

MIDLANDS STATE UNIVERSITY



The Role of the Southern African Development Community On Zimbabwe's Quest for Food Security

By

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DECLARATION

I, the undersigned do declare that the work contained in this dissertation is my own work and that I have not previously submitted it, in its entirety or in part, to any university for a degree.

Signed.....

Date.....

ABSTRACT

The study sought to establish the role that the Southern African Development Community has played in Zimbabwe's quest for food security. Food insecurity is a major development problem in Zimbabwe despite food being the most basic of human needs. The study used qualitative research methods to interrogate the research topic. The report looked at the SADC objectives on food security and how these have been translated into programmes that improve the food security situation of Zimbabwe and SADC in general. The results showed that SADC has not played an important role at programme level on Zimbabwe's quest for food security however the study also revealed that SADC has played a role as a resource centre, providing technical assistance in the form of policy formulation, guidelines and strategies. The body also acts as a conduit for financial assistance into the region by partners who are not willing to have individual country agreements but would want to provide wholesale financing with SADC monitoring and reporting on progress. The researcher reached the conclusion that given the reluctance to cede authority to SADC by member states it is up to member states, including Zimbabwe, to tap into the expertise available at the SADC secretariat to enable them to meet their food security goals.

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LIST OF ACRONYMS

AIDS	-	Acquired Immuno Deficiency Syndrome
AIMS	-	Agricultural Management Information System (AIMS)
AU	-	African Union
CAADP	-	Comprehensive Africa Agriculture Development Programme
CFU	-	Commercial Farmers Union
EU	-	European Union
FANR	-	Food , Agriculture and Natural Resources
FAO	-	Food and Agriculture Organisation
FewsNet	-	Famine Early Warning Systems Network
FMD	-	Foot and Mouth Disease
GDP	-	Gross Domestic Product
GMO	-	Genetically Modified Organisms
HIV	-	Human Immunodeficiency Virus
MDG	-	Millennium Development Goal
NEPAP	-	New Partnership for Africa's Development
NVAC	-	National Vulnerability Assessment Committee
REEP	-	Regional Environmental Education Programme
REWS	-	Regional Early Warning System
RIA	-	Regional Integration Arrangement
RPFS	-	Regional Programme for Food Security
RRSP	-	The Regional Remote Sensing Project
RVAV	-	Regional Vulnerability Assessment Committee
SADC	-	Southern African Development Community
SADCC	-	Southern African Development Coordination Conference
TAD	-	Tran-sboundary Animal Diseases
UDHR	-	Universal Declaration of Human Rights
UN	-	United Nations
UNDP	-	United Nations Development Programme
ZFU	-	Zimbabwe Farmers Union

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1 CHAPTER I - THE PROBLEM AND ITS SETTING

1.1 Introduction

This chapter, introduces the research in detail, looking into important and critical issues such as the background to the problem, the statement of the problem as well as the research objectives and research questions. It further goes on to highlight the significance of the study to the various stakeholders who might be affected by the research either positively or negatively. These stakeholders included the student or the researcher herself, the university, Midlands State University as well as SADC countries and Zimbabwe in particular.

The study also touches on issues of the research assumptions that the researcher has before the research starts so she can prove them wrong or right as the study progresses. The study goes on in this chapter to look into the scope of the study, and under the scope of the study, issues like the limitations and delimitations of the study discussed in detail and after this, definition of key terms follows and the organisation of the study follows to giving a final structure of the study.

1.2 Background

1.2.1 Food Security in the World

The right to adequate food is enshrined in the Universal Declaration of Human Rights (UDHR) of 1948, as a part of the right to a decent standard of living. Article 25 of the UDHR states that “Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, **including food**, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood,

old age or other lack of livelihood in circumstances beyond his control”. Food is also the most basic of needs for human survival without which no nation can develop as its population will have no source of energy for productive activities. It is imperative therefore that governments at all levels, (local, national and regional) ensure that people have access to food at all times.

It is in this spirit that in 1996 at the Rome World Food Summit, heads and state and government made an undertaking to achieving food security for all, eradicate hunger and halve the number of people that are undernourished by the year 2015. This summit, which was convened by the Food and Agriculture Organisation, was held in line with the right of all people to be free from hunger and the right to adequate and nutritious food. The 2015 target was the same year that was set for the achievement of the UN millennium development goals (MDGs). MDG 1 is on eradication of extreme poverty and hunger targets to halve the number of people suffering from extreme hunger between 1990 and 2015. The UN has been monitoring progress towards the achievement of these goals and according to the 2013 MDG report the world has managed to halve the number of people living in extreme poverty between 1990 and 2010. However many people are still prone to hunger with one in eight people going to bed hungry despite major progress (UNDP, 2013). In addition child malnutrition is still a major problem in sub Saharan Africa, including the SADC region. Globally, one in six children under five years of age is underweight. A total of 842 million people in 2011–13, or around one in eight people in the world, were estimated to be suffering from chronic hunger, regularly not getting enough food to conduct an active life. According to the FAO (2013) this figure is lower than the 868 million reported with reference to 2010–12. The total number of undernourished has fallen by 17 percent since 1990–92.

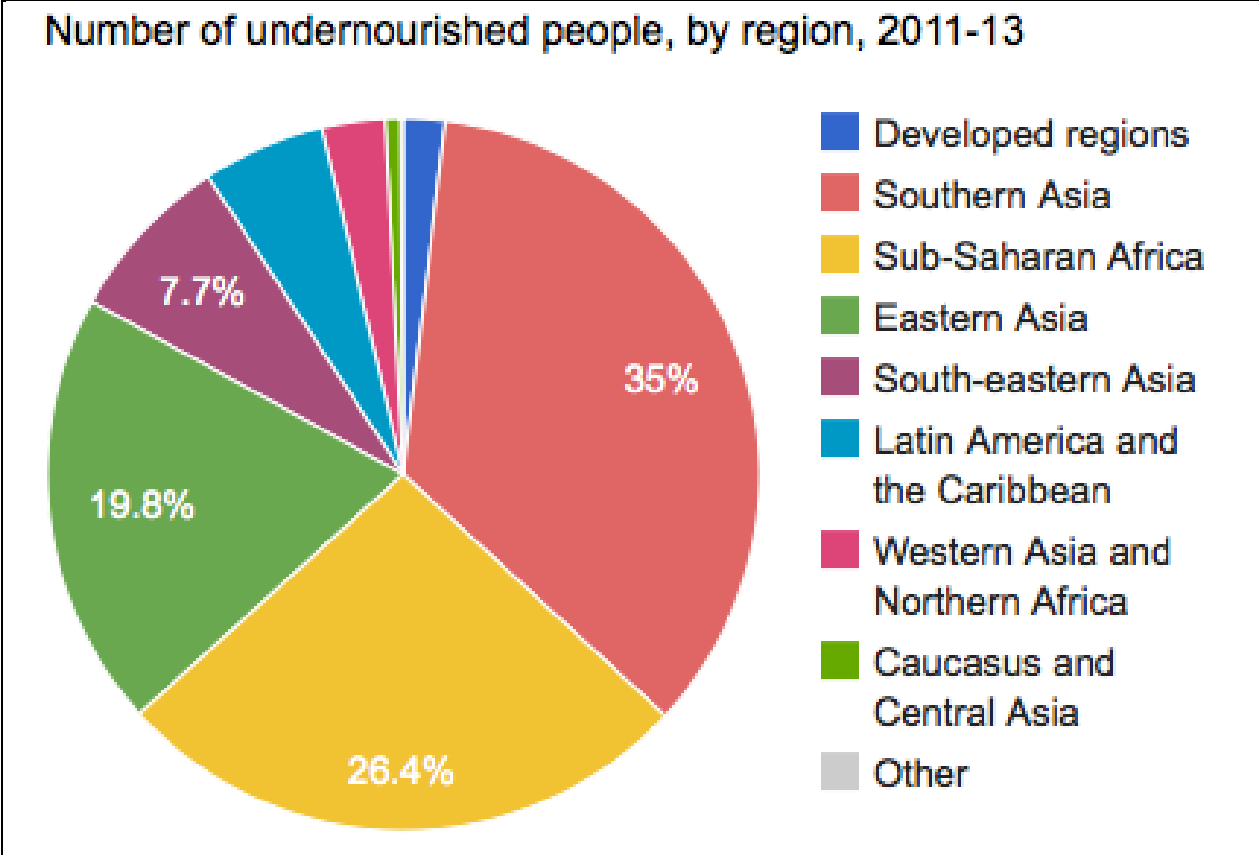


Figure 1:1: Number of Under Nourished People by Region

Source: FAO

Food insecurity in developing countries, including southern Africa, is caused by the inability of people to gain access to food due to poverty. Asia and sub Saharan Africa are home the world’s least food secure populations as shown in Figure 1:1 above. While the rest of the world has made significant progress towards poverty alleviation, Africa, in particular Sub-Saharan Africa continues to lag behind. This situation has been caused by a number of factors including civil wars, bad governance, corruption, high prevalence of HIV/AIDS frequent drought and famine. Another contributor is that most economies in Sub-Saharan Africa are dependent on rain-fed

agriculture and this leaves these countries' food security at the mercy of climate and environment.

1.2.2 Food Situation in Southern African Development Community

The climate of Southern Africa consists of seasonal rainfall and the region is prone to droughts. This coupled with other factors like poverty, bad governance and HIV/AIDS means that the goal a food and nutrition secure region remains elusive for the Southern Africa Development Community (SADC) because of poor performance of the agriculture sector. Agriculture is the mainstay of the SADC economy, and provides employment and livelihoods for over 70% of the region's population (SADC, 2012) . Agriculture contributes significantly to GDP growth, leads to poverty reduction and accounts for the major share of employment opportunities, especially for women. Between 2000 and 2010 agriculture contributed 17% of the average annual GDP for member states compared to 51% for services and 32% for industry. Since the majority of people in the region make a living from agriculture this sector has one of the highest potentials for contributing to food security through production of food and providing employment.

The Southern African Development Community (SADC) is a regional organisation consisting of 15 Member Countries (Angola, Botswana, Congo (DR), Lesotho, Malawi, Madagascar, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe). SADC has a total land area of 554 919 km² and is home to 277 million people (SADC, 2014). The regional bloc is located at the Southern tip of Africa as shown in figure1:2 below.



Figure 1:2 - SADC Countries

Source: www.sadc.int

The purpose of SADC is to create a regional community, which would provide peace and security, cooperation in fields of shared interests, and ultimately an integrated economy. It provides a forum where regional planning is done with the goal of encouraging self-sustaining development in Southern Africa, which is based on collective self-reliance and inter-dependence of Member States. It is built on the principle of achieving sustainable utilisation of natural resources and effective protection of the environment. Food security is one of SADC's sectors of

focus in developing the region and to this end SADC is assisting member states to move towards food security. It is against this noble objective that this study seeks to establish the extent to which SADC has managed Zimbabwe in its quest for food security.

1.2.3 The structure of SADC

The structure of SADC is made up of the following; the summit, council of ministers, sectoral committees, standing committees of officials, national contact points, Sector Coordinating Units, Sectoral Contact Points, the Secretariat and the Tribunal. This structure has a role to play in assisting member states achieve SADC objectives. The following are the roles of the different SADC positions:

The Summit: comprised of heads of State or Government, and is policy-making body of SADC. The summit meets at least once a year.

Council of Ministers: made up of Ministers from each member state and is responsible for overseeing the performance and development of SADC and ensuring that policies are implemented. It advises the Summit on policy matters and approves SADC policies, and also decides upon areas of cooperation. The SADC Council also meets at least once a year.

Sectoral Committees and Commissions: These may be formed as and when necessary, through some instrument approved by the Summit and ratified by member States. Commissions are regional bodies that are approved and supported by all member states and they report to the Council.

Standing Committee of Officials: This body acts as a technical advisory committee to the Council to whom it reports. It also meets at least once a year and is represented by a civil servant at permanent secretary or director general level. These are technocrats and experts in their fields.

National Contact Points: located in the Ministry/Department responsible for SADC matters and act as a vital link between other agencies of government and SADC organs. In Zimbabwe the Department of Foreign Affairs is the National Contact Point.

The Secretariat is responsible for strategic planning and management of SADC programmes. The head of the secretariat is the Executive Secretary, who is appointed by the Summit, the Secretariat is charged with the task of implementing decisions made by the Summit and the Council, and financial and general administration of the Community.

The Tribunal ensures compliance with the provisions of the SADC Treaty and subsidiary instruments, and to adjudicate upon disputes referred to it.

SADC countries face many social, development, economic, trade, education, health, diplomatic, defence, security and political challenges. Some of these challenges cannot be tackled effectively by individual members. War in one country can suck in its neighbours and damage their economies. The sustainable development that trade could bring is threatened by the existence of different product standards and tariff regimes, weak customs infrastructure and bad roads. All these facets of the SADC socio-economy have a bearing on food security as a negative impact on one can affect production, transportation, storage or proper consumption of food.

1.2.4 Food Security

Food security is intrinsically linked to the right to food. This is the right to have regular, permanent and unrestricted access, either directly or by means of financial purchases, to quantitatively and qualitatively adequate and sufficient food corresponding to the cultural traditions of the people to which the consumer belongs, and which ensure a physical and mental, individual and collective, fulfilling and dignified life free of fear (FAO, 2014)

The FAO 1996 World Food Summit stated that food security exists when all people, at all times, have physical and economic access to sufficient safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life. Food security encompasses a wide array of activities such as food availability, food access, and food utilisation. Food availability is having available sufficient quantities of food on a consistent basis. Food access is having sufficient resources, both economic and physical, to obtain appropriate foods for a nutritious diet. Food utilisation is the appropriate use based on knowledge of basic nutrition and care, as well as adequate water and sanitation. Absence of these is what is termed as food insecurity.

1.2.5 SADC Action on Food Security

According article 5 of the SADC treaty the organisation has 8 objectives and 2 of these objectives, (objective *a* and *g*) have a direct bearing on food security. Objective *a* can be summarised as *Promotion of equitable and sustainable economic growth and socioeconomic development to ensure poverty alleviation with a view to eradicate it* and objective *g* as *Achievement of sustainable use on natural resources and protection of the environment*.

SADC approaches the issue of Food Security through its Food Security Programme, and the Regional Indicative Strategic Development Plan implementation framework. Several other SADC programmes to address food security are implemented by its Food, Agriculture and Natural Resources (FANR) Directorate. These include the development and operation of the following programmes/units: Agricultural Information Management System (AIMS), Crop Development Unit; and Livestock Sector Unit.

It is upon this background that the SADC bloc is evaluated on the role it has played on Zimbabwe's quest for food security. A number of issues have been agreed upon by the bloc with regard to how each member country should ensure its population has enough food reserves to avoid hunger and starvation. These issues are the subject of this study.

1.3 Statement of the Problem

Zimbabwe has been a member of SADC since its inception in 1994 but to date the benefits of being part of SADC are not clear when it comes to Zimbabwe's quest for food security. Regional integration is being promoted as the solution to many of Africa's problems ranging from trade, governance and development but it is not clear whether Zimbabwe's membership of SADC and its participation in all SADC activities has contributed to achieving food security.

1.4 Objectives of the study

The study was guided by the following objectives:

- To establish how SADC has influenced its member states realise goals that it has set achieve on its formation.
- To measure the overall success rate of the SADC bloc in realizing its objectives
- To analyse the role played by SADC in helping Zimbabwe realize its quest for food security.
- To assess the limitations of SADC in building success in its member states.

1.5 Research questions

The study was guided by the following research questions:

- How has SADC overall influenced its member states realise goals that it has set them to achieve on its formation?
- What is the overall success rate of the SADC bloc in realizing its food security objectives?
- What is the role played by SADC is helping Zimbabwe realize its quest for food security?
- What were the limitations of SADC in helping Zimbabwe realise its quest for food security?

1.6 Assumptions of the study

The following were research assumptions that the researcher has before the study commenced:

- SADC has influenced member states including Zimbabwe towards achieving the food security.
- The majority of key respondents will be willing to participate in the study.

1.7 Significance of the study

The study is of great importance to all stakeholders involved namely the student, the University, the public, the government, the SADC and its member states

The student

The student of development studies will be a better position to understand what really matters with regard to regional development in line with how the member states could be helped by the mother bloc realise their goals.

The university

Universities are building their profile on research work and the more relevant their researches are to a specific area, the greater their chances of raising their profile. The university will create this profile as the research results will not be just academic but usable in real life.

The SADC member states

The research is expected to reveal issues which if implemented with or without minor amendments, will go a long way in turning the fortunes of the member states with regard to realising their developmental goals under SADC.

The public

The researcher expects to raise recommendations that will help SADC and its member states improve service delivery and bring better living standards for the region.

1.8 Scope of the study

The scope of the study shall be discussed in two distinct areas namely limitations of the study and the delimitations of the study.

1.8.1 Limitations of the study

The study is carried out at a time when a lot of changes have happened to the SADC regional grouping from the time that SADC was founded in 1992 and to the new set of operational structures that were amended in 2002 and this makes the gathering of data a complicated process. The SADC secretariat is now based wholly based in Gaborone following the scrapping of national sector responsibilities. This makes the gathering of data from primary sources difficult as this would entail travelling to Gaborone.

1.8.2 Delimitations of the study

The study is delimited SADC regional block and interaction it has with Zimbabwe in the area of Food security. The study will focus on SADC programmes that are designed to impact on food security and will only refer in passing to other SADC activities that are not designed to improve food security but may have an impact on the sector. These include issues like security, gender and HIV/AIDS. This study will cover the period from 2000 was moved to SADC up to the current period under new SADC structures. The study is limited to the SADC from its formation in 1992 to present.

1.9 Definition of key terms and Conceptual framework

Food security

Food security exists when all people, at all times, have physical and economic access to sufficient safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life. - 1996 World Food Summit. Food security has four dimensions according to the FAO (2008) which are food availability, food accessibility, food utilisation and food stability which are defined as follows;

Food Availability

Food availability addresses the “supply side” of food security. These are factors that ensure that there is physical availability of food. Availability is determined of food production, stock levels and food imports. It increases as more food produced, appropriately stored and when adequate amounts are imported to meet the requirements of the region, nation or household. Food availability contributes to food security.

Food Accessibility

Food accessibility refers to both economic and physical access. There may be adequate food availability but this does not guarantee adequate supply at household level. Although food may be available at national, international level some households maybe unable to afford (no economic access) or they may not be able to physically get the food due to bad infrastructure like roads (physical access).

Food Utilisation

Utilisation is commonly understood as the way the body makes the most of various nutrients in the food. Food utilisation by individuals is the result of good food handling and feeding practices, food preparation, diversity of the diet and intra-household distribution of food. Combined with good biological utilization of food consumed, this determines the nutritional status of individuals. Utilisation at household level can sometimes vary for different members of the same household. In the case of Southern Africa most rural households give preference to males when allocating food, with males being allocated more meat for example. This means males have more protein intake although all members have enough to eat.

Food Stability

This refers to how the above dimensions of food security can reliably occur over time. How stable is the availability, the access or the utilisation over different periods. Even if your food intake is adequate today, you are still considered to be food insecure if you have inadequate access to food on a periodic basis, risking a deterioration of your nutritional status.

Vulnerability

Vulnerability to food insecurity refers to the many of factors that place people at risk of becoming food-insecure. The level of vulnerability of individuals, households or groups of

people is determined by their ability to cope or withstand stressful situations without sliding into a situation of food insecurity or remaining in that state if they were already food insecure.

Types of Food Insecurity

Food security analysts have identified chronic and transitory food insecurity as the two general types of food insecurity (FAO, 2008). Chronic food insecurity is long term and occurs when people are unable to meet their minimum dietary requirements over long periods of time and results from poverty, lack of production tools and financial resources. Transitory food insecurity on the other hand, occurs when there is a sudden drop in the ability to meet the minimum food requirements and results from short term shocks like floods, food prices and also year to year variations in domestic production.

