Though aid provided food for a wide section of the population, it was less reliable as it met small amounts of consumption needs, but was unquestionably important in people's food provisioning strategies.

The period November to March was a very critical one to the people of Chitse and Kamutsenzere, in that in most cases during the farming season, that is when most families food access deficit levels will be high and, under normal circumstances, that is the time when aid will be needed. Hence, the World Food Program chief, Mr Richard Lee, echoed that the population of Zimbabwe needing urgent food aid will increase to 5.4 million people by March, but the figures will then fall only if people get good harvests (World Food Programme, 2009). From the above statement, this meant that during this period the food situation in places like Chitse and Kamutsenzere was going to worsen. This saw WFP stepping up its distribution with more people being placed under the Vulnerable Group Feeding Program in November 2008. Ironically, during this period the economy had totally collapsed, with the rural community being the one that was being hit hard, with most coping strategies eroded and no longer applicable.

During the specified period, the extreme conditions people were being subjected to forced many households to finance staple food purchases, most which were either expensive or in foreign currency as most items on the market were being imported out of the country. In both Chitse and Kamutsenzere, most households during the survey noted that their tendency to resort to the market for food has been on the increase.

People had to sacrifice their access to the utilization of basic socio-economic services, for example health and education in search of food (Chokera, 2009). A sacrifice to health and education services usually occurs under conditions of extreme difficulty. This was made manifest in school attendance data that confirmed a school drop rate of 60–70% in the district being recorded and reached its peak in August 2008. While in November 2007, the dropout rate declined 48%. That was one of the major reasons why World Food Program channelled more aid in to the institutional/schools feeding program so that children would find something that could motivate them to go to school and would, in turn, ensure that children's education will not be affected by the food shortages (Chiduku, 2009).

The rural community is largely depended on farming, such that there is a lot of investment in agriculture and livestock in terms of preparation for upcoming seasons and ensuring that livestock, which is a source of wealth, is in good health and free from various diseases, for instance, the Tsetse

fly, which can be rampant at times in Mashonaland Central. For much of the period, the commitment to such expenses was reduced, which saw communal farmers opting not to buying doses for their cattle, especially those in Kamutsenzere whose cattle are highly prone to Tsetse fly. This also applied to farming inputs, like fertilizers and seeds, for the 2008–2009 farming season. During the sample, about 78% of the farmers who supported themselves in 2007 confirmed that they had not purchased any inputs or kept any seed maize from the previous season by mid November 2008, which is unusual as by October of each year, something would be in place in preparation for the upcoming season (Clive, 2009).

On health, whenever people fell ill, they would either survive on traditional medicines or herbs from traditional herbalists and healers, or would have to go to Karanda Mission Hospital were services and medication were offered at a cheaper price at first in 2007. But, with the worsening of the situation in 2008, services were offered for free and were always available. This was unlike in many government clinics and hospital in the District where medication was not available. Besides this, people were not willing to spare any amount of money on anything besides food.

In a bid to seek better livelihoods, people somehow had to move. Most people, especially youths, moved to urban areas in the hope of securing employment or getting an opportunity to exploit a range of opportunities, which were largely common during the time, for instance money changing and vending. In Chitse, most youths moved to Madondo Business and Mt. Darwin Centers where most would be seen selling food stuff. Others went as far as the major towns, like Bindura and Harare. Commonly, under such circumstances, if the crisis was only confined to a region, this would have seen families moving, especially those that had a bread winner working in the urban areas. But the situation was now different as the food crisis was now more of a nationwide affair, thus migrating to some extent could not change anything. For example, in 2007, one could migrate to an urban area as they were food secure, with food and the local currency available and stable, but in 2008, it was difficult as they were also food insecure.

Of the three villages surveyed during the study, which included Sosera, Chihoko and Dotito, an observation was made that in 2007 out migration from the villages was low with recordings from the sample population, showing that in 2007, 35% of households in Sosera, 44% of households in Chihoko and 27% of households in Dotito had a member emigrating out of the village, most of them going to the urban areas like Bindura and Harare. The figure rose astronomically in 2008 with figures rising to 65%, 60% and 57%, respectively.

Later in 2008, when the ban on humanitarian operations was lifted, reports said that since there were food distributions being carried out by World Vision and Red Cross, some households had some of their members previously living and working in the urban areas, coming or sending their families back since it seemed that there was more food in the rural areas than in the urban areas at the time. Therefore, it would want to benefit from the program which prompted some of them to relocate back as life in towns was now a survival of the fittest affair.

