ANALYSIS OF THE SOUTHERN AFRICAN DEVELOPMENT COMMUNITY NATIONAL VULNERABILITY ASSESSMENT COMMITTEES (SADC NVACs): TOWARDS THE ESTABLISHMENT OF AN EFFECTIVE AND EFFICIENT SOUTH AFRICAN VULNERABILITY ASSESSMENT COMMITTEE (SAVAC)

Ramphoko Moipone 'Masechaba

Submitted in full fulfilment of the qualification:

Master of Agriculture (Food Security)

African Centre for Food Security,

School of Agricultural, Earth and Environmental Sciences

College of Agriculture, Engineering and Science,

University of KwaZulu-Natal,

Pietermaritzburg.

MARCH 2014



ABSTRACT

Vulnerability assessment and analysis is an important part of food security analysis. In Southern African Development Community, assessment is through the (NVACs) National Vulnerability Assessment Committees. However there is no framework informing effectiveness and efficiency. The study aimed at determining the essential elements of effectiveness and efficiency in NVACs. A model framework for analysing effectiveness and efficiency of NVACs was developed. Secondary data was then collected in NVACs supplementing it with key informant interviews. Matrices were developed from the model framework to assign scores for NVACs' effectiveness and efficiency using the robot system. This was followed by SWOT analysis. The study revealed that all NVACs are effective but 89% are highly effective. On the contrary, 67% NVACs proved efficient with 22% highly efficient. The NVACs had more weaknesses than strengths, opportunities nor threats. Based on the study's definition of effectiveness and efficiency, it was concluded that NVACs' problems are mostly internal. Emphasis on data management, regular monitoring and evaluations and NVACs' inclusion in government's budget were recommended. In addition, South African NVAC framework to effectively and efficiently assess vulnerability was developed and recommended.

DECLARATION

I, Ramphoko Moipone 'Masechaba de	clare that:
i) The work reported in this dissertatio	on, except where otherwise indicated, is my original work.
ii) This dissertation has not been su university.	bmitted for any qualification or examined at any other
iii) This dissertation does not contain ounless specifically acknowledged.	other person's data, pictures, graphs or other informatior
Signed:	Date:
Ramphoko Moipone'Masechaba	
Supervisor:	Date:
Dr. Unathi Kolanisi	
Co supervisor:	_
Dr Jovce Chitia	Date:

DEDICATION

This dissertation is dedicated to my late mother, 'Mantikoane Mpesi.

Memories are not like people, they live forever.

In my heart you will always live.

ACKNOWLEDGEMENTS

Ke rola khaebane ke e rolela uena Jehova Molimo o mphileng bophelo, matla le mamello ho phunyeletsa mosebetsing ona. Melemo ea hau eohle e ho nna, nka busetsang ho uena ntle le teboho, khumamelo le thoriso? Ka hona leleme la ka mathela holimo ha Jehova o ise tlhompho le poko le khanya ho Ralimakatso, eena Raleholimo ka sebele, Molimo o nkhauhetseng le t'siung ena.

Dr. Kolanisi, gratitudes to you for your great supervision, intellectual inspiration and patience and support through all hardships.

Dr. Chitja and Denver, thank you for your constructive criticism, patience and willingness to assist me whenever a need arose.

Thulile Dlamini, your warm assistance and time dedicated are forever appreciated.

Many thanks to SADC NVAC representatives who participated in the study.

My friends and the wonderful class of Food Security Masters, 2012, (Vongae Murugani, Fezile Ngiba, Mbali Cwacela, Odwa Mapompo and Nkanyiso Gumede).

Paul, thank you for your love, patience and unconditional support.

My daughters, Ponts'o le Kekeletso for your patience.

TABLE OF CONTENTS

BSTRACT	
ECLARATION	ii
EDICATION	iii
CKNOWLEDGEMENTS	iv
ABLE OF CONTENTS	۰۰۰۰۰۰۰
ST OF TABLES	vii
ST OF FIGURES	x
CRONYMS	x
HAPTER 1: THE PROBLEM AND ITS SETTING	1
1 Introduction to the research problem	2
2 The Importance of the study	3
3 Statement of the research problem	4
3.1 Sub-problem 1	4
3.1 Sub-problem 2	4
3.2 Sub-problem 3	
3.3 Sub-problem 4	4
4 Study limitations	4
5 Study assumptions	5
6 Structure of the dissertation	5

CHAPTER2: LITERATURE REVIEW	6
2.1 Introduction	6
2.2 The concept of vulnerability	6
2.3 The state of vulnerability to food insecurity in Southern Africa	8
2.3.1 Factors contributing to vulnerability in Southern Africa	8
2.4 The state of vulnerability to food insecurity in South Africa	12
2.5 The evolution of vulnerability assessment in Southern Africa	14
2.5.1 REWU, NEWU and vulnerability assessment	14
2.5.2 RVAA, RVAC and mandate for vulnerability assessment	15
2.6 Vulnerability assessment in South Africa	17
2.7 Frameworks/methodologies used to assess vulnerability in Southern Africa	19
2.8 South African NVAC status	24
2.9 Summary	27
CHAPTER 3: ESTABLISHMENT OF THE CRITERIA TO MEASURE EFFECTIVENESS AND EFFICIENCY C VULNERABILITY ASSESSMENT COMMITTEES (NVACs)	
3.1 Introduction	
3.2 NVAC as an organisation	
3.3 Institutionalisation of an organisation	
3.4 The concept of effectiveness and efficiency in an organisation	
3.5 Approaches in measuring organisational effectiveness and efficiency	
3.5.1 The goal approach	
3.5.2 The process approach	
3.5.3 The constituency approach	
3.3.4The systems resource approach	
3.6 Framework and criteria for analysing the effectiveness and efficiency in NVACs	
3.6.1 Well-informed and continuous VAA	33

3.6.2 Ability of NVAC to mobilise and utilise resources	35
3.6.3 Ability of NVAC to influence policy	36
3.6.4 Well-organised institutional arrangement (organisational structure)	36
3.6.5 Ability of NVAC to manage data	37
3.6.6Well-organised communication structure (communication flow)	37
3.6.7 Continuous Monitoring and Evaluation in NVAC	38
3.6.8 Ability of NVAC to manage its finances (funds)	38
CHAPTER 4: DESCRIPTION OF THE STUDY AREA	41
4.1Introduction	41
4.2 South African government	41
4.2.1 The National government	43
4.2.2 The Provincial government	43
4.2.3 The Local government	44
4.2.4 The Traditional authority	44
4.3 Livelihood zones	44
4.4 Socio-economic situation in South Africa	47
4.4.1 Social protection in South Africa	
4.4.2 Unemployment in South Africa	49
4.2.3 HIV and AIDS in South Africa	51
4.5 Summary	51
CHAPTER 5: RESEARCH METHODOLOGY	53
5.1 Introduction	53
5.2 Research design	53
5.3 Sampling technique	57
5.4 Data collection	57
E 4.1 Data collection tools	F.7

5.5 Data analysis	58
5.5.1 Secondary data analysis	58
5.5.2 The content analysis	59
5.5.3 Use of designed assessment tool (matrix scoring and ranking)	59
5.5.4 The SWOT analysis	63
CHAPTER 6: RESULTS AND DISCUSSIONS	64
6.1Introduction	64
6.2 Establishment of NVACs in SADC	64
6.2.1SADC membership and NVAC establishment	64
6.2.2 Recent consideration for establishing NVACs in non-NVAC member states	67
6.2.3 Approaches in establishing SADC NVACs	69
6.3 Determination of elements of effectiveness and efficiency in NVACs	70
6.3.1 Effectiveness of SADC NVACs	71
6.3.2 Efficiency of SADC NVACs	
6.3.3 Effective and efficient NVACs	
6.4 Analysis and discussion of SADC NVACs' SWOTS	
6.4.1 The challenges/weaknesses of NVACs	
6.4.2 Strengths of NVACs	
6.4.3 Opportunities of NVACs	
6.4.4 Threats facing NVACs	
6.5 Food Security and vulnerability Monitoring and evaluation system in South Africa	
6.6 Key element to improved food security and vulnerability	
6.7 The SAVAC framework	
6.7.1 SAVAC structural organisation	
6.7.2 Housing of SAVAC under presidency	94

6.7.3 Legitimacy of SAVAC mandate	95
6.7.4 Financial stability of SAVAC	95
6.7.5 Permanent staffing of SAVAC	95
6.7.6 Communication in SAVAC	96
6.7.7 Data management in SAVAC	96
6.7.8 Monitoring and Evaluation in SAVAC	96
CHAPTER 7: CONCLUSION AND RECOMMENDATIONS	98
7.1 Study purpose and importance	98
7.2 Methodology	98
7.3 Results and conclusions	98
7.4 Recommendations for enhanced effectiveness and efficiency in SADC NVACs	100
7.5 Recommendations for future research	100
REFERENCES	102
LISTS OF TABLES	
Table2. 1: Population vulnerable to food insecurity and poverty in SADC from 2003/04 to 2010/11 consumperiod	
Table 2(a): CFSVA and HEA as frameworks used in assessing vulnerability to food insecurity in Southern Africa	20
Table 2(b): IPC and FIVIMS as frameworks used in assessing vulnerability to food insecurity in Southern Africa	22
Table 4.1: Trend in number of social grant beneficiaries in South Africa	48
Table 4.2: Employment by industry in South Africa	50
Table 5.1: Summary of methodological approach	56
Table 6.1: Reasons for establishing NVACs in the SADC region	65
Table 6.2: Reasons for recent consideration of establishing NVACs in SADC countries	67
Table 6.3: Approaches in establishing NVACs in SADC	69
Table 6.4: Effectiveness in SADC NVACs per reference year	71

Table 6.5: Efficiency in SADC NVACs per reference year	74
Table 6.6: Grouping of SADC NVACs	77
Table 6.7: Challenges faced by SADC NVACs	79
Table 6.8: Strengths of SADC NVACs	82
Table 6.9: Opportunities of SADC NVACs	84
Table 6.10: Challenges of IFSS, WoP and NDP IN South Africa	87
Table 6.11: IFSS, WoP and NDP opportunities	88
Table 6.12: Key elements to improved food security and vulnerability	90
LIST OF FIGURES, BOXES AND APPENDICES	
Figure 1.1: Relationship between livelihood, food security and vulnerability	2
Figure 2.1: Proposed VAC institutional structure by Gandure and Manyaka	25
Box 2.1: Thematic areas for the scoping study by Gandure and Manyaka	25
Figure 3.1: Framework and criteria for analysing effectiveness and efficiency of NVAC	40
Figure 4.1: Structure of South African government	42
Box 4.1: Ministries and departments forming the South African cabinet	43
Figure 4.2: Map of South Africa	46
Figure 6.1: Food security and vulnerability related strategies in South Africa	86
Figure 6.2: The proposed SAVAC framework for delivering an effective and efficient VAA	92
Appendix A: Key informant interview guide (NVACs)	112
Appendix B: Key informant interview guide (SADC countries without NVACs)	113
Appendix C:List of SADC NVAC key informants and participants	113
Appendix D: Measure of effectiveness in SADC NVACs	114
Appendix F: Measure of efficiency in SADC NVACs	116

ACRONYMS

AIDS- Acquired Immuno-Deficiency Syndrome

BVAC- Botswana Vulnerability Assessment Committee

CFSVA- Comprehensive Food Security and Vulnerability Assessment

CRDP- Comprehensive Rural Development Programme

CSG- Child Support Grant

DFA- Department of Foreign Aid

DFID- Department For International Development

ECA-SA- Economic Commission for Africa- South Africa

FANR- Food, Agriculture and Natural Resources

FAO- United Nations Food and Agricultural Organisation

FEWSNET- Famine Early Warning System Network

FIVIMS- Food Insecurity and Vulnerability Information Mapping System

GDP- Gross Domestic Product

GHI- Global Hunger Index

GHS- General Household Survey

HEA- Household Economic Approach

HIV- Human Immuno-deficiency Virus

IFSS- Integrated Food Security Strategy

IFSN-TT- Integrated Food Security and Nutrition Task Team

IPC- Integrated Food Security Classification Phase

LFS- Labour Force Survey

LVAC- Lesotho Vulnerability Assessment Committee

MVAC- Malawi Vulnerability Assessment Committee

MEC- Member of Executive Committee

MDG- Millennium Development Goal(s)

NDoA- National Department of Agriculture

NDP- National Development Plan

NEWU- National Early Warning Unit

NVAC- National Vulnerability Assessment Committee

OAP- Old Age Pension

PMU- Project Management Unit

RVAA- Regional Vulnerability Assessment and Analysis

RVAC- Regional Vulnerability Assessment Committee

REWU- Regional Early Warning Unit

SADC- Southern African Development Community

SADCC- Southern African Development Coordination Conference

SAVAC- South African Vulnerability Assessment Committee

SWOT- Strengths, Weaknesses, Opportunities and Threats

SC UK- Save the Children- United Kingdom

STATS-SA- Statistics South Africa

UNFCCC- United Nations Framework Convention on Climate Change

UNICEF-United Nations International Children Emergency Fund

VAA- Vulnerability Assessment and Analysis

WFP- World Food Programme

WoP- War on Poverty

CHAPTER ONE

THE PROBLEM AND ITS SETTING

1.1 Introduction to research problem

Livelihood and food insecurity vulnerabilities are the growing concerns in Southern African Development Community (SADC). In the late 1990s, SADC came to a realization that its people die of hunger at an alarming rate (SADC, 2011). The major identified challenge was that the number of vulnerable people, where they are and the underlying causes of the vulnerability could not be identified easily. It was therefore important to embrace vulnerability assessment and analysis. The SADC heads of States endorsed the formation of Vulnerability Assessment and Analysis (VAA) Committees in 2004 to better understand vulnerability.

VAA is an important part of food security analysis (Marsland, 2004) whereas livelihoods determine the food security status. Therefore, it is important to briefly explore livelihoods and food security to better understand how both relate to vulnerability. According to Solesbury (2002), a livelihood encompasses the capabilities, all assets (material and social) and activities needed for making a living. On the other hand, food security is talked of when people always have access (physical, economic and social) to safe and nutritious food in required quantities to meet dietary requirements and food preferences for a healthy and active life (FAO, 2001).

A livelihood must cope and recover, maintain or enhance its capabilities and assets without undermining the natural resource base or employing socially unacceptable coping strategies when exposed to shocks and hazards (Krantz, 2001). If livelihoods, when exposed, become sensitive to shocks and hazards and cannot cope without employing socially unacceptable strategies, such livelihoods are not sustainable but are vulnerable. In such instances, food security is rendered inexistent. The relationship between livelihoods, vulnerability and food security can be diagrammatically presented as in figure 1.1, thus:

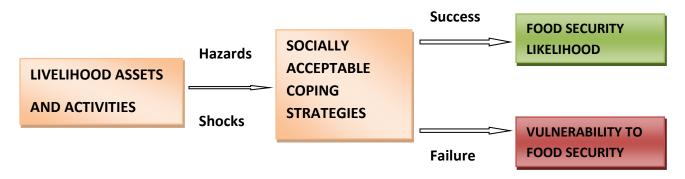


Figure 1.1: Relationship between livelihoods, food security and vulnerability (interpreted from Ellis, 2003:4)

Figure 1.1 depicts that coping strategies employed by people when faced with shocks and hazards determine whether or not they come out of the situation negatively affected or not. If people fail to cope without employing socially unacceptable strategies, they are vulnerable to food insecurity but if they succeed to come out of the situation not negatively affected, they are not vulnerable and are likely to be food secure. The figure also shows the importance of understanding people's livelihoods (assets and activities), hazards and shocks experienced as well as the likely outcome if VAA and recommended mitigation programmes are to be effective.

The SADC region's heightened interest in VAA arose from the drastic shocks and hazards such as persistent drought, floods, soaring food prices, declining agriculture and the realization that more livelihoods, resilience and food security will be seriously compromised in the long run. This led to the formation of the Regional Vulnerability Assessment Committee (RVAC) that was mandated to oversee VAA regionally (Marsland, 2004). The National Vulnerability Assessment Committees (NVACs) then followed with similar mandates at national level. Reasons for food insecurity include the prevailing inequality between the rich and poor. Gelb (2003) highlights that the inequality is the legacy of apartheid and employment status of household members, especially in South Africa.

While South Africa is more developed than most SADC member countries, its segregated past suggests that certain section of the population is still underdeveloped. Therefore; vulnerability poses a greater threat as it cannot be quantified holistically in South Africa. This is due to the absence of a specialized unit that is mandated to assess and analyse vulnerability. South Africa is a major grain producer and net grain exporter in the SADC region (Ellis, 2003).

The country was thus thought of as food secure. There is therefore reason to believe that perhaps that is why South Africa never saw a need to establish its own NVAC. Studies by (Bonti-Ankomah, 2001; Hendriks, 2005 & Altman *et. al.*, 2009) revealed that South Africa is indeed food secure at national level but food insecurity is rife at household level with over fourteen million being identified as vulnerable. South Africa has realised the need to form an NVAC due to that the current interventions on livelihood and food insecurity vulnerability do not address the situation holistically. Therefore; South Africa must form NVAC aimed at holistically gathering and analysing information on who the vulnerable are, how many they are, where they are and what the underlying causes of vulnerability are.

1.2 The importance of the study

Vulnerability Assessment and Analysis (VAA) form an important part of food security analysis (Marsland, 2004). Governments and relevant stakeholders in most SADC countries rely on the VAA results for food insecurity interventions and more on policy formulation and direction. In other words, the accuracy of the VAA results determines the appropriateness of the mitigation programmes taken.

Although NVACs have been established in SADC to assess and analyse vulnerability, the elements constituting effectiveness and efficiency in NVACs have not yet been identified, posing a big question on effectiveness and efficiency of NVACs in carrying out the VAA. South Africa is in the process of establishing its own NVAC. Despite the report on the direction this should take, it is still not clear how effective and efficient the South African NVAC (SAVAC) will be based on the current study's definition of effectiveness and efficiency. It was therefore important to study the processes, models and approaches used to establish other SADC NVACs to relate to South Africa. However, unlike many SADC countries, South Africa has a three tier government structure (national, provincial and local). Therefore, it was also critical to identify the suitable location for SAVAC within the government structure.

When used together with elements of effectiveness and efficiency the formulated framework is expected to enable delivery of an effective and efficient VAA by SAVAC. Consequently, the South African government and all relevant stakeholders in addressing livelihood and food

insecurity vulnerability will be in a better position to formulate and ensure implementation of intervention policies in harmony with the three tier governmental structure.

1.3 Statement of the research problem

The study aimed at identifying the essential elements to use in establishing SAVAC that can deliver an effective and efficient vulnerability assessment and analysis. To answer the problem stated, the following sub-problems were investigated:

- **1.3.1** Sub-problem 1: how have NVACs been established in SADC?
- **1.3.2** Sub-problem 2: what elements determine an effective and efficient NVAC?
- **1.3.3 Sub-problem 3**: establishment of criteria and a tool for assessing effectiveness and efficiency of NVACs.
- **1.3.4Sub-problem 4**: how can SAVAC be established and constituted to deliver an effective and efficient vulnerability assessment and analysis?

1.4 Study limitations

The study only considered NVACs in SADC. Reports for the past three years (2008, 2009 and 2010) were used to gather secondary data required. Prior to 2008, some NVACs were not yet established, therefore, no data could have been obtained. Although 2008 reports were used, Botswana Vulnerability Assessment Committee (BVAC) was then in the process of being established therefore lacks reports for the stated year. However, the information on how BVAC was established was used to partly answer the first sub-problem (section 1.3). It should therefore be kept in mind when referring to conclusions and recommendations that BVAC was assessed on the basis of a two year data, unlike other NVACs which were assessed over three years. Furthermore, trends for effectiveness and efficiency needed to be determined in NVACs and a three-year period was scientifically sound. It was impractical to use 2011 data as reports were not yet available during the phase of data collection hence data for 2008, 2009 and 2010 was used.

1.5 Study assumptions

The key assumption in this study was that NVACs have reports which reflect their performance and give insight on how NVACs have been performing. The study also assumed that the key informants would be willing to participate and answer questions honestly.

1.6 Structure of the dissertation

Chapter one presents background information on vulnerability assessment and analysis in SADC and South Africa, the research problem, importance of the study, limitations and assumptions in the study. Chapter two reviews existing relevant literature on vulnerability and food insecurity as well as the SAVAC status. The criteria for measuring organisational effectiveness and efficiency, NVACs in particular, is set and general framework for effectiveness and efficiency in SADC NVACs is modelled in chapter three. Chapter four describes the study area (South Africa) while chapter five provides a comprehensive methodology used in the study. The results are presented and discussed in chapter six along with the SAVAC framework as proposed by the researcher. Finally, chapter seven presents study conclusions and recommendations.

CHAPTER TWO

REVIEW OF LITERATURE

2.1 Introduction

This chapter reviews the existing literature on the concept of vulnerability, state of vulnerability in Southern Africa and South Africa. An overview of factors contributing to vulnerability in Southern Africa follows. The review outlines the evolution of vulnerability assessment in Southern Africa and how vulnerability assessment and analysis is carried out in South Africa. The chapter further outlines the frameworks/methodologies used for assessing vulnerability in Southern Africa. The South African NVAC status is also looked into. A summary is provided to conclude the chapter. Although it is critical to discuss organisational effectiveness and efficiency, this is not included in chapter two but dealt with in a separate chapter due to the length at which it is discussed.

Remote rural area inhabitants lack diverse livelihood strategies. Ellis, 2003 has shown that while agriculture is the main source of livelihood in most African countries, it is insufficient to reduce vulnerability because of its subsistence nature. Furthermore African rural areas are characterised by high levels of illiteracy and the subsequent lack of employment opportunities (Alemu, 2011). These factors reduce households' resilience and increase sensitivity to livelihood shocks. Vulnerability assessments in South Africa and the Southern African region should be holistic to address both types of marginalisation that are existent.

Decision-makers and relevant stakeholders must move vulnerable households and communities out of vulnerability and advocate for resilience but this becomes difficult in the absence of accurate information on vulnerability. It is therefore imperative that vulnerability assessments and analyses be done effectively and efficiently if this vision is to be realised.

2.2 The concept of vulnerability

Vulnerability refers to "exposure and sensitivity to livelihood shocks" (Ellis, 2003:2). A good livelihood system should display high resilience and low sensitivity to shocks while vulnerable livelihood system displays high sensitivity to shocks and has low resilience. Frankenberger et. al.

(2005) add that vulnerability can either be chronic (persistent) or transitory. It is further stated that chronic vulnerability is usually manifested when households or communities do not diversify livelihood strategies. Moreover, households or communities maybe exposed to vulnerability temporarily and this is known as transitory vulnerability (Frankenberger *et. al.*, 2005). Such incidences may be seen when coping capacity is reduced in subsistence farming households and communities when they run out of food before the next harvest or during erratic weather patterns. In the Southern African region, including South Africa, both forms of vulnerability are experienced (Ellis, 2003). Therefore it is important to carry out vulnerability assessment and analysis to help communities develop resilience.