The methods to overcome these two types of food insecurity are different. Chronic food insecurity requires long term development measures such as education, access to credit, and development of irrigation facilities. Transitory food insecurity results from unpredictable events and this makes planning and programming more difficult and requires different capacities and types of intervention, including early warning strategies and safety net programmes like food aid. Food availability, food access, food stability and utilisation can therefore be chronic or transitory and food security is achieved when all these 4 facets are present. This study thus looked at the role that SADC played in improving these four dimensions of food security in Zimbabwe since its formation in 1992. The table below summarises the indicators for each dimension of food security and these indicators guided the study in determining the achievements of SADC in Zimbabwe.

FIGURE 7

The suite of food security indicators

FOOD SECURITY INDICATORS	DIMENSION	
Average dietary energy supply adequacy Average value of food production Share of dietary energy supply derived from cereals, roots and tubers Average protein supply Average supply of protein of animal origin	AVAILABILITY	STATIC and DYNAMIC DETERMINANTS
Percentage of paved roads over total roads Road density Rail lines density	PHYSICAL ACCESS	
Domestic food price index	ECONOMIC ACCESS	
Access to improved water sources Access to improved sanitation facilities	UTILIZATION	
Cereal import dependency ratio Percentage of arable land equipped for irrigation Value of food imports over total merchandise exports	VULNERABILITY	
Political stability and absence of violence/terrorism Domestic food price volatility Per capita food production variability Per capita food supply variability	SHOCKS	
Prevalence of undernourishment Share of food expenditure of the poor Depth of the food deficit Prevalence of food inadequacy	ACCESS	OUTCOMES
Percentage of children under 5 years of age affected by wasting Percentage of children under 5 years of age who are stunted Percentage of children under 5 years of age who are underweight Percentage of adults who are underweight Prevalence of anaemia among pregnant women Prevalence of anaemia among children under 5 years of age Prevalence of vitamin A deficiency (forthcoming) Prevalence of iodine deficiency (forthcoming)	UTILIZATION	

Note: Values and detailed descriptions and metadata for these indicators are available on the companion website (www.fao.org/publications/sofi/en/).
Source: FAO.

Figure 1:3 - Food Security Indicators

1.10 Organisation of the study

The study is organized into five different chapters, each chapter being distinct in its structure, purpose and scope. Below are the various sections of the study and what they represent:

Chapter 1: The problem and its setting

This is an introductory chapter that introduces the research problem in a broad setting starting with the introduction and followed by the background of the study. The background of the study looked in to those conditions and circumstances that prevailed before the study was carried which prompted the researcher to consider carrying out a study of this nature. This is followed by a clear declaration of the research problem that the whole study seeks to establish in greater detail. The statement of the problem describes the development issue that has led the researcher to conduct this study. This is then followed by research objectives which feed into the research questions.

The significance of the study to the various stakeholders is discussed and then the scope of the study follows after assumptions are discussed in brief.

Chapter 2: Literature Review

This chapter looks into the review of related literature on the subject under study. The purpose of this review is to establish what others have said about the subject and then highlight what knowledge gap exists in the existing literature which the current study would seek to fill. In other words, literature review is carried out to justify why the current study has to be carried out through making inferences into the knowledge gaps it will fill. This helps the researcher avoid researching on an area that is over researched.

Chapter 3: Research Methodology

The chapter looked into the various research instruments that the study used in collecting data, starting with a discussion of the research design used, the data collection instruments used and their justification, the sampling techniques among many other strategies that were used which would enable data to be collected and analysed and interpreted for consumption by decision makers.

Chapter 4: Data presentation and discussion of findings

This chapter presents the findings from the data collection process and discusses the research findings. This could follow a predetermined method of analyzing data if it's going to be qualitative or quantitative in nature. This is the culmination of the study and is the most important section of the study as it gives new knowledge to the researcher and all interested parties.

Chapter 5: Recommendations and Conclusions

This is the final section of the study as the researcher puts forward her recommendations and conclusions. This chapter also gives the researcher's areas of suggested further study which would help develop detailed knowledge on issues of great importance which the current study has not dealt with.

1.11 Chapter Summary

The chapter successfully introduced the study on the role of the SADC regional bloc on Zimbabwe's quest for food security. It stated various research objectives that the researcher seeks to establish with this research and the research questions that the study will answer at the end of the research study. The next chapter, which is literature review, shall look into the critical

review of the literature on performance of the SADC region in helping its member states, with a strong bias on Zimbabwe's quest for food security.

2 CHAPTER II - LITERATURE REVIEW

2.1 Introduction

In this chapter, the study looks into the review of related literature on the role of SADC on the achievement of Zimbabwe's food security goal since its formation. The reviewed literature covers food security, the role of regional integration arrangements (RIAs) on food security, food security in SADC and lastly food security in Zimbabwe. While the core focus of most regional integration arrangements is trade, SADC and other RIAs have widened their area of focus to include other development related areas like food security. It is in this scenario that we need to assess the role of SADC in helping Zimbabwe realize its objective of ensuring food security for its people.

2.2 Food Security in the World

The concept of food security first appeared in development circles in the 1960s and 70s (Anderson & Cook, 1999) as the ability to meet food needs consistently. However the disparity between total food supply and the number of people with access to that food became clear much earlier and efforts to correct this anomaly have been going on since beginning of the last century. Today there is enough food in the world to feed the world's population but still many families go to bed hungry. Agricultural production worldwide has grown at a faster rate than world population did over the last few decades. Simon (2012) argues that there is at present more food, at least in terms of macronutrients, available to feed more than today's world population, more food than ever before. However, the number of people suffering food insecurity is reported to be

increasing and so is the proportion of the overall population suffering from insufficient food. Different authors refer to people having insufficient food as “suffering from hunger” or as “food insecure” and these two groups are in essence the same. The distinction between the total number of people suffering from hunger and the proportion of the total population being food insecure originates in the differences between the commitments taken by the international community, respectively at the 1996 World Food Summit in Rome, on the one hand, and at the 2000 Extraordinary Meeting of the United Nations General Assembly approving the Millennium Development Goals (MDGs), on the other hand. These two concepts, hunger and food security, are used interchangeably with food security being the preferred term by scholars. According to FAO (2014) there is enough food available in the world but the question remains on the distribution of that food. The developed countries have food surpluses while most of the food insecure populations are in the developing world. Even within SADC and its member states including Zimbabwe; there may be adequate availability at regional and national levels but many households may still go hungry. This is due to the fact if households have not produced enough of their own food in a particular season they may be unable to purchase food to meet their requirements. Opportunities to exchange their labour for food may also be nonexistent making food inaccessible although it may be available. Food aid programmes contribute significantly to food availability in times of poor harvest and food shortage.

Food security has been a concern at international from the 1930s when the League of Nations tasked its health division to give a report on the availability of food in the representative countries. The report showed a shortage of food in poor countries (Shaw quoted in Simon 2012) while other nations had surpluses. The need to address food security at international level was

recognised by The United Nations following the post Second World War period in Europe. The UN, through its newly established Food and Agriculture Organisation (FAO), organized its first World Food Survey in 1946 whose objective was to find out whether there was enough food for everybody on earth. The conclusions were that at that time, in 1945, at least one third of the world population would not get sufficient amount of energy. Since then The FAO has led the fight against hunger and food insecurity at international level and supports regional and country efforts towards this end. According to FAO (2012) by 2050 the world's population will reach 9.1 billion and most of the increase will come from developing countries. Agricultural production has to increase to meet this expected demand by improving food availability. General development and economic growth will ensure most people have access to this produced food by way of jobs and income.

Manyame (2002) cites a number of factors that need to be in place for food security to be achieved and these include land, water, information, human resources, technology and extension services among others.

2.2.1 The Causes of Food Insecurity

There are many factors that affect food security by impacting on food availability, physical food access, food utilisation and food stability. On a global level the main problem is that of distribution which then affects the access available food by certain groups of people. This is influenced by income levels, trade barriers and sometimes mere logistics as people affected by hunger may be in inaccessible places.

Natural Disasters

A natural disaster can be described as a natural event with catastrophic consequences for living things in the vicinity. From an economic perspective, a natural disaster can be taken as a natural event that causes a perturbation to the functioning of the economic system, with significant negative impact on assets, production factors, output, employment, or consumption (Hallegatte and Przulski, 2010 cited in Israel and Briones, 2013). Over the past 30 years, Africa has become subject to erratic weather patterns and is often plagued by prolonged droughts followed by floods. These natural shocks trigger adverse consequences, including widespread food insecurity. Sub-Saharan Africa (SSA) is the second-most severely affected region for climatological disasters among the developing regions of the world (Frimpong, 2013). This is because the temperatures are generally already high, and most of the region's inhabitants depend on rain fed agriculture for their livelihoods. Only 4% of cropland in SSA is irrigated, compared with a global level of almost 20% showing there is great potential to increase production and improve food security. IN SSA and other developing regions , the rural farming populations are the most affected by weather patterns because of their extremely low adaptive capacity, which is linked to acute poverty levels and lack of assets.

Food insecurity is disproportionately more prevalent in Africa and in South Asia and there are factors peculiar to Africa in particular that have contributed status quo. Extreme weather events and natural disasters including drought are some of the major causes as mentioned above. Theoretically, the impacts of natural disasters on agriculture and the natural resources and environment sectors can be direct or indirect as well as positive or negative. The direct and positive impacts in agriculture are easy to identify. For example in the case of excessive rain and

floods there is an increased supply of water for agriculture if the flood water can be stored. Another advantage is that the water table is raised making underground water easy to harness for agricultural purposes. Floods improve soil fertility as they deliver nutrients from the uplands to the lowlands. In addition, floods temporarily create a larger water habitat for inland fish and other aquatic animals. Together with other yet-to-be-identified factors, these impacts of cyclones and floods are viewed as positive because, *ceteris paribus*, they facilitate an increase in agricultural production in the affected areas and help improve the food security situation.

Natural disasters also have negative effects on agriculture and food security in contrast to the above positive effects. These negative effects are more apparent than the positive ones especially in the Southern African context. Cyclones, floods and droughts have the potential to reduce productive agricultural land, reduce agricultural productivity; damage farm inputs, facilities and infrastructure, and limit farm planting options. Furthermore, individually, cyclones and floods can damage farm supply routes and cause death or injury to farm workers. As a result, these direct and negative factors can further lead to indirect and negative impacts on agriculture and the economy as a whole. Cyclones, floods and droughts can lead to increased agricultural production costs, reduced agricultural output, and reduced food availability and as a result food prices rise. These direct and indirect negative impacts on agriculture, taken together, pose a definite threat to food security in the affected areas.

The comparison of the severest food crises in the later history of the world and in Africa in particular reveals that all were preceded by drought or other extreme weather events. They resulted in poor or failed harvests which in turn resulted in food scarcity and high prices of the available food. The Ethiopian Famine of the 1980s and other famines in the horn of Africa are a

case in point. In Southern Africa the 1991-92 and the 2002 drought are the most recent. Floods caused by the El- Nino effect regularly hit Southern Africa impacting on food availability. Many harvests in Africa have been affected by pests and diseases that have wiped out entire crops. The SADC region periodically experiences army worm and red locust outbreaks. This season, 2013/2014, south-eastern region of Zimbabwe has experienced an armyworm outbreak. Mr Chikwenhere of Zimbabwe Department of Research and Specialist Services (quoted by Reliefweb) said that the damage caused by army worms this agricultural season is significant and would impact the food security of households in the affected areas of Zimbabwe. Experts predict that natural disasters will become even more frequent and their impact more severe, mainly due to climate change and a further concentration of the world's population in vulnerable habitats.

Underdeveloped State of Agriculture

The underdeveloped state of African agriculture is a contributor to food insecurity on the continent according to Mwaniki (2006). Most of Africa depends on rain fed production despite frequent droughts. This means that below normal rains or poorly distributed rains will always present a threat to food security on the continent. Other issues that affect food security in Africa include low fertility soils, minimal use of external farm inputs, environmental degradation, crop losses at harvest and reliance on marketing of crops with little or no value addition.

Smallholder farmers who make up the majority of farmers in Africa do not have access to lucrative markets. This means cash crops and excess food crops cannot be used to generate income which can then be used to purchase food when necessary. This reduces the food stability aspect of food security. Access to market is hindered by a number of things including poor road infrastructure, limited resource base, lack of information, lack of or inadequate support

institutions and poor policies in place. Regional organisations like SADC are meant to assist smallholder farmers to access these markets by putting favourable policies in place for this happen. Another contributor to food insecurity in some African countries is over-reliance on cash crops at the expense of food crops. This presents a problem if there is a slump in the marketing of that crop as no money will be generated to pay for food imports.

Bio-fuels

Another recent threat to food security is the promotion of bio-fuels. Production of sugar cane, maize and cassava for fuel is taking up land that should be producing food. On the other hand countries that normally produce excess maize that can be distributed to areas with food shortage are now using this maize for production of bio-fuel.

Conflict

Africa is home to many conflicts and these disrupt agricultural production and also prevent aid workers from accessing vulnerable and needy communities thereby limiting both availability and accessibility of food. Conflicts have also occurred in the form of food riots as people protest over high food prices. Throughout history higher food prices have contributed to or triggered violent riots. Record-high world food prices triggered protest and violent rioting in 48 countries in 2007/08. The ratio of violent to non-violent protest was higher in low-income countries and in countries with lower government effectiveness (von Braun, 2004). Recent research links higher world food prices for the three main staple grains (wheat, rice and maize) to more numerous protests and riots in developing countries.

Violent conflicts are major contributors to food insecurity in affected areas. According to FAO (2012) there is a well established correlation between the exposure of countries to external or

internal conflicts, and the deterioration or long-term stagnation in their food security. Most conflicts, and especially the internal conflicts that have now become the dominant model of mass violence, mainly affect rural areas and their populations. They disturb food production through physical destruction of crops and livestock and they prevent and discourage farming. Lines of transportation of food, farming inputs and farm produce are interrupted as infrastructure is destroyed or as people refrain from travelling because they fear for their safety. Armed conflict destroys farm capital and takes away young and able-bodied males from productive farm work thereby suppressing income earning occupations. The impact of conflicts on food security often lasts long after the violence has subsided, because assets have been destroyed, people killed or maimed, populations displaced, the environment damaged, and health, education and social services shattered; still more awesome are the landmines which litter agricultural land, kill and cripple people and deter them from farming for years -even decades- after all violence has ceased. Violent conflicts have affected a number of SADC countries including Angola, Mozambique and Zimbabwe in the run period to the 2008 harmonised elections.

Disease

Diseases are another contributor to food insecurity. Diseases such as HIV/AIDS, malaria and tuberculosis increase morbidity of the food producers leading to decreased output. Other farmers also fail to produce to optimum levels because they spend their time taking care of the sick. These diseases also have an impact at national when governments have to use scarce resources on treatment instead of food especially in times of famine.

Poverty

Misselhorn (2005) in her studies to establish drivers of food insecurity in Southern Africa found that 17 drivers are responsible for 80% of the impact. Amongst the case studies, poverty, environmental conditions, and conflict featured prominently as functioning to indirectly drive food insecurity through initiating the activity of other drivers. Other drivers identified by her study are prevalence of HIV AIDS, formal and informal government policies, in- and out-migration, poor human health, sale of assets, low regional cereal availability, lack of education and population pressure. Poverty is by far the most important especially in Southern Africa as it encompasses different dimensions of deprivation that relate to human capabilities including food security, health, education, rights, voice, security, dignity and decent work. The diagrammatic presentation below shows the cyclic relation between poverty and food insecurity. Poverty leads to food insecurity, hunger and malnutrition which in turn lead to poor physical development resulting in low productivity which further fuels poverty.

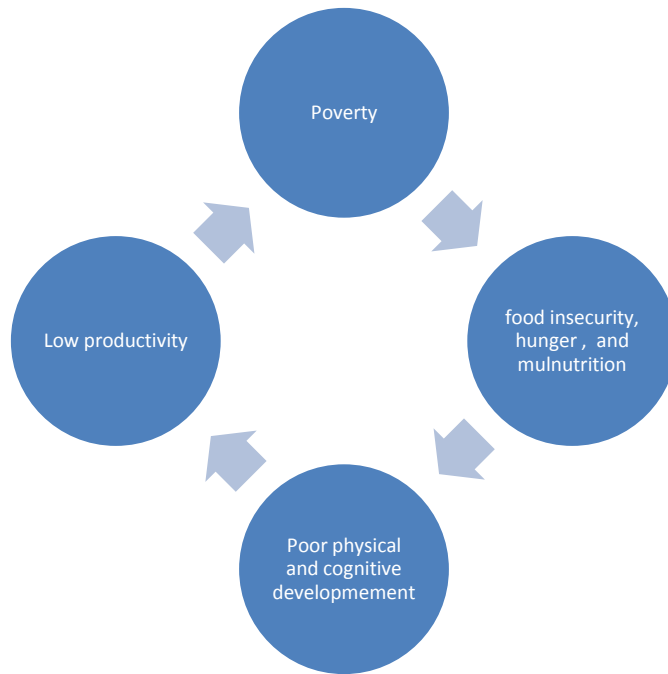


Figure 2:1 - Cyclical relationship between food insecurity and poverty

Hunger and food insecurity are accompanied by poor nourishment which diminishes the ability of affected people to produce both physically and intellectually. In the case of Southern Africa this means that people do not have the energy to engage in agricultural activities which are the main source of food and livelihoods. Malnourished people are less likely to engage in successful economic activities of any kind because malnutrition affects intellect. von Braun et al (2004) also acknowledge the existence of strong links between agricultural productivity, hunger and poverty. They contend that if food insecurity is left unaddressed it can set in motion an array of outcomes that can perpetuate malnutrition, reduce the ability of adults to work and produce healthy offspring, reduces learning ability in children and ultimately lead to poor economic performance at national level further fuelling poverty. The chronic food insecurity situation that exists in some parts of the SADC region as well as in Zimbabwe attests to this.

Land tenure

Land tenure consists of social relations and laws and processes that govern access to and use of land. Land tenure gives rights that pertain to what one can do with land and these rights are derived from customary law as well as statutory law. Land tenure affects issues of food stability as insecure tenure means farm families are not assured of continued access to the land which they use to produce food. The concept of land access is therefore based on the access to resources for production which are used for income generation. The income is used to purchase food for consumption and utilized to produce a particular nutritional status.

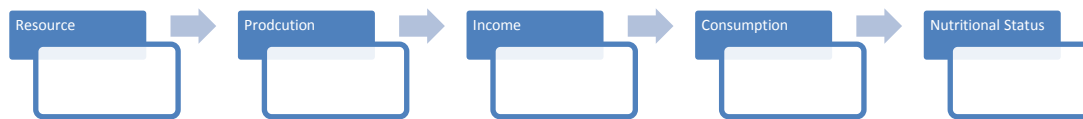


Figure 2:2 - Conventional Conceptual Links Between Land and Food – adapted from Maxwell and Wiebe (1999)

Tenure security encourages investment and farm improvements because farmers are assured that they will stay on the land long enough to get a return on their investment. The Improved farms also attract financing for agricultural production as the property can be used as security against loans. Secure land tenure therefore leads to improved access to food as well as food stability.

2.2.2 Food Security Policy

The 1996 World Food Summit is a major milestone in international food security policy. 180 nations met at FAO headquarters in Rome to discuss ways to end hunger. Nations pledged to eradicate hunger and committed themselves to a basic target: reducing the number of undernourished people by half by 2015. The targets set during this summit have guided nations

and regional organisations in setting their own targets as most nations were participants to this summit.