It also took another form of moving across the borders, which was synonymous across the country. Most people went to Mozambique and Zambia, while a few went to Botswana and South Africa which, by distance, are very far. From the Diaspora, they would send remittances to their families, as well as food.

Remittances are one of the most important sources of income, especially when people have no other sources of income or if their livelihoods have been strongly affected by drought or famine. It is difficult for one to actually come out with a level of remittances that were received as well as their frequency, but some people often received high sums of income from their colleagues who, in most cases, worked in the urban areas. The proportion of households receiving remittances between the two wards was different with 80% and 68% of households in Chitse and Kamutsenzere, respectively, confirming to have received remittances from their family members working in urban areas. Sources from World Vision Mukumbura Area Development Program alluded to the fact that in Kamutsenzere remittances are lower in Chitse because of the migration history of the area, which has seen Chitse experiencing more rural to urban migration, with some people just going as far as Mt. Darwin Center to exploit livelihood opportunities found there. In Kamutsenzere, the situation is a bit different as most people, including youths, are involved in cotton production, due to the successful production. This created an attachment between the practice and the people such that most of them saw no motivation to migrate (Chiduku, 2009).

It is imperative to note that the effectiveness of remittances as a coping strategy especially in the latter half of 2008 has been low, due to the effects of the economic meltdown as people encountered serious cash accessibility shortages and inflation, which continuously eroded the buying power of the local currency, unless the person was out of the country.

Though the activity was under fire from the police operation code named “*Chikorokoza chapera*”, meaning that the end of gold panning, it remained one of the major sources of livelihood, especially amongst people in Chitse who exploited the alluvial gold deposits along the southern parts of Ruya and Nyarandi River. Generally, those with no access to remittance income sources were significantly more involved in 2007. But in 2008, the situation was a bit different and it was no longer an issue since the remittance strategy was ineffective. Youths and middle aged men were mostly involved and before, if used wisely, the earnings were used to purchase assets like livestock, household property. But, as the food crisis worsened, they diverted much of their incomes towards purchasing of food. By the end of the rain season in March 2008, around 40% of the households in Chitse had a family member who was either a gold panner or was involved in activities linked to the practice, like selling food or beers at the sites. The figure rose in November 2008 to 69% (Kazimbiri, 2009).

Most of the households, in both Chitse and Kamutsenzere, are largely depended on communal farming, while some are involved in cotton farming. As the crisis raged on, some options for off farm work were taken up by close to 89% of the households, in what were commonly referred to as piece works, which became part of the major sources of livelihood. People could hire out their scotch carts, especially to goat buyers who came as far as Harare, to transport their livestock; they set up small businesses, like vending stalls. In many cases, people would engage in non-farm work in return for food, as cash was a major problem, in what was commonly referred in some instances as food for work. During the survey most people confirmed that in 2007, those *piece works* or *food for work* were obtainable, unlike in 2008, when demand was high with more people looking for jobs, which made jobs difficult to get.

This was one popular means of survival, as it was one of the ways one could earn an income. It was common in both years, except for that in 2008, the level of trading was high amongst people. People in both wards purchased and resold goods, especially food items, which were bought from neighboring countries like Zambia, Mozambique, South Africa, and Botswana. Not all had the opportunity to go to these places, but some would purchase the goods from cross border traders in order to sell to people on local markets. In terms of size of the business, it did not really had to be big, as at some point it was a matter of having an item that is in high demand, especially food (Nota, 2009). Though almost every sex was involved in it, it was largely dominated by women and children. Trading activities as a coping strategy started way before the above stated time frame, but in 2008, they got intense since that was the only way one could get hold of money in cash, which was scarce at the time as well as the much sought after foreign currency, *forex*.

Trading was high at Dande store for people in Kamutsenzere, which is their business center, and at Mavhuradonha Mission, where food items, like sugar, salt, and cooking oil, were sold. According to Sunga in Rukuni and Jayne (1995), “Purchasing from the market is the most prevalent of all forms of coping strategies”. In Chitse, the major trading points were at Dembedzeko stores and at the gold panning sites along Ruya River where the same food items were sold. People from both wards, especially from Chitse, utilized the Mt. Darwin Center, Madondo Business Center, and the major highways to sell food at bus terminus or non food items, to some extent. People would often trade amongst themselves in the community as people known to be selling food items would even open mini markets at their homesteads. People with livestock had to sell their livestock as a source of income. Most commonly sold were goats, especially in Kamutsenzere. Goat traders came as far as Harare to purchase goats and, in most cases, they would purchase them in foreign currency. Cattle sales, probably due to the small herds, were not prominent, though those who had cattle could be seen selling their cattle more often.