In addition, Hart (2009) has identified that vulnerability can either be internal or external. External vulnerability is when livelihoods are threatened or exposed to shocks as a result of external factors such as political instabilities and economic meltdown. On the contrary, internal vulnerability is at play if livelihoods are threatened or exposed to shocks due to internal factors such as lack of access to assets and low income (Hart, 2009). In spite of the assessments, analyses and vulnerability mitigation programmes, the Southern African region still experience internal and external vulnerability (Hart, 2009).

Vulnerability is caused by a number of factors, which can be categorised into the following two groups; economic marginalisation and social marginalisation, FIVIMS (2006). It is further stated that in economic marginalisation, the vulnerable households and communities are characterised by lack of resources such as land, capital and literacy (FIVIMS, 2006). The subsequent lack of such resources narrows the livelihood strategies and eventually exposes households to livelihood shocks, in which case, vulnerability is at play. Social marginalisation is the predisposing factors which include; gender (women and girls), age (children and elderly), illness or disability (FIVIMS, 2006). Women and girls in most African countries have limited equity rights to acquire assets such as land which is the main source of food production in Africa. The ultimate outcome is increased vulnerability. The elderly and young children cannot work and are predisposed to vulnerability.

2.3 The state of vulnerability to food insecurity in Southern Africa

The Southern African region has approximately 237 million. The region is characterised by prevalence of persistent poverty. Poverty is known as a major factor that predisposes households to food insecurity and vulnerability. A defined poverty line in Southern Africa, in monetary terms is 2 US\$ per person per day (SADC, 2008). It is estimated that approximately 45% of the population in Southern Africa lives on 1 US\$ per person per day. The implication is more people in the Southern African region experience chronic vulnerability. While studies (Ellis, 2003; Frankenberger *et. al.*, 2005; Chilonda *et. al.*, 2007 & Chipika, 2007) have identified factors contributing to vulnerability in Southern Africa, less attention has been paid to the notion of effectiveness and efficiency of the VAA bodies. Therefore, essential elements of effectiveness and efficiency must be identified to enable such bodies to deliver an effective and efficient vulnerability assessment and analysis.

2.3.1 Factors contributing to vulnerability in Southern Africa

Studies have identified several factors that contribute to vulnerability in the Southern African region (Ellis 2003; Frankenberger *et. al.*, 2005; Chilonda *et. al.*, 2007; & Chipika, 2007). Firstly, the economic melt-down has been identified as a key cause of persistent poverty, hunger and vulnerability in Southern Africa in many ways (Chilonda *et. al.*, 2007). The economic melt-down does not only result in high rates of unemployment but also in low wages. Moreover, the melt-down inflates the prices of fossil fuels. Fossil fuels are used in manufacturing of most agricultural inputs such as fertilizers. In such instances, manufacturers are bound to increase the prices of agricultural inputs. To avoid running a loss, crop producers also increase output prices such as staples when used inputs were purchased at inflated prices. Subsequently, the inflated staple prices reduce the poor households' ability to access food and therefore increase such households' livelihood vulnerability status. While the impact of the economic meltdown is seen on poor households' livelihoods, there is little certainty on the degree of such households' vulnerability. The situation calls for the effective and efficient assessment of the prevailing vulnerability in Southern Africa. This can be achieved by identifying essential elements for effective and efficient vulnerability assessment in the region.

Secondly, climate change impacts negatively on agriculture and land-based livelihoods such as wild fruit and wood gathering. Climate change is the result of increase in fossil fuel burning and land use change which ultimately increase the green gas emission (UNFCCC, 2007). The effects of climate change include; an increase in global temperatures, changes in cloud cover and precipitation as well as acidity (UNFCCC, 2007). UNFCCC (2007) further articulates that the African continent (of which Southern Africa is part) is the most severely affected by climate. In Southern Africa, agriculture is the key driving force for economic development, accounting for 61% employment and income in the region (Frankenberger *et. al.*, 2005). The continuous occurrence of erratic weather and climatic conditions in the region therefore severely threaten and shock agriculture-based livelihoods.

As a result of threatened agricultural livelihoods, poor households may be unable to secure sufficient food and cash income from agricultural production. For example, Mozambique experienced the longest dry-spells lasting for half the growing season in 2001/02 (ECA-SA, 2002). The result was poor harvest, as agriculture highly depends on rain-fed systems in the country, and a subsequent hunger, as agriculture is the main source of food in Mozambique. The safety nets were not in place at the time and the country had to rely on humanitarian assistance. However, the vulnerable could not be quantified leaving the humanitarian assistance credibility questionable.

Mozambique was not the only country affected then, other SADC countries, except Mauritius and South Africa, also experienced the worst food crisis in 2000 to 2002 due to either floods or drought (ECA-SA, 2002). Such countries also had to rely on humanitarian assistance for the same reason as Mozambique. This escalated vulnerability in the Southern African region. It therefore remains that vulnerability is critical in the Southern African region and should be assessed based on efficiency and effectiveness for credibility and sustainability.

Thirdly, poor governance and regulatory policies have escalated the levels of vulnerability in Southern Africa (Chipika, 2007). Chipika (2007) further states that, governments do not have sufficient policies to holistically address poverty, hunger and vulnerability. For instance, the South African Market Policy does not fully address the needs of smallholder farmers and

therefore such farmers do not share in the market economy (Makhura, 2001). The Land Reform Policy in Zimbabwe is an example of governance failing to reduce or at least contain vulnerability. ECA-SA (2002) highlighted that the introduction of the Land Reform Policy in Zimbabwe negatively affected the large scale commercial farming and the result was an alarming food crisis. During the dry-spells in Mozambique, the northern areas managed to produce a surplus of 100 000 tons of maize but the surplus could not be taken to the regions affected due to high transport costs (ECA-SA, 2002). Therefore it is safe to infer that had transport regulations not been poor, the surplus could have been transported to the affected regions of the country.

Malawi government of 2005 exemplifies that if intervention policies and governance are harmonious and relevant to local needs, they can reduce vulnerability. In the early 2000s, Malawi, like most Southern African countries, experienced the worst food crisis. Poverty rates were high with approximately 53% population living below the poverty line (Glick, 2011). In 2005, the then government introduced fertilizer and maize seed subsidy aimed at the poor. By 2006, the country produced 2.7 million tons of maize (Glick, 2011) which was more than twice the maize produced in the previous year. Instead of importing maize in 2007, Malawi became the largest maize exporter. It is therefore important for decision-makers and policy-makers to critically assess the situation and formulate policies that will holistically address vulnerability. This can be achieved if vulnerability assessments and analyses are prioritised and done effectively and efficiently.

Lastly, the Human Immuno-deficiency Virus and Acquired Immuno-deficiency Syndrome (HIV and AIDS) pandemic makes it even more difficult for the Southern African region to reduce vulnerability to food insecurity (Ellis, 2003). The pandemic depletes human and economic capitals in three ways. First, infected household members cannot work because of illness reducing opportunities to economic gains. Second, affected household members devote most of their time caring for the sick household members, increasing economic burdens. In the process quality and quantity of labour, along with production and productivity in agriculture and non-agriculture-based livelihoods, are reduced. Last, households are sometimes forced to

spend cash savings and or sell assets to pay for medical fees and drugs for the sick household members. Food and cash income are greatly reduced followed by an increase in vulnerability to food insecurity. Table 2.1 shows vulnerability trends to food insecurity in the Southern African region from fiscal year 2003/04 to 2010/11.

Table 2.1: Population vulnerable to food insecurity and poverty in SADC from 2003/4 to 2010/11 consumption period (SADC annual report, August 2010).

COUNTRY	CONSUMPTION PERIOD							
	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11
Lesotho	270 000	948 300	541 000	245 700	553 000	353 00	450 000	200 000
Malawi	400 000	1 340 000	5 055 000	833 000	63 200	673 498	147 492	1 061 000
Mozambique	659 000	659 000	801 655	240 000	520 000	302 700	281 300	450 000
Namibia	-	-	-	-	-	-	224 795	106 297
Swaziland	217 000	600 400	634 400	465 900	345 000	238 600	262 000	160 989
Tanzania	844 333	686 356	848 019	995 433	581 974	780 416	420 000	717 896
Zambia	60 000	39 300	1 232 700	380 537	440 866	444 624	110 000	53 629
Zimbabwe	5 422 600	2 300 000	2 884 800	1 392 500	4 100 000	5 100 000	1 400 000	1 287 937
SADC	7 872 933	6 573 356	11 997 574	4 553 070	6 604 040	7 892 838	3 295 587	4 037 748

^{*}The information is only for countries that have National Vulnerability Assessment Committees (NVACs).

Table 2.1 shows that the Southern African region experiences high levels of vulnerability and poverty. The region had the highest number of people experiencing food insecurity vulnerability (11 million) in 2005 as the result of drought and floods which crippled crop production (Drimie, 2005). While an improvement in vulnerability (3.3 million people) was seen in 2009/10, an increase (4.04 million vulnerable people) was experienced in 2010/11. The increase implies that the Southern African region is far from meeting its pledge of achieving the first Millennium Development Goal (MDG): eradicate extreme poverty and hunger. The specific target of MDG 1: halving the proportion of people living below 1 US\$ per person per day and people suffering from hunger by 2015, is clearly indicative of the important role, the assessment of vulnerability has on overall development. Progress towards achievement of the other seven MDGs depends on the successful outcome of MDG 1 therefore; vulnerability assessment is an

underlying factor of all the MDGs. The Southern African (South Africa in particular) decision makers must therefore take into consideration; establishing NVACs on the basis of essential elements for delivering an effective and efficient vulnerability assessment and analysis if they are determined to meet the MDG 1 target. This is also likely to render households food security and resilience to livelihood shocks and threats.

2.4 The state of vulnerability to food insecurity in South Africa

More than fifty percent of cereals in the Southern African region is produced in South Africa (Ellis, 2003). Because of its continuous grains exportation, unlike other Southern African countries, South Africa was thought of as food secure until recently (USAID, 2009). Some longitudinal studies (Bonti-Ankomah, 2001; Altman *et. al.*, 2009) revealed that South Africa is indeed a food secure country; however food insecurity and vulnerability are rife at household level. About 39% of households are food insecure in South Africa, (Bonti-Ankomah, 2001). However, the quantification of vulnerability is not yet holistic and credible due to the absence of a body dealing specifically with vulnerability assessment and analysis.

Moreover, food insecurity in South Africa used to be attributed to crop failure but it has been revealed that failing livelihoods are the causal factors (Hendriks, 2005). The situation is exacerbated by chronic poverty which persists in most rural areas as remnants of the previous apartheid era. Poverty prevents households from developing diverse and sustainable livelihood strategies. As a result, households' resilience to livelihood shocks and threats is limited and predisposition to vulnerability is increased. FIVIMS (2006) additionally highlighted that food insecurity in South Africa is not caused by food shortage but inadequate access related to unemployment. Despite the economic growth in South Africa, this has been a largely jobless growth benefitting only highly skilled personnel and not the poorly skilled and vulnerable (Burger & von Fintel, 2009). In spite of South Africa being a high middle economy (World Fact Book, 2011) and therefore distinct from many Southern African countries, its economy still poses a threat to many livelihoods due to uneven distribution of income. Income distribution affects households in a number of ways.

Firstly, many South African households do not grow own food but depend on cash for purchasing (Bonti-Ankomah, 2001). Secondly, households that produce food may not have enough for year-round consumption therefore will have to supplement by purchasing food items (Labadarios *et. al.*, 2009). In addition, South Africa, like the rest of the world, recently experienced the negative impact of global recession and economic melt-down that resulted in significant job losses. Livelihoods in South African rural areas mainly comprise of wage income and social grants (Bonti-Ankomah, 2001). Rural provinces in South Africa were therefore most affected by the economic melt-down. The affected households, with weak livelihood strategies in particular, could not financially access food and therefore were rendered vulnerable.

Furthermore, an on-going demographic and epidemiological transition exposes South Africa to high levels of vulnerability (Labadarios *et. al.*, 2009). The prevalence of HIV in South Africa is currently at 10.5% while 17% of the population is infected (STATS SA, 2010). The impact of HIV and AIDS in South Africa is similar to that in the Southern African region discussed in section 2.3.1. STATS SA (2010) documents that in 1994, the underweight in under-fives constituted 9.3% of under-fives in South Africa and the percentage had increased to 10% in 2010. The increase reflects that South Africa is currently not in a position to meet the target of halving the prevalence of underweight in under-fives by 2015. The absence of the NVAC in South Africa makes it difficult to establish and quantify the underlying cause of vulnerability. Vulnerability in South Africa remains complex in effective and efficient implementation due to a three tier government structure and the overlapping responsibility in food insecurity and vulnerability in some government departments. Therefore establishing an NVAC based on essential elements for delivery of an effective and efficient vulnerability assessment remains important.

2.5 The evolution of vulnerability assessment in Southern Africa

Vulnerability assessment is one of the means in which food (in) security status is analysed (Marsland, 2004). The assessment involves critical analysis of how households obtain and utilize food incorporating risks and coping strategies. In vulnerability assessments, baselines are established on household livelihoods, food access and consumption over a defined period of time. The use of vulnerability assessment enables linkage between relief and development

activities. Most importantly, vulnerability assessments provide information which, when used appropriately by decision-makers and relevant stakeholders, can make vulnerable households resilient to livelihood shocks and threats.

In Southern Africa, the scope of assessment has changed since the 90s and no longer deals with food security issues only but looks at factors that impact on food insecurity and vulnerability for example, vulnerability assessments used to concentrate on early warning of shocks, particularly drought on crop production.

The Southern African region experienced the worst food crisis in 1992. This was as a result of widespread drought from El Nino (Drimie, 2005). Not much was done by SADC then known as SADCC (Southern African Development Coordination Conference). A decade later, the region continued to experience drought owing to erratic rainfall patterns. This led to the continuous fluctuations in food production and subsequently, food insecurity and vulnerability (Drimie, 2005). It was only then that SADCC took the matter seriously by considering the establishment of a data recording system that would predict food availability levels. The Regional Early Warning Unit (REWU) was established.

2.5.1 REWU, NEWU and vulnerability assessment

The Regional Early Warning Unit (REWU) was established through the commissioning of the United Nations' Food and Agricultural Organization (FAO) by SADC in 1990 to come up with the institution that would gather and document information on food security. By 1996, the FAO commissioned project established the SADC REWU and housed the unit under SADC Food, Agriculture and Natural Resources (FANR) (Marsland, 2004). The establishment of REWU was based on FAO's finding that food production fluctuates due to seasonal variations in weather patterns. Therefore, REWU was mandated to establish food data recording system that would enable monitoring of food availability throughout the seasons.

Since REWU was regional, the scaling down was done to enable each member state to have its own National Early Warning Unit (NEWU). NEWU performed similar functions to REWU but at country level. According to Marsland (2004), NEWUs were initially funded by REWU. When

REWU could no longer fund NEWUs, information on food availability could hardly be gathered. Marsland (2004) has shown that this was due to NEWU not being fully integrated into government structures, and therefore could not be budgeted for, coupled with a high staff turnover resulting from lack of institutional structures. While REWU and NEWUs dealt with food availability issues, it did not fully address vulnerability, as the concentration was on food availability. REWU and NEWU needed to have encapsulated food access and livelihoods in an attempt to holistically address the vulnerability. In addition, NEWUs could have been effective had the approach used to establish them been bottom-up not top-down as was the case. In top-down approach decisions are made and imposed by top management (Panda, 2007) and the outcome is, poor ownership by individuals expected to implement the decisions on the ground. REWU formulated a mandate and guidelines on how NEWUs should operate. Since member states were not fully engaged in decision making such as budgets and funding, ownership of NEWUs was minimal in member states. There is therefore a reason to believe that NEWUs' ineffectiveness was an outcome of the use of top-down approach in the establishment.

2.5.2 RVAA, RVAC and mandate for vulnerability assessment

Information on vulnerability to food insecurity remained scarce due to dysfunctional NEWUs. SADC then established the Regional Vulnerability Assessment and Analysis (RVAA) which was to "encourage coordinated development in the field of vulnerability and livelihood assessment in Southern African Community region" (RVAC, 2005). The Regional Vulnerability Assessment Committee (RVAC) was then formed as part of RVAA. Information from previous attempts of improving on vulnerability usually reached decision makers late. RVAC was to ensure that vulnerability assessment is such that the obtained information on food (in) security reaches decision makers in time for informed interventions. Each SADC member state was encouraged to form its own National Vulnerability Assessment Committee (NVAC) as subset of RVAC. Of the fifteen SADC member states, only nine have established their own NVACs exclusive of South Africa (RVAC, 2005)

The NVACs were to integrate development issues in assessing vulnerability as food security issues alone, did not solve the persisting vulnerability. Inter-agency groups participated in the

national vulnerability assessment in member countries. In 2004, SADC Head of State Summit stamped on the formal participation of inter-agency groups in vulnerability assessment. In the same year, SADC Regional Stakeholder Workshop on Vulnerability Assessment developed the RVAC mandate which is as follows:

- "broadening the composition of RVAC to include
 - -SADC bodies covering social issues, health, food security and nutrition, poverty and HIV/AIDS
 - -To fully recognise the membership of technical collaborating partners, being, FAO, FEWSNET, CHA, SC UK, UNICEF, WFP, and to include other agencies working in vulnerability assessment.
- Establishment of full time technical secretariat with dedicated staff to implement the RVAC work plan under the direct supervision of the RVAC chair
- Create an RVAC Steering/Advisory Committee, meeting annually, chaired by the SADC
 Senior Management officer and comprising of senior-level officials from the following
 -SADC member states
 - -SADC Secretariat Directorates/Units covering social issues, health, food security and nutrition, poverty and HIV/AIDS
 - -Technical collaborating partners
 - -Donors
- Place the RVAC under the office of the Chief Directorate (CD) and house it as a Project Management Unit (PMU) probably under the Strategic Planning Unit which will also take on Poverty Mapping Unit in the near future" (RVAC, 2005).

In member states where there is no NVAC, vulnerability assessments are done by equivalent bodies to NVACs such as the Department of Agriculture in South Africa. In assessment of vulnerability, the NVACs or equivalent bodies are not bound to follow a particular methodology or framework due to a number of variations such as types of disasters experienced, weather patterns in member countries (RVAC, 2008). Seemingly, the RVAC and NVACs address vulnerability more than NEWUs. However, more work is still pending for NVACs to effectively

and efficiently address vulnerability. This can be effected if essential elements for effective and efficient NVAC are identified and appraised.

2.6 Vulnerability assessment in South Africa

South Africa joined SADC membership in 1994 (DFA, 2011) but saw no need to have own NVAC like most SADC member states. As aforementioned, South Africa has been known as grain exporter and was assumed to be food secure (Bonti-Ankomah, 2001). Perhaps South Africa did not see a need to establish its own VAC like most of other SADC countries because of the assumption that it was food secure albeit only at a national level.

Food security research is very limited in South Africa (Hendriks, 2005). Existing studies on food security have highlighted that the phenomenon of food security in South Africa applies only at country level but not at household level (Bonti-Ankomah, 2001; Hendriks, 2005, Altman *et al.*, 2009). Upon realization that there is food insecurity and vulnerability at household level, the South African government, through the social cluster consisting of various government departments, formed the Integrated Food Security Strategy (IFSS) nested under the National Department of Agriculture (NDoA, 2002). The social cluster consists of health, social development, public works, water affairs and forestry, transport, education, provincial and local government, land affairs, environment and tourism, arts and culture, science and technology, Statistics South Africa and agriculture(food security) departments (NDoA, 2002).

The main goal of the strategy was to eradicate hunger, malnutrition and food insecurity (Makhura, 2008). However, the country continues to experience shocks and hazards increasing vulnerability. According to Dlamini (2011), eight provinces (Limpopo, Gauteng, KwaZulu-Natal, North West, Northern Cape, Mpumalanga, Free State and Eastern Cape) have been declared disaster areas because of floods which resulted in loss of 20 000 hectares of land. In addition, crop production has declined from 12 815 million tons in 2009/2010 to 10 883 million tons in 2010/11 (Dlamini, 2011). The critical problem lies in implementation of vulnerability and food insecurity mitigation programmes due to overlapping of responsibilities among the social cluster departments.

A key omission in the parties involved in the government clusters such as the social cluster, is the traditional governance which is a legitimate governance structure in South Africa. Bonti-Ankomah (2001) and Moletsane & Reddy (2011) highlight that about 14 million vulnerable and food insecure South Africans reside in rural areas where the traditional authority is highly regarded by inhabitants. Therefore, exclusion of the traditional authority in food insecurity and vulnerability issues has created an enormous gap. This is due to that the ground social situation, well-known by the traditional authority, is not clearly accessed by the constitutional government. Moreover, most rural inhabitants do not have the ability to communicate with officials or if they do, they do not trust that their needs will be attempted (Campbell & Meer, 2007) as much as would be a case, had their traditional leaders been involved. In addition, there is no legitimate body within the three tier South African government structure that is solely mandated to address VAA and food insecurity. It is therefore not clearly known how food insecurity and vulnerability issues must be coordinated and flow within the three tier government structure. In this regard, the credibility of food insecurity and vulnerability information remains dubious.

Altman *et. al.*, 2009, have shown that in attempting to assess food security in South Africa, studies have used different sampling techniques and methodologies such as the General Household Survey (GHS), Labour Force Survey (LFS) and National Food Consumption Survey (NFCS) which are not even nationally representative. In addition, the surveys are not comparative and yield different results (Hendriks, 2005). Despite the surveys, it remained not clear who the vulnerable are, where they are, why they are vulnerable and how many they are, making it difficult for the government and relevant stakeholders to effectively target food insecurity and vulnerability interventions (Drimie & Schwabe, 2009). In 2004/05, South Africa embraced the Food Insecurity and Vulnerability Information Mapping System (FIVIMS) as an information tool to assess vulnerability and food insecurity. FIVIMS was piloted in Sekhukhune District Municipality in 2006 with the aim of establishing the baseline on food insecurity and vulnerability and building the suitable model (in South African context) for reporting and monitoring (Drimie & Schwabe, 2009).

The baseline on food insecurity and vulnerability, food security model and monitoring and evaluation system for Sekhukhune were established through FIVIMS. This provided more credible information on food insecurity and vulnerability interventions by decision makers. However, not much has been done about the obtained information due to overlapping of food insecurity and vulnerability responsibilities among government departments and omission of traditional authority in planning and implementation. Additional reasons why FIVIMS has not impacted effectively on food insecurity and vulnerability despite being a good model include; collection of data by illiterate enumerators and a "shaky political will" (Rule *et. al.*, 2005) which resulted in a limited budget for proposed activities.