According to van Dijk (2011) countries can choose between two forms of food security policy. One option is to pursue the food self sufficiency strategy which requires the country's food needs to be met entirely from domestic production. The other strategy is the food self-reliance strategy which argues that availability of food is of paramount importance and it can be produced domestically or sourced by means of international trade. While the food self sufficiency strategy may have some advantages it fails to take advantage of trade benefits created by international differences in production factor endowments, technology and environmental factors such as infrastructure and climate. Food self sufficiency thus promotes inefficiency as countries may continue to produce certain food crops at high cost instead of importing from countries that can produce at low cost. Food self-reliance, on the other hand, is more in line with regional integration arrangements as it emphasises access to food regardless of who produces the food and is based on the premise that rarely can any one country meet all its food needs from own production. Van Dijk concludes that food security becomes mainly a poverty issue determined largely by whether a country or an individual has sufficient income to purchase or exchange something for food. Food production, distribution and consumption are now market processes for most countries, according to Pouncy (2012). As a result the ability for a country or individual to meet its nutritional needs now depends on the ability to pay the price for the item. In this scenario issues of drought and other national disasters become of minor importance as the nutritional needs can be met by food produced anywhere in the world. Again there are dangers in this strategy as local farmers may be put out of business by the importation of cheap agricultural

products. An example is the flooding of the Zimbabwean market with cheap chicken from Brazil until the Zimbabwe government had to intervene by banning these imports.

Many scholars including supporters of economic growth as a poverty eradication tool contend that economic growth enhances food security. However certain types of growth do more to improve food security at the country level, whereas other types of growth have stronger effects on household-level food security. Export-led growth generates foreign exchange revenues for food imports and thus improves food security at the country level. Inclusive growth that generates jobs and increases incomes for the poor enhances food security at the household level. Growth, combined with appropriate tax systems, also generates government revenues that can be directed to public spending on food security. Many SADC countries have registered economic growth with the average GDP growth for 2010 being 5.2% (SADC, 2012). Policies aimed at enhancing agricultural productivity and increasing food availability, especially when smallholders are targeted, can achieve hunger reduction even where poverty is widespread. When they are combined with social protection and other measures that increase the incomes of poor families to buy food, they can have an even more positive impact and spur rural development, by creating vibrant markets and employment opportunities, making possible equitable economic growth.

Food policy in SADC is intrinsically linked to the organisation's regional agricultural policy (RAP). The RAP's policy statements emphasise SADC's role as that of complementing and supporting members states' national initiatives in a range of areas including water management, pest control and soil fertility among others. SADC being part of African Union aligns its policies to those of the continental body and in turn gets support from some of the AU's initiatives that

include the New Economic Partnership for Africa's Development (NEPAD) and its programmes like the Comprehensive Africa Agricultural Development Programme (CAADP).

2.3 Regional Integration and Food Security

Regional trade agreements are an important and integral part of the global trade environment and almost all nations belong to at least one. Due to globalisation it has become more and more important that important national issues do not remain managed at national level but move to a regional level in order to take advantage of the benefits associated with the new global order. The major benefit for regional integration for most nations is the belief that there is strength in numbers and in unity and that this strength can hasten development as well as enhance security. This is especially so for the fragmented Sub-Saharan Africa sub region which has 47 small economies and this makes it a good candidate for benefitting from all the advantages of regional integration. The same applies for Southern Africa. However the small domestic markets, combined with generally high production costs and deficient investment climates result in limited investment (Kritzinger-van Niekerk, n.d.). Integration is therefore a strategy for overcoming perceived weaknesses and development obstacles and in the case of Zimbabwe the intention is take advantage of SADC membership in order to tackle development issues, one of them being food security. SADC membership has consequences for Zimbabwe and other member states but the membership also presents opportunities for members in addressing food insecurity. According to Matthews (2003) one of the consequences of regional integration is that small scale farmers may suddenly find themselves in a situation where their market is affected by products from other countries and they fail to compete favourably. Matthews argues that small scale farmers may suffer the consequences of regional integration because they are not in a

position to take advantage of regional trade arrangements because they lack information and exposure. These same consequences can also come about as a result of globalisation as globalisation brings liberalization of markets. The food security threat caused by liberalization is due to dumping of heavily subsidized produce in developing countries and premature exposure of upcoming industries to genuine competition from producers in developing and developed countries.

Food security is also affected by international trade in general and agricultural trade in particular (FAO, 2010). Increased intra-regional trade is expected to foster economic growth and increase employment prospects and the income-earning capacities of the poor; in that regard it will improve people's ability to purchase food. Whether regional integration promotes overall economic growth and promotes more trade creation rather than trade diversion will depend on the design of the agreement. Increased agricultural trade between regional member states has the ability to improve food security through supplementing domestically produced food supplies and by reducing overall food supply variability thereby enhancing stability of food availability.

However, potential beneficiaries of regional integration among the majority low-income smallholder farmers may be unable to take advantage of increased market access opportunities in the presence of production constraints. Accompanying measures may be needed to assist them to increase both the quantity and quality of their products in order to take advantage of the market opportunities created. Where supply constraints are identified Skully (1998) proposes that regional integration strategies should include investment and training interventions to address these constraints, including technology transfer and rural extension; new production alternatives, labour training on new farming practices and for off-farm activities; and possible ways to

integrate smallholders with more commercial farm enterprises. Where negative impacts are identified, then a regional integration strategy which is food-security aware should be accompanied by flanking measures to address these negative impacts.

Scholars like Skully (1998) and FAO (2010) argue that as with many interventions there will also be those who either fall behind or lose out in the regional integration process. As a result, if those who lose out are concentrated disproportionately among food-insecure households, then the overall impact on food insecurity in the short run may be negative. In countries with dualistic agricultural structures, it may be the larger commercial farms already well-integrated into food markets which benefit, while semi-subsistence smallholders are simply too constrained to take advantage of the new market opportunities and may even lose out from greater import competition on the domestic market. How smallholder farmers will fare following integration depends on what the farm can produce profitably, its tenure situation and the sector specificity and diversification of its assets. Although the opportunities presented by regional integration and globalisation are open to all, most farmers in the SADC region are unable take advantage of them due to lack of information and facilitation by their governments.

2.4 Background of SADC

In 1980, countries in the southern tip of Africa came up together to form a grouping that was called the Frontline States. The primary objective of this regional grouping was for them to establish ways of reducing their economic dependency on apartheid South Africa. When Nelson Mandela was removed from prison in 1990, this was considered the fall of apartheid in South Africa and the Frontline States were dismantled and a new regional grouping called SADCC was

formed. When political and economic environment in the region changed, there arose a need for a paradigm shift and changing focus and subsequently the name of the then SADCC changed to SADC. The former was an institution striving for reduction of economic independence, particularly from South Africa while the latter is a development community working towards regional integration and a free trade area. The transformation of the organization from a Coordinating Conference into a Development Community (SADC) took place on August 17, 1992 in Windhoek, Namibia when the Declaration and Treaty was signed at the Summit of Heads of State and Government thereby giving the organization a legal character. SADC (Southern African Development Community) is a regional organisation consisting of 15 Member Countries which are Angola, Botswana, Democratic Republic of Congo, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe.

The purpose of SADC is to create a regional community, which would provide peace and security, cooperation in fields of shared interests, and ultimately an integrated economy. It provides a forum where regional planning is done with the goal of encouraging self-sustaining development in Southern Africa, which is based on collective self-reliance and inter-dependence of Member States. It is built on the principle of achieving sustainable utilisation of natural resources and effective protection of the environment. Due to the high poverty levels in SADC poverty alleviation is one of the regional bloc's main objectives and food insecurity is a major component of poverty.

2.5 Preview of Zimbabwe's Food Security Situation

The food security situation in Zimbabwe is inextricably linked to the performance of its agriculture sector. As a nation with over 70% of its population working as farmers or making a living as support services to this sector this is not surprising. The growth and development the agriculture results in growth of the other sectors of the economy like industry and services. This creates jobs and enables people to have access to food. According to the government of Zimbabwe in its 2012 national economic budget (Government of Zimbabwe, 2011), agriculture is the second largest sector of the economy in Zimbabwe with a growth of 33.9% in 2010. The growth is derived from the following growth rates for selected commodities; maize, 34%; tobacco, 110%; sugar, 35%; and cotton, 23%.

Zimbabwe's agricultural sector has emerged from a prolonged period of structural change, in the context of shifts in the social, political and economic environments. Of particular note are the shifts in the scale of operations and the composition of the farming sector since 2000. This is a sector that has been under collapse since the country embarked on the land reform programme in early 2000. Agricultural production in Zimbabwe underwent a 10 year period of decline until 2008. Since 2009 there has been stabilisation on the macroeconomic front as witnessed by the decline in the country's inflation rate which has reached record high in the preceding years. The stabilisation of the economy brought back the confidence in the agriculture sector in Zimbabwe as signalled by the rise in the market price of crops such as tobacco which also triggered their mass production by the majority of smallholder farmers.

As the farming sector improved, the need for emergency food also decreased as many communities become self sufficient in food and the shift in aid moved towards promoting longer-term food security initiatives. The country sought to engage development partners who could make better the long-term sustainability of the food security programmes in the country (Ministry of Agriculture, 2011). A number of funding partners including the European Union are assisting Zimbabwe in developing food security programmes that lead to long term and sustained food security. Anseeuw et al (2012) agree with this new focus and argue that focussing of the development of the agriculture sector is the key to rebuilding Zimbabwe's economy and ensuring food security.

2.5.1 The causes of food insecurity

It is a widely believed notion that the 2000 land reform programme in Zimbabwe led to the decline in agricultural production and caused food insecurity at national level. However studies have shown that large scale farms in Africa are causing underutilisation of productive land and have shown that many small scale farmers are more likely to use land more intensively and thus produce more per unit area. A World Bank supported land redistribution programme project in Malawi has managed to increase agricultural production of 15000 small scale farmers by parcelling out large scale farms into smallholdings (Byamugisha, 2013). This programme fared better than the Zimbabwe programme in that the programme includes development of farm infrastructure and farming equipment which is lacking in the Zimbabwe scenario resulting in limited production. This shows that a land reform programme with the right support to farmers can improve food security. In the case of Zimbabwe, success is yet to come because the new farmers lack skills and commitment and the government has not provided financing, inputs and

infrastructure to support these farmers. The lack of support affects the supply side of food security by depressing production. Farmers are unable to produce enough to feed themselves let alone produce enough to feed the urban population or to export within the region. Food availability becomes the stumbling to food security in this case.

The Commercial Farmers Union Report published in 2010 (Theron, 2010) contends that the current food insecurity in Zimbabwe is the result of complex interlinked factors stemming from both a man made crisis of a political and economic nature as well as climatic shocks affecting the overall agricultural production of the country. The report went on to justify why the country has been experiencing this, which was as a result of the fact that the country had entered into a land redistribution programme it had not planned for and hence that disturbed the level of crop production. Since the majority of Zimbabwe industries were dependant on agriculture the deteriorating economic situation of the country has resulted in large scale unemployment at national level and estimates range from 80 – 95%. It has also resulted in shortage of farming inputs which has further contributed to low production levels. Organised marketing of agricultural produce has also been affected as a large proliferation of produce buyers has emerged and farmers are taken advantage of.

The lack of employment opportunities combined with limited cash crop production has prevented the poor from accessing any opportunity to ensure income security, needed to cover basic needs and eventually supplement their own staple food production. Lack of employment reduces access to food as unemployed people have no income and therefore are unable to purchase food even if the food is available on the market.

Non availability of inputs and lack of means to purchase inputs has reduced the capacity of the smallholder farmers to produce enough staple food for their annual needs and that is the reason why it has been always argued that the government is responsible for the gross food insecurity that crippled the people of Zimbabwe since the year 2000. Reduced production dysfunctional markets and absence of access to rural finance has prevented farmers from increasing and diversifying their production toward more sustainable food security.

All these factors led many small scale farmers to resort to non sustainable coping mechanisms like selling assets such as livestock and farm equipment. As a result some of the farmers have had to resort to relying on relatives working outside the country and on other external aid including donor funded programmes. According to Babatunde & Martinetti, (2010) the volume of remittances to developing countries has been increasing steadily over the last decade. Their level is higher than official development assistance and foreign direct investment in Nigeria for example. This trend can be observed across developing countries and in Zimbabwe in particular. According to DFID (2010) Zimbabwe received between \$500m to \$1,3 billion in remittances contributing 13 to 38% of national income.

Small scale farmers had been contributing a very significant percentage to the national harvest, especially on maize production and their failure to produce due to lack of inputs and droughts led to the big decline in food reserves and therefore national food security.

Although improvement in agricultural production has been observed over the last 2 years as a result of some level of economic recovery, most of the small scale farmers remain dependant on external aid as they are still not able to produce enough food or generate enough income to cover

their annual needs. Such a situation still needs to be addressed if the food security has to be addressed.

The economy of Zimbabwe – once considered the breadbasket of southern Africa – has begun to turn around after a decade-long recession that saw a marked drop in agricultural production, falling incomes and increasing food shortages. With some 70 percent of people relying on agriculture for their livelihoods, the strength of this sector is key to economic recovery. Several actors have partnered with government to promote agricultural recovery. According to FAO (n.d) the organisation has worked with the government to increase farmers' uptake of conservation agriculture – a no-till system that increases yields while protecting fields from erosion, improving soil quality and mitigating the effects of drought and climate change. Addressing issues of soil fertility and conservation agriculture mitigate drought and therefore aid food security by addressing the food stability component.

With the dawn of the new millennium, Zimbabwe had been under grave economic which made it difficult for the nation to survive on its own hence giving rise to the need for external assistance. The development by the Zimbabwe government of a matrix of programmes with a horizon of 2011-2013 enabled the development partners to develop a division of labour between donors as well as to take into consideration Government programming (EU, 2013). This was geared towards ensuring that to the extent possible all categories of the rural farming population are not only "supported" but that programmes of support are interlinked in order to promote development of farmers from one category to another. This matrix ensures that the farmers get total support from production, market linkages, input supply, contract farming, rural

entrepreneurship and even humanitarian assistance. This matrix is another way of ensuring food stability.

The European Union and the United States of America brought new aid initiatives to help the struggling country by boosting the food security. In response to the situation above, the EU has adopted an overall implementation framework called the "Integrated Programme to achieve Sustainable Food Security" (IP-SFS). This overall objective is to achieve food security by creating an environment that is conducive to reduce the dependency of vulnerable rural households on humanitarian assistance and to sustainably increase resilience to food insecurity (European Union, 2012). Considering the current division of labour between donors, the specific objective of the programme is to sustainably increase productivity of emerging productive-small scale farmers. The programme looks at all aspects of agriculture including production and market linkages in order to improve both food production and access.

By 2010 Zimbabwe's gross domestic product (GDP) had shrunk to less than half the size it was in 1998 and according to CFU the land reform programme played a very substantial role by reducing output from commercial farmers. The violent way in which the farm invasions were carried away scared away investors and potential investors as most of them felt their property rights were unlikely to be protected by the government. Commercial production was responsible for most of the grain stocks that made Zimbabwe the bread basket of southern Africa and its decimation reduced the country's food security status.

The traditional balance of payments support by institutions like the IMF has not been forthcoming. Whereas previously agricultural export earnings easily covered any need to import

maize in drought years this position has not applied since 2002. The situation now is that the balance of payments situation has deteriorated and Zimbabwe has had to forego imports of other vital goods needed for development in order to ensure that a reasonable degree of food security is maintained. Luckily international donors have often come to the rescue by directly supporting food aid programmes.

2.5.2 Land reform in Zimbabwe and food production

In 1980 when Zimbabwe attained independence from colonial rule there were around 6000 large scale mainly white commercial farmers and they owned over 15million hectares of the most productive land (Scoones, et al., 2011). There was plenty of food in Zimbabwe with the country producing way over its own requirements but the ownership of land along racial lines presented a threat to food security because of the possibility of racial conflict.

The war of liberation that had been ravaging the country from the 1960s through intensification in the 1970s came to an end and most Zimbabwean got back to farming. The Zimbabwean government set about redistributing the land and the commercial land holding had fallen to around 12million hectares by 1999, in part through a modest, but in many ways successful, land reform and resettlement programme, largely funded by the British government under the terms of the Lancaster House agreement. The period from 1980 to the late 1990 was characterised by increased agricultural production mainly from the smallholder sector. This production was supported by efficient extension services, available inputs and efficient marketing systems through state owned enterprises like Cotton Marketing Board, Dairy Marketing Board and Grain Marketing Board. The land reform process was slow and food production for strategic food reserves remained in the hands of the whites and there was growing dissent among the black

majority. This coupled with the high food prices and food riots of 1999 -2000 precipitated the beginning of one most important phenomenon to impact on Zimbabwe's food security, the fast track land reform programme.

2.5.3 Compulsory acquisition of land and associated problems

The Fast Track Land Resettlement Programme in Zimbabwe began in March of the year 2000 when war veterans began the occupation of commercial farms. About 7000 farm title deeds comprising 11 million hectares were gazetted for resettlement (Theron, 2010). Less than a quarter of the 4500 commercial farmers operating in 2000 were still on their farms in 2010, with many only producing at very reduced levels due to security concerns..

The SADC regional bloc watched events unfold and did little to protect the property rights of those whose farms were invaded, mainly because it did not have an alternative method for the redistributing the land. The land reform and especially the manner in which it was done, exposed the country to food insecurity as the transformation from those who were in the communal lands taking over in the commercial farms had its own learning curve costs.

Like in most other countries, the Government of Zimbabwe has legislative powers to acquire private land without the consent of owners in order to benefit society. The constitution of Zimbabwe also provides for the protection of private property rights. However, major problems have arisen because compulsory acquisition has not been done properly.

The Government of Zimbabwe has done very little to address long term tenure and its methods of acquiring land did not follow the legislative requirements pertaining to this, including paying compensation. The confidence required for investment and growth in commercial agriculture

was lost and is now almost non-existent. However a study conducted by Scoones et al (2011) showed that some farmers are investing on their land despite lack of security, although the level of investment is low and limited to homesteads, grain storage and movables like equipment. This shows some confidence in the government promises and augers well for production and food security.

Evictions and the arbitrary loss of farms in Zimbabwe have been, and still are major factors in discouraging both large scale local and foreign investment. The breakdown of the rule of law and the obvious lack of property rights keeps investors away. Donor aid is also not forthcoming in the amounts needed to revive the economy. This means investment in activities with high impact on food security, like dams, irrigation and road infrastructure are unlikely to get funding.

Currently it is impossible to buy or sell commercial farm land in Zimbabwe. As such farms have no collateral value and farmers are forced to use other means to raise working capital to run their businesses. This is a major obstacle to recovery of the sector. Hundreds of millions of small landholders, pastoralists and indigenous people do not hold formal land titles. And when it suits governments, they ignore this customary land holding and sell or lease the land to private companies. This lack of security is what is having a negative impact on Zimbabwean agriculture as farmers cannot borrow against their land and they are reluctant to make developments for fear of being moved from their land.

Corruption has increased because fast track resettlement programme has not been implemented in a very transparent and there have been double allocations and eviction of some resettled farmers without proper explanation. The aggrieved farmers' claim those that are displacing them

are politically connected and therefore being allocated lucrative pieces of land. A land audit proposed during the period of the government of national unit is yet to take place.

2.5.4 Agricultural production

In SADC and Zimbabwe in particular food security is a function of agricultural production because the majority of the population grow their own food. Most households in Zimbabwe have maize as the staple food and close to 100% of rural households supply their own requirements in a good rainfall year. With the increase in urban agriculture a significant number of urban households also grow enough maize for own consumption. Anything that affects agricultural production also affects food availability. Decline in production of non food crops also affect food security because it affects employment and results in lower incomes and therefore inability of affected families to buy food and food reserves.

The effect of land reform is well illustrated by the steep decline in output since 2001 for commodities produced primarily by commercial farmers. However Scoones et al (2011) dismiss the assertion of reduced agricultural output as a myth there is evidence to show that national output has declined. Scoones et al's (2011) tracked maize production of a group of resettled farmers in Masvingo over seven seasons, starting in 2002/2003 and their data showed production did not decline. While this could be true on an individual farmer level, national maize production did decline.