Table 4. Families involved in trading activities per yearly quarter in 2007 and 2008 per each village

Village	Jan - Mar	April – June	July - Sept	Oct –Dec	Jan -Mar	April – June	July – Sept	Oct – Dec
	2007	2007	2007	2007	2008	2008	2008	2008
<b>Chitse ward</b>	%	%	%	%	%	%	%	%
<i>Sosera</i>	33	38	44	49	54	57	59	67
<i>Dotito</i>	27	36	42	45	50	55	54	63
<i>Chihoko</i>	38	45	50	54	58	63	68	74
<b>Kamutsenzere ward</b>	%	%	%	%	%	%	%	%
<i>Mutape</i>	13	15	19	23	25	31	35	39
<i>Kachidza</i>	11	17	21	23	27	33	37	43
<i>Chimudzeka</i>	15	19	23	25	30	34	40	47
<i>Chiswiti</i>	17	20	25	26	31	35	41	48
<i>Chibaira</i>	19	24	28	33	36	41	44	53

Source: World Vision, 2008a

The table above shows the percentage of people who were involved in the trading of food items between the periods 2007 to 2008. Comparing the two wards, it can be seen that a lot of trading activities took place in Chitse, more than in Kamutsenzere. Reasons being were the close proximity of the ward to Mt. Darwin and Madondo business centers where there is a lot of trading activities taking place and high population densities. Livestock trading was high in Chitse, Chiswiti, and Chibaira villages of Kamutsenzere. Due to Tsetse fly prevalence in Mutape, Kachidza, and Chimudzeka villages of Kamutsenzere, the ownership of livestock for a lot of people in these areas was undermined.

People also sold firewood, and this venture was popular since the country was experiencing acute power cuts and energy shortages, and this was the only source of energy and power left. Most of Chitse and Kamutsenzere households do not use electricity; the major buyers were from the rural and urban centers, as well as farmers, especially those involved in tobacco farming. Mr Mudzinganyama, who is the village head of Kachidza village in Kamutsenzere, lamented that the area has been left without trees and it will take decades to recover back to its former state. He emphasised that he personally feels it is not fair to blame the people since they had limited options of survival, which even made it difficult to punish offenders during the time (Mudzinganyama, 2009).

The unequal distribution of trading activities amongst villages in the same ward had to do with factors like closeness of the village to transport networks, shops, and even the availability of natural resources in the area. For instance, Mutape village has few *masawu* trees while Chiswiti and Chibaira are abundant with the trees, such that some are even inside people's homesteads and grazing lands. Chimudzeka village, despite having a few *masawu* trees, was close to the main transport network which placed it also on a better position in as far as trading was concerned.

As the economy experienced acute shortages of cash amid a hyper inflationary environment, it was no longer conducive to conduct any business using the local Zimbabwean currency, especially in 2008 when prices rose on a daily basis and accessing cash remained a problem. Most people resorted to barter trading as a system of payment to attain goods and services or sell their goods or assets in foreign currency. Most people, especially in Kamutsenzere, which is far from major centers, had difficulties in accessing money as well as supplies of food, such that they would exchange goods with traders who would be carrying out trading operations in their area, with items like chicken, goats, and cotton. The exchanges were as shown below.

Of concern was the fact that most local people were short-changed by the most traders, especially from the urban areas, who took advantage of the desperation of locals, who would end up losing more to benefit a little. For instance, traders would offer a pack of sub-standard sugar, weighing less than 2 kilograms, for 2 hens or 2 cocks. This was also echoed by World Vision officials. They emphasised that this also was one of the reasons why fighting hunger in the area was a problem. As people sought for other commodities, they ended up trading the food rations. For instance, maize provided by World Food Program, in order to get other non-food or food items they did not had, which indirectly furthered their poverty (Makono, 2009).

The garden has been a source of food supplement for most households in Zimbabwe, providing relish for most diets. Most households in both Chitse and Kamutsenzere relied on produce from their gardens. The most commonly cultivated crops were green vegetables, tomatoes, onions, etc. Most cultivation was carried out using minimal water from the wells. Some who were fortunate to have abundant sources of water would cultivate bigger areas and would often sell their produce to earn an income.