2.7 Frameworks/methodologies used to assess vulnerability in Southern Africa

Owing to insufficient information and persistent vulnerability, the Southern African region adopted certain frameworks that would provide a better understanding of livelihoods and vulnerability. Many frameworks (methodologies) have been used in the SADC region to assess food insecurity and vulnerability but for the purpose of this study, four frameworks (methodologies) are discussed. The frameworks (methodologies) considered are; the Comprehensive Food Security and Vulnerability Assessment(CFSVA), Household Economic Approach (HEA), Integrated Food Security Phase Classification (IPC) as well as the Food Insecurity and Vulnerability Information and Mapping System(FIVIMS). Table 2(a) and 2(b) summarise some frameworks used in vulnerability assessment in Southern Africa, the information each framework gathers, how the information is gathered, countries that have used such frameworks/methodologies and the framework/methodology's strengths and weaknesses.

Table 2(a): CFSVA & HEA as frameworks used in assessing vulnerability to food insecurity in Southern Africa (Devereux 2004; FAO 2005; FAO 2008; LVAC 2002; SC (UK) 2000; Seaman *et. al.*, 2006; WFP 2009).

FRAMEWORK/	DESCRIPTION	INFORMATION	HOW THE	COUNTRIES	ADVANTAGES	DISADVANTAGES
METHODOLOGY		COLLECTED	INFORMATION IS	WHERE USED		
			COLLECTED			
Comprehensive	Mostly used in	Who, where, how	Establishing livelihood	Mozambique,	Identifies causes of	Takes long time to complete (4-
Food Security	countries where	many and why the	strategies, household	Angola,	vulnerability, profiles	8months),
and Vulnerability	crisis recur.	vulnerable are. The	asset-base, household	Democratic	household livelihoods.	costly, information not used
Assessment	Provides detailed	suitable response to	food access, utilization.	Republic of	Uses secondary data only.	year after year and
(CFSVA)	information on	vulnerability.	Gender dynamics,	Congo,	Designs and implements	information collected through
	food security and		established markets	Madagascar,	food security monitoring	households only.
	vulnerability.		and decision making.	Tanzania.	systems.	
Household	A livelihood based	Who, where, how	Livelihood zoning,	Malawi,	Predicts short-term	Requires highly skilled and
Economic	methodology	many the vulnerable	wealth breakdown,	Swaziland,	changes in food security	experienced personnel.
Approach (HEA)	enabling the	are. The suitable	livelihood strategies,	Lesotho,	access, compares wealth	
	analysis of	response to	analysis of market	Tanzania,	categories and provides	
	livelihoods	vulnerability.	trends and outcome	Mozambique	more reliable results.	
			analysis.			

Table 2(a) has summarised the use of CFSVA and HEA in the Southern African region. The Southern African region has not reached a consensus on which methodologies/frameworks to use as standard therefore countries choose any that is convenient depending on the resources and urgency of the information to collect. This has been identified as a crippling factor in the region's vulnerability assessment as it becomes difficult to compare results among countries (Frankenberger *et. al,* 2005). It would therefore be beneficial for countries to reach a consensus on methodologies/frameworks to use for vulnerability assessments.

Different assessment methods/frameworks have been adopted in different countries. For instance, CFSVA has been used in Tanzania to analyse the impact of drought (McKinney, 2006). It was known that the country was food insecure and vulnerable but there was no information on the hardest hit. The use of CFSVA revealed that food insecurity and vulnerability was present in all livelihood groups and that variation was noticeable among the groups and locations. Decision makers were then able to take appropriate interventions.

The success of the HEA has been seen in Malawi. This is because there is continuity of the use of the methodology for vulnerability assessment. Malawi has since moved from relying on food aid to having grain surplus for exportation (MVAC, 2006). In countries where there is no continuity of the use of HEA, the methodology's successes have not been realised.

CSFVA and HEA are not the only frameworks popular in the Southern African region. Table 2(b) summarises two other popular frameworks used in the region.

Table 2(b): IPC & FIVIMS as frameworks for assessing vulnerability to food insecurity in Southern Africa (Devereux 2004; FAO 2005; FAO 2008; LVAC 2002; SC (UK) 2000; Seaman et. al., 2006; WFP 2009).

FRAMEWORK/	DESCRIPTION	INFORMATION	HOW THE	COUNTRIES	ADVANTAGES	DISADVANTAGES
METHODOLOGY		COLLECTED	INFORMATION IS	WHERE USED		
			COLLECTED			
Integrated Food	Classify phases of	Who, where, how	Measures livelihoods	Zimbabwe,	Compares different	Secondary data not usable,
Security Phase	livelihood vulnerability.	many the vulnerable	against defined	Mozambique,	regions results, results	consumes time, no prediction
Classification	,	are.	phases of	South Africa,	used in development	of hazard impact, cannot
(IPC)			classification.	Swaziland.	planning. Information	quantify response to hazard.
					collected easily linked to	
					action	
Food Insecurity	Addresses	Who, where, how	Establishing	South Africa,	Enables monitoring of	Weak in-depth appraisal of
Vulnerability	information	many the vulnerable	demographics,	Mozambique,	vulnerability and food	causes of vulnerability, needs
Information	systems and/ or	are. Suitable	economics, famine	Namibia,	security, improves	high level expertise
and Mapping	their networks.	interventions.	early warning	Tanzania,	information	
Systems			systems, hazards and	Madagascar,	management and use,	
(FIVIMS)			shocks.	Lesotho.	and facilitates	
					integration of data.	

Table 2(b) has outlined the IPC and FIVIMS as two of frameworks in assessing vulnerability in the Southern African region. However, IPC is very recent in Southern Africa. The framework has been adopted by South Africa and Zimbabwe (Korpi, 2010). In South Africa, IPC was used as an initiative to test if the framework could be useful in assessing vulnerability in the absence of VAC whereas Zimbabwe incorporated the framework in VAC for assessing food security vulnerability (Korpi, 2010). IPC has not been successful in Zimbabwe as users did not fully understand how the framework operates. In addition the IPC only used stunting in the first phase of classification whereas stunting has a high prevalence in the country (more than 40%) (Korpi, 2010). Moreover, the standard indicators used in IPC had little relevance to Zimbabwe.

In addition to similar problems experienced in Zimbabwe, South Africa experienced problem of water as an IPC indicator. In IPC, water is talked of in terms of availability whereas availability is not a problem in the country but quality. Livelihood assets, HIV/AIDS and unemployment are very important for South Africa, but IPC does not capture such indicators (SADC, 2010).

FIVIMS network was established following the 1996 World Food Summit recommendation that information on vulnerability assessments must be improved. FIVIMS was adopted in Southern Africa through the assistance of the Department for International Development (DFID), Famine Early Warning System Network (FEWS-NET) Save The Children (SC UK), World Food Programme (WFP) and Food and Agricultural Organization (FAO) (Verduijn, 2005).

South Africa adopted FIVIMS framework on the premise of its capacity to enhance best practices across agencies working in food insecurity and vulnerability information and mapping within countries. The framework was piloted in Greater Sekhukhune District Municipality in two phases starting from 2004. Phase (I) involved collecting data from all households in the district in order to establish who the vulnerable are; the underlying causes of the vulnerability; the coping strategies employed and the institutional structures addressing the vulnerability. Phase (II) took place in 2006 and validated the information collected in Phase (I). Guidelines were also devised for implementing FIVIMS in other provinces (SADC RVAA, 2010). FIVIMS has been successful in proving baseline for food insecurity and vulnerability through exploration and quantification of livelihood strategies in the Sekhukhune District Municipality.

However, FIVIMS has not yet been implemented in other provinces (SADC RVAA, 2010) due to limited resources resulting from a low political will (Drimie & Schwabe, 2009). This pitfall may be attributed to the absence of NVAC and subsequent nesting of FIVIMS under the Department of Agriculture which is not mainly concerned with vulnerability assessment but in agricultural issues in the country. The NVAC could have seen to the FIVIMS implementation in other provinces as NVACs deal specifically with vulnerability assessment. This calls for establishment of an institution that will, specifically, be mandated to efficiently address vulnerability to food insecurity in South Africa.

In Lesotho, FIVIMS framework was implemented at the time when the Food Security policy was being formulated (LVAC, 2002). Therefore, it was through the implementation of FIVIMS that recommendations from Lesotho Vulnerability Assessment Committee were incorporated in the Food Security Policy.

2.8. South African NVAC status

The scoping study on the establishment of the South African NVAC was carried out by Gandure & Manyaka in 2010. The main focus of their study was on the thematic areas illustrated in box 2.1.

Box 2.1 Thematic areas for the scoping study by Gandure & Manyaka, 2010.

- Identification of food security and vulnerability information systems in South Africa and assessment of whether current information systems are able to answer cross cutting issues such as linkages to acute and chronic food insecurity, poverty, health and HIV and AIDS,
- The establishment and analysis of institutional roles and responsibilities regarding food security and vulnerability issues in the country,
- The documentation of food security and poverty alleviation programmes implemented by Integrated Food Security and Nutrition—Task Team (IFSNTT) members and key policies guiding food security and vulnerability programming.
- Stakeholders' views on the integrated food security analysis approach, institutionalisation of food security structures and the feasibility of setting up a formal and operational national VAC in South Africa.

From the thematic areas, the following were identified:

- the existing information systems in relation to acute and chronic food insecurity,
- the institutional roles and responsibilities regarding food security and vulnerability assessment,
- food security and alleviation programmes in South Africa as well as
- key policies for food security in South Africa.

Gandure and Manyaka (2010) were able to formulate and propose the South African Vulnerability Assessment Committee (SAVAC) as shown in figure 2.1.

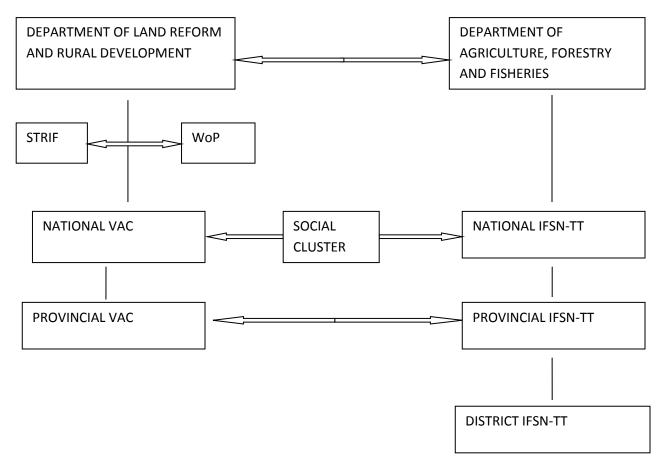


Figure 2.1 Proposed VAC institutional structure (Gandure and Manyaka, 2010).

Figure 2.1 illustrates the institutional structure of SAVAC as proposed by Gandure & Manyaka, 2010. The figure proposes that SAVAC should be housed under the departments; agriculture, forestry and fisheries as well as land reform and rural development. The National VAC is expected to liaise with social cluster and the National Integrated Food Security and Nutrition Task Team (IFSN-TT) as they already deal with food security intervention issues. The provincial VAC is expected to liaise with the Provincial IFSN-TT to assess and analyse food insecurity and vulnerability based on the context of each province. This was arrived at through stakeholder consultations. The main focus of Gandure & Manyaka's, 2010 study was centred on the thematic areas shown in box 2.1.

Whilst the scoping study reviewed the existing food security and vulnerability information systems, the institutional roles and responsibilities as well as documentation of food security and poverty alleviation programmes, it took no regard that housing the NVAC under two ministries is likely to render it ineffective as the ministries are already mandated with other

responsibilities. In addition, coordination of NVAC activities is likely to be difficult due to overlapping of responsibilities between the two ministries and among the social cluster departments. The proposed framework further excludes the traditional authority yet is aimed at addressing food insecurity and vulnerability shown to be rife in rural areas (Rule *et. al.*, 2005) where the traditional leaders rule, possess knowledge on local socio-economic issues and are highly regarded by rural inhabitants. It is critical that these issues are considered when establishing the SAVAC if it is to deliver an effective and efficient VAA.

2.9 Summary

The chapter has shown that people are vulnerable if they cannot cope to livelihood shocks. Vulnerability in SADC has been attributed to numerous factors such as; declining economy that results in unemployment and subsequent reduction of cash income, changing climatic conditions that reduce agricultural production and subsequent food income, poor governance policies as well as increasing HIV and AIDS reducing the human capital. Despite attempts made to assess and analyse food insecurity and vulnerability in SADC, it is seen in the chapter that the state of vulnerability and food insecurity is on the increase. Finally, the chapter has illustrated that the SAVAC framework has been proposed though loopholes such as exclusion of traditional authority in the framework have been identified by the researcher. Chapter three will focus on elements constituting effectiveness and efficiency in NVACs.

CHAPTER THREE

ESTABLISHMENT OF THE CRITERIA TO MEASURE EFFECTIVENESS AND EFFICIENCY OF THE NATIONAL VULNERABILITY ASSESSMENT COMMITTEES (NVACs)

3.1 Introduction

This chapter outlines the concept of organisations in relation to NVACs, how organisations are institutionalised, their effectiveness and efficiency thereof. An exploration of how the concept can be used to formulate a tool (framework) that will be used to measure existing SADC NVACs' efficiency and effectiveness will follow. Measuring effectiveness and efficiency in existing NVACs is crucial as reasons for success or failure thereof will inform the premise for establishing the SAVAC framework to enable delivery of an effective and efficient VAA. Based on the hypothesis of this study, it is expected that establishing a NVAC on the basis of essential elements of effectiveness and efficiency enables the NVAC to deliver an effective and efficient vulnerability assessment and analysis.

3.2 NVAC as an organisation

Rainey (2009; 15), defines an organisation as "a group of people working together to pursue a goal". NVAC is therefore an organisation as it involves a group of people dealing with the assessment and analysis of livelihood vulnerability in the countries where existent. Such assessments and analyses generate information that can be used to; predict famines and disasters, quantify the levels of vulnerability, design social safety nets and programmes (Frankenberger et. al., 2005). The accuracy of information gathered and analysis is one factor that determines the appropriateness of the intervention and impact of the mitigation programme to curb vulnerability. The study hypothesises that if SAVAC is located in an appropriate department and sphere of government where it has strong governance, accountability and legitimacy (by law), it will be effective and efficient in addressing vulnerability. However, effectiveness and efficiency in organisations cannot be talked of

without mentioning institutionalisation. Therefore, it is imperative to first explore the concept of institutionalisation to establish how it affects the effectiveness and efficiency of NVAC as an organisation.

3.3 Institutionalisation of an organisation

An organisation is not born an institution but it becomes one (Boin & Christensen, 2008). Two major phases of institutionalisation have been identified; formalisation and legitimisation (Schwalbe, 2006). It is important to first note that organisations are formed because of a need to achieve certain goal(s) (Forbes, 2007).

In the phase of formalisation, an organisation must first define its goals which, in turn, must be translated into effective working practice. Goals may clash at times and an organisation must be able to reconcile them for client and stakeholder satisfaction (Boin & Christensen, 2008). An organisation must carefully choose goals likely to be perceived as valuable in the society it intends to operate. This is due to that the organisation must be seen as an important feature in the public system by both the political and societal stakeholders before it is institutionalised. Second, rules, procedures and means to ensure compliance must be devised and formalised followed by legitimisation.

In the legitimisation phase, formalised rules and procedures, along with provision of means of enforcing compliance in organisation are submitted to legal bodies for approval and therefore granting of legitimacy (Schwalbe, 2006). Legitimacy is granted through a mandate that provides organisational rights as well as obligations. Mandate of an organisation is considered legitimate if it is accepted by legislative bodies (Brinkerhof, 2005). In addition, a mandate is conferred if; the organisation is in alignment with the country's laws, displays broadly shared concepts of acceptable goals and has documented standards, code of conduct as well as expected performance. Organisational mandate further stipulates hierarchies, roles and responsibilities, values and norms, mission, vision, profile of positions as well as organisational policy regulations. In addition, the legitimate mandate grants an organisation legal recognition, formal power and authority (Koppell, 2008). An organisation with legitimate mandate can therefore be referred to as 'institutionalised' (Cantero, 2005).

The importance of institutionalisation becomes evident when power has to be exercised and decisions made (Elsig, 2006). Power is the ability of a person; team or organisation to influence other's behaviour or activities (McShane &Travaglione, 2003). Using Cantero (2005)'s definition of institutionalisation and Koppell (2008)'s view of legitimacy it is evident that only an institutionalised organisation can be in possession of formal (legitimate) power. Legitimate power enables enforcement of order. This is due to that legitimacy of a mandate enables a clear definition of institutional structure, roles and responsibilities as well as the chain of command. Clegg (2004) adds that when power is legitimate, there is minimal opposition-if at all- upon its execution as such power is regarded as impartial and therefore acceptable.

Furthermore, decisions have to be made within the organisation and by authorities above the organisation such as policy-makers. In decision-making, choice is made among alternatives (Elsig, 2006). In institutionalised organisation, decisions are made by hierarchies to whom legitimate power is vested upon. When not institutionalised, it becomes difficult for an organisation to make decisions due to absence of legitimate authority characterised by roles and responsibilities not clearly defined. The implication is limited effectiveness and efficiency in such organisation. Moreover, policy makers rely on organisations for information relating to the subject of concern. Therefore policy makers become reluctant to use information from uninstitutionalised organisations (Frankenberger *et. al.*, 2005). In summary it is important for organisations, including NVACs, to be institutionalised so that they are powerful to make own decisions, influence decisions made and policies to perform effectively and efficiently.

3.4 The concept of effectiveness and efficiency in organisations

Effectiveness and efficiency are often used interchangeably yet they are not synonymous. An organisation is described as efficient if it utilises minimum inputs (resources) for increased output (productivity) (Forbes, 2007). On the other hand, an effective organisation is one that achieves its objectives. In achieving the objectives, the effective organisation has to be efficient and therefore efficiency is a component of effectiveness (Scott *et. al.*, 2008). For the purpose of this study, Cetin & Cerit (2010)'s view of effectiveness and efficiency is crucial. They view effectiveness in an organisation as encompassing all external factors affecting the organisation

whereas organisational efficiency is viewed as the totality of all internal activities that determines the output in the organisation.

The concept of effectiveness and efficiency in an organisation is complex and there is no specific and universal indicator for effectiveness and efficiency (Forbes, 2007). Therefore, it is important that criterion be set for individual organisations. The current study explores different approaches that can be used in determining effectiveness and efficiency in an organisation to enable the selection of the best approach to use in determining NVAC's effectiveness and efficiency.

3.5 Approaches in measuring organisational effectiveness and efficiency

Mohamed (2004) highlights four approaches that can be used in determining the organisational effectiveness and efficiency thus: goal, process, contingency as well as system resources approach.

3.5.1The goal approach

According to Mohamed (2004), the goal approach determines organisational effectiveness and efficiency by measuring the organisation's ability to realise and achieve its goals. The goal approach is the commonest measure used in assessing organisational effectiveness because most organisations are formed with the aim of achieving certain goals. However, the goal approach has limitations in determining the organisational effectiveness as the approach considers only the outcomes and overlooks the processes involved in achieving the set goals. The NVACs, like any other organisations, are formed with the purpose of achieving certain goals with Vulnerability Assessment and Analysis as the major goal. The importance of the processes involved in achieving organisational goals has been emphasised by many researchers (Cantero, 2005; Clegg, 2004; Elsig, 2006; & Koppell, 2008). NVACs, like any other organisations, do have goals to achieve and also go through various processes in achieving the set goals; therefore it becomes essential not to overlook the processes involved in achieving the goals if effectiveness and efficiency are to be holistically determined. The goal approach is therefore inadequate to use in measuring the effectiveness and efficiency in NVACs.

3.5.2 The process approach

The process approach uses the internal processes in an organisation as specific features for measuring the organisational effectiveness and efficiency (Mohamed, 2004). Such processes include; how information flows and how power is used in decision making in determining the organisation's effectiveness and efficiency. However, the approach is limited to one element of organisational effectiveness and efficiency (the processes taking place in the organisation) and ignores the two other most important elements (inputs and outputs). It is important to consider how the organisation mobilises and utilises the resources (inputs) to achieve the goals (outputs) in assessing effectiveness and efficiency. The current study needs to look into all elements of effectiveness and efficiency in NVACs therefore the process approach is not suitable as it overlooks the inputs and outputs in organisations.

3.5.3 The constituency approach

The constituency approach, stipulates that the organisation has constituents (workers, clients and providers). In an organisation, providers may be donors, clients refer to users of the service provided by the organisation whereas workers are the employees in a specified organisation. When used to determine organisational effectiveness and efficiency, the approach considers the degree at which the organisation meets the needs of its constituents (Mohamed, 2004). The approach does not fully determine the organisational effectiveness and efficiency due to the difficulty in meeting the needs of all constituents of the organisation. Furthermore, the approach does not consider the relative importance of each constituent and the influence; the latter may have on the overall organisational performance (Mohamed, 2004). Due to the stated limitations, the constituency approach is insufficient to holistically address the problem in hand- effectiveness and efficiency in NVACs.

3.5.4 The systems resource approach

The system resource approach measures the organisation's ability to utilise resources and opportunities from its surrounding environment to achieve its goals. In addition, the approach

stipulates that equilibrium must be achieved as the organisation utilises the environmental resources while attempting to realise its goals. Therefore, failure to achieve equilibrium implies ineffectiveness in such organisation. Furthermore, the systems resource approach takes two directions. The first direction is the relationship of the organisation with its environment and the second is the open system approach. The open system approach comprises of the first three approaches (goal, process and constituency approaches) and has all necessary elements for organisation effectiveness and efficiency (Mohamed, 2004). Therefore the open system approach is considered holistic as it encompasses all components of the approaches discussed under 3.5 and includes the essential elements such as how the organisation relates to the surrounding environment. The approach is the most ideal for use in the current study as it will enable the establishment of a tool (framework) that will enable the measurement of effectiveness and efficiency based on NVAC goals, processes (organisational activities) as well as the extent to which goals are achieved.

3.6 Framework and criteria for analysing the effectiveness and efficiency in NVACs

Literature based on vulnerability assessment and analysis, and the following concepts thereof: what makes a NVAC an organisation, institutionalisation of organisation, effectiveness and efficiency in organisations as well as approaches used in measuring organisational effectiveness and efficiency shows that, effectiveness and efficiency in NVACs can be measured through the main objectives (gathering and analysing information on VAA and recommending mitigation programmes and interventions). However, for NVAC to achieve the stated objectives there are processes (as postulated by the system resources approach) that must be fulfilled within the NVAC. Such processes include:

- Well-informed and continuous VAA
- Ability of NVAC to influence policy
- Ability of NVAC to mobilise resources
- Well-organised institutional arrangement (organisational structure)
- Ability of NVAC to utilise resources
- Ability of NVAC to manage data

- Well-organised communication structure (for communication flow).
- Continuous monitoring and evaluation in a NVAC
- Ability of a NVAC to manage its finances (funds).

The extent to which the processes are achieved in the NVAC determine the success of NVAC (key success factors) and therefore form basis for measurable criteria for the effectiveness and efficiency of the NVAC in question.