According to the Government of Zimbabwe (Ministry of Agriculture, 2008) the most important commodity contributing to food security in Zimbabwe is maize which is the staple food for the overwhelming majority of the people. This commodity is followed in a distant second place by

wheat which is consumed mostly by urban dwellers. It can be said that the annual output of both of them have a very direct impact on the food security status each year. In the years preceding the land reform, the government of Zimbabwe tried to supplement the production of wheat by encouraging winter wheat irrigation farming countrywide.

Zimbabwe's population in 2012 population was 12.97 million (Zimstats, 2012) compared to 11.6million in 2002. This gives an average annual growth rate of 1.1% against the SADC average of 2.6% over that 10 year period (SADC, 2012). Zimbabwe's population growth rate was negative for the 2001 and 2002, according to SADC and this was as a result of mass emigration as people left the country in search of jobs in the region and beyond. This meant there was reduced pressure on the country to provide food compared to other countries as the population growth rate had slowed down. A population of that size consumes roughly 1.7 million tonnes of maize per annum and when maize for stock feeds is added in the total annual domestic requirement is about 2.1 million tonnes. Such volumes cannot be relied upon from aid from other countries and a handful development partners. A total maize output of over 2 million tonnes was realised in the year 2000. Since then production fell rapidly to less than half of Zimbabwe's requirements indicating a high degree of food insecurity and an obvious lack of production self-sufficiency. In some years the situation was worsened by rainfall deficits.

In Zimbabwe, wheat, the country's second most consumed cereal is grown under irrigation in winter. Except for one year in the 1970's Zimbabwe has never been self-sufficient in wheat production. In 2010 the national annual requirement was roughly 400,000 tonnes. Every year shortfalls are met by imports of this commodity. Prior to land reform about 95% of the crop was produced by commercial farmers. Currently Zimbabwe continues to fail to meet its own wheat

demands due to a number of factors including lack of expertise of the new farmers, electricity cuts, high input costs and unfavourable producer prices.

A similar situation prevails for other food commodities that were produced mainly by commercial farmers. 175,000 tonnes of soya beans was grown in 2001 and by 2010 output has dropped by over 75% to around 40,000 tonnes. Another example is annual milk production which fell from around 187 million litres in 2000 to 50 million litres by the end of 2010 (CFU,2010) However ZFU reported a significant number of farmers in high rainfall areas were turning to soya bean production because buyers were offering lucrative prices and in some cases also offering contract farming arrangements. This will contribute to food security for the concerned households. The national vulnerability assessment committee (ZimVAC) estimated that 25 percent of the rural population (about 2.2 million persons) will be food insecure until the April 2014 when harvesting begins, mainly because production in 2013 was low.

Farmers and their families comprise the larger part of the population and therefore it is pertinent to look at food security in a broader sense. One must examine not only food commodities themselves but also the ability to generate incomes from other sources that can be used to purchase food. In Zimbabwe the two main cash crops are tobacco and cotton.

A record output of flue cured tobacco of 236million kgs was achieved in 2000. At the time about 96% of production originated from commercial farmers. In 2008 tobacco production fell to about 48 million kilograms. The current situation is that about 170 million kgs is expected to be sold in 2014 according to the Tobacco Industry and Marketing Board (TIMB). The decline in tobacco production meant loss of jobs and reduced food security for affected families. However, the

current increase in tobacco production augers well for improved food security for Zimbabweans employed in the farming sector and for the nation. Cotton production is expected to fall again this year, 2014, by 16% (www.fao.org). This is the second consecutive year production as dropped for this crop which was a major source of income for some of the drier parts of the country that do not have significant yields of food crops. These areas have now become vulnerable as their ability to access food has been reduced through reduced incomes.

2.5.5 Agricultural pricing

Another contributory factor to reduced agricultural production was the introduction of price controls. According to Bautista (2002) it is now generally agreed that most important reason for the failure of increased support to small holder agriculture to promote equitable growth was the preservation of institutions that involved widespread government regulation like the Grain Marketing Board and the Cotton Marketing Board. The pricing mechanisms by these state controlled bodied were largely inelastic in an inflationary environment with farmers being often expected to produce at a loss. Needless to say this acted as disincentive to agricultural production and affected food availability.

2.5.6 Downstream effects of reduced agricultural production on other sectors

There are very strong linkages between agriculture and some other sectors. About 60% of manufacturing firms rely on agriculture as a source for raw materials or as a market for agricultural inputs. Raw material supplies have dried up or demand for inputs has fallen drastically. Many firms have shut down while others are now operating at less than a third of maximum capacity. The loss of jobs has had a detrimental impact on food security as most urban families are unable to purchase food. The poor performance of this sector and its effect on other

sectors has meant that the tax base for the government has been severely eroded and this has resulted in the deterioration of the social services especially health and education. The Zimbabwe government has also been unable to invest in infrastructure especially roads further negatively impacting on food security by hindering transport of both inputs and produce.

2.6 Food Security and SADC

Zimbabwe as a member of SADC joined the bloc in order to enjoy trade benefits among other benefits. These benefits can be explained according to the Ricardian “conventional” or “neo-classical” trade theory (FAO, 2003). The theory states that differences that exist in productivity and in costs of production between member countries are the reasons why countries engage in trade. The reasons that contribute to productivity and opportunity costs of production include climate, availability of land, security of tenure and water supply for the agriculture sector. Labour productivity can be influenced by levels of education, skills and productive technologies. Within SADC most countries produce similar goods and most of these goods are raw materials and therefore the benefits of the exporting country are minimal within the bloc. The issue of unstable currencies in the region has a negative effect on trade and according to Matunhu (2008) this has been a problem for countries like Zimbabwe, Zambia and Malawi during the periods when their currencies were highly unstable.

The SADC Protocol on Trade (2005), as amended, envisaged the establishment of a Free Trade Area in the SADC Region by 2008 and its objectives are to further liberalise intra-regional trade in goods and services; ensure efficient production; contribute towards the improvement of the

climate for domestic, cross-border and foreign investment; and enhance economic development, diversification and industrialisation of the region.

The SADC Free Trade Area was achieved in August 2008, when a phased programme of tariff reductions that had commenced in 2001 resulted in the attainment of minimum conditions for the Free Trade Area - 85% of intra-regional trade amongst the partner states attained zero duty. While the minimum conditions were met, maximum tariff liberalisation was only attained by January 2012, when the tariff phase down process for sensitive products, which covers agricultural products, was completed.

2.6.1 Agricultural Production and Food Security in the SADC Region

The nature and structure of agricultural production in southern Africa arises out of the political economy of the colonial era. Beginning in the 1880s, the economy was based on the exploitation and export of natural resources such as gold in South Africa, copper in Zambia and the Democratic Republic of Congo, diamonds in Namibia and beef in Botswana. Zimbabwe concentrated on the production of maize and tobacco, Malawi produced tea and later tobacco, while in Angola and Mozambique estate farming concentrated on coffee and sugar, respectively, and Tanzania's main export was sisal. This set up contributed to the way in which Zimbabweans selected crops and therefore has a significant impact on the food security situation of the country and its contribution to the region.

However, access to resources and agricultural production was based on extreme inequalities along racial lines. In Zimbabwe commercial agriculture was the preserve of white settlers, while in South Africa and Namibia exploitation of the mineral wealth mainly benefited Europeans.

African societies in these countries were characterised by poverty, illiteracy and exclusion from participating in economic development. The inequalities that existed during the colonial period have continued into the 1990s and the 21st century. For example, with a Gini 1 coefficient of 0,7, Namibia exhibits extreme income inequality with 11 per cent of the population earning 51,5 per cent of total income. 2002 figures showed that in South Africa the richest 10 per cent earn 47 per cent of national income, while in Zimbabwe 41 per cent of the people live below the national poverty line and the richest 10 per cent earn 47 per cent of national income (Manyame, 2002). To eradicate poverty and reduce inequalities in the region SADC governments should ensure that government departments maximise the use of the relevant units of SADC to achieve the region's food security objectives including those of Zimbabwe.

Since 2000, when implementation of the SADC Trade Protocol commenced, intra-SADC trade has more than doubled, with intra-SADC trade estimated to have grown from about US\$13.2 billion in 2000 to about US\$34 billion in 2009, representing an increase of about 155% (SADC, 2010). As a proportion of total SADC trade, intra-SADC trade has only grown from 15.7% to 18.5% in the same period. As the process to remove tariffs on sensitive products is on-going there is still potential for further expansion of intra-SADC trade as most of the products on the sensitive list such as textiles and clothing, leather and leather products are highly tradable products. Removal of tariffs allows easier movement of food items so that food requirements of any member can be easily supplemented by other members. Easier movement of people means SADC nationals can freely access employment in any member state thereby improving food access by sending remittances to their home country.

2.6.2 SADC Regional Programme for Food Security

The desire to address food security problems within a regional context was first expressed as early as 1980 in the Southern Africa Region, now officially known as the Southern African Development Community (SADC). In the Declaration: Southern Africa: Towards Economic Liberation, adopted in Lusaka, Zambia, on 1st April, 1980, the Heads of State or Government of independent states of Southern Africa committed themselves to pursue policies for economic liberation and integrated regional development and chief among the development policies was poverty and food security.

The RPFS was a brainchild of The World Food Summit that was convened in Rome, in November, 1996 in response to the persistence of widespread malnutrition and growing concern about agriculture's capacity to meet future food needs. The aim of the Summit was to give impetus to global commitment at the highest political level to eliminate hunger and malnutrition and to achieve sustainable global food security. At the end of the summit, the Rome Declaration on World Food Security and an Action Plan were produced. The Declaration made seven commitments which lay the foundation for achieving sustainable global food security. The Action Plan spells out the objectives and activities required for implementation of the seven commitments.

Following the commitments, FAO developed frameworks for the elaboration of Regional Programmes for Food Security for several Regional Economic Groupings, including SADC. These programmes contain components which target assistance at the microeconomic level (support to strengthening food production and productivity increases); the macroeconomic level (support to agricultural policy and investment) and, trade facilitation, (covering, inter alia,

support to establishment of food quality and safety standards, promoting intra-regional trade in agriculture and commodity development).

The framework for the SADC RPFS was approved in 1999 by its 14 member states in Botswana. Subsequently, at the SADC meeting of Ministers of Agriculture in Mauritius in September, 2001, the FANR was instructed to operationalise the RPFS with the assistance of the FAO.

A decision of the SADC Summit held in Maputo, Mozambique, in August 1999 instructed that a review be conducted of SADC Institutions as well as its Operations. This directive was issued because the sectoral approach inherited from SADCC, was constraining the organization in its endeavours to achieve regional integration by devising and implementing regional policies and strategies in a co-ordinated and harmonized manner. The Sector-based decentralized approach has been discontinued in favour of a centralized system situated at the SADC Secretariat Headquarters in Gaborone, Botswana.

2.7 The Food, Agriculture and Natural Resources Sector

The SADC food security programme falls under the Food, Agriculture and Natural Resources (FANR) sector. The Secretariat for this programme is provided by the Food, Agriculture and Natural Resources Development Unit (FANR DU) which was originally based in Harare but has now been moved to Gaborone, Botswana.

The food security programme has evolved since 1980 and presently comprises several regional programmes and projects. Existing projects and programmes that cover Zimbabwe as well as other SADC member states include the following:

2.7.1 Regional Coordination and Cooperation

Regional cooperation is one of the major SADC objectives and to this end SADC has come with a Regional Coordination and Cooperation Programme. This programme provides the core financial and technical support for the processes of cooperation within SADC on all food security, agricultural development, and natural resources development issues. FANR DU is currently responsible for implementing the food security programme as well as coordinating and providing direction to the cluster of sectors within the overall FANR Sector. The main functions are developing sectoral policy and strategies and coordinating the activities of the overall cluster of FANR sectors.

The SADC FANR is organized on a project basis. Each project is staffed by two to four permanent professionals and administrators. The main functions of the unit are day to day management, administration, policy and programme development of the SADC Food Security Programme, as well as the wider food, agricultural and natural resources programme.

Up to 7 December 2001, the management unit was funded by the Zimbabwe Government. This responsibility has now been removed from Zimbabwe due to the ongoing restructuring of SADC.

2.7.2 Small Scale Seed production

A strong base of a wide range of diverse seeds is necessary in order to withstand the challenges of climate change and disease. Without this, crop varieties can be wiped out in a season. Promoting the use of a wide range of seed and seed types promotes food security and ensures the preservation of traditional cultural practices and values. Seed security can come from different forms including preserving seeds in traditional storage but it is more durable if it is promoted by

allowing free seed exchange within a community. With the advent of genetically modified organisms (GMOs) worldwide, seed sovereignty is threatened by patents defending seeds as intellectual property.

The SADC region has been afflicted by droughts that are increasing in both intensity and frequency. At the same time the vast majority of farmers who grow staple food crops do not for various reasons, have access to drought tolerant seed. Seeds of the more drought resilient crops like sorghum and millets have been found to be hard to access in times of below average rainfall since they have largely been discarded in favour of hybrid maize varieties. This is particularly true for Zimbabwe where even in the driest parts of the country people still attempt to grow maize every season despite consistent crop failures. The SADC Small Scale Seed Production programme, in close co-operation with farmers and farmers' groups has sought to set up a regional seed grower scheme in search for practical solutions to make seeds produced by farmers available according to the demand of the farming community. The aim has also been to provide farmers with a portfolio of readily available genetically diverse varieties that are suited to the different growing conditions and requirements. The main activities of the project have included: working with seed grower pilot groups; publishing a seed newsletter; conducting workshops; supporting seed fairs; and establishing a subject matter library.

According to the University of Chicago (University of Chicago, 2012), there are two methods of seed production, the local system and the formal system. The formal system produces seed of a consistent quality and is usually certified, it is the business part of seed production and encompasses the big seed houses that produce genetically modified seed and those that produce organic and heirloom varieties. This seed type is often expensive and sometimes out of the reach

of smallholder farmers who are the most vulnerable in terms of food security. The local system covers all the other ways of accessing seed and planting material including farmer exchange, using own harvest and seed fares. The SADC project seeks to strengthen mainly the local seed production component. Since small scale farmers are the majority in terms of numbers and also produce more than large scale farmers local seed production becomes a key element of sustainable food security for Zimbabwe.

2.7.3 Drought Mitigation

Since the formation in 1980 of the Southern African Development Co-ordination Conference (SADCC), the member states have been concerned with food security and the effects of drought. With the transition into SADC each member state signed a treaty through which all agreed “to coordinate, harmonize and rationalize their policies and strategies for sustainable development in all areas, including drought management and food security.

Southern Africa is a region prone to frequent droughts and 6 droughts were experienced in the SADC region in the period from 1980 to 2000. The 1992 drought was dubbed “the worst in living memory” in the region. This prompted SADC into action and resulted in the development of the regional drought management strategy by the FANR Development Unit in 1999. The strategy was developed with the assistance of national, regional and international stakeholders and partners and followed the recommendation of the SADC Food Security Technical and Administrative Unit (FSTAU) seminar in 1997. The objective of the Strategy is to build capacity to design and implement medium to long drought mitigating policies and programmes.

The programme activities aim to develop human capacity to design, implement monitor and evaluate drought policies and programmes; and to support member state governments to develop and strengthen drought policies and management plans. The activities also focus on developing and strengthening methods for early warning so that governments can tell in advance if there is going to be famine in their country and in the region. Other issues that the programme supports include contingency planning for drought; development of databanks on early warning food security and market information; promoting technology development and transfer; building analytical capacity to assess and exploit opportunities provided by bilateral and multilateral trade protocols (e.g. WTO); and building capacity for the development and management of irrigation.

The SADC region recognises that droughts are indeed a risk that can be managed largely within the scope of normal long-term development planning and economies can be managed through drought cycles. All SADC member states have approved drought policies but like most policies in the region funding of programmes still remains a challenge.

2.7.4 Regional Early Warning System (REWS)

Early warning is one of the most effective ways of trying to avert and prepare for famine. SADC has been running the Regional Early Warning System since its inception. It is therefore the flagship of the regional food security programme and continues to make significant progress. Phase 1 of the project started in June 1986 and ended in October 1990. The Council of Ministers approved a second phase of the project, lasting a further 5 years starting in early 1991 and ending in September 1995. Phase 3, followed the second phase and this programme is ongoing. The project contributes to regional food security through provision of advance information on the food and nutrition situation to facilitate national and regional policy and decision making to deal

with food shortages, surpluses and problems related to inadequate access to food. It also provides technical support in the collection, dissemination and use of this information. The early warning system in Zimbabwe is administered by the Ministry responsible for Agriculture

2.7.5 Remote Sensing Component of the Regional Early Warning System

The Regional Remote Sensing Project (RRSP) started operations in June 1988 with funding from the Government of Japan. The second phase of the RRSP started in January 1994 and was aimed at strengthening national and regional capabilities in the area of remote sensing for early warning and food security through the establishment of an operational information system. The project was suspended due to funding challenges.

2.7.6 Regional Food Security Training Project

The first phase of the project commenced in April, 1995 and the project has gone on to subsequent phases. The aim of the project is to expand food security related training in the SADC region; strengthen the capacity of regional training centres to provide in-service training; improve the use of skills and expertise from within the region; and increase capacity at the regional level to manage training activities and to support national programmes. Training is a key component

2.7.7 Regional Food Security Data Management and Analysis Project

The pilot phase covered four countries, namely Malawi, Tanzania, Zambia and Zimbabwe from 1995 to 1997. The current phase started in 1999. Both phases have led to the establishment of information modules in the following areas: food supplies, climatic/weather trends, markets & prices. The project aims to improve access to essential food security information by stakeholders,

decision-makers and analysts within SADC through efficient storage, retrieval and analysis of food security information.

2.7.8 Regional Programme for Communication for Development

The overall aim of this programme is to promote the sustainable and systematic use of communication for development approaches to help ensure people's participation at all levels, identify and implement appropriate policies for economic development and improvements in sources of income and human welfare. The programme is housed in the SADC Centre of Communication for Development which assists development organizations and communities working at grassroots level.

2.7.9 Regional Food, Agriculture and Natural Resources Policy Analysis Network (FANRPAN)

The SADC FANRPAN was established in 1994 and the SADC Ministers of Agriculture and Natural Resources designated the University of Zimbabwe to co-ordinate the establishment of the Network as well as to mobilise funding for a full-time Secretariat. The overall objective of the network is to help build a sustainable capacity within SADC member states to undertake policy analysis and research that can be readily utilized for planning, priority setting and to promote informed and effective policymaking in the field of food, agriculture and natural resources.

2.7.10 Local Indigenous Knowledge Systems (Links)

The project was launched in 1998 and by 2002 was operating in Mozambique, Tanzania and Zimbabwe (SADC and FAO, 2002). The Links project overall objective is to raise awareness on how rural farmers use and manage biological diversity as well as promote recognition of the

existence of enduring and long term farmer knowledge, practices and skills that are respectful of the natural ecosystems. This should help funding partners and other organisations working with communities to create linkages among themselves, with rural communities, and with decision-makers – to share information about how local knowledge supports food security, livelihoods and the conservation of agro-biodiversity.

2.7.11 SADC Food Security and Rural Development Hub

This project provides a regional resource facility to promote rural development in member States through capacity building and resource mobilization at local and regional level. It brings together regional and international experts at regional level and makes this resource pool available at national level. At national level, focal points appointed from Ministries are supposed to ensure that procedures, policies and national development needs are followed. They work closely with Permanent Secretaries and Ministers of Agriculture in developing national programmes and priorities. The work of the Hub is guided by a regional steering committee consisting of representatives of member States.