In Kamutsenzere, not all villages were fortunate enough as only Chimudzeka and Chibaira villages were the only ones with people who were involved in effective gardening since they had boreholes benefited from World Vision Mukumbura Area Development Program, which they often used for irrigation purposes. By the time the research was carried, the program was making efforts to install more boreholes in Chiswiti, Mutape, and Kachidza villages.

In order to control and preserve the food sources and reserves, there had to be strict monitoring of the food sources. The level of strictness increased with time in relation to the availability of food as well. As food became scarce, so was the level of strictness. Some families that had control or owned food sources, like fruit trees, had to jealously guard them. In previous years, like 2007, people would normally offer neighbors and passer-by's any form of food, especially fruits. But during the period covering much of 2008, most people were in a rather difficult position where they were not willing to offer people food for free at many a times, as they would be consuming the food available or would prefer to sell in order to raise their income. The situation was the same within the household were there was strict monitoring of the food reserves available. In many times, the household head, especially women, would be in charge of the rate by which food would be consumed and how much would be consumed at any given time.

As people employed several coping strategies, some of the coping strategies had serious harmful effects on the environment and health of the people, whilst some violated morals, values, ambitions, and ethics of individuals and the society, at large. But all was done in a bid to survive the effects of the food shortages that people were experiencing during the period whilst others did not employ them due to barriers to the decision making process, therefore lacked motivation to employ them.

The old fashioned way of coping with a crisis was common, though no one in the sample openly admitted to have committed it, but all alluded to have witnessed or heard of people who were victims of thieves. During Focus Group Discussion's all participants managed to agree that stealing has always been there, but the motivation to steal was largely driven by hunger, since people stole food items on many occasions. During the survey, most people noted that one could barely leave a homestead with no one present because there were many theft cases, such that many people either started sleeping inside the granary or moved the few food items to their sleeping rooms. As for the age range, there was no clear cut age range as cases heard by the Chief. It seemed to cut across all ages. According to Mt. Darwin ZRP records, there was a 58% increase in theft cases in 2008 from the 33% increase recorded in 2007, which was not far from previous average from the past five years since 2002, which recorded 26% per year (Rusike, 2009).

This was reported as one of the major sources of income. According to Mrs. Nancy Ravu (2009), Kamutsenzere ward counselor, it was common amongst girls as young as 14 years old. It was rife at the major trade centers, along the major highways where most trucks going to Tete Mozambique normally ply the main highway from Mt. Darwin, and at the gold panning sites along Ruya and Nyarandi River. Others even moved into the major surrounding District Centers like Centenary, Rushinga, and towns, like Bindura, Mazowe, and, to some extent, Harare. Upon earning some cash, they would remit it back home. They were also prominent at commercial beer parties, commonly referred to as 'ndari', but these got less popular as patrons were no longer able pay cash, and most prostitutes preferred to operate at service centers, according to Mbuya Nyika, who used to host the commercial beer parties. According to Mbuya Nyika (2009), cash earning opportunities for prostitutes remained high during the month ends. One disturbing thing was that this high risk behavior exposed these people to HIV and AIDS, and was anti-progressive in as far as the fight against HIV and AIDS was concerned.

It was the means of preserving the little food available. It was common amongst adult members of the household who were forced to forgo meals on a regular basis. In most cases, preference to get



food was given to children, for it was better for them not to starve. As the situation got worse, people were forced to cut down consumption. It even turned into skipping days without eating a proper meal, depending with the availability of food. The situation would normalize, especially when the supply of food improved. Aid officials observed that, during the period, most people were malnourished and underweight and often would appear to be weak and unable to perform physical tasks.

Successful implementation of the coping strategies depended on the level of supply of resources, commodities or labor, and how much people needed the goods and services as well as how the market functioned. These were subject to risk and uncertainty. The rate they got the commodities to sell was largely depended on wealth of the household or if the household had other sources of income, which was vital to start any business. Households that were wealthy, that is they possessed livestock, were better able to sell these to goat traders from the urban areas.

Another determinant for the success of coping with food shortages was the demand for goods and services. Those people who were involved in the trading of goods, especially food which was not available on the market, were better able to succeed. Proximity to major trading routes also made it possible for some coping strategies to succeed. Like people in Chitse were better able to exploit the advantage of being close to Mt. Darwin Center and also near the major highway, thus were involved more and successfully in trading than people in Kamutsenzere.