3.6.1 Well-informed and continuous VAA

The National Vulnerability Assessment Committees were established with the main objective of gathering data to assess and analyse vulnerability (RVAC, 2005) for informed recommendations of mitigation programmes to policy makers. One of the components of system resource approach in measuring organisational effectiveness and efficiency is the organisation's ability to achieve its set goals (objectives). However, it is difficult to measure the extent to which the goals are achieved unless the measurable criterion is devised. In this regard, the informed and continuous VAA can be measured by first looking into the number of assessments carried out per annum. Secondly, area coverage (sample representativity) during assessment must be considered. When collecting data, it is usually expensive and time consuming to include the entire population being studied hence, sampling is done. However, the sample has to be representative of the entire population to enable accurate generalisation (Gerlach & Nocerino, undated) so that mitigation programmes are relevant to the entire population. Lastly, the existence of skills among personnel carrying out the VAA is essential as non-skilled personnel subjects data to various errors (Frankenberger *et. al.*, 2005) and subsequent mitigation programmes.

3.6.2 Ability of NVAC to mobilise and utilise resources

Using the postulation of the system resources approach, NVAC as an organisation must be able to draw (mobilise) resources from the surrounding environment and utilise the resources to the maximum capacity for achieving the objectives. Cetin & Cerit (2010) have highlighted that

external factors affecting the organisation's functioning, measure effectiveness and internal processes measure efficiency. NVAC's ability to utilise resources is an internal process in that, utilisation occurs within the NVAC. On the contrary, the NVAC must relate well with the surrounding environment so that it is able to mobilise resources from the latter. Scott *et. al.*, (2008) regard efficiency as a 'subset' of effectiveness, so does the current study. Since the NVAC mobilises resources such as funding externally and has human resources that can be mobilised internally, the study regards the ability of NVAC to mobilise resources as an indicator of both efficiency and effectiveness.

The main objective of NVAC is assessment and analysis of vulnerability. In order for the NVAC to achieve this objective, it must have stable finances and funds. An NVAC must be able to mobilise finances and funding from the environment (government and donors) to utilise in carrying out daily activities that will enable the NVAC achieve its objectives. Such activities include logistics such as transportation, payment of personnel as well as training in assessment methodologies.

According to Frankenberger *et.al*, 2005, donors have own objectives and interests and will fund activities that are in line with the preferred objectives. Frankenberger *et. al.*, (2005) further reported that SADC NVACs, with the exception of Mozambique NVAC, do not have own finances and depend entirely on short term external funding. This led to unorganised NVAC assessments, inadequate training of labour carrying out the assessments and analysis and the subsequent data being of poor quality. In addition, SADC NVACs, except Mozambique NVAC, are not institutionalised therefore receive limited financial support from the governments. Governments operate on budgets and NVACs cannot be budgeted for due to lack of institutional framework (Frankenberger *et. al.*, 2005). NVACs may therefore shift the assessment methodologies to meet the funders' conditions. Consequently, NVACs' ability to achieve own set goals is negatively affected.

3.6.3 Ability of NVAC to influence policy

As outlined in section 3.4, an institutionalised organisation is in a better position to influence policy than its counterparts. An organisation is referred to as institutionalised if it has a

legitimate mandate (Brinkerhoff, 2005). The legitimacy of a mandate enables a clear definition of institutional structure, roles and responsibilities as well as the chain of command. Clegg (2004) adds that when power is legitimate, there is minimal opposition -if at all- upon its execution as such power is regarded as impartial and therefore acceptable. Therefore, mandated organisations are in a better position to influence policies.

One of the objectives (goal) of NVACs is to make recommendations for mitigation programmes to policy makers, therefore; the successful NVAC is one that is able to influence policy. From Koppell's, (2008) statement that the legitimate mandate grants an organisation legal recognition, power and authority, it is evident that NVACs may neither legally be recognised nor be powerful enough to influence policy in the absence of legitimate mandate. Frankenberger et. al.,(2005) revealed that most SADC NVACs carry out vulnerability assessments and analysis but due to lack of institutionalisation and legal recognition thereof, the recommendations made by the NVACs are seldom implemented. This therefore calls for institutionalisation of NVACs for effective and efficient delivery of vulnerability assessment and analysis.

3.6.4 Well-organised institutional arrangement (organisational structure)

As outlined in section 3.3, institutionalisation of an organisation such as NVAC, implies legitimacy of the institutional arrangement (Koppell, 2008). In an organisation, institutionalisation is one of the key indicators of effectiveness. This can be measured by determining whether or not; the legitimate mandate is present, roles and responsibilities are clearly defined (specialisation). When specialised, roles and responsibility are assigned (discussed in section 3.4) to the full time staff (FAO, 2007). The full time staff enhances NVAC performance as they are awarded salaries and commit fully to continuous NVAC activities, knowing what has to be done, by whom and when. In such situation, organisation members are in a better position to work towards achieving similar goals. However, this is not the case in most SADC NVACs.

Frankenberger *et. al.*, (2005), observed that most NVACs in SADC are not institutionalised, and membership is formed casually by agencies interested in information on vulnerability. The implication is that the members are unlikely to be working towards achieving the same goal but

that of their different agencies. In addition, roles and responsibilities are not clear in the absence of institutional arrangement rendering it difficult to know who has to do what, when and how. Therefore in such cases, effectiveness and efficiency become minimal if existent.

3.6.5 Ability of NVAC to manage data

Data management has been found to be one of the major determinants of effectiveness and efficiency in an organisation. A successful NVAC is one that manages data well. Well managed data is more accessible to users and can be revisited to check on organisational progress (Wise, 2008). In addition, well managed data enables use for purposes other than those initially intended for. This enhances the credibility of the organisation. To assess the extent to which the organisation such as NVAC manages its data, the presence of skills among personnel collecting and analysing data, can be looked into, along with whether or not the NVAC is able to store (presence of storage device) and access data to other users. An effective and efficient NVAC is one that collects and analyse data using skilled personnel to enhance the accuracy of the information collected and the subsequent recommendations for mitigation programmes.

3.6.6 Well-organised communication structure (for communication flow)

The effectiveness and efficiency of NVAC is determined by good communication flow. According to Millet (1998), if communication and information systems are disadvantageously placed in the organisation in terms of accessibility and availability to top decision-makers, it is unlikely that such an organisation will perform effectively (Millet, 1998). Therefore, availability of information and how it is disseminated to decision-makers and relevant stakeholders such as humanitarian agencies plays a major role in informing the interventions taken. For instance, if formats used for reporting are very technical to be understood by decision makers, it is likely that the decision-makers lose interest and interventions made are not necessarily informed by that information (Frankenberger *et. al.*, 2005). For example, in Lesotho, decision makers showed that information from the Lesotho Vulnerability Assessment Committee (LVAC) was given in a format that confused them and could not derive any decision for interventions based on the information. Frankenberger *et. al.*, (2005), highlighted that NVACs must devise simplified

formats such as the INFOFLASH used in Mozambique to include only information needed for decision-makers.

3.6.7 Continuous monitoring and evaluation in NVAC

Monitoring and evaluation is important factor in determining the effectiveness and efficiency in NVACs. According to Martinez (2005), an organisation that continuously carries out monitoring and evaluation is able to realize the mistakes and embark on corrective measures. It is further stated that monitoring and evaluation enables the development of organisational memory (Martinez, 2005).

3.6.8 Ability of NVAC to manage its finances (funds)

Funds enable organisations implement activities leading to attainment of set goals/ objectives. For instance, the system resources approach entails that an organisation has constituents such as workers (staff). Likewise NVAC as an organisation consists of people dealing with vulnerability assessment and analysis. In order to deliver an effective and efficient vulnerability assessment and analysis, NVACs need skilled and trained personnel. This can be realised if training is done for capacity building. To achieve capacity building, funding needs to be present and managed according to budgets. However, Frankenberger *et. al.*, (2005) articulated that NVACs' assessments and analyses are carried out by staff not sufficiently trained. This is attributable to limited funding resulting from lack of institutional framework in most SADC NVACs. The result is poor quality data and poor assessment and analysis.

Figure 3.1 is the framework summary of elements that should be considered when assessing the effectiveness and efficiency of any NVAC. The figure highlights that the NVAC has to be assessed for effectiveness and efficiency based on the open system resources approach which involves; the main goals, processes done in the NVAC that are considered as key success factors as well as NVAC constituents. From the approach and literature on organisational effectiveness and efficiency, the measurable criteria for effectiveness and efficiency is also devised as depicted in the framework.

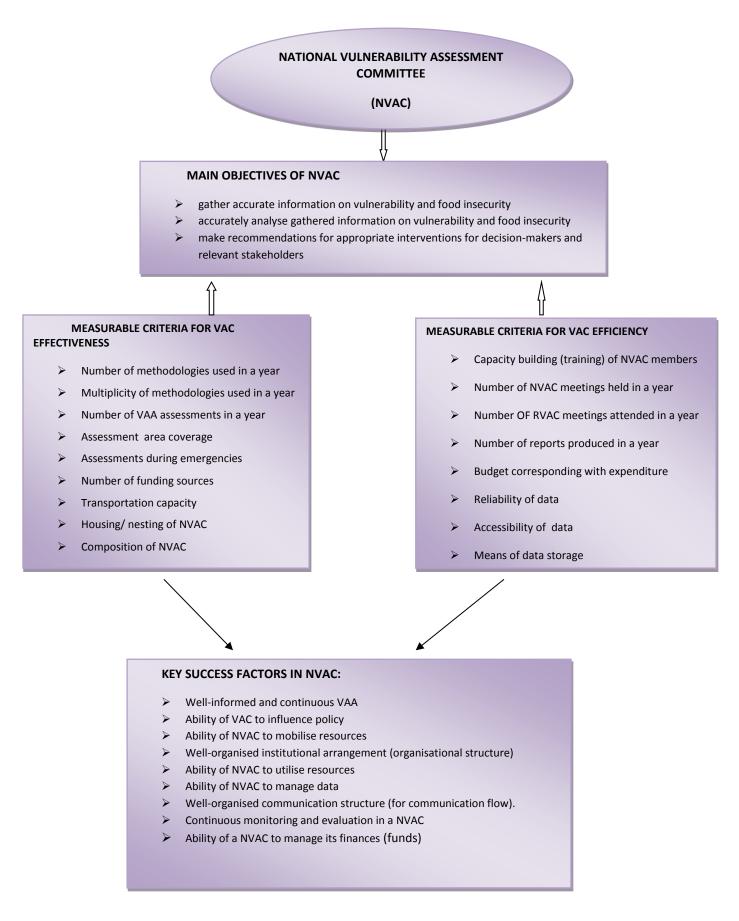


Figure 3.1 Framework and criteria for analysing the effectiveness and efficiency of NVAC.

CHAPTER FOUR

DESCRIPTION OF THE STUDY AREA

4.1 Introduction

This chapter gives the background on South Africa as the study area. It is imperative that the study area (South Africa) is described so that the framework formulated to guide the effectiveness and efficiency of NVAC is relevant and appropriate for South Africa. In so doing, the structure of South African government will be viewed along with how it functions in order to enable the appropriate location of the SAVAC to be proposed by the study. The chapter further explores the socio-economic situation of South Africa to determine who should be involved in SAVAC structure to be proposed and the roles to be played.

4.2 South African government

The South African government consists of two main spheres; the political constitutional democracy and the traditional authority. The political constitutional democracy has three tier structure(national, provincial and local) led by the politically elected president who is also the head of the state whereas the traditional authority constitutes a number of tribal kings and queens by birth (BAA, 2011). The traditional leadership consists of tribal kings and queens who do not have enough political power. The National House of Traditional Leadership advices the parliament on customary laws (BAA, 2011). The Local House of Traditional Leadership works at grassroots and cements the relationship between traditional and political powers. The constitutional democracy is political but also functions at three spheres, national, provincial and local. Figure 4.1 shows the structure of South African government followed by a description of the three tier structure.

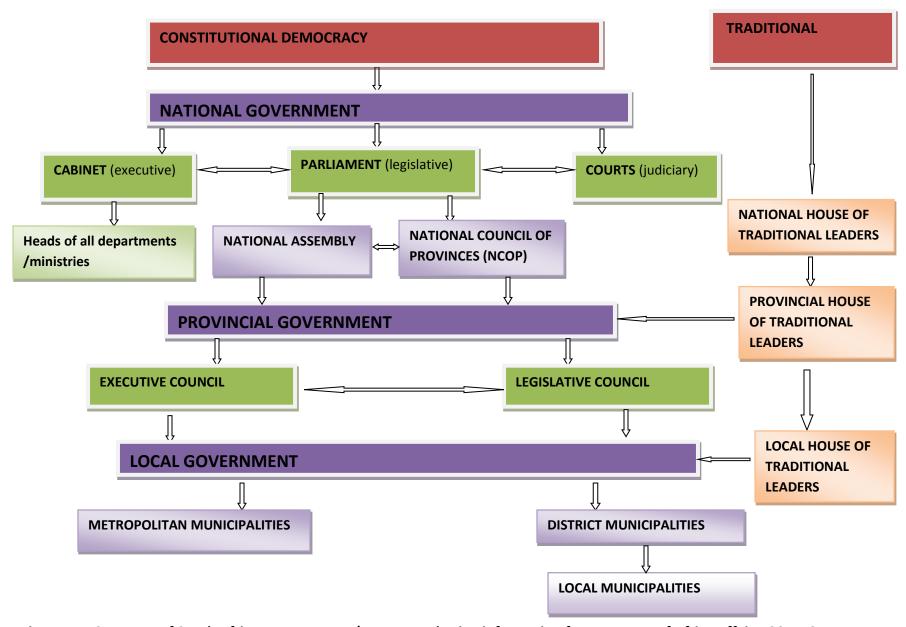


Figure 4.1: Structure of South African government (constructed using information from: Bureau of Africa Affairs, 2011; SA Tourism, 2011 & SA Government, 2011).

4.2.1 The national government

The national government is the highest body of the constitutional democracy made up of the cabinet, parliament and courts. All heads of ministries or departments constitute the cabinet with the president as its head. The ministries and departments that collectively form the South African government cabinet are shown in the box below:

Box 4.1: Ministries and departments forming the South African cabinet.

Agriculture, Forestry & Fisheries, Arts & Culture, Basic Education, Communications Cooperative, Governance & Traditional Affairs, Correctional Services, Defence & Military Veterans, Economic Development, Energy, Finance, Health, Higher Education & Training, Home Affairs, Human Settlements, International Relations & Cooperation, Justice & Constitutional Development, Labour, Mineral Resources, Minister in the Presidency for National Planning, Minister in the Presidency for Performance Monitoring, Evaluation & Administration in the Presidency, Police, Public Enterprise, Public Service & Administration, Public Works, Rural Development and Land Reform, Science & Technology, Social Development, Sport & Recreation, State Security, Tourism, Trade and Industry, Transport, Water & Environmental Affairs, Women, Youth, Children & People with Disabilities.

Adapted from www.gov.za (September, 2011).

The cabinet executes the national government's decisions. The parliament consists of the national assembly and the National Council of Provinces (NCOP) oversees the legislative issues. Bills deliberated upon by the cabinet are passed onto the NCOP by the National assembly. The NCOP links the provincial government with the national government. The overall purpose of the national government is to deal with inter-provincial issues (BAA, 2011).

4.2.2 The provincial government

South Africa has nine provinces, each with own government. The provincial government is constituted by the legislative and executive councils. Members of the Executive Council (MECs) are appointed by the premier of the province. The executive Council functions as the cabinet

but provincially. A province may formulate own legislations but in line with the national government legislations (BAA, 2011).

4.2.3 The local government

The local government executes local affairs subject to national and provincial legislations. It consists of three municipal spheres; the metropolitan found in big and unique cities, district municipalities mandated to execute the provincial government legislations, plan and build capacity in the entire district municipality and the local municipality which deals directly with local issues in line with the district municipality authorities (SA government, 2011).

4.2.4 The traditional authority

The traditional authority is prominent in six provinces (KwaZulu Natal, Eastern Cape, Limpopo, Mpumalanga, Free State and North West) where there are Houses of Traditional Leaders. Each province is represented by three members to the National House of Traditional Leaders. The traditional authority oversees the traditional and customary laws (Campbell & Meer, 2007). Although the traditional leaders are denied much of political power by the constitutional democracy, they are highly regarded and influential in the rural communities. The traditional leaders are powerful in; expressing the views and will of their societies, mobilising local support and voicing the societal grievances (Campbell & Meer, 2007). In addition, most rural inhabitants lack the ability to communicate with officials and do not fully trust that their needs will be attended if the traditional leader is not involved. Moletsane & Reddy (2011) highlight that about 14 million vulnerable and food insecure South Africans reside in rural areas. Therefore traditional leaders should not be excluded in attempting to tailor mitigation programmes for the rural problems such as vulnerability assessments.

4.3 Livelihood zones

Livelihood zones are areas in which people broadly similar livelihood strategies (SC UK, 2002). Livelihoods are mainly influenced by geography, production, markets/trade and consumption. Geography (soils and climate) influences the production options and the proximity to selling points (markets). Consumption depends on market accessibility and kind of food produced in

the area. In South Africa, livelihood zoning is currently on-going with work having initiated in Western Cape. It is not clearly known—which group use what livelihood strategies and food insecurity and vulnerability interventions are not well informed, hence livelihood zoning in the country. Zoning is done per province but there is a likelihood of overlapping of livelihood strategies in neighbouring areas of different provinces, mainly because of similar; geography (soils and climate), production systems as well as proximity to markets. Like in most countries, the livelihood zones in South Africa are named on the basis of geography and a dominant livelihood strategy in the area, for instance, in Western Cape where the small stock husbandry is dominant, the livelihood zone is named the Great Karoo small stock zone. However, the zoning is likely to provide broad livelihood strategies thus may be unable to show clearly, the combination of dominant strategies at household level.

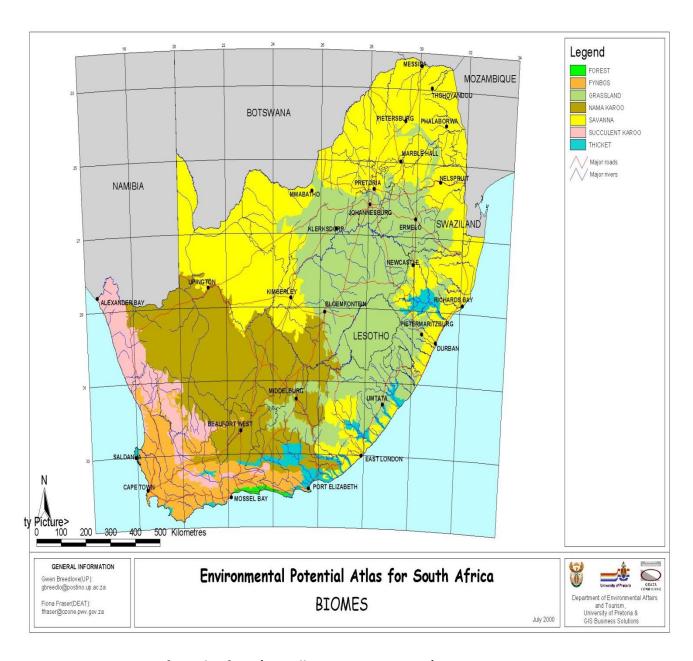


Figure 4.2: Map of South Africa (Breedlove & Fraser, 2000).

The map shows South African demarcation and four neighbouring SADC countries.

4.4 Socio-economic situation in South Africa

South Africa is a key driving force behind Africa's economy and classified as one of the four upper middle income countries in the continent (World Fact Book, 2011). Its resourceful nature of minerals has given it recognition by developed countries in the world. The study undertaken in 2003 by Ndlela revealed that South Africa, then at the Gross Domestic Product (GDP) of U\$ 354 billion, is classified among the fifty wealthiest countries in the world. In 2010, the GDP was at U\$ 364 (World Bank, 2010). Although the country's economy is growing, with social protection (grants) gaining momentum, food insecurity and vulnerability are rife at household level due to social threats such as unemployment and HIV and AIDS. Moreover, IFPRI 2010, using the Global Hunger Index (GHI) measure, documents that South Africa has not seen a significant change in hunger situation from 1990 to 2010. Therefore South Africa is still in the state of vulnerability to food insecurity. This is attributed to the jobless growth benefiting only the highly skilled personnel and not the poorly skilled and vulnerable (Burger & von Fintel, 2009).

4.4.1 Social protection in South Africa

"Social protection involves policies and programs that protect people against risk and vulnerability, mitigate the impacts of shocks, and support people who suffer from chronic incapacities to secure basic livelihoods" (Adato & Hoddinott, 2008: 1). In South Africa, the social protection is mainly through social grants administered by department of Social Development (Baiphethi *et. al.*, 2010). Table 4.1 illustrates the trends in number of social grant beneficiaries from 1999 to 2010.

Table 4.1: Trends in number of social grant beneficiaries (source: Madonsela, 2010)

Type of grant	1999	2002	2005	2008	Jan 2010
Older persons	1 818 733	2 010 884	2 097 982	2 222 952	2 508 899
War veterans	4 340	3 790	3 340	1 500	1 293
Disability	459 880	537 925	1 305 464	1 408 456	1 303 203
Foster child	65 938	95 216	256 949	454 199	504 666
Care dependency	22 438	34 978	85 897	102 292	110 359
Child Support Grant	330 328	1 801 862	5 326 581	8 189 975	9 400 347
Grant-in-aid	-	-	-	37 772	51 998
TOTAL	2 701 657	4 484 655	9 076 213	12 417 144	13 880 765
% GROWTH	-	66%	102%	37%	12%

The number of social grant beneficiaries in all categories has been on the increase from 1999 to 2010 (table 4.1). Most people (1 818 733) received Older Persons Grant (OPG) from 1999 to 2005. However, from 2005 to 2010, the Child Support Grant (CSG) had most beneficiaries compared to other grants. South Africa has seen a positive impact on the social protection recipients' livelihoods. Devereux (2010) has shown that children living in households receiving the CSG are relatively taller than their poor counterparts when height-for-age is measured. In addition, the social grants have been found to encourage diversification of livelihoods such as petty trade (Devereux, 2010) in some recipient households thereby increasing cash income and subsequent reduction of vulnerability and food insecurity. A study (Baiphethi *et. al.*, 2010) has revealed that 60% of social grants recipients reside in rural provinces (KwaZulu Natal, Limpopo and Eastern Cape) of South Africa. Although the social grants (mostly received by rural population) play a major role in reducing vulnerability, research (Moletsane& Reddy, 2011) has recently revealed that about 14 million South African are vulnerable and majority reside in rural areas. Since social grants cannot overcome vulnerability own their own, it is critical that South

Africa establishes and suitably locates a body, within the tier government structure, that will address the root cause of vulnerability and food insecurity for long term mitigation.

4.4.2 Unemployment in South Africa

Unemployment is one of the major socio-economic threats in South Africa. Kingdon & Knight (2007) have shown that Africans are the most unemployed in South Africa as a result of apartheid. Amongst the unemployed Africans, women constitute a larger proportion and majority reside in rural areas (Altman *et. al.*, 2009). However, Burger & von Fintel (2009) argue that unemployment is caused by a speedy increase in labour force resulting from increasing education among those who were previously disadvantaged in the apartheid regime. Although the economic growth is booming in South Africa, this has been a jobless growth due to mismatch between subjects studied and labour market requirements (Altman, 2007). Table 4.2 shows distribution of employment by industry in South Africa.