2.7.12 Vulnerability Assessment Committee (VAC)

The Regional Vulnerability Assessment Committee (RVAC) is a Committee established within the Food, Agriculture and Natural Resources (FANR) Directorate in 1999. Its role is to monitor vulnerability assessment issues in the SADC region and it has very broad terms of reference. The membership of the committee is made up of representatives from the following FANR management, Regional Food Security Data Analysis and Management, Remote Sensing Unit, REWS, WFP, Save the Children (UK), FewNet, and FAO. The committee is tasked with keeping abreast of and encouraging coordinated development in the field of vulnerability

assessments in order to assess the possibility of linking these developments to activities undertaken by the Early Warning Information Systems for Food Security at national and regional level. The VACs are responsible for information that informs policy makers of the possibility of a food shortage so that they make the necessary efforts to secure food for the affected population.

2.8 Chapter Summary

The chapter looked into the food security situation in Zimbabwe reviewing current literature. It also looked at SADC and what it is doing and how this is relevant to Zimbabwe's quest for food security. It has been highlighted that little has been done by the regional trading bloc in giving direct assistance for Zimbabwe to improve its food security as a result there is not much literature on the subject. The available measures have little impact in trying to initiate the required kind of service that would help achieve food security. In the next chapter, the study will look into the research methodology that was used in the data collection process.

3 CHAPTER III - RESEARCH METHODOLOGY

3.1 Introduction

This chapter is the approach to carrying out the research and it outlines the various methodological issues such as the research design, the data collection instruments as well as the sampling techniques and sample size.

Some important factors in research methodology which are going to be covered in this section include validity of research data, ethics and the reliability, formulating of research questions along with sampling. The last two stages are data analysis and finally writing the research paper, which is organised carefully into graphs and tables so that only important relevant data is shown.

3.2 Research design

In order to find out if SADC has assisted Zimbabwe towards achieving its goal of food security the researcher decided to conduct a qualitative research. The research has two components. The first is the administration of a questionnaire in the field targeting individuals who are in the food security sector as respondents. The second component is a desk exercise where the researcher looked at SADC documents and reports to establish the organisation's achievements. Documents from other actors in food security sector were also analysed.

An analysis was made of the SADC food security programmes and the extent to which they have contributed or are likely to contribute to food security in Zimbabwe and the region.

A research design is a planned set of research activities, which gives details of the strategies the researcher will adopt when conducting the study. This study is an exploratory research that uses qualitative research methodology in the gathering and analysis of research findings.

3.3 Population, Sample and Sampling Technique

The study population is composed of Zimbabwean government officials in the Ministry of Agriculture, Mechanisation and Irrigation Development, The Zimbabwe SADC secretariat (Ministry of Foreign Affairs), Former staff of the SADC Food Security Unit, farmers Organisations and employees of SADC supported projects.

3.3.1 Sampling

The following methods were used:

Convenience sampling

Judgemental sampling

3.3.2 Justification

Not every person in an organisation can be in a position to give very relevant information especially with regard to research considering that data needs to be credible and reliable sources should be used. The researcher decided to use judgemental sampling technique hence only those who were considered more likely to give the required information are the ones that were also targeted in the survey.

3.4 Type of data used

Qualitative data was used for the study, giving the survey a qualitative nature where questionnaires were considered the instruments that are more ideal to gather that kind of data.

Primary data was used in the study to supplement secondary data in coming up with reliable conclusions. In other words, both secondary and primary data were used though secondary data was just used for the sake of confirming what the primary sources of data would have indicated. These could be reports that show results obtained by field staff that was monitoring an issue related to something that is on the questionnaire.

The research also had a desk study component since most of the SADC secretariat functions are now in Gaborone after the scrapping of the country sector focus approach.

3.5 Data collection instruments

In carrying out this study, the researcher will use various data gathering instruments such as:

- Questionnaires
- Interview guide
- Secondary sources data

The questionnaires were made to be open ended to enable the respondent to explain in detail their opinions with regard to each of the questions under study as the researcher felt that a closed-ended question might restrict the respondent to just picking an option hence no supporting explanation would be there to justify such a choice.

Secondary sources of data within the organisation would help the researcher in having an independent analysis of what has been happening with regard to the performance of the organisation in line with the implementation of the strategies during the given period.

3.6 Reliability, validity and generalisability of data

To ensure that all the data collected would be reliable and valid, the researcher ensured that the data collection instruments were easy to understand and not vague. The researcher has got a control mechanism in which for every response given, it should fall within a category of expected responses. When the respondent gives a response which doesn't fit into the category, then the researcher would be alerted that either the respondent failed to understand the question or the question needs to be rephrased.

To avoid such challenges, all the research instruments were pilot tested before the actual data collection was done. Just a few people were selected using the sampling techniques to be used and data was collected. After the data from the pilot study, the researcher sat then down to revisit the data collection instruments so that they could be revised. Those questions which respondents had difficulties answering, the researcher adjusted so that they have a clear meaning.

The study itself evaluates the data collection instruments as well as the sampling techniques to see the extent to which they are effective for their purposes. An instrument is said to be valid when it measures what it claims to measure.

3.7 Bias

The research can be subject to bias considering that the researcher would be asking some of the people who were participants in the implementation of SADC food security initiatives as most of these would appear to support the notion that it was a great success to the country Zimbabwe and

would give of facts to support that. The researcher was aware of this fact and carried out triangulation to verify the authenticity of the responses.

3.8 Data analysis statistics

The data was analysed using logical content analysis since there was no room to use statistical analysis tools such as SPSS, Eviews, etc. Data was analysed and presented in graphs and tables as well as charts and different figures. For data to be analysed using statistical software, the data needs to be quantitative in nature hence the need to put it into analysis using software. Qualitative studies like this one did not use statistical analysis.

3.9 Ethical Considerations

The researcher put all other issues to do with research ethics into considerations and went on to advice the respondents and all the other concerned stakeholders about the study and the purpose which it serves to play. In actual fact, the researcher had to seek written permission to carry out the study from the University Department Chairperson and that clearance enabled the other respondents to cooperate without any fear or doubts. Some researches infringe on the rights of the respondents to the extent that some have claimed that they have been abused by researchers by being given false information. In some cases, researchers have lied to and went on to publish their researches without the written consent of the respondents when the researches are so sensitive to the researchers socially.

The researcher also elaborated that the research is purely academic and is not going to be used for any other purposes without the written consent of the SADC.

3.10 The pilot study

The researcher pre-tested the questionnaire among a selected group of people to measure its effectiveness. This was done successfully and this helped the researcher to refine the exact issues it was supposed to measure. The pilot study is a mean study that seeks to authenticate the actual study by giving reference to the extent to which it is able to measure what it is intended to measure.

The questionnaires were pilot tested to enable them to establish if they mean what the researcher intends them to measure. A research instrument like a questionnaire might fail to measure an intended subject because the respondent understands the question in a different manner from the intended meaning and this enable the researcher to fine tune such instruments to enable them to be correctly understood by the respondent the way the researcher wants.

This also helped in the sampling technique which resulted in the researcher making a choice to use judgemental sampling since some of the selected sample elements under the used random sampling had no clue on how the organisation has been performing over the period under study. That when the researcher had to use judgemental sampling to ensure that the questionnaire goes to the people who have the capacity to give informed contributions to the study.

3.11 Chapter summary

The chapter looked into the research methodology used in the survey and the research design that the researcher used which included the sampling techniques, data collection instruments among

other issues. The next chapter is going to look into the presentation of research findings as gathered in the study using mainly narratives supported by graphs, tables and charts.

4 CHAPTER IV - DATA PRESENTATION AND DISCUSSION OF FINDINGS

In this chapter, the study looked into the data that was collected and went on to discuss the findings. Data is presented in tables and charts figures and graphs as a way of depicting the respondents' views on various questions from both the questionnaire and the interviews. It is important to note that the study used two data collection instruments, namely questionnaires and interviews and the sample of each instrument is attached at the end of the document in the index section. Interviews were conducted with key informants and their views are included in this section. The chapter starts with presentation of demographic statistics of the respondents. This will then be followed by presentation and discussion of findings on the issue of food security in Zimbabwe and the role played by SADC in helping Zimbabwe achieve her food security objectives. The third section will include views of key informants and the final section will present findings from the desk study.

4.1 Research Findings - Questionnaire

4.1.1 Questionnaire response rate

A total of 30 questionnaires were issued out to a number of targeted individuals and organizations that are knowledgeable with regard to the issue of Zimbabwe and SADC and the food security sector. These included staff from the Ministry of Agriculture, Mechanisation and Irrigation Development, staff at the Food and Agriculture Organization in Zimbabwe, SADC Secretariat office in Harare and governmental and non-governmental organizations that deal with food and agriculture in Zimbabwe.

Out of the 30 questionnaires issued out, only 20 questionnaires were returned in time and completed properly to make them eligible for use in the analysis process. This is a positive response given the time the respondents had to respond. 11 of the 20 respondents were female despite the fact that the questionnaire was sent to an equal number of males and females. The following sections summarise the responses to the questions:

4.1.2 Zimbabwe: a case of mixed fortunes with regard to food security

To some extent, it is true that Zimbabwe has been a case of mixed fortunes in relation to food security since 1980 due to the fact that so many things have been happening over this period notably the serious droughts like the ones experienced in 1983, 1992 and 2002. This has also been mixed with years of bumper harvests in-between the droughts. The respondents were of the opinion that food security is not predictable and is a matter of chance. Like most people, they believe that there are bumper harvests when there is rain and hunger when there is drought. They believed there was not much that one could do to change the effects of the weather according to responses to this question. This can be viewed to reflect the fact that the respondents indicated that any programmes to influence food security were ineffective but the situation was dependant on mother nature. This viewpoint has some truth in it given the fact that farmers in Zimbabwe rely mainly on rain fed agriculture. In such a situation the level of production is dependent on the quality of the agricultural season that year.

4.1.3 Natural disasters as causes for Zimbabwe's food security challenges

There are some respondents who said the food insecurity in Zimbabwe experienced between 1992 and 2012 was as a result of the drought experienced in the country and not due to poor planning in terms of policy issues. However, some argued that poor policy prioritization is the major cause of food insecurity in the country as they site that only 3 major droughts were

experienced in the country from 1992 to 2012 yet the country, especially after the year 2000, food insecurity was very evident in the country, with some regions such as Masvingo and Matebeleland being perennially in need of interventions in terms of food supplies.

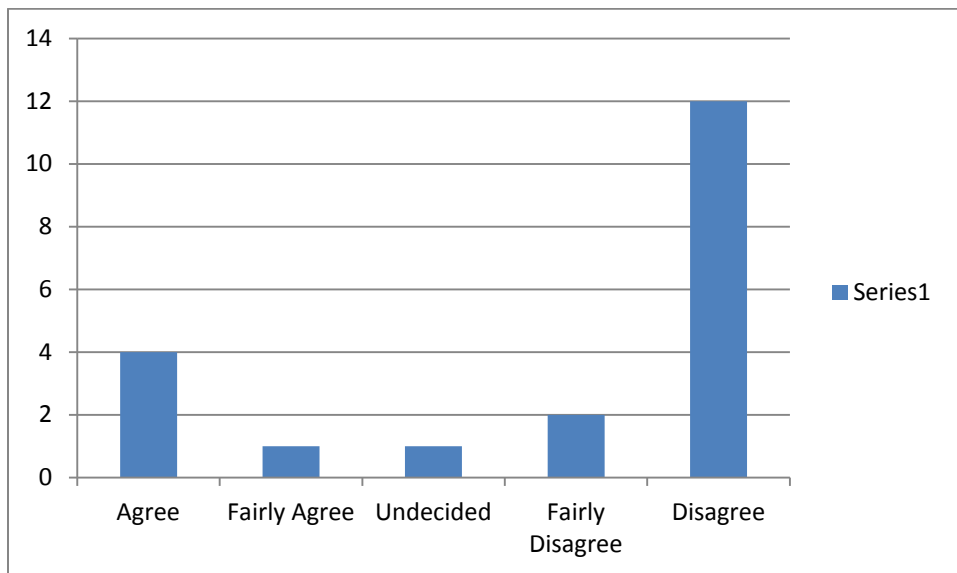


Figure 4:1 - Zimbabwe's Food Insecurity Situation: Droughts are responsible

Source: Study Results 2014

The majority of the respondents believed that Zimbabwe’s food security challenges are due to policy limitations rather than droughts. This was supported by more than half of the respondents while a quarter said that this was due to droughts. This response is supported by the fact that droughts have been a feature of the Southern African Climate for a long time yet Zimbabwe was known as the bread basket of Africa. The current chronic food unavailability at national level can only be as a result of policies. Commercial farms that were responsible for producing most of the food reserves are no longer as productive as a result of the land programme which has replaced productive commercial farmers with inexperienced and ill-equipped smallholder farmers. The

economic melt-doom following the land seizures resulted in unavailability of agricultural inputs and production decreased even for the small scale farmers in communal areas. The closure of industries that relied on agriculture resulted in loss of jobs and this affected food access for the urban population that relied on purchasing food for survival. It can therefore be safely concluded that government policies have been, to a large extent, responsible for Zimbabwe's current state of food insecurity.

4.1.4 SADC's drought-mitigation measures

The same information discussed above supports the fact that the SADC region, despite concurring droughts, failed to plan sufficiently for the droughts that frequently hit the region, especially in Zimbabwe, Swaziland and the Seychelles.

The majority of the respondents strongly believe that SADC could have done better than it has in terms of helping member states mitigate the effects of drought. Responses from the interviews acknowledged the fact that there is more that the region could have done and these are some of the suggestions that the interviewees made.

Because severe drought is often slow in its development, it is relatively easy to tell when one is coming and in areas that are capable, there are several mitigation measures that can be used to reduce the impacts of drought. One of the respondents, from the Ministry of Agriculture, Mechanisation and Irrigation Development, suggested one of the most effective ways of lessening drought effects is through soil and water conservation. By protecting soil, it is better able to absorb precipitation, but it can also help farmers to use less water because it is absorbed and not as much runs off. It also creates less water pollution by the pesticides and fertilizers present in most farm runoff.

Drought mitigation should be one of SADC's priority areas however some drought mitigation strategies, such as building dams, can lead to displacement of people and farmland and can alter the landscape forever. Others require human behaviour to change. Many drought mitigation strategies are expensive, and taxpayers are the ones who pay the bill for their implementation. It's important that SADC and its citizens can judge the costs and benefits of different drought mitigation strategies so they can support responsible planning for protection from drought.

4.1.5 SADC Assistance to Member Countries in Fighting Food Insecurity

SADC has not been very successful in assisting its members to combat drought as evidenced by the recurrent food shortages that accompany drought in Zimbabwe and the region as a whole. This is also seen by the number of food and drought relief organization operating in the region and the kind of help they have been extending to the region and its population. The respondents totally agree that SADC has failed in this scenario and in the near future, it seems there is little hope about the value that SADC can bring to its member states in order to promote food security. The following are the views of the respondents on factors that are important to Zimbabwe's food security.

4.1.6 Importance of financial support to Zimbabwe's food security initiatives

It is generally acceptable as a normal and common excuse in Africa that most things don't work because of limited financial support. In this section, the study sought to assess the opinion of the respondents on the impact of financial resources at national level on food security.

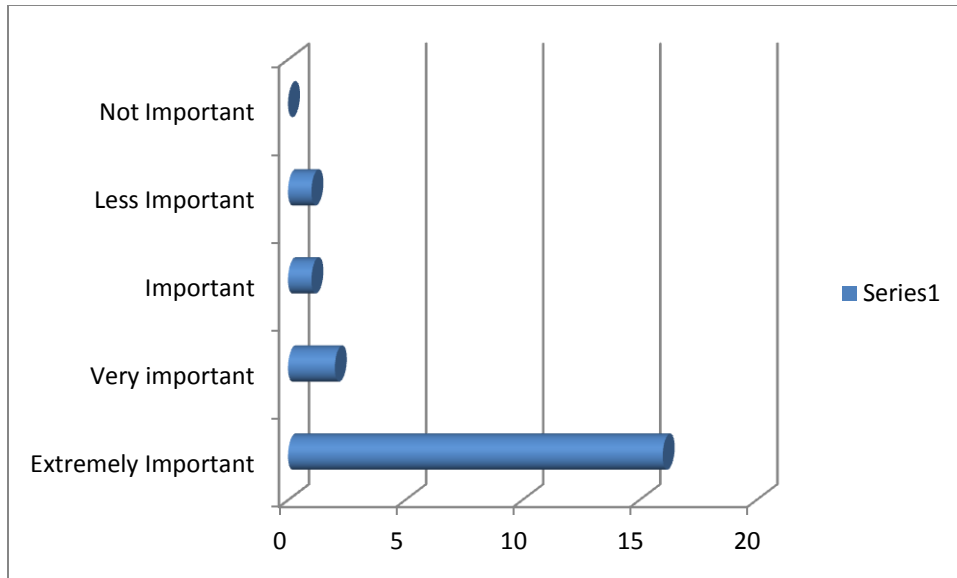


Figure 4:2 - Importance of Financial Assistance to Zimbabwe’s quest for food security

Source: Study Results 2014

The majority of respondents said that financial assistance is critical to Zimbabwe if it is to realise its quest for food security. Very few disputed that as it is a fact but interview responses indicated that though finance is very important, it is not the only thing that the country needs in order to realise its food security goal. According to FAO (2012) world food production has to increase dramatically if it is to keep up with population growth and this can only happen if there is increased investment in the supply side of food. Most of the population growth is expected to take place in Africa and fortunately Africa is also the place with the largest potential for increased production. Africa, including SADC and Zimbabwe also lacks the infrastructure, the expertise and the resources required to increase production. SADC therefore has to find the necessary inputs to improve agricultural production if it is to help Zimbabwe achieve its food security goal. Money to fund this increased production can come from taxes or from

development partners since the SADC tax base is very poor. Innovative ways of increasing production have to be devised by SADC and its member states.

4.1.7 The importance of technical support to Zimbabwe in achieving food security

The interviews rated technical support as very important in Zimbabwe's quest for food security. Technical assistance has been provided by SADC in some areas in particular the early warning system for predicting food shortages and the trans-boundary disease management programmes. The improvement of a country's capacity to increase agricultural productivity is essential for sustained food security. Zimbabwe has a substantial pool of trained agriculturalists and every year more are produced from the country's universities and agricultural colleges. These individuals contribute to research and support agriculture through education, extension and entrepreneurship. Agricultural extension provides non-formal training for farmers and contributes to increased agricultural production and food security. Extension services can bridge the gap among farmers with little education especially women whose education levels and literacy rates fall well below those of their male counterparts. Improving technical capacity of support services leads to improved farming methods and improved productivity which in turn leads to improved food availability.