While it seemed like some of the coping strategies might have brought better livelihoods to the people, their illegal nature, for example prostitution, illegal vending, and gold panning, made them face serious restrictions from the government and local authorities. Though at times restrictions were relaxed, like in the case of trading, but this went a long way towards reducing the vulnerability of the people.

One factor that affected coping was that if one looks carefully at the coping strategies, it can be seen that most of the strategies had to do with one being paid or earning some form of income. With inflation affecting the economy, prices of almost everything on the market sky rocketed. It affected rural incomes by reducing its buying power, such that people's ability to acquire food on the market was hindered.

## **FUTURE POLICY ISSUES**

The main idea behind policy formulation is to find ways by which the shortages of food are avoided as well to reduce the impact of food shortages to further enhance the capacity of people to cope in case of future crisis and increase food security.

Various important elements of coping with drought and famine have been identified by the research, and the means by which coping is facilitated, in particular, the roles of formal and informal institutions. The transfer of knowledge, not simply between individuals, but from key individuals to communities is vital if successful coping is to take place in the future.

There is need to establish policies that provide a stronger framework for improving household capacity to cope with droughts and famines. Most of the policies should not target only at improving the resilience of the commercial agricultural sector alone, but also need to target rural communal farming since its output goes a long way in ensuring that the country meets its food requirements.

Several livelihoods can be addressed in policy formulation. These will have to put emphasis on strengthening alternative sources of income, research and extension, economic policies, informal sector activity, food security, and drought policies that affect local coping strategies, drought early warning response mechanisms, and facilitation of social reforms that go a long way in reducing vulnerability.

If food shortages are to be taken seriously, a very different type of policy making is needed. According to Holling and Walters (1993), it needs to allow solutions to emerge from the people; they need to be credible, and to encourage people to learn. They emphasized on policies that do not take a top-down approach; otherwise, solutions should emerge from a local and lowest level. The policy implementation should be open, transparent, and characterized by higher levels of accountability, though on record, it is very rare. People must believe in the policies and policy makers must be accountable for them.

Planning and policy making should be seen as a co-learning process whereby different views are acknowledged and different voices are heard. According to Cornwall (1994) participatory rural appraisal to participatory action research and training for transformation are participatory approaches that offer useful opportunities for the exchange of ideas.

However, for successful implementation of policy formulation, according to Robert Chambers (1989), there is need for removal of barriers, like bureaucratic inertia, to retrain and re-skill agricultural professional, organizational change, and shifts in methodological approach and individual behavior.

As rural livelihoods and off farm work are threatened and end up being limited, diversification of the income sources of the people will be needed. According to S. Moyo (1991) there is need for encouragement of rural manufacturing industry and trading, which are a vital component of rural development policy. The state needs to encourage income generating projects for the communities. This may include establishment and resuscitation of cooperatives, offering subsidies, credits, as well as training in various business activities. Currently the same efforts are being pursued in Kamutsenzere by World Vision through its Mukumbura Area Development Program, which has promoted income generation through the stimulation of incentives for rural industrialization and agricultural production. It has initiated a range of income generating projects, like vegetable production, candle making, cloth making, and milling cooperatives.

If developmental policies are planned with a scope like this in mind, it will go a long way in ensuring that people's livelihoods will not only rely on agriculture. There is need for people to engage themselves in other activities that are independent from the adverse weather conditions, which will reduce their vulnerability in times of future food shortages, and increase their capacity to purchase on the market.

This is when the state plays a role in the production and spreading of new technology to the community. Experimentation, skills training, and access to new technologies, which offer new innovations and resilience to future droughts, are needed. Such processes are effective where inclusive systems of communication and participation exist. Farmers should take part in experiments which the researchers will also be involved. According to Hagman and Chuma (1994), farmer participatory research has been successful in diverse areas like agro forestry, soil and water conservation, and crop variety testing.

People in Chitse and Kamutsenzere can be better able to acquaint themselves with knowledge concerning proper farming methods as well as natural resource utilization relative to the two areas, and there are many crop hybrids resistant to drought. Mr Masveto (2009), who happens to be a village head, acknowledged that most people in his village were not fully aware of the proper maize

seed varieties that are peculiar to the area, drought resistant crops, and the new cropping systems that are used these days relative to their area. In his personal capacity, his household has managed to be food secure by cultivating drought resistant crops like sorghum, millet, and rapoko. If such information is dissemination to communal farmers, they would be better able to attain better yields, which will go long way in ensuring food security in the future.