Table 4.2: Employment by industry (STATS S.A, 2011)

	Jan-Mar	Oct-Dec	Jan-Mar	Qrt-to-	Year-on-	Qrt-to-	Year-on-
Industry	2012	2012	2013	Qrt	year	Qrt	Voorshange
				change	change	change	Year change
						_	
	Thousand				Percentage		
Total	13422	13577	13621	44	199	0.3	1.5
Agriculture	656	685	739	54	83	7.9	12.7
Mining	336	357	365	8	29	2.2	8.6
Manufacturing	1722	1730	1753	23	31	1.3	1.8
Utilities	91	98	117	19	26	19.4	28.6
Construction	986	1061	1020	-41	34	-3.9	3.4
Trade	3057	2921	2855	-66	-202	-2.3	-6.6
Transport	783	816	813	-3	30	-0.4	3.8
Finances and other	1741	1804	1781	-23	40	-1.3	2.3
business service							
Community and other	2891	3028	3072	44	181	1.5	6.3
Social services							
Private households	1151	1076	1105	29	-46	2.7	-4.0

Table 4.2 illustrates that employment is generally on the increase in South Africa but agricultural sector does not employ as many people as manufacturing and some other sectors. This is perhaps the result of some people not being able to generate a significant income from subsistence agriculture and the subsequent migration into urban areas. Despite the smaller percentage in Agricultural employment, South Africa comprises the largest agricultural sector in Southern Africa making it the net exporter of farm products. In most SADC countries, agriculture forms the mainstay of the economy (ECA SA, 2002) whereas South Africa's trade, community services and manufacturing employ more people thus contribute more meaningfully to the economy than agriculture (table 4.2).

Unemployment has sequential outcomes; household cash income is reduced, access to food becomes limited especially to non-farming households and eventually food insecurity and vulnerability are seen at play. However, there is a mix-up of information on food insecurity and vulnerability due to overlapping departmental responsibilities in implementation within the South African government structure. Establishing SAVAC and locating it suitably within the three tier government structure remains critical in providing credible information on vulnerability and food insecurity for informed interventions by policy and decision makers.

4.4.3 HIV and AIDS in South Africa

Approximately, five million people are infected with Human Immuno-deficiency Virus (HIV) in South Africa, making the country the most infected in the world (Ladzani, 2009). It is documented that 90% of the new infections is constituted by the youth in age group 15-24 and one third of the newly infected is young women. HIV and AIDS impact on household food insecurity and vulnerability in three main ways. First the sick household members cannot work resulting in reduced cash and or food income. Second, the affected household members devote most time caring for the infected members and either or both cash and food income are reduced. Lastly, the household with infected members may be forced to use the assets and savings, for instance, older persons using the pension allowance, to pay for medications. Consequently, food security and resilience for such households are compromised and vulnerability is seen at play. However, the credibility of information on food insecurity and vulnerability is questionable as it is collected by various government departments. Establishing a legitimate body and locating it suitably in the tier government structure is important in addressing vulnerability and food insecurity in relation to HIV and AIDS.

4.5 Summary

It is seen that South African government has three tier structure, the national, provincial and local. The national government is the highest decision-making body the provincial government links the national and local governments whereas the local government executes the local affairs subject to the national and provincial legislations. In this regard, the South African government structure is more complex than most SADC countries. The traditional authority is

not politically powerful and advice the constitutional government on traditional laws. Furthermore, it has been shown that although politically not very powerful, the traditional authority is highly regarded and influential in rural communities where majority of the vulnerable reside. Moreover, the chapter has revealed that while livelihoods are diverse in South Africa, livelihood zoning was never done until recently though likely to provide broad livelihood strategies and may not clearly show the combination of dominant strategies at household level. Lastly, it has been found that South Africa's economy is booming though it is a jobless growth. Unemployment along with HIV and AIDS, are high in the country and eventually lead to food insecurity and vulnerability.

CHAPTER 5

RESEARCH METHODOLOGY

5.1 Introduction

This study aimed at identifying the essential elements for formulating the framework for effective and efficient NVAC to use in establishing an effective and efficient SAVAC. The study was desk top, inductive and employed mixed methods research. This chapter outlines the techniques that were employed in the study, data collection tools as well as data analytical methods.

5.2 Research design

From the onset of the current study, it was known that inductive research is scientifically sound. Burney (2008) articulates that inductive research is used if a theory or model has to be developed from observations and patterns emerging under the subject of interest during the course of the study. In this study, existing SADC NVACs documents had to be studied, observed and analysed for effectiveness and efficiency in order to inform the framework (model) for an effective and efficient SAVAC, therefore inductive research was relevant and scientifically sound.

The mixed methods research was used to collect data. This method of research provides broader understanding of issues under consideration. Tashakkori & Teddie (2010) articulate that mixed research is good as it has both qualitative and quantitative aspects. The 'numbers' in quantitative aspect add meaning to the 'words' in qualitative aspect and vice versa. The mixed method research was used since one source of data is usually insufficient in providing detailed information nor enables the researcher to generalise the findings (Clark and Cresswell, 2010). The rationale for using this kind of research was to expand the breadth and range of qualitative data.

A qualitative part of the research dominated and explored how NVACs were established in SADC member states. While qualitative research dominated the current study, quantitative

research was also incorporated in part to enable statistical comparisons of the NVACs'. Meurer *et. al.*, (2007) highlight that qualitative research is grounded on the assumption that people's behaviour, meanings and interpretations form the social reality therefore is used on little known social phenomena. The exploration of behaviour, experiences, feelings and perspectives are attributes of qualitative research enabling identification of intangible value systems such as social norms (Marc *et. al.*, 2005 & Meurer *et. al.*, 2007). In addition, qualitative research involves rich and detailed descriptions of document reviews, verbal conversations or researcher's observations on participants (Savenye & Robinson, 2005).

The approach in qualitative studies is process- oriented and context-bound as the researcher delves in gaining insights on the subject of concern (Hancock, 2002). In the current study, qualitative research was relevant as processes in establishing NVACs had to be studied within the context of each country in SADC to enable inference for establishing an effective and efficient SAVAC. Qualitative research collects data through in-depth, non-standardised interviews, observations and or documents (Marshall, 2011) as was employed in the study.

In order to address the first study sub-problem, it was important to explore the models and approaches used in establishing the NVACs. Therefore, the qualitative aspect of the study was exploratory. In exploratory research, in-depth interviews are made by a researcher to gather required information from experts in the field of concern (Dung, 2006). In addition, exploratory research design is secondary as it utilises information from existing documents. Elements contributing to the efficiency and effectiveness of NVAC were also looked into. This was aided by the use of a framework designed to determine the indicators of effectiveness and efficiency in NVAC as an organisation described under 4.5. The summation of how NVACs were established and what determines an efficient and effective NVAC would help formulating a viable framework for an efficient and effective South African NVAC.

It is stated that the quantitative research allows quantifiable comparisons across the population through the use of statistical analysis (Harty *et. al.*, 2004). Since statistical comparisons had to be made between NVACs' effectiveness and efficiency coupled with a need to determine the relationship among indicators, quantitative research was also relevant in the current study,

though not dominant. For each of effectiveness and efficiency, the indicators were grouped as key indicators and determinant indicators respectively. This was done to enable the researcher establish which indicators are essential when dealing with NVACs' effectiveness and efficiency. Effectiveness and efficiency cumulative percentages were calculated and correlation ran through the use of Statistical Package Software for Social Sciences (SPSS) version 18.0. Bazeley (2002) has shown that SPSS is used in analysis of quantitative research. From the key informant interviews, themes that best presented the results were then derived based on the contextual meaning from the interviews. The overall research methodological approach is summarized in table 5.1.

Table 5.1 Summary of methodological approach

SUB PROBLEM	DATA TO BE COLLECTED	TOOLS FOR DATA COLLECTION	ANALYSIS TOOLS
How have NVACs been established in SADC?	Reasons for establishing individual NVACs, models, processes, approaches and tools used to establish SADC NVACs	Available SADC NVAC documents, Key informant interviews	Content analysis, SWOT analysis
What elements determine an effective and efficient NVAC?	Elements of effective and efficient NVAC	Vulnerability and food security reports and documents, key informant interviews	Content analysis, Matrix ranking, SWOT analysis
Establishment of a criteria and tool for assessing effectiveness and efficiency of NVACs and testing thereof	Elements of effective and efficient NVAC, NVAC documented information such as reports,	Vulnerability and food security documents, key informant interviews	Content analysis, SWOT analysis, SPSS
How can SAVAC be established to deliver effective and efficient vulnerability assessment	Elements of efficient NVAC.	Key informant interviews, vulnerability and food security documents	Content analysis and Matrix ranking

5.3 Sampling technique

From the onset of the research question and the subsequent sub-problems, it was clear that purposive sampling was a more appropriate technique as the population dealt with was already identified, the NVACs and non-NVAC member states. SADC has the membership of 15 countries but only nine have NVACs. Since there are only nine NVACs in SADC-making the overall population very small, all NVACs had to be studied to enable proper and near-accurate comparison. Similar criterion was used for non-NVAC SADC countries. In addition, it was known from the onset that a developed NVAC assessment tool for effectiveness and efficiency would be tested in all NVACs, making purposive sampling more scientifically sound.

5.4 Data collection

Data was collected to answer the study sub-problems (section 1.3). Reports for the past three years (2008 to 2010) were used to gather the required information for analysis Reports on NVACs were obtained from the SADC website. However, not all required reports were publicised on the SADC website. Request for NVAC reports not publicised was then made electronically using the latest NVAC key contacts publicised on the 'SADC 2011 RVAA Synthesis Report'. Some NVACs responded positively and others lagged behind. A second attempt was made to NVACs that, either did not respond or promised to avail reports in vain, by telephonically requesting the reports. Some requested reports could no be accessed and NVACs which could not provide requested reports were assessed on the basis of information obtained from documents.

5.4.1 Data collection tools

Existing documents such as reports were used to gather required data. Data obtained from existing documents is secondary. This method of data collection was suitable for the study as population studied (NVACs) already had documented information that could be used for the study. However, the information obtained from existing reports was not sufficient to holistically answer the study problems (table 5.1); therefore, key informant interviews were done to supplement data obtained from reports.

In key informant interviews, data is collected through qualitative in-depth interviews with people with high levels of expertise in the field of concern (Marshall, 1996). In the current study context, the interviewees comprised of SADC NVAC chairs and representatives as they have experience in NVAC issues and VAA therefore could provide insight information under consideration. Documents were used to obtain the information on reasons for other SADC member states for not establishing own NVACs. The obtained information was supplemented by key informant interviews. The key informant interview questions were developed to guide the communication with the interviewees (see appendices A and B). The key informant interviews can take two directions (Marshall, 1996). The interviews can either be face-to-face between the interviewer and the interviewee or the interview can be telephonic. In this study the interviews were telephonic across all SADC NVACs due to logistics such as transport costs.

5.5 Data analysis

Data obtained were mostly qualitative and textual; therefore the researcher had to use more qualitative methods of data analysis than quantitative. The framework developed to determine NVAC effectiveness and efficiency was used to analyse the results obtained in part. The results were presented on the designed matrices to compare NVACs effectiveness and efficiency in order to answer the study sub-problems (table 5.1). Effectiveness and efficiency cumulative percentages were calculated followed by a subsequent analysis of relationship among indicators of effectiveness and efficiency respectively, using correlation. From the key informant interviews, themes that best presented the results were then derived based on the contextual meaning from the interviews.

5.5.1 Secondary data analysis

Secondary data analysis involves analysis of existing data originally compiled for purposes other than the present researcher, (Leech & Onwuegbuzie, 2007). Since secondary data analysis makes use of already collected data, the phase of field data collection is by-passed therefore resources (time, expenses and effort) saved (Boslaugh, 2007). Gaps and deficiencies may be experienced while using secondary data as the data were collected for other purposes. Therefore collection of primary data to supplement the secondary data may be necessary to

answer the study problem. For instance, in the current study, secondary data was obtained from existing documents such as reports but the researcher found that the documented information was insufficient to address the study problem (section 1.3). As a result, key informant interviews were deemed necessary to supplement the existing secondary data. However, resources needed to collect primary data in this regard are significantly lower than could be required if data were to be collected by primary means only (Boslaugh, 2007).

5.5.2 The Content analysis

The Content Analysis was used to analyse information obtained from documents and key informants. According to the FAO (2004), content analysis determines the presence of particular words, meanings or contextual concepts made by respondents. Therefore the content analysis was suitable since the study was mostly qualitative. The analysis was presented by tabulating themes, trends and patterns from key informants and inferences made concerning the contextual messages followed by discussion based on the literature.

5.5.3 Use of designed assessment tool (Matrix scoring and ranking)

Based on the criteria and framework set in chapter three of the current study, effectiveness and efficiency assessment tools (matrices) were developed (see appendices D and E). Data from documents and key informants was used to rank NVACs' effectiveness and efficiency. In matrix ranking, items to be compared are listed horizontally and criteria used for comparing listed vertically. Scores are then assigned to comparable items against each criterion listed, the frequency of items valued based on scores obtained show preference for drawing conclusions (Adebo, 2000).

Matrix scoring and ranking was suitable to use in this study as the main objective was to identify which elements for effectiveness and efficiency in the NVAC, can be used as reference when establishing SAVAC. In so doing, it was important to establish which SADC NVACs are more effective and efficient so that they could be studied in detail for South Africa to draw reference from. Therefore matrix scoring and ranking was scientifically sound. The analysis was done using the respective matrices (Appendices D and E).

In the respective matrices (Appendices D and E) the indicators (criteria) of effectiveness and efficiency in a NVAC obtained from the designed framework in figure 3.1, were placed vertically on the matrix and NVACs being measured placed horizontally. The indicators were placed vertically as they are the criteria measured. Each indicator (criterion) was assigned the weight of 10 points divided among three sub-criteria per the indicator (criterion). The weights assigned to the three sub-criteria per indicator (criterion) were arrived at through an intensive literature search on important impact of each sub-criterion on effectiveness and efficiency. Hence the sub-criterion per indicator showing the least performance was assigned 1, 3 given to medium and 6 assigned to mark outstanding performance. Therefore, the maximum weight (score) NVAC could attain per indicator (criterion) was 6 and the least was 1.

None of the formulated indicators of effectiveness and efficiency from the designed framework (figure 3.1) could be overlooked. Therefore a strategy was devised to group the indicators according to their relationship and importance based on literature. Two groups were then arrived at, thus composite indicator and determinant indicators. Investopedia (2011) documents that when a complex phenomenon has to be addressed, and performance indicators seem all important, it is best to aggregate the indictors into one unit, the composite indicator for easier assessment. This was applied on the effectiveness indicators and the same followed for efficiency indicators. The composite indicator was constituted by all core indicators whereas the determinant indicators constituted those that were likely to impact on the outcome of the composite indicator. The main purpose of grouping the indicators was to enable a comprehensive analysis through correlation that would enable the determination of the potential impact (influence) the determinant indicators might have on the composite indicator. NVACs were then assessed individually per the two groups of effectiveness indicators and the process repeated for efficiency indicators. Based on the scores obtained by NVACs per indicators, cumulative scores (percentages) were calculated per NVAC per reference year, that is 2008, 2009 and 2010. The following formulae were used to derive the cumulative scores:

• Effectiveness Composite Indicator Cumulative Score (E°CICS):

Four (4) weighted criteria (number of methodologies used in a year, number of assessments per year, assessments during emergencies and assessment coverage) were used to constitute the E^oCICS, and as mentioned earlier that the maximum score per criterion was 6, it means NVACs were evaluated per reference year out of 6 (maximum score) × 4 criteria= 24 thus:

 $E^{\circ}CICS = [(y \div 24) \times 100\%]$ where y= sum of scores obtained in effectiveness composite indicator.

• Effectiveness Determinant Indicators Cumulative Score (E^oDICS):

Six (6) weighted criteria (composition of NVAC, number of funding sources, transportation capacity, housing of NVAC, legitimacy of mandate and definition of roles and responsibilities) were used to constitute the E^oDICS, likewise the maximum score per criterion was 6, therefore NVACs evaluated out of 6 (maximum score) × 6 criteria=36 thus:

 $E^{o}DICS = [(n \div 36) \times 100\%]$ where n=sum of criteria scores obtained in effectiveness determinant indicators.

Efficiency Composite Indicator Cumulative Score (ECICS):

Five (5) weighted criteria (budgeting, number of reports produced in a year, capacity building among members, number of meetings held per year and number of RVAC meetings attended per year) were used to constitute the ECICS with the maximum score of 6 per criterion therefore evaluation done out of 6(maximum score)× 5 criteria=30 thus:

ECICS = $[(q\div30) \times 100\%]$ where q= sum of criteria scores obtained in efficiency composite indicator.

Efficiency Determinant Indicators Cumulative Score (EDICS):

Six (6) weighted criteria (reliability of data, data accessibility, data storage, communication flow, frequency of monitoring and evaluation and management of funds and finances) constituted the efficiency determinant indicator (EDICS) and the maximum score per criterion was 6, therefore NVACs evaluated out of 6 (maximum score) × 6 criteria=36 thus:

EDICS = $[(r \div 36) \times 100\%]$ where r=sum of criteria scores obtained in efficiency determinant indicator.

After obtaining all cumulative scores, trends on effectiveness and efficiency per NVAC were then derived at per the stated reference years (2008, 2009, and 2010). This was achieved by calculating the weighted average of the cumulative score per indicators per reference year over three years. In this study, an NVAC was considered effective if it obtained a score of 50% or above, so the same applied for efficiency. In order to assess the degree of effectiveness and efficiency, the traffic light system was employed in the study. The following ranges were devised for use by the robot system for assessing the subsequent effectiveness and efficiency of individual NVACs over a three-year period:

- < 50 %=(Red colour) =ineffective/ inefficient NVAC
- (50-59) % = (Yellow colour) = less (effective/ efficient) NVAC
- ≥ 60% = (Green colour) = highly (effective/ efficient) NVAC.

5.5.4 The SWOT analysis

SWOT analysis is used to evaluate the strengths, weaknesses, opportunities and threats (Pahl, 2007). In the current study, the SWOT analysis was instrumental in identifying each NVAC's strengths, weaknesses, opportunities as well as threats faced. The information gathered from the matrix analysis was not enough to fully inform SAVAC framework. Therefore, the effective

and efficient NVACs had to be studied for strengths, weaknesses, opportunities and threats so the SAVAC framework relates the strengths and opportunities to the South African context.

The analysis was presented in a SWOT matrix showing individual NVAC's strengths, weaknesses, opportunities as well as threats. Discussion based on literature then followed. The NVACs' SWOTs were then used to formulate the SAVAC framework to suit South Africa's uniqueness described in chapter three. In so doing, a path was created for determining the best NVAC elements and practices that South Africa could draw from, when establishing own NVAC that would be efficient and effective.

CHAPTER SIX

RESULTS AND DISCUSSIONS

6.1 Introduction

The main purpose of the current study was to identify the essential elements for establishing an effective and efficient South African Vulnerability Assessment Committee (SAVAC). In order to answer the main study problem stated above, the following four sub-problems had to be addressed:

- how have NVACs been established in the Southern African Development Community?
- what elements determine effectiveness and efficiency in NVACs?
- establishment of the criteria and tool for assessing effectiveness and efficiency in NVACs
 and
- how can South Africa establish a VAC that can deliver an effective and efficient vulnerability assessment and analysis?

6.2 Establishment of NVACs in the Southern African Development Community

In answering how NVACs were established in SADC, it was important to first address reasons for establishing NVACs in some member states, why other member states are only considering the establishment of NVACs lately and why other member states do not have NVACs, yet the issues of hunger, poverty, food insecurity and vulnerability cut across the region. This was followed by an exploration of the approaches used in establishing the existing NVACs in preparation for formulating the framework for SAVAC by the current study.

6.2.1 SADC membership and NVAC establishment

SADC has the membership of fifteen countries but to date, only sixty percent (60%) of the member states felt a need to establish NVACs whereas other member states are in the process of establishing their own NVACs. NVACs' establishment stemmed from the worst food crisis experienced in SADC in the 1990s lasting over a decade.

The current study has established that the NVAC establishment in all member states was primarily because of the idea being RVAC's initiative. Apart from the stated primary reason, the study revealed from key informants that SADC member states had other varied reasons for establishing NVACs. The reasons for establishing NVACs are stated in table 6.1.

Table 6.1: Reasons for establishing NVACs in the SADC region.

NVACs	Reasons for Establishment			
	Difficulty in	Lack of consensus	Irregular previous	Changing disaster
	quantifying food	on gathered	assessments	patterns
	insecurity and	information on		
	vulnerability	food insecurity and		
		vulnerability		
ANGOLA	✓	✓		✓
BOTSWANA	√	1		1
LESOTHO	√	1	√	1
MALAWI	✓		✓	
MOZAMBIQUE		1		1
NAMIBIA	✓	✓	✓	✓
SWAZILAND	✓	✓	✓	✓
ZAMBIA	✓			1
ZIMBABWE	✓			√

It is evident that two major reasons appealed to most SADC member states to seriously consider NVAC establishment. First, most member states experienced the problem of changing weather patterns which could not be addressed by the then current early warning systems.

Second but equally important, the member states could not quantify food insecurity and vulnerability hence a reason for buying into the NVAC establishment idea.

Furthermore, the current study has revealed that various stakeholder institutions in some SADC member states used to carry out individual food insecurity and vulnerability assessments which produced different results. From the study key informants, it was gathered that consensus on information obtained from assessments could not be reached hence a need to establish NVACs in SADC member states. While irregular food insecurity and vulnerability assessments are some of the reasons for establishing NVACs in some member states, the current study proved it to be the least compelling reason behind NVACs establishment.

The current study is in agreement with the articulation by Marsland (2004) that the then current early warning systems in member states were dysfunctional hence the establishment of NVACs to holistically assess and analyse vulnerability. Furthermore, Drimie (2004) stated that the SADC region experienced the worst food crisis due to changing weather patterns while ECA-SA (2002) added that the region depends on agriculture for food and agricultural system is rainfed. Therefore the current study's finding that NVACs were established to address declining agricultural productivity which resulted in high levels of food insecurity and vulnerability yet could not be quantified is backed.

In summary, considering that the NVAC initiative was from the RVAC, the current study concludes that the approach used was top-down. In top-down approach, decisions are made and imposed by top management (Panda, 2007). The approach is characterized by lack of ownership among bottom implementers due to non-involvement in decision-making. Therefore if member states were consulted first and engaged in finding the solution on the then prevailing hunger, poverty and vulnerability, they could have formulated NVACs according to their local situations and capacity. That way, NVACs could be delivering a more effective and efficient vulnerability assessment and analysis than they currently do.