4.1.8 The importance of capacity building for small scale farmers

In many cases, small scale farmers do help a lot in providing enough cover for the country in terms of food security and having capacity building is an important requirement to both Zimbabwe and SADC as the responses from the study show:

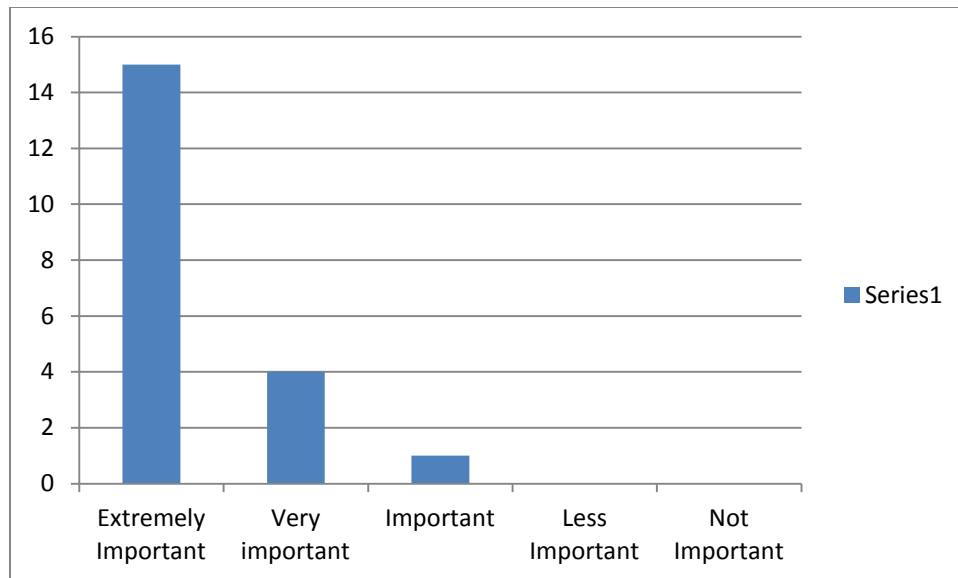


Figure 4:3 - Importance of capacity Building for farmers

Source: Study Results 2014

The majority of the respondents indicated that it is extremely important that small scale farmers receive capacity building if the country and the entire region are to realise food security. Over three quarters of respondents said it is extremely important that farmers receive capacity building. Capacity building activities for farmers in SADC and Zimbabwe vary considerably. Some interventions focus directly on teaching farmers through extension services that in some cases can be viewed as top-down with extension workers having knowledge that they impart to farmers. In the case of Zimbabwe this knowledge comes from research through the country's research stations and then disseminated to farmers through extension services. If used correctly, this knowledge can result in increased production. Extension services can be provided by the government, farmers unions or by the private sector in cases where farmers are contracted to grow certain crops for a particular buyer. The buyers provide extension services in order to ensure that farmers realise the yield levels that they expect. In Zimbabwe contract farming is

common in the production of soya bean, sugar cane and barley among the food crops. Tobacco and cotton are also grown on contract and provide valuable income for small holder farmers who can use the cash to access food. Smallholder farming in southern Africa is therefore both an effective subsistence strategy and a potential income-generating activity enabling poor farmers to purchase additional food. Apart from traditional extension, farmer capacity building can also include farmer field schools and demonstrations and these are more participatory in nature and not just top down. Another aspect of these capacity building interventions relates to the training objectives: there is a clear distinction in the literature between those courses which focus on aspects of farm management and those that are directed to improving agricultural practices and increasing yields (for example, training on natural resource management; integrated pest management; conservation agriculture). When designing capacity building for farmers SADC and the national governments must be clear on what they want to achieve before spending scarce resources on farmer capacity building programmes. This is an area that respondents felt was critical in improving food security and SADC needs to focus on this area by facilitating development of new innovations in smallholder agriculture.

4.1.9 Importance of market linkages

Many respondents said that this was an important aspect as access to markets allowed farmers to sell their excess produce and cash crops. Income contributes to sustainable food security as it can be invested and later liquidated to provide food.

Contract farming is one way of linking farmers to the market and if done properly can result in a win-win situation for the farmer and the company contracting them. In this arrangement farmers have access to inputs and training and have an improved chance of realising a good harvest. In

the 2010/11 agricultural season, the FAO in Zimbabwe implemented a contract farming project, benefiting 3 797 smallholder farmers (FAO, 2012). Under contract farming, eligible suppliers select farmers to grow crops through a contractual agreement. Under the agreement farmers sell their produce to suppliers who then deduct the cost of the inputs. Contract farming does not always work to the advantage of the farmer and sometimes results in farmers being taken advantage of. Farmers sometimes do go into the arrangement without enough knowledge and unscrupulous suppliers rip them off by overcharging on inputs and interest and undercharging on farmers commodities. The FAO experience has been a good one because the organisation acted as a middle man.

4.1.10 Challenges faced by SADC countries in implementing food security

To some extent, the regional bloc faces a number of challenges in trying to implement programmes towards food security. The respondents were requested to assess the following challenges and rate how much of a challenge they were to SADC: Conflicting interests, fraudulent practices, incompetent teams, information management and poor infrastructure. The respondents identified poor infrastructure as the most pressing of the five challenges presented in the questionnaire. Most identified the poor state of roads as a hindrance to movement of inputs to the farm and of farm produce to the market. Both have an adverse effect on food security in that they affect food availability and food access. In cases where people require access to food, bad roads hinder transportation of food. Poor infrastructure also hinders trade in agricultural produce within SADC resulting in nations that are facing shortages being unable to access food from those that have excess produce. Information management and incompetent teams were not rated as important challenges to food security by many of the respondents. Results from the desk study

support the fact that information management is one of the areas in which the SADC secretariat is very strong having set up early warning systems that are able to produce timely and accurate information. Flow of information between member states and the SADC secretariat on other food security issues other than early warning system is not efficient because of the poor capacity of national SADC secretariats. However, flow of information is not a major challenge for SADC according to the survey. Another challenge that was identified as not being important is incompetence among the SADC staff. This may have been an unclear question or the respondents had no way of assessing the competence of the teams since the team members are few resulting in limited contact with most of the respondents. Fraudulent practices were also rated as not important as a challenge in food security. Conflicting interests was rated as an important challenge by an equal number to those who rated it as unimportant.

Support given by SADC to member states

Respondents were asked to rate the support given to five sectors that have a bearing on food security by SADC to Zimbabwe and other member states. The sectors are Irrigation development, research and development, market linkages, infrastructure development and technical expertise. SADC has done well on research and development with most of the respondents rating its performance in this area as excellent and others as good. This is supported by the desk study which revealed that SADC has undertaken numerous studies and developed many policy documents that lack funding for implementation. Another area where SADC was assessed as good was in the area of technical expertise. Respondents rated this highly despite the fact that SADC is under staffed in relation to the number of countries it has to cover and the number of thematic areas in which the member states need support.

SADC performance on irrigation was rated as poor to average by the majority of respondents. Approximately one fifth of the respondents felt SADC had done well in supporting development of irrigation in member states. However results of the desk study show that the SADC secretariat has done little to develop irrigation. A Regional Strategic Action Plan III has been developed to guide the implementation of water projects in SADC including water for irrigation for the period 2011 to 2015. The plan included projects from member states and was used to source for funding from donors. Unfortunately the plan includes water projects for hydro power and other uses other than irrigation and these are dominant in the plan. The Zimbabwe projects included in the plan are the Bulawayo water project, The Batoka Gorge Hydro Power project and the Limpopo Basin water monitoring project (SADC, 2011). None of these will provide water for irrigation which goes to support the assertion that SADC has done little to support irrigation development despite the region and Zimbabwe being drought prone and in desperate need of irrigation to boost crop production and increase food availability.

Respondents also ranked SADC input on infrastructure development very poorly with some rating it average. SADC has developed the regional power pool and Zimbabwe is one of the 12 member states that had been connected to the grid by 2012 (SAPP, 2013). Through this project SADC has contributed to the improved food security in Zimbabwe as it helps with assurance of power availability which can be used in irrigation to support food production and in industry to create employment and improve food access. SADC has in its Regional Infrastructure Development Master Plan (2012) plans to upgrade the Beitbridge – Chirundu highway as one of the major transport corridors in the region. Other corridors are also earmarked for development but the major challenge is finding investors to fund these projects. The SADC secretariat has done well to produce an infrastructure plan that can be used to source for funding.

Overall, the kind of assistance given in most aspects is rated poor by the respondents and it could justify why the SADC region remains very prone to high food insecurity and why SADC has not has a major role on Zimbabwe's food security.

4.2 SADC and Food Security - Desk Study

This section gives the results of desk research conducted on SADC reports and on reports from other institutions.

Zimbabwe's quest for food security takes place in an environment characterised by a number of development problems including poverty, gender inequity and high HIV/AIDS prevalence. These same problems also exist in the rest of SADC and any development efforts taken by SADC have to take place in this environment. Some of the factors that impact on food security as extracted from the desk study are discussed below:

4.2.1 Poverty

About 40 percent of the region's population live in extreme poverty as reflected in poor social indicators including high levels of malnutrition, illiteracy, unemployment, underemployment, declining life expectancy and unsatisfactory access to basic services and infrastructure. The region has the highest proportion of people subsisting on less than US\$1 a day in the world. Poverty limits the ability of farming households to invest in productive assets and agricultural technologies, resulting in insufficient agricultural productivity. In addition, Southern African and Zimbabwean importers are unable to profitably bring in the food needed to make up national food deficits, simply because poverty is so great that insufficient demand is expressed through the market system.

The region registered positive growth rates during the late 1990s however, the pace, consistency and level of real economic growth in the region continues to fall behind annual population growth, estimated at 3.5 percent. Looking at a number of indicators, there is a clear indication that poverty is indeed a challenge for the region. When considering the population living on USD 1 per day, on average in SADC, the population amounts to 43.6% of the total population. The population that is undernourished, that is it does not have access to nutritious foods and therefore is underweight, accounts for 36.1%. This average figure obscures some of the highest figures of undernourishment where 6 countries have figures in the range of 44 to 72% (SADC, 2008). These are really high figures which indicate the gravity of the poverty problem in the region. Life expectancy has declined substantially in many countries in SADC with the lowest being 33years and the highest 72 years. Only 7 countries have life expectancy of above 40 years. This decline in life expectancy emanates from poverty and has been exacerbated by the HIV and AIDS pandemic.

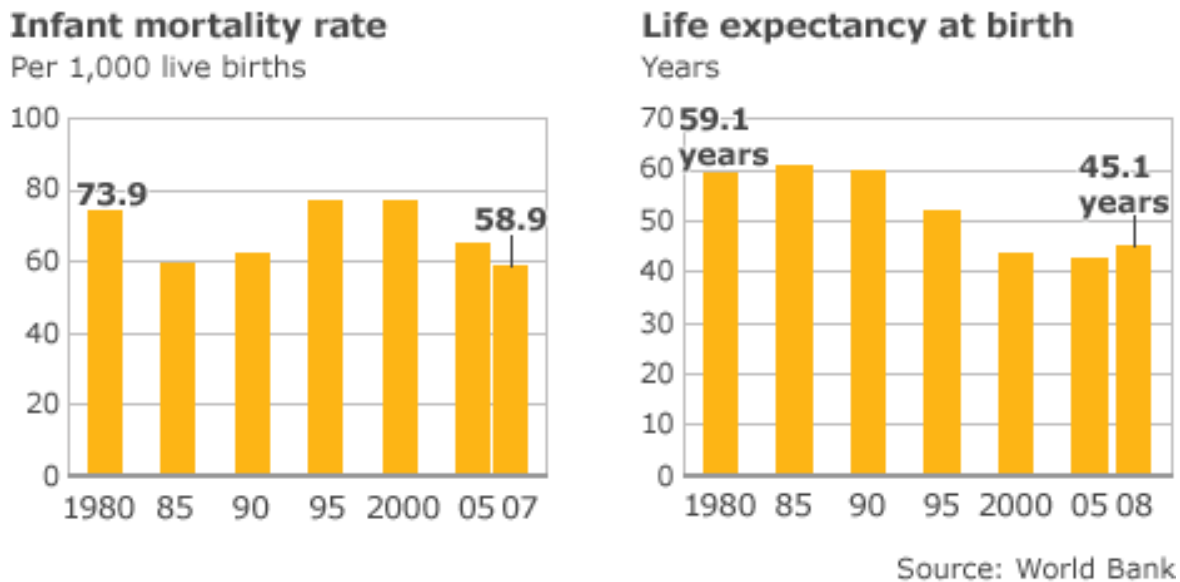


Figure 4:4: Zimbabwe Life Expectancy:

These figures tell a story about how deep-seated poverty is in SADC and it makes it imperative that programs should be designed to deal with poverty at both regional and country level. The World Health Organisation (WHO, 2014) estimates life expectancy in Zimbabwe at 60 for females and 56 for males in 2012, which shows an improvement in this poverty indicator from the low levels at the peak of the AIDS related deaths in the mid- 1990s .

In October 2006 the SADC Summit held an Extraordinary meeting to discuss the progress of regional economic integration in SADC and noted that although the focus of the organisation is on trade integration, developmental integration based on the principles of balance, equity and mutual benefit would continue receiving attention. Consequently SADC in its wider development framework resolved to focus on areas that have a direct impact on poverty eradication such as infrastructure and services, agriculture and food security, social and human development including gender equality, combating of HIV & AIDS. A poverty and development seminar was held in 2008 in Mauritius where the Heads of State and Government put food security as a top priority for development and resolved to; “achieve food security by setting up a Task Force of Ministers of Trade, Agriculture and Finance to encourage regional collaboration and by sustainably improving the production capacity and productivity, facilitating cross border and internal food flows based on improved infrastructure and distribution networks”

The SADC RISDP singles out poverty eradication as the overarching priority of regional integration in SADC. As stated above poverty is a determinant of food insecurity and addressing poverty will ultimately impact on food security. Although other SADC programmes have an impact on poverty the Regional Poverty Reduction Framework targets poverty reduction specifically. The Regional Poverty Reduction Framework aims to elaborate and translate the

RISDP's priority intervention area on poverty eradication into an implementation framework. At regional level SADC has played a role in terms formulating policies that are favourable towards food security and eliminating food insecurity in member states.

4.2.2 HIV/AIDS

HIV prevalence is high in the region, being as high as 20% in some countries but at around 13.1% in 2011 for Zimbabwe (United Nations, 2013). HIV/AIDS has a significant negative impact on food production as it increases morbidity resulting in people being too weak to work. It also diverts resources that may be used for household food towards medical costs. Family members that are supposed to be working in order to secure food divert their energies towards care giving resulting in reduced productivity. Food insecurity forces girls into high risk behaviours such as sex work as they try to earn money to provide for their families. All these factors are present in the SADC and Zimbabwe environments and any programmes to reduce food insecurity have to take into effect impact of HIV/AIDS on these societies. While HIV/AIDS fuels food insecurity, food insecurity in turn worsens the plight of those affected by HIV and AIDS. Families that have lost senior family members lose knowledge in terms of coping mechanisms in times of famine and this leaves the younger members vulnerable and likely to succumb to the vagaries of food insecurity. An important skill is knowledge of wild foods and how to prepare them, which is handed down from mother to daughter (de Waal & Whiteside, 2003). If young women do not have this key knowledge, they may go hungry because of their ignorance. This is particularly true in the drier areas of Zimbabwe where families can subsist on roots and tubers in times of drought and famine. Wild fruit and plants make a vital contribution to food security and knowledge on their use and preparation is important to food availability and food access.

The SADC regional intervention on HIV/AIDS is guided by the Maseru declaration and covers the reduction of HIV incidence among the most vulnerable population subgroups; mitigating the socio-economic impact of HIV and AIDS; harmonising policies, strategies and legislation relating to HIV prevention, care and support and treatment; and resource mobilisation. Documents to guide the member states in terms of policy formulation and implementation strategies have been developed and are available for use by member states. These include an HIV/AIDS prevention strategy; orphans, vulnerable children and youth regional strategic framework and minimum standards for prevention of mother to child transmission and HIV testing. Other standards also cover HIV in the military and laboratory testing standards.

According to SADC these standards have sharpened the HIV/AIDS response in the region and have contributed to reduced HIV incidence in the region and in Zimbabwe in particular. Zimbabwe has seen its incidence of HIV infection fall from an all time high of 24% in the mid 1990s to the current 13%. SADC was awarded funding by the global fund for cross border HIV and AIDS activities. This programme targets border posts, truck drivers and sex workers. The programme is visible in Zimbabwe especially at Chirundu and Beitbridge border posts.

In the area of HIV and AIDS, SADC has acted as a conduit for funding from donors and member states. At present SADC has developed a HIV and AIDS fund and spearheaded the agenda on research. This fund receives funding from donors and member states. Instruments developed under this fund are available for use by member states and each member state should take the initiative to make use of this resource so that the population's food security does not continue to be negatively impacted by this pandemic.

4.2.3 Gender

Various studies have shown that the division of labour is generally more in favour of men than women. In addition, a result of limited resources is that females are often denied equal access to education, training and skills development opportunities. Females therefore become likely to succumb to early marriage, early pregnancy and early motherhood and other anti-social behaviours like sex work. Decision making at all levels of society from household, to community and national level is dominated by males, a situation that can have negative effect on food security as males are more likely to favour activities that do not necessarily promote food security especially at household level. Many customary and traditional practices still limit the allocation of capital and assets only to males as a result females and female headed households are less food secure than the male headed ones. In Zimbabwe the issue of debt servicing has meant that the government is left with few resources to invest social services like education and health. Females are therefore more affected by males in such a situation and have less access to education.

The implementation of gender related programmes is guided by the SADC Protocol on Gender and Development from 2008 and facilitated by the SADC Gender Unit within the Secretariat. The SADC Gender Programme spearheads regional initiatives to ensure that a gender perspective permeates the entire SADC Programme of Action. A “SADC Regional Gender Policy” was adopted by the Council of Ministers in 2007 to provide guidelines for institutionalising and operationalising gender as a key development strategy for achieving gender equality, equity and women’s empowerment within SADC Member States and the region as a whole. Zimbabwe, as well as the majority of the SADC Member States, has developed National

Gender Policies and some are reviewing their policies to harmonise them to the regional priorities. In 1997 Zimbabwe signed the SADC Declaration on Gender and Development as well as its addendum on the Prevention and Eradication of Violence against Women and Children. Despite the significant progress made in the area of policy and legislation reform, the legal, socio - economic and political status of women remains relatively low in Zimbabwe. Zimbabwe is a highly unequal society with women having a lower status than men terms of access, control, ownership of economic resources and positions in decision making processes. The SADC gender protocol has been responsible for the increase in women representation in politics in Zimbabwe though this is still below the 50/50 gender parity in the SADC Protocol on Gender. However women's representation in Parliament more than doubled from 17 per cent following the 2008 general elections, to 35 per cent in the elections of July 2013. This status means that females are underrepresented in national decision making and this, coupled with the traditional practices means females not in control of their food security situation and are more vulnerable to food insecurity than their male counterparts.

Through the SADC regional gender policy SADC has been promoting gender equity through developing regional gender policies that include strategies for mainstreaming gender in development and for promoting women participation in decision making. These policies are available for member states to use in order to promote the interests of females and increase their participation in the economy. Increase in women access to resources and decision making reduces the imbalance of food availability along gender lines. Food access by females at household levels is also improved as society becomes aware of the need to treat females in a fair manner.

4.2.4 Instability

The Pockets of civil strife and wars in a few member States, trade in illicit drugs and the spread of the HIV/AIDS pandemic further compound the problem of poverty and food insecurity in the region.

In Zimbabwe the 2008 harmonised parliamentary and presidential elections were held in an atmosphere characterised by political violence and intimidation of voters. The situation in the two years preceding the elections was such that most rural families were unable to go about their day to day farming business thereby affecting food availability at household level. In areas that required food assistance, food security for some families was further affected by the fact that food aid was distributed along party lines. Those families that were viewed as belonging to the wrong party were denied food aid and could not have access to the food although it had been made available by a number of donors. In May 2007, SADC being aware of the situation of economic and political instability, in both urban and rural areas, mandated former South African President Thabo Mbeki to negotiate a political agreement between the three main political parties in Zimbabwe at that time which were ZANU-PF and the two factions of the Movement for Democratic Change (MDC). The mediation process had three main goals; to get an agreement on the decision to hold harmonised presidential, parliamentary and local government elections in 2008; agree on measures to take in order to ensure the results of the elections would be viewed as fair, be accepted by all parties; and, agree on the measures that had to be implemented to create the climate that would facilitate such acceptance. The three political parties reached an agreement, with the help of the SADC facilitator, which created an atmosphere for the elections to be held. The results of the first elections necessitated a runoff between the two major parties and the interim period between the elections and runoff was further marred by even worse

political violence. This wave of politically-motivated violence left hundreds of MDC supporters dead and many more injured. President Mugabe declared himself winner although SADC had declared that the runoff was neither free nor fair. SADC and the AU then facilitated the formation of the Government of National Unity (GNU) through the signing of the Global Political Agreement. This move by SADC helped bring peace and stability to Zimbabwe and dramatically improved food access especially for the urban population. The GNU abolished the Zimbabwe dollar and put a stop to the hyperinflation that had crippled the Zimbabwean economy. Food stuffs returned to the supermarket shelves and people were able to buy food items which had become unavailable. Although SADC played a very important role in stopping the violence of this period it did not put in place a mechanism to ensure that the parties to the agreement abided by the terms of the agreement. This resulted in an unstable government which was unable to put in place policies for sustainable solutions to Zimbabwe's quest for food security.