Through C-Safe, Which is a consortium comprising of Care, Catholic Relief Services, and World Vision, have been providing incentives and input support to communal farmers willing to cultivate these drought resistant crops, and have been encouraging them to grow them commercially. The consortium would buy it from them at a fair purchasing producer price. The project seems to have been a success as the products from the 2008-2009 farming season are now on the market, for instance the sorghum meal, which is also affordable.

As mentioned earlier in the research, most of the communal farmers, especially in Kamutsenzere, are involved in cotton farming, on which they earn quiet a substantial amount of income. It, however, emerged as a big lesson to most communal farmers, especially from Kamutsenzere, that despite the high incentives from cotton production, they should, first, see to it that they have cultivated enough land to produce food crops, which will guarantee them of enough food. Most of them, due to macroeconomic problems that characterized the economy in 2008, despite receiving a lot of money, was eroded by inflation while they could not access it from their banks, and were unable to purchase food and inputs for the following season.

Since the erratic rainfall pattern has failed a lot of people in the past years, there is need for the state and donors to fund or establish irrigation scheme facilities for the communities. Most wards in Chitse and Kamutsenzere have no other sources of water except rainfall water. These will supplement rain water. The floods that usually occur in both areas can be a potential source of water if lakes are constructed as all the water is being lost into the flood plains. Lessons can be learned from Chiredzi, which has got almost similar weather and environmental conditions with Mt. Darwin, but has managed to establish a complex irrigation scheme that supplies water to various sugar estates and to the communal farmers as well.

There is need to diversify one's sources of income, as mentioned earlier. This one is vital as it lessens peoples reliance on farm generated income, creating room for people to depend on activities less affected by droughts and famine. There is also need to increase the efficiency of markets for

both food and tradable items. Flexible marketing is needed and restrictive practices imposed through legislature and local councils will have to be removed, increasing market entry and competition. The decline in real wage during the period 2007 and 2008 and increasing unemployment had a negative impact on rural livelihoods as this affected the major source of rural income.

This was seen by the reduction in the levels of investment in rural assets, like livestock and farming implements, decrease in input level, like seeds and fertilizers, a reduction in school and health attendance level, and lowering in sending of remittances from those working outside the wards back to their families. This means that there is need of a comprehensive revival of the economy led by the government and private sector so that real wages increase and unemployment is reduced as it affected the accessibility of food amongst the rural households since they also depend on the urban work force. Since some communal farmers in Kamutsenzere had resorted to growing too much of cotton crop at the expense of maize or any food crops, policies that address the issue of low producer prices of most food crops in Zimbabwe, especially maize by the Grain Marketing Board, which has the monopoly to purchase grain in Zimbabwe. Tobacco and cotton production have been reputed to be more lucrative than maize production, so the farmer and buyer need to agree on the terms of the producer price. There is need to also create opportunities for micro-finance and business training, together with infrastructural support, with a goal to facilitate livelihood specialization and commercialization of farming.

Most public policies have tended to neglect the reduction of risk exposure. Most food security policies tended to dwell much on grain reserve, early warning systems, and emergency relief plans, without taking a wider view that encompass the many dimensions of vulnerability. In order for people in Chitse and Kamutsenzere to realize a reduction in their vulnerability and exposure to a range of stressors affecting them, ensuring viability in their production base, has to be increased.

Since the two are vital to rural people's livelihoods, there is need for policies that will increase people's access and control over them and ensure sustainability arising from the use of the resources. Zimbabwe conducted a land reform program at the turn of the millennium. Surprisingly, there are a lot of people in Kamutsenzere and Chitse who did not benefit from the program, despite claiming to have applied for land. It could have been beneficial if people were given land in former white owned farms, which have boreholes and various sources of water. The program had a lot of loopholes; most of the people who got land around nearby farms do not live permanently in the district. If the land reform policy is revisited in order to ensure that it also caters for people with inadequate or without

land and those exposed to high risk of climate adversity, it will go a long way in ensuring better livelihoods for rural people.