6.2.2 Recent consideration for establishing NVACs in non-NVAC member states

The current study embarked on document studies and supplemented the obtained information with key informant interviews to determine why NVACs establishment are only considered recently in SADC member states that currently lack NVACs. The reasons obtained are presented in table 6.2.

Table 6.2: reasons for recent consideration of establishing NVACs in SADC countries

	Consideration for Establishment			
Country	Natural disaster	Civil unrests	Reach Consensus on Food insecurity and vulnerability information	Upgrade the work of current VAA
South Africa	√		✓	
Madagascar	√	√	/	1
Mauritius	√		/	1
Seychelles	√		1	✓ ·
Tanzania				/
Democratic Republic of Congo		1		1

Table 6.2 shows that non-NVAC SADC member states still carry out vulnerability assessments but are only considering NVAC establishment recently because of a need to upgrade the work of the current vulnerability assessments. Furthermore, the non-NVAC countries are considering NVAC establishment mainly because of experienced natural disasters. Civil unrest is also an important reason why some member states without NVACs are considering the NVAC establishment.

Democratic Republic of Congo is characterized by civil unrest due to armed conflicts. According to the country's key informant, the prevailing environment results in destruction of the socio-economic infrastructure and displacement of people thus resulting in high levels of vulnerability. However, vulnerability assessments are still carried out at six months interval and the results are incorporated in the country's Humanitarian Action Plan though not all recommendations are implemented due to factors such as armed conflicts.

Most of the non-NVAC SADC member states have bodies functioning in a similar manner to NVAC but are considering NVAC because of a need to upgrade the work of current systems. For instance, Tanzania has MUCHALI framework that strengthens the use of Livelihood-based Food Security and Nutrition Information System (LFSNIS) used by the Food Security Information Team (FSIT) to assess vulnerability (SADC RVAC, 2009). FSIT has membership similar to that of most NVACs in SADC. It comprises of different stakeholders such as UN agencies, NGOs, department of nutrition. The study found out that NVAC was considered because funds are currently insufficient and it is difficult to attract funders since there is no permanent home for MUCHALI. This finding has affirmed Frankenberger *et. al.'s* 2005 articulation that homeless NVACs are disadvantaged when it comes to funding as funders get sceptical to disburse the funds where enforcing of adherence to terms and conditions of funding and accountability seem bleak.

Occurrence of natural disasters has been found to be the second most prominent reason why SADC member states without NVACs consider NVAC establishment. The Flood Alert, 2011 documents that eight provinces (Gauteng, Northern Cape, Eastern Cape, North West, KwaZulu Natal, Mpumalanga, Limpopo and Free States) in South Africa have been declared disaster areas due to recent floods.

Since most of the non-NVAC countries assess vulnerability though not through NVACs and no consensus on gathered information, the study concludes that establishing NVACs would be of assistance for informed natural disasters and food insecurity interventions as well as policy formulation.

6.2.3 Approaches in establishing SADC NVACs

The study established that all NVACs in SADC followed similar pattern of establishment. All NVACs are characterised by open and voluntary membership and the use of multi stakeholder approach. Table 6.3 presents the approaches used in establishing existing SADC NVACs.

6.3 Approaches in establishing NVACs in SADC

NVAC	APPROACHES IN ESTABLISHMENT			
	Open and voluntary membership	Multi- stakeholder		
Angola	✓	✓		
Botswana	✓	✓		
Lesotho	✓	✓		
Malawi	✓	✓		
Mozambique	✓	✓		
Namibia	✓	✓		
Swaziland	✓	✓		
Zambia	✓	✓		
Zimbabwe	✓	✓		

The current study found out that the main reason for bringing together, different stakeholders was to strengthen the effectiveness of vulnerability assessment and provide holistic information that can inform humanitarian and government interventions in terms of immediate assistance and long term policy. Maennling & Zimmerman (2007) have shown that multi-

stakeholder process allows unified participation as is the case in NVACs. Marsland, 2004, adds that organisations that had stake in food security and vulnerability such as FEWS NET, FAO, SC UK, individually assessed vulnerability were brought together to form RVAC, the mother-body for NVACs.

The multi-stakeholder approach was ideal for RVAC as it was difficult to reach a consensus on results obtained by different individual food security and vulnerability institutions. This was a result of agencies' use of different methodologies of interest. Upon the process of establishing RVAC, FANR thought it inherent to involve all agency stakeholders in vulnerability assessment to enable skill diversification, sharing of experiences and reach consensus on results. Therefore NVACs' approach followed that of the RVAC and it is concluded that the approach encourages participation from NVAC members.

However, the voluntary member renders NVACs less effective as most key informants indicated that lack of permanent staff hinders the continuous engagement in NVAC activities. Frankenberger *et. al.* (2005) are also in agreement that voluntary membership is one of the crippling factors in NVACs' performance. Therefore, the study concludes that if NVACs' membership can be permanent and not voluntary, NVACs can be in a better position to deliver an effective and efficient VAA.

6.3 Determination of elements of effectiveness and efficiency in NVACs

As outlined in chapter five, score less that 50 percent denotes ineffectiveness of a NVAC. The traffic light system has also been used to mark level of effectiveness. The following ranges were used:

< 50 %=(Red colour) =ineffective NVAC

(50-59) % = (Yellow colour) = moderately effectiveness NVAC

≥ 60% = (Green colour) = highly effective NVAC.

Similar criterion was used for efficiency assessment in NVACs.

6.3.1 Effectiveness of SADC NVACs

The findings of the current study, through the use of the 'robot system', revealed that all NVACs were effective in the three years of reference though the level of effectiveness differed across years and NVACs.

Table 6.4: Effectiveness in SADC NVACs per reference year

n=9				
SADC NVAC	CUMULATIVE SCORE PER REFERENCE YEAR			SCORE AVERAGED OVER THREE YEARS
	2008	2009	2010	OVER THREE TEARS
ANGOLA	55	60	55	57
BOTSWANA		<mark>71</mark>	71	71
LESOTHO	71	<mark>78</mark>	71	<mark>73</mark>
MALAWI	<mark>66</mark>	<mark>79</mark>	<mark>79</mark>	<mark>75</mark>
MOZAMBIQUE	83	90	90	88
NAMIBIA	<mark>55</mark>	<mark>59</mark>	<mark>71</mark>	<mark>63</mark>
SWAZILAND	<mark>67</mark>	<mark>61</mark>	<mark>76</mark>	<mark>65</mark>
ZAMBIA	<mark>62</mark>	<mark>66</mark>	<mark>66</mark>	65
ZIMBABWE	68	68	56	<mark>64</mark>

On the basis of the outlined ranges, table 6.4 shows that all NVACs are highly effective except Angola with the average score of 57%. All NVACs' effectiveness improved in 2009 except Swaziland NVAC (Swazi VAC) with a drop of 61% in 2009 from 67% in 2008. Angola's score of 57% is attributable to reduced area coverage during assessments. Mozambique NVAC (SETSAN) has been the most effective for the three years of reference with an average score of 88% followed by Malawi (MVAC), Lesotho (LVAC) and Botswana (BVAC) with an average above 70% respectively. However, SETSAN, MVAC, Zambia VAC and BVAC did not improve on effectiveness

from 2009 to 2010 but remained constant with respective percentage scores of 90, 79, 66 and 71. Swazi VAC, though the only NVAC whose effectiveness did not improve in 2009, managed to pick up in 2010 along with Namibia NVAC, from 61% and 59% in 2009 to 76% and 71% in 2010 respectively. Lesotho NVAC (LVAC) has been effective for the three years of reference. However, its effectiveness dropped from 78% in 2009 back to 71% in 2010. Zimbabwe VAC (Zim VAC) was effective but constant in 2008 and 2009 at 68%. However in 2010, it became ineffective with a score of 56%.

The observed changes in NVACs' effectiveness are explained by the information from key informants and literature. LVAC and MVAC had all areas represented in 2009 when carrying out the vulnerability assessment and analysis but reduced the areas represented in 2010 due to insufficient funds. In Angola and Namibia, NVACs had more funders in 2009 than in 2010 implying limited activities in 2009. These findings support Mohamed, 2005 that activities (processes) aimed at achieving goals, if limited, impact negatively on an organization's effectiveness.

From BVAC key informant interview, the BVAC was established in 2009 after the government decided to do away with the Early Warning Unit which dealt only with drought. This is because people remained vulnerable even after drought interventions. It was later realized that drought is not the only threat to households but floods in the Okavango, fires and so on. Table 6.4 shows that BVAC is however more effective (Average score of 71 percent) than older NVACs such as Swazi VAC with an average of 65 percent. BVAC's relative effectiveness to NVAC stems from it being housed under presidency thus receiving more recognition and in a better position to influence policy. It was revealed in the key informant interview that BVAC, as part of the presidency, has to report to the cabinet and the recommendations from BVAC are highly valued and used to inform interventions. This finding has affirmed Clegg's 2004 documentation that an effective organization is one that is able to influence policy. On the other hand, Swazi VAC was disadvantaged because it was "...initially supposed to be housed under the Prime Minister's office in DMA, but no NVAC member is there..." as revealed by the Swazi VAC key informant.

Furthermore, the key informant interview established that roles and responsibilities among Angola NVAC members are not clearly defined. In such instances, effectiveness is crippled in that, it is not known who has to do what, how and when. Therefore, the finding has affirmed Schwalbe's 2006 articulation that roles and responsibilities can only be clearly defined when rules and norms in an organization are formalized into a mandate and taken further for legitimization by legislative bodies.

Moreover, SETSAN, MVAC, LVAC and BVAC's effectiveness is a resultant of a combination of elements of effectiveness. For instance, the study revealed that the mentioned NVACs have mandates outlining roles and responsibilities though mandates not legitimate except for SETSAN. The named NVACs are recognized by the government. For instance, SETSAN, LVAC and BVAC are budgeted for, by the governments like other departments. The findings are in line with Elsig (2006) that a mandate grants legal recognition, power and authority in an organization which in turn boost mobilization and attainment of resources.

The current study also established that ineffectiveness of Angola NVAC is a result of lack of mandate. In addition, the study identified insufficient and unreliable funding as a factor making it difficult for Angola NVAC to carry out the vulnerability assessments as often as would have been preferred. The findings of the current study support Frankenberger *et. al.*'s observation in 2005 that funding is a major challenge in the functioning of the NVAC.

From the above findings, the following conclusions are made; firstly, SETSAN, MVAC, LVAC and BVAC are respectively the most effective NVACs in SADC. However, constant effectiveness score is not a good sign in the stated NVACs and they should evaluate their weak points as constancy may lead to ineffectiveness in the long run. Secondly, it is inherent that formulation and legitimization of mandates not be overlooked in NVACs so that NVACs gain legal recognition, power and authority to be able to mobilize resources and influence policy for effective realization of NVAC goal, which is VAA. Lastly, the process approach of measuring organizational effectiveness by Mohamed (2005), together with the findings of the current study, it is further concluded that housing of NVACs be formal and specific as the impact is

negative on NVAC finance. As shown in discussions above, most of the NVACs formally included in government budgets deliver a more effective VAA than their counterparts.

6.3.2 Efficiency of SADC NVACs

The study results revealed that not all SADC NVACs are efficient. The used 'robot system' highlighted that three NVACs were not efficient over the three years of assessment. Table 6.5 elaborates on the efficiency of NVACs.

Table 6.5 efficiency in SADC NVACs per reference year

n=9				
SADC NVAC	CUMULATIV	SCORE AVERAGED OVER THREE YEARS		
	2008	2009	2010	
ANGOLA	<mark>26</mark>	<mark>26</mark>	<mark>26</mark>	26
BOTSWANA		64	60	62
LESOTHO	61	53	61	59
MALAWI	<mark>56</mark>	47	<mark>56</mark>	53
MOZAMBIQUE	<mark>72</mark>	<mark>72</mark>	<mark>72</mark>	<mark>72</mark>
NAMIBIA	<mark>59</mark>	<mark>59</mark>	<mark>59</mark>	59
SWAZILAND	<mark>51</mark>	<mark>51</mark>	<mark>51</mark>	51
ZAMBIA	48	<mark>53</mark>	<mark>46</mark>	49
ZIMBABWE	48	48	48	48

In Assessing NVACs' efficiency, a similar criterion used in effectiveness was applied. A score less that 50 percent marked inefficiency of NVAC and was marked red by the robot system. (50-59) % showed moderate efficiency and was indicated by yellow whereas the score of 60% and above indicated high efficiency and was marked green by the robot system. Table 6.5 indicates that six NVACs are efficient in SADC. On the basis of the outlined ranges, the robot system

dictated that three NVACs are inefficient. Furthermore, four NVACs are moderately efficient and two NVACs are highly efficient (SETSAN and BVAC). SETSAN, though highly efficient, did not improve on efficiency but showed a constant score of 72% for the three years of reference (2008, 2009 and 2010). BVAC's efficiency, on the other hand, declined from 64% in 2009 to 60% in 2010. Four NVACs showed a constant inefficiency over the past three years. These were; Angola NVAC, Swazi VAC, Zim VAC and Namibia VAC. MVAC was efficient but its efficiency dropped from 56% in 2008 to 47% in 2009. However, MVAC picked up in 2010 though back to 56% making it still not so efficient. LVAC was highly efficient in 2008 with a score of 61% but became less efficient in 2009 obtaining a score of 53%. In 2010 LVAC picked up to 61% but is still less efficient because of the three-year average score of 59%. Zam VAC improved efficiency from 48% in 2008 to 53% in 2009 though still categorized as inefficient. In 2010 it became even worse with 46% efficiency score. This is attributed to a reduction in number of reports produced and meetings held. In addition, the number of funding sources was reduced resulting in crippled assessments.

SETSAN and BVAC's efficiency relative to other SADC NVACs stems from regular reporting and holding of regular monthly meetings. It is established from NVAC key informants that reports and meetings are means of communication that enable check on progress, and form a basis for planning as well as stimuli for efficiency. The finding supports Judge & Robbins' 2010 statement that organisations with established and regular communication means tend to function more efficiently than their counterparts. SETSAN has also set up a data storage device, the INFO FLASH placing it on a better position of efficiency than BVAC with no storage device. SETSAN key informant stated that INFO FLASH enables easier storage and more accessible data. This is in support of the article by Wise (2008) that, a well-managed data is more accessible and can be revisited to check on progress and used for purposes other than those intended for.

It was revealed from key informants that inefficient NVACs either do not carry out monitoring and evaluation or it is done irregularly unlike efficient SETSAN where it is done consistently though internally. This has affirmed Martinez's 2005 statement that monitoring and evaluation

reveal mistakes and provide corrective measures and enable development of institutional memory hence boosting of efficiency.

In summary it has been established that efficiency is a serious problem in SADC NVACs as evidenced by only two NVACs being highly efficient. SETSAN and BVAC, though efficient, are at risk of inefficiency due to declining efficiency (BVAC –in spite of it being two year-old and SETSAN not improving on its efficient but remaining constant.

6.3.3 Effective and efficient NVACS

When effectiveness and efficiency were assessed in SADC NVACs as in sections; 6.3.1 and 6.3.2, it was important to group the NVACs into categories outlined in chapter five. This would aid in a deeper analysis of the strengths, opportunities, weaknesses and opportunities (SWOTs) existing in each group. The SWOTs would be used to inform the elements that should be considered in designing the framework for South African VAC that will be able to deliver an effective and efficient VAA. Table 6.6 illustrates the grouping of SADC NVACs into the categories mentioned above.

Table 6.6 Grouping of SADC NVACs

NVAC CATEGORY	FREQUENCY (%)
Highly effective only	89
Less effective only	11
Ineffective only	0
Highly efficient only	22
Less efficient only	44
Inefficient only	33
Highly effective and highly efficient	22
Highly effective and less efficient	44
Highly effective and inefficient	22
Less effective and highly efficient	0
Less effective and less efficient	0
Less effective and inefficient	11
Ineffective and highly efficient	0
Ineffective and less efficient	0
Ineffective and inefficient	0

Table 6.6 illustrates that majority (89%) of NVACs in SADC are highly effective but a small proportion (22%) is highly efficient. The major conclusion the current study draws from the findings of effectiveness and efficient assessment is that efficiency is a serious problem in the SADC NVACs compared to effectiveness. As outlined in chapter four, the current study views

efficiency in NVAC as comprising of all internal processes while effectiveness consists of all external factors affecting the NVAC. Therefore, on the basis of most NVACs being inefficient, it is further concluded that SADC NVACs' problems are mostly internal. It is also concluded that if NVACs organize themselves, for instance; by formulating and legalizing the mandates, defining roles and responsibilities among members, meeting and reporting frequently and obtaining an appropriate institutional home, external assistance such as funding, will be easier.

6.4 Analysis and discussion of SADC NVACs' SWOTs

After assessing NVACs' effectiveness and efficiency (sub-problem 2) and grouping NVACs into the stated categories under 6.3, the SWOTS for all NVAC categories were identified. These aided the researcher in a further identification of the essential elements to consider in designing the framework that can enable effectiveness and efficiency in SAVAC.

6.4.1 The challenges/weaknesses of NVACs

Identification of the weaknesses was important as it would enable the current study to know what has to be avoided in establishing the SAVAC framework for effectiveness and efficiency. Table 6.7 summarises the challenges/weaknesses observed in NVACs.

Table 6.7 Challenges faced by SADC NVACs

THEME	CONCEPT	DISCUSSIONS
Inability of NVACs to influence policy	NVAC results not used for policy interventions	Some key informants claimed that NVAC results are used for convenience "by decision makers". Implication: inappropriate livelihood and food security interventions by decision makers due to lack of information on who are vulnerable, where they are, how many they are and the underlying causes of their vulnerability.
NVACs not institutionalised	Lack of legitimate	Some NVACs claimed they have "mandate drawn but however did not go through legal processes but approved by top government officials".
	mandate	In addition, some of the key informant showed that "the VAC does not have a mandate yet"
		Implication: difficulty in enforcing order and overseeing task implementation among members due to "lack of recognized authority".
Technical	High staff	NVACs showed that "due to voluntary membership to VAC, member agencies keep changing members".
capacity	turn-over	Implication: NVACs need to train new members on VAA due to high turn-over and sometimes "VAC does not have funds to carry out the training". Therefore VAA results not of good quality.

Table 6.7 has summarised the challenges facing SADC NVACs. Firstly, the study revealed that most NVACs are unable to influence policy because the assessment and analysis results are barely used by policy makers. The ability of NVAC to influence policy is one of the success factors in determining the NVAC's effectiveness and efficiency in the model framework designed in figure 4.1. This has affirmed Koppell (2008) that the legitimate mandate grants an organisation legal recognition, power and authority. It is evident that NVACs may neither legally be recognised nor be powerful enough to influence policy in the absence of legitimate mandate.

Secondly, the NVACs are not institutionalised as they either have illegitimate mandate or lacked the mandate thereof. Organisational mandate further stipulates hierarchies, roles and responsibilities, values and norms, mission, vision, profile of positions as well as organisational policy regulations. In addition, the legitimate mandate grants an organisation legal recognition, formal power and authority (Koppell, 2008). An organisation with legitimate mandate is the one referred to as 'institutionalised' (Cantero, 2005).

Thirdly, lack of technical capacity proved major in the NVACs. The found causal factor is high staff turn-over attributed to voluntary NVAC membership. Lastly, the study established that the NVACs have insufficient funding. The finding supports Frankenberger *et. al.* (2005), that donors have own objectives and interests and will fund activities that are in line with the preferred objectives. The ultimate outcome is NVACs shifting the assessment methodologies to achieving funders' objectives and in the process, negatively affecting NVACs' ability to achieve own set objectives.

The challenges outlined above result in NVACs' ineffectiveness and inefficiency in delivering an effective and efficient vulnerability assessment and analysis for informed interventions and policy making.

6.4.2 Strengths of NVACs

Chapman (2007), articulates that strengths in SWOT analysis identify existing skills and capabilities in an organisation. The SADC National Vulnerability Assessment Committees are

organisations as outlined in chapter three, therefore have capabilities lying within. In order to identify the SADC NVACs' strengths, the researcher sourced relevant information from the key informant interviews and existing documents. The study revealed that effective and efficient NVACs have more strengths than their counterparts. The strengths that existed in two categories (effective only and neither effective nor efficient) were not exclusive but also existed in other NVAC categories. It was important to identify the NVACs' strengths in order to use them in the South African context to inform the establishment of SAVAC framework that can enable a delivery of an effective and efficient vulnerability assessment and analysis. The NVACs' strengths are illustrated in table 6.8.

Table 6.8: Strengths of SADC NVACs

THEME	CONCEPT	DISCUSSION
Multi- stakeholder	Consensus on VAA	Effective and efficient NVACs, NVACs effective only: NVACs showed the membership consisted of various stakeholder institutions in food security and vulnerability, therefore can now "reach consensus on VAA" Implication: consensus reached on VAA and resources saved.
Capacity building	Trainings of NVAC members	Effective and efficient NVACs, NVACs effective only: NVACs claimed the members are trained regularly even though" there's high staff turn-over" Implication: more improved data collected as personnel collecting are skilled.
Defined roles and responsibilities among members	Division of work	NVACs Effective and efficient: NVACs claimed they have legitimate mandate outlining roles and responsibilities of members. Implication: Members clearly know who has to do what, when and how.

Firstly, all NVAC categories are multi-stakeholder (membership from government, NGOs, UNagencies). The study found out that the strength of multi stakeholder membership in NVACs lies in its ability to harmonise assessments and enabling consensus on assessment results. Therefore the study is in agreement with Maennling & Zimmerman (2007) that multi-stakeholder process allows unified participation in organisations. Secondly, capacity-building exists in all NVAC categories except that in neither effective nor efficient NVAC, training is inconsistent since members are trained when RVAC decides to train NVAC members.

Thirdly, effective and efficient NVACs have defined roles and responsibilities among members and this is boosted by presence of legitimate mandate. This has affirmed Koppell (2008) that the legitimate mandate grants an organisation legal recognition, power and authority. Fourthly, the study found out that effective and efficient NVACs communicates (through regular reports and meet) frequently. The finding supports Judge & Robbins' 2010 statement that organisations with established and regular communication means tend to function more efficiently than their counterparts. Lastly, continuous internal monitoring and evaluation- sometimes external- were found to be attributes of effective and efficient NVACs.

6.4.3 Opportunities for NVACs

According to Chapman (2007), opportunities are external factors, which, when used, may strengthen and boost organisational performance. For instance, a change in government policies, technologies, social patterns as well as people's lifestyle may present an organisation with opportunities. The study identify some opportunities that exist in SADC NVACs as shown in table 6.9.

Table 6.9: Opportunities of SADC NVACs

THEME	CONCEPT	DISCUSSION
Presence of mandate	 Defined roles and responsibilities, 	Effective and efficient NVACs: Key informants showed that the mandate has helped "NVAC members know what is expected of them".
	Mobilisation of resources	Funding is easier to access from external donors since there is some form of accountability. Implication: improved VAA activities.
Housing of	Political	All NVACs: most key informants revealed that housing of NVACs under presidency or prime minister's
NVAC	recognition,	office "offers some sort of recognition and enables VAA results used to formulate policy".
	Ability to influence policy	Implication: influence in decision-making and implementation interventions leading to recognition of NVACs.
Presence of	User-friendly	Effective and efficient NVACs: some key informants claimed the presence of data storage devise "has
data storage	data	made the VAC work easier and people who want to use the information can now obtain it with ease".
devise	Accessible information	Implication: sharing information with other institutions, departments and organisations increases the credibility of NVAC.