4.2.5 Natural Disasters

The region as a whole is susceptible to highly variable climatic conditions rendering the agricultural sector and food security at risk of natural disasters. Droughts are the most serious risk due to unpredictable levels of rainfall and inadequate irrigation. Natural Disasters, in particular droughts and floods, continue to undermine efforts to enhance food security in the region and in Zimbabwe in particular. The adverse effects of drought are compounded by falling international commodity prices, in the face of fluctuating production and trade patterns. Droughts are now an integral component of peoples' livelihood processes and yet for a variety of reasons, member states have been slow to put in place measures to mitigate the effects of these disasters

in their countries. SADC has put in place the Regional Drought Mitigation Programme which has a positive effect on Zimbabwe's quest for food security. The overall aim of this intervention area is to reduce the adverse impact of natural and man-made disasters through improved forecasting, prevention, and recovery. Every year some sectors of the population in the region become vulnerable to food insecurity due to one or several of these disasters.

With the assistance of SADC, 12 SADC member states have established National Early Warning Units (NEWUs) to collect analyse and disseminate early-warning information at country level. Early-warning reports have been developed and used by various stakeholders including the Zimbabwe government, the SADC Secretariat, FAO and WFP in a number of countries. It is thanks to these units that food aid appeals are made in time for donors to mobilise resources before people starve to death. Another SADC programme that has been instrumental in forecasting food shortages is the Regional Vulnerability Assessment Analysis (RVAA) programme which is managed by the Regional Vulnerability Assessment Committee (RVAC) and its national structures. The RVAA was formed after SADC suffered a major drought in 2002. The persistent household vulnerability to food insecurity and poverty arising from weather, HIV/AIDS pandemic, economic and other shocks, brought about recognition of the need to improve the region's capacity to forecast, assess and respond to food insecurity and vulnerability. The National Vulnerability Assessment Committees (NVAC) of the RVAA programme has provided early-warning information on number of populations vulnerable to food insecurity and poverty to enable timely intervention. These are active in 8 member states including Zimbabwe where it is run by the Ministry of Agriculture, Mechanisation and Irrigation Development. The Zimbabwe NVAC is made up of the Ministry of Agriculture, Mechanisation

and Irrigation Development, FAO and NGOs involved in the food security sector. This committee is also responsible for coordinating donor assistance in addition to collecting data on vulnerability. Judging by the impact of the RVAA programme through the work of the NVAC, SADC has had a positive impact on Zimbabwe's food security.

4.2.6 Environment

The SADC region is endowed with abundant natural resources that include wildlife, water sources and fertile soils all of which, if properly managed can contribute to food security for the region's population. High population densities on fragile lands, inappropriate and unsustainable farming systems and conservation technologies continue to cause environmental degradation. Most soils in the region have been overused and are now depleted and the agricultural potential is fast deteriorating. It is essential that SADC member states collaborate at regional level in the sustainable use of shared natural resources and adoption of appropriate conservation technologies. SADC has facilitated the development of Regional programme on Reduced Emissions from Deforestation and Forest Degradation (REDD) and the Biodiversity Strategy both of which promote preservation of the environment which is the main source of food and food security. The SADC secretariat has also focussed on environmental awareness as some of the damage that has occurred in the region is due to ignorance and lack of awareness. To this end the SADC secretariat has facilitated the establishment of the Regional Environmental Education Programme (SADC REEP). The REEP based at the Wildlife and Environment Society of South Africa (WESSA) in Howick, KwaZulu Natal, South Africa, facilitates environmental Education in the region. The overall objective of the programme is to enable environmental educationists in the SADC region to strengthen environmental education processes. The programme has been

very successful and received regional and global recognition for its efforts. The programme received the Environmental Education Association of Southern Africa (EEASA) Presidents Award for its achievements and in 2009 the programme's contribution was recognised globally when it was selected by UNESCO as an international model of best practice in Environmental Education. The programme is open to member countries and is supported by the Swedish International Development Cooperation Agency (Sida). Education on the environment augurs well for sustainable food security as it contributes to the management of the resources on which food production depends. Through this project SADC has contributed to food security through preservation of the environment and the level of impact can only be determined by extent to which Zimbabwe makes use of the project benefits. Not much more has been done by SADC in the area of environmental conservation at regional level and this reduces its impact on Zimbabwe's quest for food security.

With the advent of climate change, water is increasingly becoming scarce in the region, and this significantly constrains agriculture and livestock development. There is an urgent need for increased regional cooperation to regulate the use of major inland water bodies, adopt drought management strategies, assess groundwater resources, as well as to rehabilitate small-holder old irrigation schemes.

Lack of security of tenure leads to poor management of communally owned land resources, thereby undermining the food security efforts in the region. The land reform programme has availed land to people without secure tenure and this has led to indiscriminate cutting down of trees and land degradation as farmers feel they can be removed at any time. Poor tenure arrangements therefore exacerbate food insecurity by not giving farmers incentives to preserve

their land. SADC has not had specific programmes to promote security of tenure for farmers who are the primary food producers. The following are some of the individual SADC programmes and their impact on food security in SADC and Zimbabwe.

4.2.7 Food Security policy

SADC through its highest decision making body, the summit, has since formation prioritised food security as one its major development objectives. For example the Dar es Salaam Declaration on Agriculture and Food Security of 2004 identifies a number of priority areas on which SADC countries should focus in the short term and medium-to-long term to achieve food security for the region. The short-term measures include availability and access to key agricultural inputs for farmers, consisting of improved seed varieties, fertilizers, agrochemicals, tillage services and farm implements. At this summit it was also agreed that member states will allocate at least 10% of their national budgets to agriculture and rural development in order to boost food security. This was in line with African Union agreements. Malawi was the first country to abide by this agreement and the bumper harvest in that country in 2008 was accredited to this policy compliance. The Zimbabwe 2013 budget only allocated 4% of the national cake to agriculture and food security which falls short of the Dar-es-Salaam and Maputo declaration target of 10%. However the minister in his budget presentation noted the fact that Zimbabwe was falling short of the SADC target which shows that SADC has been effective in setting targets and ensuring that countries commit themselves to meeting these targets. Zimbabwe is striving towards this target although falling short due to limited overall budget financing which results in a large percentage of the budget going towards social services.

4.2.8 Agricultural Management Information Systems

Agricultural information systems are crucial for the management of cross border issues. SADC developed an Agricultural Information Management System (AIMS) in 2007 to lead the collection, dissemination and storage of information on trade figures, disease outbreaks, food security, environment, etc; and a Livestock Information Management System (LIMS) was developed to generate data on animal health, production and marketing from the Member States. AIMS has received support from FAO and FEWSNET. AIMS covers information on rainfall, crop development, price monitoring and harvest forecasting among others. It also encompasses information for preparedness and disaster risk management leading to national contingency planning, safety nets and social protect design and management. The other programme of LIMS has helped in collecting animal production, animal health and animal disease control. Through this programme SADC has trained the Zimbabwe department of Veterinary services in the use of LIMS. Two major programmes were facilitated by SADC under this component and these are the SADC Foot and Mouth Diseases Project (SADC FMD) – funded by European Union; and the Strengthening Institutions for Risk Management of Trans-boundary Animal Diseases (TADs) – funded by African Development Bank. The FMD project had a particular focus on Malawi, Mozambique and Zimbabwe because of the high likelihood of outbreak in these countries. Zimbabwe’s once efficient FMD control system disappeared during the economic meltdown as the government failed to fund activities associated with the control. The SADC assistance is helping Zimbabwe to bring the situation under control with the hope of the country resuming export of meat products to the European Union. The objective on the part of SADC was to contain the spread of FMD in the three countries and to prevent FMD from spreading to other countries in the region. The project included provision of vaccines and control of animal

movement to limit interaction between livestock and wildlife. AIMS also encompasses early warning technology as well as market information activities for farmers. An example of such a project is the Zambia National Farmers Union's SMS Market and Trade Information Service. This system enables farmers to access cost-effective, actionable and reliable agricultural marketing and trade data that links farmers with local and national traders and processors. Since system was launched in 2006 farmers and traders are able to access current prices of key commodities by named buyers. SADC should assist small scale farmers in Zimbabwe and the rest of the region to use technology that is available at farm level to improve their production and thus improve food availability and access.

Collection of agricultural management information is faced by problems of capacity at the very local level. Some of the information is produced at farm level and requires that farmers record this information. Since some of the small holder farmers are illiterate this leads to poor quality and inaccurate information being reported and consequently decisions may be based on inaccurate information. The information may also not be timely produced and disseminated making it irrelevant for decision making purposes.

4.2.9 Regional Programmes on Natural Resources

Preservation of the environment is essential for sustainable food security especially in Southern Africa where the majority of the population makes a living from exploitation of natural resources. The RISP indicated that programmes on natural resources management were to be developed and implemented but none have been implemented in Zimbabwe despite destruction of forests being a major problem in the region and in Zimbabwe in particular. Environmental issues are trans-boundary and in most cases are more effectively dealt with at regional and

international levels. A number of frameworks, guidelines and project proposals have been developed for use by member states including the following: protocol on forestry, protocol on shared water courses, Sustainable Groundwater Management in SADC Member States Project and SADC Simplified Environmental Management Framework & Management Plane & Resettlement Policy Framework. SADC also developed a Regional Biodiversity Strategy to provide a framework for cooperation among member states, act as a forum for cooperation with donors and to provide guidelines to build the region's capacity to conserve its biodiversity. Biodiversity is necessary for sustainable food security as it helps in maintaining ecosystem balance. These frameworks and strategies are there for member states regulate member states' interaction with the environment and member states must take the initiative to use the relevant documents to their advantage.

4.2.10 Control of Pests

The region has become susceptible to increasingly intense and frequent pest and disease outbreaks, droughts and floods. Crop and livestock disease and pest outbreaks, continue to play havoc with food security prospects in the face of failure to implement appropriate measures.

SADC recognises this threat and has carried out advocacy work on the importance of pest control including control of the quelea birds and army worm. A handbook to help in the identification of pests has been produced and distributed to all member states including Zimbabwe. This handbook is being used by farmers but this researcher could not locate it at the Zimbabwe Farmers Union. This means that it is not widely available especially for use by the people who need it, the Farmers.

A network for the surveillance of migratory pests was developed with the aim of increasing the capacity of Member States to manage migratory pests in a coordinated manner. To support the operations of this network, the Directorate carried out capacity building activities for surveillance and reporting of migratory pests. In this aspect SADC has contributed to control of this threat to food security in Zimbabwe.

4.2.11 Land Tenure

SADC recognises the importance of land ownership and use and developed a Land reform Facility to assist members in drawing up sustainable land programmes. This facility has been established by SADC with assistance from the United Nations Development Programme (UNDP). The design of the facility is based on a demand assessment from member states, which highlighted a range of land related issues, many of which were common across multiple countries. The facility has a number of programme areas which are (i) Land Policy Formulation and Implementation, Land Information Management, Capacity Building and research. These programme areas cover a diverse array of activities such land tenure, land redistribution, land use planning, institutions, documentation, study tours, training of civil society on land policy issues among others. This initiative is particularly important in the SADC region given the experience of Zimbabwe. Zimbabwe may even be able to make use of the facility to regularise tenure for the resettled farmers. The facility currently falls under the Food, Agriculture and Natural Resources (FANR) Directorate of the SADC Secretariat.

4.2.12 Irrigation

According to FAO (Food and Agriculture Organisation, 2002) Irrigated agriculture has been an extremely important source of food production over recent decades the world over. The highest

yields from rain fed agriculture are half those of highest yields from irrigated land. According to the same source even high input rain fed agriculture is less productive than low input irrigation. This demonstrates the difference that availability of water can make to production and food security. Despite the region being drought prone and SADC recognising irrigation development as one of avenues for securing food availability, no regional irrigation projects have been implemented. FANR directorate, with the participation of stakeholders, has undertaken various activities, including advocacy, seminars, and workshops to develop appropriate policies to increase agricultural irrigated land and sustainable use of water resources. The directorate even went as far as designing irrigation projects, an example being the middle Zambezi sub-basin project, which covered areas in Botswana and Zambia and also parts of Sengwa and Sanyati tributaries in Zimbabwe. However the project never got off the ground because member states decided to tackle issues on a country level.

4.2.13 Increasing Access to Food

The level of household income and guarantee of stable food prices are important in ensuring households can afford to purchase food thus become food secure. SADC is supporting initiatives that contribute to increasing trade within SADC and between SADC and other regions. Other factors also affect trade in food crops and these include lack of capacity to meet phytosanitary standards, and other tariff and non-tariff barriers including rules and regulations governing trade in agricultural products. SADC is working to ensure standardisation of agricultural products so that it meets EU standards to enable produce from the region to qualify for that market. This process requires training in the requisite production methods and hygiene standards. So far no major deals have been struck by Zimbabwe and these major markets based on SADC's efforts.

Food access is also affected by the existence of road and railway infrastructure to transport inputs to the farm and farm produce to the market.

4.2.14 Food safety

Harmonised sanitary and phytosanitary standards have been developed by the secretariat and these are necessary to ensure food safety for the local market as well as quality assurance for the export market. According to the SADC RISDP SADC has conducted training for member states in enforcing some of these standards from the lowest levels of the value chain but this researcher could not identify any of the trainees in Zimbabwe. Accessing export markets improves income for farmers who make the majority of SADC citizens and this improves their ability to purchase food.

The importation of genetically modified crops has been linked to food safety by some countries in the region and Zimbabwe is one them. This means that these countries cannot import maize from those countries that are using this technology. South Africa is the only country in SADC and Africa as a whole that has fully adopted GMO technology and has the largest hectareage under GMO crops. While South Africa is pushing ahead with commercial GMO crops, other southern African countries shun them since the technology is still under experimentation and therefore, restricted use. GMO crops can contribute to improved food security but at present SADC has not made a policy position on their production and trade within the region. The decision has been left to national governments.

4.2.15 Disaster Preparedness for Food Security

At the regional level, SADC FANR has in some cases implemented programmes and projects aimed at early detection, early warning and mitigating the disaster effects. The SADC region continues to face a multitude of disasters which have a negative effect on food security every year. These disasters can be natural or man-made ones. The disasters include droughts, floods, cyclones, wild fires, and pests and diseases. Man-made disasters include mostly policy-induced disasters related to food and agricultural input prices as was the case with Zimbabwe land reform. Other man made distress are civil unrest, and human-wild life conflicts.

One of SADC's best areas of performance has been in the areas of information generation and early warning through the Regional Early Warning System, the Regional Remote Sensing Project, Data Management and Analysis Projects. The REWS provides information of crop forecasts and help anticipate food shortages and gives authorities time to mobilise food aid.

The Regional Food Security Training Programme has focused on building capacity of regional training institutions in specific food security courses at policy, managerial and technical levels while other programmes have concentrated on promoting seed availability and developing and disseminating participatory methodologies. However, other suggested programmes, especially aimed at promoting food supply and availability, such as food reserve mechanisms, irrigation development and agricultural trade development which can provide the region with long term solutions to periodic food supply fluctuations have not attracted significant attention and resources. SADC member states decided to do away with the proposed regional food reserve mechanism in favour of a financial reserve. A financial reserve has the disadvantage of being easy to liquidate when faced with urgent financial requirements and there is a possibility that the

reserve may be empty when it is needed. Many of earlier SADC food security projects had a noticeable impact on Zimbabwe as they were implemented when Zimbabwe still had the mandate for coordinating the Food Security sector on behalf of SADC.

A reserve of food is essential for food stability. During normal periods, markets may work reasonably well to ensure adequate supply and distribution of food, addressing at least the food availability issue. However, market failure becomes apparent in times of food emergencies. First, in emergency situations caused by widespread calamity, commercial food distribution networks may be seriously disrupted and lack the incentive and coordination to rapidly restore supply lines. Due to transaction costs, private traders may move too slowly to release stocks or bring in stocks from other areas or from abroad; worse, they may also be prone to speculative hoarding in anticipation of a higher price. Assuming good governance, a centrally coordinated response by a government free of commercial motives can address faster and more decisively the day-to-day needs of the affected population. The idea of maintaining a food reserve is necessary if not at regional level then SADC should promote it at national level to avoid widespread hunger which can lead to social unrest, undermining key market institutions such as private property rights.

Extreme price increases may cause the nutrient intake of the poorest households to fall below a critical threshold. Poor households may not have access to coping mechanisms (e.g., sale of assets, inter-household transfers, ability to relocate); hence, the poor may require special assistance. Moreover, market bubbles and volatility can lead to extreme price episodes that may require special protection measures for the most vulnerable households. To the extent that food reserves expedite response to food emergencies, society will enjoy the intended benefit of standby reserves.

Preservation of seed and other planting material is key to food security as it guarantees that seed is available for the next season. SADC has completed the harmonisation of seed policies in the region and a document outlining the agreed system for the regulation of seed production and certification has been produced and approved. The overall objective of the harmonised system is to promote trade of high quality seed varieties between countries in order to increase availability of such seed to farmers. The harmonised system contains science-based procedures for variety release; quality control and certification; and phytosanitary measures for limiting the spread of plant diseases and pests. Seed availability contributes to food availability and food stability

According to the SADC Drought Management Strategy the effects of agricultural disasters can be mitigated through various measures however, the economic status of SADC member states means they cannot sustain the financial and human resource requirements of implementing some of the measures. There is need for financing partners to be proactive and responsive to requests for funding long term measures that guarantee safety against the eventuality of natural disasters, rather than periodically react with emergency aid. In 2007 heavy floods displaced more than a million people in SADC (SADC, 2012) and this prompted the regional body to meet annually to prepare for future occurrences. A Disaster Risk Reduction Unit responsible for coordinating regional preparedness and response programmes for trans-boundary hazards and disasters was established and inaugurated in 2011. Being prepared can help reduce the impact of disasters. Disasters hurt the poor and vulnerable the most. According to the World Bank, low-income countries account for more than 70 percent of the world's disaster "hotspots." Since 1980, low-income countries have accounted for only 9 percent of the disaster events but 48 percent of the fatalities.

4.3 Challenges Faced by SADC in Addressing Food Security

SADC is facing many challenges in its quest to assist members eliminate food insecurity. Perhaps one of the main ones is the shortage to both human and financial resources given the many activities the organisation has set itself to accomplish. SADC has experienced a rapid increase of sectors over a short time and this was accompanied by a plethora of priorities and activities dependent on limited resources which has led to a proliferation of meetings and an increase in associated costs.

Another significant challenge is that member states also participate in other regional economic cooperation schemes that may compete with or undermine SADC's aims. For example, South Africa and Botswana both belong to the Southern Africa Customs Union; Zambia and Zimbabwe are part of Common Market for Eastern and Southern Africa, and Tanzania is a member of the East African Community.

The quest for border control by member states is affecting the need to promote free trade and movement of goods, services and human capital within SADC. Some countries may be reluctant to eliminate some of the tariffs because they constitute a major source of revenue for them. Eliminating these tariffs may end up affecting social services in the respective countries that do not have strong tax bases. In some cases intolerance among member states has resulted in xenophobic attacks which claimed lives of Zimbabweans, Mozambicans and others living in South Africa. This contributed towards destabilizing the region as South Africa is the hub of Southern Africa and people from other countries in Southern Africa work in the country.

Most information that is gathered on food security is centred on disasters for example droughts and floods and there is little information available that assesses livelihoods and long term coping strategies. This presents challenges when trying to formulate policies that address long term food insecurity. Information is not coordinated within government departments and also across different member states making it difficult to come up with a consolidated picture of the region's food security situation.