On the issue of natural resource, the state should ensure that local leadership is empowered to implement rules and regulations over resource use, and make sure that the Traditional Leaders Act of 1999, which re-empowered the traditional leaders and village assembly on the management, planning, and conservation, of natural resources, receives the backing of the state. During the survey, both Chief Chiswiti (2009) and Chief Dotito (2009) echoed that there is need for them to be empowered in controlling resource utilization. As they lamented that during the period 2007 to 2008, the community did not benefit from its rich endowment of wild fruits like masawu, as the police environmental authorities failed to control the over exploitation that occurred, which led to most of masawu fruit being exploited and not really benefiting the local people.

Local level management of resource remains an important option for the creation of opportunities for people to manage and benefit from wildlife and other natural resources. Local businesses can be supported, as well as engagement with the private sector. These will go a long way in providing of significant economic incentives, as well as creation of a more involved in resource management strategy for the local community. For instance, gold miners, along, can be properly organized and be granted claims such that their activities can be done in an proper manner and not harmful to the environment, as well as beneficial to the community at large.

There is also need to engage all stakeholders in the implementation of these processes and support of established programs put in place by organizations in the area such as Environment Africa, CAMPFIRE, and Zambezi Society (operating in Kamutsenzere only). Partnerships are also needed with district councils, government agencies, and local leadership.

It is important to develop structures that will enhance communication at the village level with greater interaction of different formal and informal institutions, households and individuals, which would allow the sharing of information between entrepreneurs and the village. The advantage will be that it will encourage learning of new things, individual organizations and creation of ownership of reliance than external facilitation. This will lead to widening of the ability of people to cope with risks and opportunities.

Narayan D (2000) brought an important issue about social capital, which are the norms and networks that enable people to coordinate collective action. In social capital, that is when people will invest in social relations for psychological, cultural, and economic well being, and the cohesion and associational life created will further enhance chances to attract government and non-governmental resources. However, such efforts will enhance the chances for the creation of civil society groups. Such groups would be very crucial for the well being of the people, while they will also connect their society with other societies outside, which will, in the long run, improve their lives.

## **CONCLUSION**

With the array of evidence given in this research, it can be concluded that the communities of Chitse and Kamutsenzere employed a variety of coping strategies in response to the food shortages that were experienced during the period of March 2008 to March 2009 in a bid to improve their livelihood in the wake of the crisis. To be better able to understand the food shortages that were experienced between these periods, it is imperative to understand the cause of the food shortages as well as the drivers of the crisis, which have been termed the underlying factors, such economic decline, HIV and AIDS, political crisis, and unfavourable climatic conditions. Since the failure of the Structural Adjustment Program, Zimbabwe's economy has been on a downward spiral that has seen, with the turn of the millennium coupled with worsening international relations with the west, the country deepening into serious economic crisis. Inflation has been sky rocketing and income levels are getting lower by each year. Commodity prices have also been going up. Agriculture performance has also been one of the victims of economic meltdown, with an agricultural relying rural population being affected as government failed to support them with much needed farming inputs. HIV and AIDS also played its role by claiming the active population that contributes towards sustaining most rural households, claiming a huge chunk of the family budget towards purchasing medication and most of the patients failing to implement a range of coping responses, due to ill health. The climate has not been favorable to the people of Mt. Darwin District as a whole, which, due to its adverse conditions, is not favorable to people's output. For instance, the high temperatures, low rainfall, and floods experienced in Kamutsenzere, all which have affected the output of agricultural production of the communal areas of Kamutsenzere and Chitse. Political disturbances that were characteristic of Zimbabwe also had a part in worsening the situation for Zimbabweans, especially when one looks at the closure on aid and humanitarian organization operations in Zimbabwe by the Zimbabwean government on allegations of interference by the sector in Zimbabwe's political affairs. All this together with some minor factors like the cash crop production by many communal farmers instead of food crop production contributed to the food shortages that

were encountered. The communities had to draw a range of coping strategies locally and from outside their communities. These responses were, at first, maintaining coping responses whereby the community attempted to secure the immediate needs, first, with no possibility to sell any household property. Later, the households or community employed reductive coping responses that were meant to reduce food consumption and any form of expenditure in order to maintain the remaining property. Lastly, as the crisis persisted and most maintaining and reductive coping responses had been completed, that was when people, without any choice, began to trade their property in order to raise income. The success of the coping strategies depended on a number of factors, like demand of the goods and services that one offered, proximity of one's area of community to the major business centers, legal restrictions that could be imposed or maintained by the law enforcers, supply of income through remittance, knowledge, which is vital for someone as it provides someone with skill to do something that one cannot do, and earn a livelihood out of the knowledge and skill.

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