In the SADC NVACs, three main opportunities were identified. Firstly, presence of legitimate mandate existed in effective and efficient NVACs. Secondly, NVACs housed either under presidency or prime ministers' offices are in a better position to influence policy than those that do not have a direct link with these offices. Frankenberger *et. al.*, 2005 also revealed that housing of NVACs plays an importance role in determining NVACs' ability to influence policy. Lastly, effective and efficient NVACs have data storage device whose benefits are discussed under 6.3.

6.4.4 Threats facing NVACs

In spite of the stated strengths and opportunities, NVACs are faced with a major threat of funding rendering the future VAA effectiveness and efficiency uncertain. Insufficient and unreliable funding has been observed in NVACs that are effective only and those that are neither effective nor efficient. Efficient and effective NVACs are threatened by insufficient funding not unreliability. This is because the study revealed that the latter NVACs are included in formal government budgets though funds not approved as requested.

6.5 Food Security and Vulnerability Framework in South Africa

Food security is a national policy priority in South Africa but is highly politicised. Several strategies and plans have been developed to address the food insecurity challenges. A multi-sectoral approach has been introduced however; there are still critical factors that impede the success of implementation and assessment thereof. Some of the food security related strategies/plans include IFSS, War on Poverty, the National Development Plan and now newly introduced is Comprehensive Rural Development Programme aimed at improving on the former strategies. Figure 6.1 presents the poverty, food insecurity and vulnerability reduction strategies in South Africa.

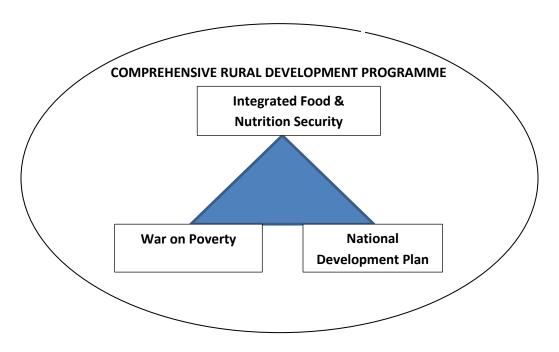


Figure 6.10: Poverty, Food insecurity and vulnerability reduction strategies in South Africa

All the strategies/plans presented in figure 6.10 are an 'Image of reality' presenting the South African context. The overall primary purpose is to combat food insecurity and relieve vulnerability through poverty alleviation, enhanced livelihood, improved nutrition and food security. As noted there are synergies and complementarities between these strategies/ plans. But literature has noted several challenging factors with the successful implementation of all these strategies/plans (NDC, 2011 & SA Gov, 2011). Table 6.10 shows the challenges in implementation of food security and vulnerability strategies in South Africa.

Table 6.10: Challenges and Implications of IFSS, WoP, NDP and CRDP in South Africa

CHALLENGES	IMPLICATIONS
All strategies enable all sectors own food	Unnecessary replication of service
security	deliverables, waste of resources
Lack of coordination	Engagement and social accountability not structured
No formalised platforms to engage the government and community on food security and vulnerability issues	Difficulty in accessing food security information on the ground
No standardised monitoring and evaluation systems	Difficulty in designing appropriate interventions and policy targets

Referring back to lessons learnt from a number of NVAC that were ineffective and inefficient the following were the key factors that lead to their failure; lack of continuous monitoring and evaluation of VAA, food security and vulnerability issues not receiving necessary attention from governments in terms of budgets and policy-making. In like manner, South Africa currently lacks a standardised food security and vulnerability measuring, monitoring and evaluation system which makes it difficult to make appropriate food security and vulnerability policy interventions. A strong emphasis is therefore made that monitoring and evaluation be paramount in establishing the SAVAC. Despite the challenges experienced by the four strategies South Africa embarked on, some opportunities exist as shown in table 6.11.

Table 6.11: IFSS, WoP, NDP and CRDP opportunities

KEY OPPORTUNITY	BENEFIT	DISCUSSION/SUGGESTION
Housing under presidency	Ability to make decisions and influence policy	Selection of a serving committee to all sectors dealing with IFSS, WoP, NDP CRDP and will be recognised and gain power to effect formalised platforms engaging the government and community on food security and vulnerability issues
Devised monitoring and evaluation though not specific to food security and vulnerability issues	Ease of establishing food security and monitoring system within the presidency	If established, the food security monitoring system will create a foundation for proper planning, oversee implementation and impact assessment on food security related issues

In comparison to the gaps identified in reviewing the efficiency and effectiveness of IFSS, War on Poverty and gaps identified from the NDP it is therefore recommended that food security and Vulnerability be de-sectoralised by developing a committee to coordinate, monitor and evaluate Food Security and Vulnerability in South Africa. This committee should play a service role to all the sectors that deal with IFSS, War on Poverty, NDP and CRDP.

South Africa presents unique situation as compared to other SADC countries which is mainly influenced by its dual economy. Therefore a 'One Size Fits All' would not work. The dynamic

complexities food security and vulnerability and transformation of the country need to be of priority when designing or establishing SAVAC. South Africa requires a tailor Vulnerability Analysis and Assessment to suit the South African situation. However, lessons learnt from the efficient and effective SADC VACs could also help in developing SAVAC. Nevertheless, South Africa has come a long way with planning, development and implementation of food security initiatives to improve the well-being and quality of life of SA citizens. Regardless of such progression the major challenge is that South Africa still to date cannot measure or assess food security and vulnerability status. As a response to this challenge it is recommended in this study that the VAA in the context of SA be interpreted as a robust food-security monitoring and evaluation system. Referring and by adopting this system it will create a foundation for proper planning, development and implementation of programmes and most of all to allow for assessment of impact.

6.6 Key elements to improved food security and vulnerability

The key elements to improved food security and vulnerability are presented in table 6.12

Table 6.12; Key elements to Improved Food Security and Vulnerability (S A government, 2011; Hendriks, 2005; Hart, 2009)

Four parameters of food security	Key issues	Departments related to the key issues
Availability	Productivity,	Agriculture, Forestry and Fisheries,
	Skills & technology , Postharvest storage,	Higher education, Performance Monitoring and evaluation, The
	Climate change	Presidency, Meteorology
Access	Access to; production	Agriculture, Trade, Economic
	resources, and markets,	Development, Social Development,
	purchasing power, Intra-	Water and Environmental Affairs,
	household distribution	International Relations and
		Cooperation
Utilisation	Nutrition knowledge,	Basic Education, Higher Education,
	behaviour towards Nutrition	Health, Agriculture
	implementation	
Stability	Changing seasonality,	Meteorology, Statistics, The
	increasing population	Presidency

Each of the above mentioned departments are actually actively engaged in addressing food security and vulnerability issues however, till to date there is system in place that captures, reviews, measures and assess the progression and impact of the development plans and interventions. Therefore a holistic, synergetic and multi-sectoral umbrella body housed under the presidency is recommended. It has been noted by the researcher that most NVACs that were housed under the presidency did outstandingly well compared to their counterparts as the former were recognised, budgeted for and in a better position to influence policy interventions. When established, the umbrella body will play a holistic and synergetic role of

coordination, monitoring and evaluating all food security and vulnerability-related issues in the South African context.

6.7 The SAVAC framework

On the basis of literature, results obtained from the analysis of SADC NVACs, the uniqueness complexity of South African government and the dualistic nature of its economy, the umbrella body forming SAVAC should be composed of the following committee members:

- Government Departments
- Research institutions
- Private Sector
- NGOs
- Tribal Authority
- International Public/financial None Profit making Institutions

The following framework, figure 6.2 is recommended for effective and efficient SAVAC.

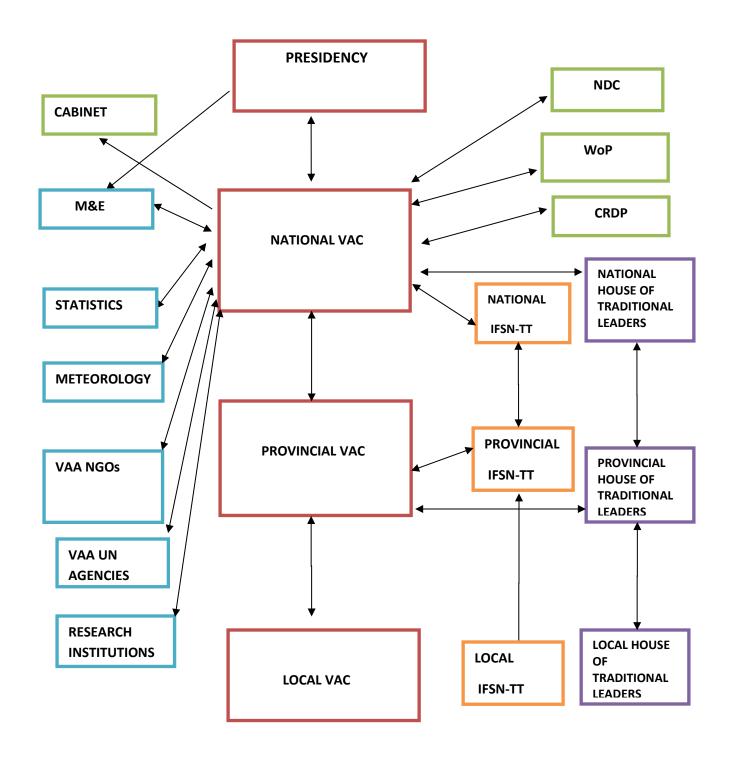


Figure 6.2: The proposed SAVAC framework for delivering an effective and efficient VAA

6.7.1 SAVAC structural organisation

The South African government has a unique and complex structure (section 3.3). It has three tiers of governance; the national, provincial and local. In designing the SAVAC framework, it was important that SAVAC is represented in all spheres of government since the national government is administrative while provincial links the national to the local government whose function is to execute local affairs subject to provincial and national legislations. SAVAC representation at all spheres will enable liaising with essential departments at all tiers, improve coordination and ownership of VAA. As depicted in framework 6.2, it is recommended that SAVAC members be representative of; the cabinet, M & E, NDC, WoP, House of Traditional leaders, IFSN-TT, Statistics SA, Meteorology, Research Institutions as well as relevant VAA NGOs. The current study established that NVACs which were represented in cabinet were in a better position to influence policy and gain recognition as the NVACs could present the vulnerability assessment and analysis findings and recommendations in the cabinet. Except for the House of Traditional Leaders and Meteorology, all proposed representative departments, progammes and institutions already deal with food insecurity and vulnerability issues, therefore bringing them under one umbrella (SAVAC) will help South Africa avoid duplication of work and enable consensus on VAA information.

The role of traditional leaders is paramount in addressing rural issues. Traditional leaders are highly regarded by rural dwellers consisting of 14 million vulnerable South Africans. Most rural dwellers are unable to communicate with government officials and at times do not fully trust that their needs will be attended to, by officials but their traditional leaders (Moletsane & Reddy, 2011). In addition, the traditional leaders know the societal norms, behaviour and are able to successfully mobilise the rural masses. Although SAVAC will be aimed at addressing the entire country's food insecurity and vulnerability, the impact will be major in rural areas as majority of the vulnerable reside in rural areas. In this regard, the success of SAVAC outcomes depends on representation of the vulnerable by the

Furthermore, the current study revealed that one of the NVAC weaknesses was lack of sampling representativeness for assessment area coverage, which yielded results not credible hence

identification of Department of Statistics as one of the key department to have member representation in SAVAC. Statistics will aid in proper sampling and data analyses. Equally important, the study has identified the department of meteorology as of enormous importance to be represented in SAVAC. Worldwide, food security is recently compromised by the impact of climate change rendering nations vulnerable particularly in Africa (UNFCCC, 2007). Therefore the importance of involving department of meteorology cannot be over-emphasised on weather and climate change for credible assessment and analysis recommendations to policy makers.

6.7.2 Housing of SAVAC under presidency

The current study proposes that SAVAC be housed under presidency as shown in figure 6.2. On the basis of the current study findings, NVACs' housed under presidency or prime ministers' offices receive more political recognition and therefore are in a better position to influence policy and to some extent, attain funding. In South Africa, the head of the state is the president. The SAVAC should therefore be housed in the presidency for the stated advantage. Housing SAVAC under other government ministries such as Agriculture and Land Reform as proposed by Gandure & Manyaka (2010), would deny SAVAC the stated advantage. In addition, the ministries do not specifically address food insecurity and vulnerability. On the contrary, the presidency already deals with issues on poverty and hunger, for instance, the War on Poverty strategy, and now the newly introduced NDC under presidency are complimentarily mandated to eradicate poverty and vulnerabilities in South Africa which are closely related to the VAC primary objective of carrying out VAA.

The current study has shown that organisational structure and housing are not the only elements that enhance effectiveness and efficiency of NVAC. For SAVAC to deliver an effective and efficient VAA it should have; legitimate mandate, financial stability, permanent staff, good communication, data management structures and well organised monitoring and evaluation systems.

6.7.3 Legitimacy of SAVAC mandate

The findings of the study showed that NVACs that have mandate are more recognised that those that do not have a mandate. However, the NVACs could have done even better, had the mandate been legitimate. It is evident that NVACs may neither legally be recognised nor be powerful enough to influence policy in the absence of legitimate mandate. In addition, legitimate mandate enables a clear definition of roles, responsibilities, outlines communication structures and accountability. Therefore SAVAC should be mandated legitimately if it is to be effective and efficient.

6.7.4 Financial stability of SAVAC

NVACs which proved effective and efficient in the study were more financially stable than their counterparts. It was also revealed that such NVACs were annually budgeted for, by the governments. The stated NVACs are able to carry out the VAA more effectively. However, the effective and efficient NVACs could not perform better because despite being budgeted for, by the governments, the budget was insufficient to carry out all NVAC activities. SAVAC should therefore have an independent and sufficient budget from the South African government for it to deliver a highly effective and efficient VAA. Possession of a clear organisational structure as outlined in 6.7.1, and legitimacy of mandate thereof, will enable formal budgeting of SAVAC and approval by the South African government.

6.7.5. Permanent staffing in SAVAC

The study established that one of the approaches used in establishing the SADC NVACs was; voluntary and open membership. NVAC members are not permanently placed to deal with VAA but have commitments in their organisations and institutions. The result was high turn-over and lack of full commitment. Due to high member turn-over, NVACs have to spend already insufficient funds to repeat trainings for new members. SAVAC should have permanent staff at so that they fully commit to SAVAC activities.

6.7.6 Communication in SAVAC

It is established from NVAC key informants that reports and meetings are means of communication that enable check on progress, and form a basis for planning as well as stimuli for efficiency. The structure of communication should therefore be clear if SAVAC is to deliver an effective and efficient VAA. This can be effected by formulating SAVAC Mandate and legitimising the mandate as outlined in section 4.6. A mandate outlines who has to do what, specifies time frames, authorities involved, indicators to monitor as well accountability.

6.7.7 Data management in SAVAC

The study has revealed that NVACs that have devices for data management and use the devices are more efficient than those that do not (section 6.3). In addition a well-managed data is more accessible and can be revisited to check on progress and used for purposes other than those intended for. Therefore data management is one of the essential elements of effectiveness and efficiency to reckon with when establishing SAVAC. Liaising with Department of Statistics will enable a more credible management of data (sampling, analysis and storage) in SAVAC.

6.7.8 Monitoring and evaluation (M & E) in SAVAC

Referring back to the results of this study, NVACs that regularly carried out M & E were more effective and efficient than their counterparts. South Africa has come a long way with planning, development and implementation of food security initiatives to improve the well-being and quality of life of South African citizens. Regardless of such progression, the major challenge is that the country still to date cannot measure or assess food security and vulnerability status. In addition, there is, to date, no unit or department that is specifically held accountable for food insecurity and vulnerability issues in the country due to the issues being multi-sectoral yet not coordinated. Therefore South Africa is currently neither in a position to monitor progression of food insecurity and vulnerability interventions made nor evaluate the policy intervention impact. It is therefore strongly recommended that the umbrella body (SAVAC) have a member representative from The Department of performance monitoring and Evaluation and equally

importantly, be vested with the responsibility of monitoring and evaluating all food security and vulnerability issues pertaining to South Africa.

CHAPTER SEVEN

CONCLUSIONS AND RECOMMENDATIONS

7.1 Study purpose and importance

The study aimed at identifying the essential elements for establishing the SAVAC that can deliver an effective and efficient vulnerability assessment and analysis. In so doing, all SADC NVACs were used as references. Approaches used in their establishment along with the assessment of effectiveness and efficiency thereof, were looked into. A further investigation was made to establish why some SADC member states do not have NVACs and are only considering NVAC establishment recently. These would holistically inform the formulation of SAVAC framework for enabling a delivery of an effective and efficient vulnerability assessment and analysis.

7.2 Methodology

The investigation mainly used mixed methods research though qualitative dominated data collection and analysis. Qualitative methods were employed only in assessing the percentage scores of effectiveness and efficiency of NVACs. Data was collected through document studies and key informant interviews to identify the approaches used in establishing the SADC NVACs and assess the effectiveness and efficiency of individual NVACs over a three-year period. Matrix ranking and scoring appendices were designed to assess the SADC NVACs' effectiveness and efficiency respectively. Themes and concepts were identified from the information gathered from SADC NVAC key informants. This was followed by the analysis of NVAC SWOTS. Elements for effectiveness and efficiency in NVAC were then identified. This enabled the formulation of SAVAC framework.

7.3 Results and conclusions

The study identified that the SADC NVACs were established using similar approach to that of their mother body, the RVAC. SADC member states brought together the institutions that have

stake in food security and vulnerability to form NVACs. This was the use of multi-stakeholder approach which has been shown to enhance participation and consensus.

Furthermore, the reasons for considering NVAC establishment included a need to upgrade the work of the current vulnerability assessment institutions so that consensus can be reached on the gathered information to holistically inform policy interventions.

In the current study, effectiveness was viewed as the relationship of NVAC to its external environment determining whether or not the NVAC is able to achieve the set objectives. On the contrary, efficiency in the study encompassed all internal processes in NVAC determining the extent to which the NVAC is able to attain the outputs. Efficiency therefore, in part, was a component of effectiveness.

The findings of this study have revealed that SADC NVACs are highly effective except for Angola NVAC. While all SADC NVACs are effective, it has been identified that not all NVACs are efficient. In addition, only two NVACs (SETSAN and BVAC) are highly efficient. On the basis of the study's definition of effectiveness and efficiency, it is concluded that SADC NVACs' problems are mostly internal and the ultimate outcome is a negative impact on the relationship of NVACs with the external environment.

Furthermore, more weaknesses than threats were identified by the study buttressing that most NVACs' are not well-organised internally. The major identified threat in all NVACs was funding. When critically analysed, it was established that the threat stemmed from a combination of weaknesses. First, the absence of legitimate mandate in NVACs hindered NVACs from mobilizing resources including funding. Donors are usually skeptical to fund organisations that lack a clear mandate and accountability measures and subsequent legalities thereat. Second, either lack of, or irregular monitoring and evaluation in SADC NVACs constrain identification of pitfalls and realization of corrective measures coupled with planning that is not well-informed. Last, irregular reporting and meetings in SADC NVACs crippled planning in NVACs and without an informed plan, it is difficult to mobilise funding and other essential resources.

Moreover, the NVACs housed under higher offices such as the presidency and Prime Ministers' have, to some extent, gained recognition and power to influence policy. For instance, LVAC is housed under Prime Minister's office (Disaster Management Authority) with the NVAC chair being a member of the cabinet, was able to influence the food price subsidy.

7.4 Recommendations for enhanced effectiveness and efficiency in SADC NVACs

On the basis of the identified weaknesses in the SADC NVACs, it is recommended that NVACs organise themselves internally so than they can relate more gainfully with the external environment such as donors. Since absence of legitimate mandate denied NVACs legal recognition and limited their ability to mobilise resources, it is inherent that NVACs be legitimately mandated and institutionalised under higher offices in respective countries in order to enhance the ability to mobilise resources gain influence. In addition, the absence of legitimate mandate hindered NVACs from accessing resources such as government and donor funding, while NVACs should be empowered to externally source funding, they should be legitimately budgeted for by the respective governments so that funding is reliable and sufficient. NVACs which were not efficient poorly managed data, did not meet nor report regularly and lacked monitoring and evaluation strategies. Therefore, monitoring and evaluation, data management as well as reporting and meetings should be regularly done in NVACs to check on progress, inform planning and enhance effectiveness and efficiency thereof.

7.5 Recommendations for further research

Key informant interviews formed part of the study data collection. The interviews were telephonically and electronically carried out due to logistics such as transport. While the chosen approach proved economical, the ultimate outcome was delayed response or no response at all. Some identified key informants did not want to be telephonically interviewed and requested that interview questionnaires be electronically sent to them. However, some of these key informants never responded though they acknowledged receipt of the questionnaire.

Further apart, some key informants, who participated telephonically, were out in the field when interviewed and network coverage was poor, causing a lot of inconvenience between the

researcher and the key informant. In some instances, the key informants were sceptical to disclose the NVAC information to the researcher claiming that they were not even sure that the research is legitimate despite the invitations proving so. Therefore face-to-face interviews are recommended for research of this nature in future.

REFERENCES

ADEBO, S. (2000) Participatory training manual rural appraisal: Addis Ababa.

AIRD, R., DRIMIE, S., FABER, M., GERMISHUYSE, T., JORDAAN, A., KOK, P., ROEFS, M., ROBERTS, B., RULES, S., SCHWABE, C., VAN LIESHOUT, M., VAN ZYL, A., and VERMEULEN, H. (2005) *Report on survey in Sekhukhune to pilot the development of a food insecurity and vulnerability modelling system (FIVIMS) for South Africa, March*. Human Science Research Council research outputs 3376. South Africa.

ADATO, M. And HODDINOTT, J. (2008) *Social protection*: opportunities for Africa. International Food Policy Research Institute.

ALEMU, Z.T. (2011) *Livelihood strategies in rural South Africa*: Implications for poverty reduction. Development Bank of Southern Africa.

ALTMAN, M. (2007) Youth labour market challenges in South Africa. Employment, growth and development initiative. Human Science Research Council, South Africa.

ALTMAN, M., HART, T.G.B. and JACOBS, P.T. (2009) Household food security status in South Africa. *Agrekon*, 48(4):345-361.

BAIPHETHI, M., HART, T., JACOBS, P. And NGCOBO, N. (2010) *The potential of social grants expenditure to promote local economic development and growth*. Hunan Science Research Council, South Africa.

BAZELEY, P. (2004) Research in marketing and management in Burber R., Gadener, J. and Richards, L. (Eds.): *Applying the qualitative methods to marketing management*. Pp 141-156. United Kingdom. UK Palgrave MacMillan.