One of the biggest challenges faced by the SADC secretariat is following up on the resolutions of the summit and other decision making bodies of the regional bloc. The secretariat has no way of enforcing compliance as a result those countries that do not decide to abide by a certain resolution are not penalised. Requests for information from member countries by the secretariat can simply be ignored.

5 CHAPTER V - CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

In this chapter, the study looked into the conclusions made from findings with regard to the level of support that Zimbabwe got from the SADC region. After these conclusions are made, the chapter went on to make some recommendations on what needs to be done if the country is to benefit from SADC and what SADC needs to do to effectively promote the food security of its member countries.

5.2 Conclusions

5.2.1 Trade

Although Zimbabwe and most SADC countries are members of the World Trade Organization (WTO) whose legislation is strong and enforceable, the SADC regional trade regime is characterized by inadequate and weak legislation. SADC also has poor physical infrastructure which hinders trade in food products and low technical capabilities. The region also has far lower than the WTO international requirements for basic national, regional and international sanitary and phytosanitary obligations. Decision making on exports and imports of food is currently not based on pest risk analysis and assessment; and is therefore not technically justifiable but very subjective. Importing countries such as Japan, Australia and others have often required a Pest Risk Analysis to be conducted prior to importing fruit, vegetables and ornamentals and SADC needs to improve these sanitary and phytosanitary standards if SADC wants to break into lucrative markets which bring in the much needed foreign currency. Plant quarantine and

pesticide legislation has been in existence for a long time in the region, but requires reviewing, and updating to ensure conformity with current international sanitary and phytosanitary standards, in order to ensure food safety in the export market and within the region. SADC plant inspectors need to be trained in up to date sanitary and phytosanitary procedures and international standards for sanitary and phytosanitary measures governing international trade.

The prevalence of livestock diseases has restricted Zimbabwe's access to lucrative external markets, regionally and internationally in particular the European Union. Trans-boundary animal diseases affect the livelihoods of millions of farmers in the region and seriously limit the chances of benefiting from the expected rapid increase in animal production and trade that would provide opportunities to escape from hunger and poverty. In the case of Zimbabwe the systems that were in place prior to 2000 have been dismantled and disregarded, however SADC programmes can assist individual countries from whatever level they are in order to build an effective disease control mechanism for the region. In addition, no country fighting FMD in isolation can obtain a lasting success. Strengthening national border controls and commodity inspections alone, as is the case at present, will not be sufficient to adequately manage the risks of trans-boundary animal disease spread especially FMD. A parallel regional plan for the containment and progressive control at source in the areas where these diseases are still endemic is also needed. These diseases negatively affect availability of animal protein which supplies vital nutrients for the human body and thus improve the quality of food security by complementing cereals produced in crop production.

Lack of quality standards for food and agricultural commodities in some SADC member countries is further constraining the development of regional trade by increasing health hazards

for importing countries. This affects trade with other regions that require certain minimum standards and for intra-SADC trade it poses health risk for the importing country even if they do not have standards.

The growing importance of liberalizing international trade through the WTO regime, the high level of sophistication of negotiations and bargaining required at the trade meetings as well as the growing need to ensure consumer protection cannot be over-emphasized for a regional bloc such as SADC. This calls for qualified and experienced people who are able to negotiate on behalf of the block. Unfortunately in a number of cases some countries attempt to establish new barriers to trade, particularly with regard to imports from developing nations, thereby reinforcing the urgent need to create analytical capacity and proficient skills to negotiate at WTO and other forums.

5.2.2 Financial, human and technical resources

SADC needs enhanced capacity in order to effectively manage its food security project. Financial resources are required to enforce agreements as well as to implement projects and programmes that contribute to national and regional food security. Human resources are required in particular at national level in order to have effective national secretariats that act as the link between activities at regional level and those at national level. In the past the SADC FANR benefited from significant external support, particularly from EU and AusAid that assisted in the establishment and development of the SADC Food Security Programme. External support will continue to be needed given the fact most SADC member states are poor and therefore unable to contribute all the resources necessary for the running of the organisation. At present national secretariats do not really exist as countries are failing to raise the necessary

funding to support them. In Zimbabwe the SADC secretariat is made up of staff in the ministry of foreign affairs and there is no full time staff.

The SADC Secretariat handles a complex mix of projects in their portfolio and therefore need people with the right skills in the food security section in order for organisation to provide the right support to member states. The evaluation of the RISDP done in 2011 showed that availability of human resources of the right quality and quantity is one of the major limitations of performance by SADC. In addition the staff most of the time do not have sufficient funding to travel to member states to implement and monitor programmes.

The SADC secretariat requires technical capacity to be able to discharge its food security mandate. This means availability of computers, satellite imagery for remote sensing, instruments for efficient collection of information and analysis of that information.

SADC need to strengthen its food security information system by looking at gaps in the early warning system which is one of its flagship programmes. The programme can be broadened to include urban households and integrating food security indicators in household surveys.

SADC Development partners' contribution to the regional food security plans has been lukewarm, with weak donor coordination. In general, more donors are needed to step up their support to regional food security initiatives in SADC, and in particular to the Regional Agricultural Policy as the overarching framework that should guide also future external support. Many donors assist agriculture and rural development programmes at national level in SADC countries, but only few of them have a policy to create synergies between regional and national level assistance and between their different sectoral programmes that contribute to food security

(e.g. aid for trade). According to many actors in SADC, both types of synergies should be built, and if donors are to fulfil their commitment to support implementation of CAADP at regional level, including to fast-track regional action, they could: improve operational linkages and coordination around regional CAADP plans between their respective head-quarters, regional and national offices; increase regional donor coordination in SADC around CAADP including by assigning a donor lead agency (possibly in Gaborone) and establishing a specific donor working group for the SADC regional CAADP.

5.2.3 Regional co-operation in the development, management and utilization of shared natural resources

The SADC region is home to many of Africa's most valued species and wildlife sanctuaries and possesses a number of World Heritage Sites. The region is highly dependent on its natural resources for water supply, for biodiversity tourism, agriculture, minerals and all these have a bearing on the region's food security. Recent droughts and floods and the prospect of accelerated global warming, reinforce the need for the SADC region to consider options for more sustainable management and sharing of the region's natural resources.

A number of transnational parks have been established with the assistance of SADC and they contribute to food security by reducing the human wildlife conflict. The parks also bring in national income which goes towards social services that can contribute to poverty alleviation and food security.

Currently there is little regional collaboration in the management of natural resources like water. However, there is room for collaboration in a number of areas and this collaboration will contribute to improved regional food security. For example there is need to make full use of the

Zambezi River and Kariba dam as sources of fish and water. The Kariba dam is home to the Kapenta fish which, if managed properly, can significantly increase its food security by value by increasing volume of production. Fish is high in good protein and anti-oxidants which contribute to the improved quality of food security. For the sustainable management of the fisheries component of the dam and river SADC needs to put in place monitoring of fish species and quantities to avoid over fishing and ensure ecosystem balance is maintained.

5.2.4 The Region's Vulnerability to Drought

The Southern African sub-region has increasingly become drought prone having experienced six severe and wide spread droughts experienced over the last 15 years. Zimbabwe had been experiencing those drought in a very severe magnitude on nearly after every 10 years with the first one having been in 1983, followed by 1992 and the last serious one was in 2002(Ministry of Agriculture,2010).The intensity of droughts have also increased. According to the “Regional Drought Management Strategy for SADC” over the period of 1980-1996 the SADC region experienced four major droughts: 1982-83, 1987-88, 1991-92 and 1994-95. All these droughts were linked to the El- Nino phenomenon. Drought therefore remains the single most important threat to food security in the region and SADC need to scale up efforts to address drought and mitigate its effects. Harnessing of water resources for irrigation is one area that the SADC secretariat can help member states address. Zimbabwe is currently only irrigating 34% of its irrigable land (SADC, 2012). This is clearly an opportunity for improving food security by ensuring more of the irrigable land is put under irrigation. According to the same source, scientific projections and current research suggest that the region is likely to become more prone to low rainfall in future and droughts are likely to be more intense and the regional climate to

become drier and warmer during the current Millennium. Irrigation can effectively counter the threat to food security that is posed by droughts in the region as well as in Zimbabwe.

The character of drought in the region is such that it very often follows an unusually short rainy season. The rains may end early in the season, or the distribution throughout the season may be erratic. The result is that the annual precipitation is not sufficient to meet the normal demands for human, animal and plant regeneration (FAO, 2010). This has had and continues to have significant adverse effects on the agricultural sector in the region and on government finances, and has significantly contributed to the overall reduction in the vegetation cover in the many parts of the region. Since the area is drought prone due to rainfall shortages, the SADC region should have enacted irrigation programmes in countries like Zimbabwe and Swaziland as well as Tanzania which are normally hard-hit by these natural disasters.

As noted in African Development Bank report (AFDB Report,2009), it is critical for the SADC region to try to establish reliable irrigation schemes as a way of building reliable agriculture activities to avert drought in the region. However water can be stored in reservoirs, rivers, streams and aquifers for use in times of water shortage. The use of such water for small-scale irrigation may greatly cushion the effects of drought on the level of farming activities, especially at the local or even on a regional scale. Experience in the region and other countries has shown that in the years of good rainfall irrigation gives the smallholder farmers the opportunity to expand the season by supplementing irrigation at the beginning of the season and at the end of the season. This allows the farmer to grow, for example, two maize crops in one season thereby increasing production from the same piece of land. Farmers can also expand their agricultural activities into production of high value crops for the market. Likewise, smallholder irrigation

development is a sure way of intensifying agricultural production for the rural population in drought prone areas, resulting in improved nutrition and higher incomes. The benefits of proliferation of small-scale irrigation would enable small farmers to grow crops all year round if the stored water allows, and the productivity per unit area of land is increased resulting in more economical use of available land, water and human resources.

5.2.5 SADC's Response to Drought Vulnerability

As part of the lessons from drought devastation, the SADC countries and the regional authority have devised a number of policies and programmes aimed at both reducing the vulnerability and enhancing the internal preparedness and responsive capacities. Policies and programmes on drought management have evolved over the years to the current RVAC and early warning systems. For these programmes to be a success there is need for serious infrastructure to be developed in the region to enable irrigation to happen. This would involve the construction of dams, canals among other requirements for total transformation into irrigation.

The early warning system focused on the food availability situation with the sole intention of triggering emergency responses to avoid starvation or famine during the years of drought. The view of food security in the SADC has since broadened and now emphasis is placed on long term access to food and the promotion of policies and programmes that generate sustainable employment opportunities, general economic and agricultural growth. This demonstrates the region's realization that long term policy drought management and preventive measures are required as opposed to emergency responses that tend to jeopardize long term development efforts.

The development of the SADC Regional Drought Management Strategy through the Food, Agriculture and Natural Resources Development Unit (FANRDU) is a welcome move. This strategy has been operationalised in the RISDP and reinforces the region's long term preparedness to the perennial problems of drought. The strategy incorporates long term mitigation and vulnerability reduction programmes, including concerted development and implementation of various scales of irrigation schemes and related capacity building in the region. Most of the recommendations to develop irrigation at a regional level have been suspended following lack of interest from member states that preferred tackling irrigation programmes on an individual level.

SADC realizes the importance of water resources management as part of an integrated strategy to enhance the region's economic development and alleviate recurrence of food security problems. As a result, the SADC Council of Ministers in August 1999 approved the proposal that water resources management should be made a separate sector in line with its importance and be separated from the Environment and Land Management Sector. The Water Sector was also removed from the Food, Agriculture and Natural Resources cluster of sectors for the same strategic planning reasons. All water-related programmes, especially those on irrigation, can now directly access and benefit from services of the Water Sector. This is viewed in SADC as an important step towards long-term drought management and mitigation.

5.2.6 Development of Small-Scale Irrigation Schemes

SADC member governments are keen to ensure that small-holder farmers progressively join the mainstream economy through increased production for the market. Small-scale irrigation development is consequently considered an important vehicle for enhancing production

capacities to commercialize smallholder enterprises. Traditionally, irrigation schemes are planned, developed and, in some cases even managed by expatriates with limited involvement of the nationals. This had partly contributed to the high cost of development and, in a number of cases, even to inappropriate development. In addition, in many countries of the sub-region, until quite recently, irrigation planning and design have been undertaken by private irrigation companies, based on the commercial farm or estate model where there is a single user. Such schemes tended to marginalize small-holder farmers and constrained them from making use of opportunities to increase their productivity and cushion themselves against recurring drought.

There is a pressing need for wider implementation of capacity building programmes at all levels, in the public as well as the private sector, to overcome the above mentioned barriers and to achieve the goal of sustainable small-scale irrigation development in the field and at the policy level. While a number of donors have established academic curricula on irrigation engineering and water management in some countries, such as Tanzania, Botswana, Kenya and Zimbabwe, a more comprehensive approach to facilitate the practical aspects of irrigation development is required. Such capacity building programmes should not be limited to technical training, but should be designed to include other key aspects of land-use management, rural development economics, environment and social interactions. Since women are active participants in smallholder farming, care needs to be taken that this key target group is effectively integrated into the training programmes at appropriate levels, particularly on specialized courses and on-the-job training.

The experience of FAO with small-scale irrigation development schemes, through the Special Programme for Food Security (SPFS) in several countries of the sub-region, has shown that

considerable scope exists in implementing small-scale irrigation schemes sustainably, provided that adequate support becomes available for the introduction of these new technologies.

In the 1990s Zimbabwe developed a fair amount of capability in the design, implementation and management of sustainable irrigation schemes for small-holder farmers. This capacity was developed through a programme of intensive training of irrigation officers in planning, design and implementation of small-scale irrigation schemes with farmer and private contractor participation. The 3-4 month intensive courses were followed by a 3-4 year apprenticeship, in which each training irrigation officer was placed under an experienced officer, so as to allow the trainee to develop the necessary field experience. Under the programme, the trainers continued to provide guidance and frequent backstopping to the trainees in the field for the entire period of apprenticeship. This model worked and can be resuscitated and promoted within SADC and its member states. In this instance Zimbabwe's programme was ahead of developments within SADC and had this programme been sustained it could have been replicated to other SADC countries. Zimbabwe should build on this model and develop a technical capacity for irrigation in order to come up with irrigation solutions for improved food production.

The overall conclusion to be reached by the study is that, SADC interventions in promoting food security in the region especially in Zimbabwe has been very ineffective with a number of limitations in their approach. The main limitation is that SADC member states are sovereign and thus only implement those SADC programmes and policies that they wish to implement. SADC cannot force member states into implementing their recommendations especially when it comes to programmes. So, in terms of programmes of food security there is little impact to show. However SADC has come up with many policies and guidelines to assist member states in

crafting their own national policies and it is up to member states to take advantage of the resources, both technical and institutional, that are available to them at the SADC secretariat. The SADC secretariat has been very active in producing policy documents and manuals but not enough has been done to ensure implementation of policies and programmes. However SADC needs to redouble efforts to encourage member states to come up with programmes and projects that address food insecurity. In most cases member states' failure to come up with programmes results from lack of capacity at national level. It is my view that although SADC may have the will to implement cross boundary projects this may not be possible due to limited resources. Many countries in the region are not able to meet their obligations to SADC due to the size and performance of their economies. Given this fact it is safe to conclude that SADC cannot afford to implement region wide programmes and would therefore make the best of the available resources by focussing on providing guidelines and regulatory framework for managing cross border issues. Programme implementation can be left to national governments to implement at their own pace.

5.3 Recommendations

Below are my recommendations

For SADC to have a greater impact on the food security quest of its member states it needs to engage in a number of things some of which are as follows;

SADC must concentrate on a few high impact areas so that their resources are not spread too thin. This study in its desk review established that one of the major constraints to SADC performance in all areas, including food security, is lack of capacity. SADC has too much to do

with a relatively small human resource base and a small budget. In the area of food security SADC should focus on improving production levels of small scale farmers and linking them to markets within SADC or in other regions. This is an area likely to have the greatest impact because the majority of SADC citizens including Zimbabwe derive their livelihood from agriculture.

SADC must scale up efforts to control animal and plant diseases in order to have access to developed world Markets. This includes control of Foot and Mouth Disease and other trans-boundary diseases as well improvement of sanitary and phytosanitary standards for the region. Improvement of these standards opens up markets in other regions and other high value markets like the EU, Japan and the United States.

There is need to attract foreign direct investment into the region by promoting investor friendly policies. The recently held UN World Tourism Organisation summit was endorsed by SADC and promoted Zimbabwe and Zambia as safe tourist destinations. This attracts investors and tourists and leads to employment creation. One people have jobs they can have access to food.

Using biofuels reduces food availability as biofuels are made from food crops. Food security is affected by use of first generation biofuels which are made directly from food crops like maize, soya bean and sugar cane. Countries should therefore be encouraged to remove subsidies on first generation biofuels, as this would promote a shift to second and third generation biofuels which utilise waste thereby avoiding the capture of cropland by biofuels.

Animals are competing with humans for same food thereby creating an artificial shortage of food. The use of cereals and food fish in animal feed must be reduced and animal nutritionists

must develop alternatives to these feed sources. This can be done in an environmentally friendly way by increasing food energy efficiency and minimising waste. For example animal scientists can breed animals that use feed more efficiently so that they eat less but produce the same amount meat or milk. Another example is, when incorporating fish in animal diets, fish discards should be used and other food fish left for humans. During harvesting a lot of grain is lost in the field, during transportation and at packing. Farmers should improve collection and recycling of post-harvest losses and waste. There is also need to development of new technology, thereby increasing food energy efficiency by 30–50% at current production levels. It also involves re-allocating fish currently used for aquaculture feed directly to human consumption, where feasible.

There is need to support farmers in developing diversified agricultural systems that can cushion them against droughts and other disasters. Agriculture practices that promote development of habitat for wild plants and animals, genetic diversity, pollination, pest control, climate regulation, as well as adequate food to meet local and consumer needs should be promoted by SADC. This includes managing extreme rainfall and finding ways of storing water for later use when there is drought. Use of conservation farming must be promoted as this preserves the soil and ensures long term food availability. Rainwater harvesting and water recycling are some of the things that are currently being promoted to build on existing water supplies and further reduce the impacts of drought in dry areas. Whatever method is used however, extensive monitoring of precipitation and water usage are the best way to prepare for a drought, inform the public on the problem, and implement conservation strategies.

SADC should promote increased investment in rural infrastructure and market institutions, since these are hindering a stronger production response. Improving infrastructure and reducing local, regional and international trade barriers can lead to increased trade and improved market access. Lack of infrastructure reduces food access and access is hindered if food cannot be moved from an area of surplus to an area of shortage. Increased market access and food access must also incorporate a reduction of armed conflict, which has a major impact on trade and food security

SADC must tackle the issue of corruption at a regional level by coming up with strategies for combating this widespread scourge. Corruption bleeds the SADC economies of vital resources that can be used for development which improves food access.

There is need to balance the tensions between national interests and political realities of survival as well as sovereignty issues. National governments need to mainstream integration into their development strategies by creating institutional instruments and the regulatory framework that makes it possible for other stakeholders to join the process, thereby recognizing that certain projects are perhaps better executed at regional rather than national level.

There is need to improve the investment climate in SADC so that investors can invest in infrastructure projects like roads to improve food access and irrigation schemes to improve availability. Investment can be funded by citizens of by development banks.

Funding SADC and regional projects requires major retooling and skills building at the regional body level, national, sub-regional, and donor levels. Basic skills such as project preparation are inadequate in many regional organisations and national organizations. In discussing regional projects the reality that ultimately, implementation of such projects will be at country –level,

must be recognized. Delivery of donor-led programs is not always aligned with regional integration. Donor instruments currently remain country-focused.

Lastly, SADC should strengthen policies that reduce the region's carbon foot print. This can be done by promoting eco- friendly agricultural production systems and land-use policies that help mitigate climate change. This in the long run will contribute to reduction in extreme weather patterns like drought and floods which affect agricultural production and food security.

6 References

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