BOIN, A. and CHRISTENSEN, T. (2008) The development of public institutions: reconsidering the role of leadership. *Administration and Society*, 40(3): 271-298.

BONTI-ANKOMAH, S. (2001) Addressing food insecurity in South Africa, 4-5th June, 2001. *Paper presented at the SARPN conference on Land reform and poverty alleviation in Southern Africa*. Pretoria, South Africa. National Institute for Economic Policy.

BOSLAUGH, S. (2007) Secondary data sources for public health: *a practical guide*. UK. Cambridge University Press.

BRINKERHOF, D. (2005) Organisational legitimacy, capacity and capacity development: *Discussion paper 58A*, June. Maastricht European Centre for Development Policy Management.

BURGER, R. and VON FINTEL, D. (2009) Determining the causes of the rising South African unemployment rate: an age, period generational analysis. *Stellenbosch economic working paper 24/09*. Department of Economics and Bureau for Economic Research, Stellenbosch, South Africa.

CAMPBELL, C., and MEER, T. (2007) Traditional leadership in South Africa. URL:http://www.dpp.org.za/information-material/articles/traditional leadership (04/03-12).

CANTERO, M. (2005) *Processes of institutionalisation*. International Journal of Knowledge, Culture and change management 5.Common Ground Publishing Pty (ltd). URL: www.management- Journal.com/ (15/08/11).

CETIN, C.K. and CERIT, G.A. (2010) Organisational effectiveness at Seaports: Systems approach. *Maritime Policy and Management*, 37(3): 195-219.

CHAPMAN, A. (2007) SWOT Analysis. URL: www.businessballs.com/swotanalysistemplate.htm [accessed on the 4th December 2013].

CHILONDA, P., JAYNE, T.S., GOVEREH, J., MASON, N. and CHAPOTO, A. (2007) Trends in agriculture and rural development indicators in Zambia. *ReSAKSS working paper No 2*.

CHIPIKA, J.T. (2007) Current macroeconomic frameworks, challenges and alternatives for attainment of Millennium Development Goals (MDGs). Johannesburg, South Africa.

CLARK, V.L.P. and CRESSWELL, J.W. (2010) *Designing and conducting mixed research method.* 2nd ed. Mathura road, New Delhi, India. Sage Publications Pty (ltd).

CLEGG, S. (2004) Managing power and politics in organisations: resistance, power and ethics. In Ybema, S. and Bijlsma, F. (Eds) *Organisation Science*, London. Sage Publications pp 473-496.

CORPI, K. (2010) The regional Integrated Phase Classification consultation in Southern, Eastern and Central Africa: mission report. European Union. Joint Research Centre.

COUSINS, B. (2007) Agrarian reform and the two economies: transforming South Africa's countryside. In: Lungisile Ntsebeza and Ruth Halls (eds) *The land reform question in South Africa: the challenge of transformation and redistribution*. Pretoria, South Africa. HSRC Press.

DEPARTMENT OF AGRICULTURE, FORESTRY AND FISHERIES (2002) *The Integrated Food Security Strategy*. Pretoria, South Africa.

DEPARTMENT OF AGRICULTURE, FORESTRY AND FISHERIES (2006) *Integrated Food Security and Nutrition Task Team status report.* Cape Town, South Africa.

DEPARTMENT OF FOREIGN AFFAIRS (2011) South African Development Community: *history and present status*. South Africa.

DEVEREUX, S. (2010) Building social protection systems in Southern Africa. *Paper prepared in the framework of the European report on development 2010*. Centre for Social Protection, Institute of Development Studies, Brighton, United Kingdom.

DEVEREUX, S., KARIM, H., SHOHAM, J., SIDA, H. And WILCOCK, D. (2004) Improving the analysis of food insecurity: food insecurity measurement, livelihood approaches and policy: applications in FIVIMS. Human Security and Development, Development Reader. University of South Africa.

DLAMINI, T. (2011) DAFF presentation at the SADC VAA Programme dissemination meeting, July, 2011. South Africa.

DRIMIE, S. (2005) Regional vulnerability and food insecurity: unravelling the entangling crisis? *Paper presented to the World Vision Roundtable*. 8th March.

DRIMIE S (ND) *Monitoring food security in South Africa*: the FIVIMS-ZA experience. FIVIMS Consortium and National Department of Agriculture. South Africa. URL: www.sarpn.org/documents/d0001230/papers (30/01/12).

ELLIS, F. (2003) Human vulnerability and food insecurity: policy implications. *Paper presented for food security in Southern Africa*, August 2003. Overseas Development Group.

ELSIG, M. (2006) Different facets of power in decision making: *Working paper No. 2006/23*. Swiss National Foundation.

FIVIMS (2006) Food Insecurity and Vulnerability Information Mapping Systems Newsletter, March 2006, 8(1): 1-9.

FOOD and AGRICULTURE ORGANISATION (2001) The state of food insecurity in the world. Rome, Italy. UN FAO.

FOOD and AGRICULTURE ORGANISATION (2005) Crop and food supply assessment mission to Swaziland. Rome, Italy. UN FAO.

FOOD and AGRICULTURE ORGANISATION (2008) Initiative on soaring food prices, Lesotho. Rome, Italy. UN FAO.

FRANKENBERGER, T.R., MOCK, N. and JERE, P. (2005) *Vulnerability assessment methodology review synthesis report*. October. SADC FANR RVAC. Tango international Inc.

FREDERIKESEN, M.S., JENNIFER, J.R.N., LINGLING,Z., MAJERSIK, M.D., MEURER, W.J., SANDRETTO, A., SHIRLEY, M.M.D., SCOTT, M.D. and PHILLIP, A.M.S.N. (2007) Qualitative data collection and analysis methods: *the INSTINCT trial*. Society for Academic emergency Medicine. URL: www.aenj.org / (20/10/11).

FORBES, M. (2007) Governance and organisational effectiveness: *towards a theory of government performance*. Department of Sociology, University of Michigan, USA.

GANDURE, S. and MANYAKA, S. (2010) A scoping study for the establishment of the South African Vulnerability Assessment Committee (SAVAC): *Draft findings report, November, 2010*. South Africa.

GELB, S. (2003) Inequality in South Africa: *nature, causes and responses*. DfID Policy Initiative on addressing inequality in middle income countries. The EDGE Institute, South Africa.

GRELACH, R.W., & NOCERINO, J.M. (ND) Guidance for obtaining representative laboratory analytical sub samples from participatory samples. United States Environmental protection Agency, United States.

HANCOCK, B. (2002) Trent focus for research and development in primary health care: *an introduction to qualitative research*. Division of general practice, University of Nottingham.

HART, T. (2009) Exploring definitions of food insecurity and vulnerability: time to refocus assessments. *Agrekon*, 48(4): 362-383.

HARTY, H., NEWCOMER, K. and WHOLEY, J. (Eds) (2004) Handbook of practical program evaluation. San Francisco. CA. Jossey-Bass.

HENDRIKS, S.L. (2005) The challenges facing empirical estimation of food (in)security in South Africa. *Development Southern Africa*, 22(1): 1-21.

KINGDOM, G. and KNIGHT, J. (2007) Unemployment in South Africa, 1995-2002: Causes, problems and policies. *Journal of African Economies*, 16(5): 813-843.

KOPPEL, J.S.G. (2008) Global governance organisations: legitimacy and authority in conflict. *Administration Research and Theory* 18:177-203. UK. Oxford University Press.

KRANTZ, L. (2001) The sustainable livelihood approach to poverty reduction: *an introduction*. Division for Policy and Socio-economic Analysis, Stockholm. SIDA.

LABADARIOS, D., DAVID, Y.D., MCHIZA, Z. And WEIR-SMITH, G. (2009) The assessment of food insecurity in South Africa. Centre for Poverty and Employment Growth. South Africa.

LADZANI, R. (2009) *The impact of HIV and AIDS on food security and nutrition in South Africa*. Centre for Poverty, Employment and Growth. Human Science Research Council, South Africa.

LEECH, N.L. and ONWUEGBUSIE, A.J. (2008) Qualitative data analysis: a compendium of techniques and a framework for selection for school psychology research and beyond. *School Psychology Quarterly*, 23 (4): 587-604.

LUTHANS, F. (2002) Organisation Behaviour. New York, USA. McGraw-Hill.

LESOTHO VULNERABILITY ASSESSMENT COMMITTEE (2002) Food security emergency assessment report. Maseru, Lesotho.

MADONSELA, V. (2010) A presentation on South Africa's basic social protection floor: *South-South Cooperation- The UN Social Floor*. United Nations Headquarters, New York City.

MAKHURA, M.T. (2001) Overcoming transaction costs barriers to market participation of smallholder farmers in the Northern Province of South Africa. PhD thesis, University of Pretoria, South Africa.

MAKHURA, M. (2008) Rethinking agricultural development finance in South Africa: options for implementation. *Agrekon*, 47(1): 1-18.

MARSHALL, C. And ROSSMAN, G.B. (2011) *Designing qualitative research*. London. Sage Publications.

MARSLAND, N. (2004) Development of food security and vulnerability information systems in Southern Africa: *the experience of Save the Children UK*. Unpublished paper. United Kingdom. Save The Children UK. URL: www.sarpn.org.za/(15/07/11).

McKINNEY, P. (2006) Tanzania comprehensive food security and vulnerability assessment: strengthening the emergency needs assessment capacity (SENAC). World Food Programme vulnerability analysis and mapping branch. Rome, Italy.

McSHANE, M. and TRAVAGLIONE, P. (2003) *Organisational behaviour on the Pacific Rim*. Australia. McGraw Hill Pty (ltd).

MILLET, B. (1998) Understanding organisations: the dominance of systems theory. International Journal of Organisational Behaviour 1 (2): 1-18.

MAENNLING, C. and ZIMMERMAN, A. (2007) Multi-stakeholder management: *tools for stakeholder analysis:* 10 building blocks for designing participatory systems of cooperation. Germany. Deutsche Gesellshaft fur Techische Zusammenarbeit (GTZ).

MALAWI VULNERABILITY ASSESSMENT COMMITTEE (2006) Food security monitoring report. MVAC, Malawi.

MARTINEZ, C.L. (2005) *The importance of evaluation*. Centre Point Institute. URL: www.guidestar.org/rxa/news.

MARTINEZ, J. (2000) Assessing quality, outcome and performance management. Paper presented at the Workshop on Global Health Workforce Strategy. 9-12 December 2000. Annecy, France.

MOHAMED, F.A. (2004) Role of agricultural cooperatives in agricultural development: the case of Menoufiya Governorate Egypt. Inaugural PhD dissertation. Institute for agricultural policy market research and economic sociology. Bonn University, Egypt.

MOLETSANE, R. and REDDY, V. (2011) *The gendered dimensions of food security in South Africa:* a review of literature. Human Science Research Council, South Africa.

NDLELA, N. (2005) The African paradigm: the coverage of the Zimbabwean crisis in the Norwegian Media. *Westminster Papers in communication and culture. Special issue, pp 71-90, November 2005*. University College of Hedmark Norway.

NATIONAL DEPARTMENT of AGRICULTURE (2002) *The Integrated Food Security Strategy for South Africa*. Pretoria, South Africa.

ORGANISATION for ECCONOMIC CORPORATION and DEVELOPMENT (2006) Agricultural policy reform in South Africa. Policy Brief. URL: www.daff.gov.za/docs/GrenPub/SA-policy brief / (2/08/11).

PAHL, N. and RICHTER, A. (2007) SWOT analysis: *idea, methodology and a practical approach*. Department of Business Economics, Marketing Corporate Communication, CRM, Market Research. University of Applied Science, Berlin.

PANDA, B. (2007) Top down or bottom up? Study of grassroots NGOs' approach. *Health Management*, 9(2): 257-273.

RAINEY, H.G. (2009) *Understanding and managing public organisations*.4th ed. San Francisco: Wiley/Jossey-Bass.

REGIONAL VULNERABILITY ASSESSMENT COMMITTEE (2005) Five year programme to strengthen vulnerability analysis in the Southern African Development Community region. *A synthesis document, April* 2005.

REGIONAL VULNERABILITY ASSESSMENT COMMITTEE (2008) State of Food insecurity and vulnerability in Southern African Development Community region. *VAA synthesis report presented at the 2008 RVAA annual dissemination forum.*

REGIONAL VULNERABILITY ASSESSMENT COMMITTEE (2010)State of vulnerability to food insecurity and poverty in the Southern African Development Community region. SADC RVAA programme. Gaborone, Botswana.

SOUTHERN AFRICAN DEVELOPMENT COMMITTEE (2011) Regional *Agricultural Policy: Country summary agricultural policy review reports.* Gaborone, Botswana. Directorate of Food, Agriculture and Natural Resources.

SAVENYE, W.C. and ROBINSON, R.S. (2005) Using qualitative research methods in higher education. *Journal of Compute Higher Education*, 16 (2): 65-95.

SCHWABE, C. (UN) Food security in South Africa and FIVIMS guidelines. Department of Agriculture: Food Security Directorate., South Africa.

SCHWALBE, S. (2006) Organisational institutionalisation of BRAC. *Air and Space Power Journal*. URL: www.defenselink.mil/brac/navy.htm/ (21/09/11).

SCOTT, G. (2008) *Academic leadership capabilities for Australian higher education*. Council for Educational Research and the Australian Learning and Teaching Council. University of Sidney, Australia.

SAVE THE CHILDREN UNITED KINGDOM (2002) *The practitioners' guide to Household Economic Approach.* Save The Children, UK.

SEAMAN, J. (2006) Extending the Household Economic Approach to support the design of cash transfers programme in Zambia. *Regional hunger and vulnerability programme*. URL: www.wahenga.net/ (30/05/11).

SOLESBURY, W. (2003) Sustainable livelihoods: a case study of the evolution of DFID policy. Working paper 217, June 2003. Westminster Bridge Road, London, UK. Overseas Development Institute.

STATISTICS SOUTH AFRICA (2010) Annual report 2009/10. Pretoria, South Africa.

STATISTICS SOUTH AFRICA (2010) The current state of short term2011/12: prospects for the South African and Western Cape economies. *Quarterly report for the Western Cape Department of Economic Development and Tourism*. South Africa.

TASHAKKORI, A. and TEDDIE, E. (2010) Putting the human back in "Human research methodology": the researcher in mixed method research: *Mixed methods research* 4(4):271-277.

UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE (2007) Climate change: impacts, vulnerabilities and adaptation in developing countries. Climate Change Secretariat. Bonn, Germany.

UNITED STATES OF AMERICA INTERNATIONAL DEVELOPMENT (2009) Global food insecurity and price increase. Situation report # 1, May. Bureau for Democracy, Conflict and Humanitarian Assistance (DCHA). Office of US Foreign Disaster Assistance. USA.

VERDUIJN, R. (2005) Strengthening food security and vulnerability information management in Lesotho: FIVIMS assessment report. UN-FAO, Rome, Italy.

WORLD FACT BOOK (2010) South Africa. URL: www.gov.library/publications (20/09/11).

WORLD FOOD PROGRAMME (2009) Integrating the crop and food supply and the emergency food security assessment. *FAO/WFP Crop and food security assessment mission*: phase 2. Rome, Italy.

WISE, L. (2008) How trends in data management affect cohesion between business and IT. Information management on line. URL: www.information-management.com /authors 1069077.html (15August 2011).

APPENDIX A

KEY INFORMANT INTERVIEW GUIDE (VULNERABILITY ASSESSMENT COMMITTEES)

SECTION A: VAC BACKGROUND

- 1. How were vulnerability assessments (VA) done before VAC was formed?
- 2. Why was the VAC established?
- 3. How was it established? (Agencies involved, government role etc)

SECTION B: INSTITUTIONALISATION

- 4. Where is VAC nested? Why there?
- 5. Has it any mandate?
- -Is the mandate legitimate?
- -What is the impact of having a mandate /lack thereof?

SECTION C: VAC FINANCES

- 6. Where does a VAC get funding?
- Is government involved? Why?
- -Is funding sufficient and reliable?
- -how are finances managed?
- -Are there records?

SECTION D: OPERATIONS

- 7. Are roles and responsibilities clearly defined among members?
- 8. Since VAC is multi-agency, who oversees implementation of activities/ tasks?
- -how is compliance ensured?
- 9. How is information communicated among members?
- 10. Is VAC staff trained on VAA?
 - -if so, how often
 - -if not, what is the barrier?

- 11. How often are vulnerability assessments done?
 - -how many assessment methodologies are used in a year?
 - -are all areas always covered during the assessments? If not, what informs the coverage?
 - are assessments done during emergencies such as natural disasters?
- 12. How often do VAC members meet in a year?
- 13. What is the frequency of writing reports in a VAC?
- -is it adhered to?
- 14. How is assessment and analysis data stored?
 - -is it accessible to other users?
- 15. To carry out its activities, does a VAC use own transport?
 - -if not, where does it get transport?
 - -is transportation sufficient?
- 15. Does the VAC embark on M & E?
 - -if no, why not?
 - -if so, how often?
 - -if done, is it internal, or external?
- 17. Is VAC powerful to influence policy in the country?
 - -if so, what empowers it?
 - if no, what is the barrier?

SECTION E: SUGGESTIONS

- 18. Generally, what do you think hinders the VACs from delivering an efficient vulnerability assessment?
- 19. What do you think needs to be done to improve on the efficiency of VAC and vulnerability assessment?

APPENDIX B

KEY INFORMANT INTERVIEW GUIDE (SADC COUNTRIES WITHOUT NVACs)

- 1. Your country is a member of the Southern African Development Community (SADC), why does it not have the Vulnerability Assessment Committee (VAC) like other SADC countries?
- 2. In the absence of VAC, how does the country manage the issues of food insecurity and vulnerability?
- 3. Are there problems encountered using the current system of managing food insecurity and vulnerability? What are they? how are they addressed?
- 4. What do you think needs to be done to holistically address food insecurity and vulnerability in DRC and SADC as a whole?

APPENDIX C: LIST OF SADC NVAC KEY INFORMANTS AND PARTICIPANTS

ANGOLA NVAC- Ermelinda Carliengue

BOTSWANA NVAC- Kutlwano Sebolaaphuthi

LESOTHO NVAC- Mats'eliso Mojaki and Mokotla Ntela

MALAWI NVAC- Simon Mulungu and Hannock Kumwenda

MOZAMBIQUE NVAC (SETSAN)- Francisca Cabral

NAMIBIA NVAC- Timothy Tshixunguleni

SWAZILAND NVAC- Thembumenzi Dube

ZIMBABWE NVAC- George Kembo

TANZANIA- Carol Kilembe

SOUTH AFRICA- Thulile Dlamini and Zodwa Phakeli

DEMOCRATIC REPUBLIC OF CONGO- Robert Nsakala

APPENDX D: MEASURE OF EFFECIVENESS IN SADC NVACs

KE	Y INDICATORS					SOUTHERN AFRICAN VAC COUNTRY SCORE BOTSWANA LESOTHO MALAWI MOZAMBIQUE NAMIBIA SWAZILAND ZAMBIA ZIMBABWE																											
FOI		WEIGHTED CRITERIA	ANG	GOLA		ВО	TSWA	NA	LES	отно		MA	LAWI		МО	ZAMBI	QUE	NA	MIBIA	ı	SW	AZILA	ND	ZAN	ИВIA		ZIM	BABW					
VA	VAC EFFECTIVENESS (weight in brackets)			! -			! -	! .		1 -	١ _		! -		_		1 -		! _	1 -		1 -	1 -		1 -	! .	_						
	REFERENC	# of methodologies	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3				
C O M P O	Assessments/ methodologies	used /year > 2 (1) 2 (3) 1(6)																															
S I T E		# of assessments /year • None (1) • 1 (3) • ≥ 2 (6)																															
K E Y		Assessments during emergencies Never done (1) Seldom done(3) always done(6)																															
N D I C A T O R		Assessment coverage (sample representativity) one chosen area (1) chosen districts/province s(3) across districts/province s (6)																															
	CUMULATIVE SCORE	100%																															

			 			! 1			 -		, ,	
D	Ability of VAC	Composition of VAC										
E	to influence	NGOs only (1)										
Т	policy	Government only										
Е	' '	(3)										
R		Combination of										
		government and										
M		other stakeholders										
1'		(6)										
N	Ability of VAC	1 (6)# of funding sources										
Α	to mobilize	• 1-2 (1)										
N	resources	• 3-4 (3)										
Т	resources	>5 (6)										
						<u> </u>			+			
к		Transportation capacity										
E		Hire transport (1)										
Ϋ́		Use transport from										
ľ		willing member										
		agencies (3)										
1		Use own transport										
N		(6)					Ļ					
D	Organisational	Housing (Nesting) of VAC										
1	structure	one of member										
С		agencies (1)										
A		government										
Ϊ́		department (3)										
1 -		president's office(6)										
0		Legitimate mandate										
R		absent (1)										
S		present but not										
		exercised (3)										
		 present and 										
		exercised (6)										
		Roles and responsibilities										
		not defined (1)										
1		defined but not										
		clearly (3)										
1		clearly defined (6)										
	CUMULATIVE	100%										
1	SCORE											
	33011				<u> </u>		1 1	<u> </u>		ii		

APPENDIX E: MEASURE OF EFFICIENCY IN SADC NVACs

KEY INDICATORS FOR EFFICIENCY										S	OUT	HERN	I AFF	RICAN	VA(c col	JNTR	y sco	ORE										
WEIGHTED (WEIGHTED CRITERIA(weight in brackets)			ANGOLA			BOTSWAN						MALAWI			ZAMB	IQUE	NA	MIBIA		SWAZILAND			ZAMBIA			ZIMBABWE		
COMPOSITE	REFERE	NCE YEAR	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
KEY	Ability of VAC to utilize resources	Budget no deficit(6) deficit < 50% (3) deficit > 50% (1)																											
		# of reports/year																											
		Capacity building regular training (6) training seldom (3) no training (1)																											
		# of meetings held/year • none (1) • 1 (3) • ≥2 (6)																											
		# of RVAC meetings attended/year • none (1) • 1 (3) • > 1(6)																											
CUMULATIVE SCO	CUMULATIVE SCORE 100%																												
DETERMINANT	Data	Reliability																											

_	ı	
	management	personnel
KEY		collecting not collecting not
		skilled (1)
INDICATORS		collected by 'mixed'
INDICATORS		personnel (3)
		collected by skilled
		personnel (6)
		Accessibility
		not user friendly
		partly user friendly
		(3)
		completely user
		friendly (6)
		Storage
		• no storage
		device(1)
		• storage device
		present but not
		used/updated (3)
		• storage device
		present &
		updated(6)
	Communication	• top-down(1)
	flow	
		horizontal(6)
	Monitoring and	• never done (1)
	Evaluation	either internal or
		external only (3)
		internal and
		external (6)
	Management of	• no records (1)
	funds and	financial records
	finances	not corresponding not corresponding
		with budget (3)
		financial records in
		line with budget (6)
	Cumulative	100%
	score	