

**RISK-SPREADING STRATEGIES AND VULNERABILITY TO POVERTY AMONG  
RURAL HOUSEHOLDS: THE CASE OF TSIANDA VILLAGE IN MAKHADO  
MUNICIPALITY, LIMPOPO PROVINCE**

by

**THANYANI SELBY MADZIVHANDILA**

RESEARCH DISSERTATION

Submitted in fulfilment of the requirements for the degree of

**Master of Administration**

in

**Development Management**

in the

**Faculty of Management and Law  
(School of Economics and Management)**

at the

**University of Limpopo**

**Supervisor:** Dr JP Tsheola

**2010**

## **DECLARATION**

I declare that the dissertation hereby submitted to the University of Limpopo, for the degree of Masters of Administration in Development Management has not previously been submitted by me for a degree at this or any other University; that is my work in design and execution, and that all the materials contained herein have been duly acknowledged.

\_\_\_\_\_

**Initials & Surname (Title)**

\_\_\_\_\_

**Date**

**Student Number:** \_\_\_\_\_

## **ACKNOWLEDGEMENT**

I would like to acknowledge with appreciation the assistance I received from the following people:

First I want to thank God Almighty who gave me strength, wisdom and good health throughout the course of this study.

Secondly, I would like to thank my supervisor Dr J.P Tsheola for his expert guidance, motivation and inspiration throughout the course of this study. The success made of this study was due to his patience, insightful knowledge and excellent supervision.

I would also like to thank my parents, Joseph Madzivhandila and Mavis Munyai, for giving me the opportunity to continue with my studies and also for continuously giving me support throughout my studies.

Lastly, special thanks go to the University of Limpopo for the financial assistance it provided me for the completion of this research project. Also I want to thank my sister Ndivhuwo Mbulaheni and all the people in Tsianda Village who participated in the process of collecting data for this study.

## **DEDICATION**

This dissertation is dedicated to the late Ms Fhedzisani Nemakhavhani, my late step- mother who made it possible for me to access tertiary education when there was no hope. If it was not for her I could not have reached this far. May her soul rest in Peace. The study is also dedicated to my beloved parents, Mr. Joseph Madzivhandila and Mavis Munyai for being there for me when I needed them most. This dissertation is also dedicated to my grandmother, Vho-Nyawasedza Madzivhandila and my cousin Todani Madzaga and also my three siblings, Andani, Murunwa and Mudisazwothe Madzivhandila who showed patience and gave me all the extra support needed throughout the course of this study. Lastly, this study is dedicated to all my friends who were there for me during the stress and the ups and downs of this study.

## **ABSTRACT**

Rural households have always faced a variety of risks which rendered them vulnerable to poverty; hence, they have continuously adopted different risk-spreading strategies aimed at reducing and/or de-concentrating the risks that they face. However, there is always a chance that risk-spreading strategies adopted by rural households could intensify or increase the levels of vulnerability to poverty, because most of them are too informal and ineffective. The study examines different risks that households in the rural areas face, including their implication for levels of vulnerability to poverty. The effects of risk-spreading strategies on household level of vulnerability are analysed using a sample of 100 households from Tsianda village.

The survey results reflect that a variety of risks faced in the village have a cumulative effect on households' vulnerability to poverty. However, the risk-spreading strategies appear to be more helpful for the better-off households than for the poor, because the former experience short-term risks whereas the latter face apparently multiple perpetual risks. The village's political, social, economic, cultural, institutional, technological and environmental contexts seem to perpetuate the status quo against the efforts of the poor households. The study concludes that the political, social, economic, cultural, institutional, technological and environmental contexts in the rural area have a huge impact on the concentration of risks that households face, the risk-spreading that they adopt and also their level of vulnerability to poverty. Hence, the poorer households' risk-spreading strategies are not effective to reduce and de-concentrate the risks; moreover they introduce them to new risks and high level of vulnerability to poverty.

## **ACRONYMS**

**AIDS:** Acquired Immune Deficiency Syndrome

**FAO:** Food and Agriculture Organisation

**HIV:** Human Immunodeficiency Virus

**RDP:** Reconstruction and Development Program

**IDP:** Integrated Development Plan

## TABLE OF CONTENT

<b>CONTENT</b>	<b>PAGES</b>
<b>DECLARATION</b>	<b>II</b>
<b>ACKNOWLEDGEMENT</b>	<b>III</b>
<b>DEDICATION</b>	<b>IV</b>
<b>ABSTRACT</b>	<b>V</b>
<b>ACRONYMS</b>	<b>VI</b>
<b>LIST OF TABLES</b>	<b>XI</b>
<b>LIST OF FIGURES</b>	<b>XII</b>

### CHAPTER 1

#### INTRODUCTION AND BACKGROUND TO THE STUDY

<b>1.1 Introduction and Background</b>	<b>1</b>
<b>1.2 Statement of the Problem</b>	<b>4</b>
<b>1.3 Research Questions</b>	<b>5</b>
<b>1.4 Aim and Objectives</b>	<b>6</b>
<b>1.5 Definitions of Terms</b>	<b>6</b>
<b>1.6 Research Design and Methodology</b>	<b>10</b>
1.6.1 Research Design	10
1.6.2 Data Collected	12
1.6.3 Target Population	12
1.6.4 Sampling Design	13
1.6.5 Data Collection and Analysis	13
1.6.6 Questionnaire	14
<b>1.7 Structure of the Dissertation</b>	<b>15</b>
<b>1.8 Significance of the Study</b>	<b>16</b>
<b>1.9 Ethical Considerations</b>	<b>16</b>
<b>1.10 Conclusion</b>	<b>17</b>

**CHAPTER 2**  
**THE CONCEPTUAL FRAMEWORK OF THE STUDY**

<b>2.1 Introduction</b>	<b>18</b>
<b>2.2 Risks Faced by Rural Households</b>	<b>19</b>
2.2.1 Risks Associated with Food Insecurity	20
2.2.2 Risk Associated With Income Insecurity	22
2.2.3 Risks Associated with Climatic Change (Climate Risks)	24
2.2.3 Factors which Influence Risks in the Rural Households	29
<b>2.3 Rural Household Vulnerability to Poverty</b>	<b>31</b>
2.3.1 Factors Influencing Vulnerability among Rural Households	31
2.3.2 Aspects of Vulnerability in Rural Households	37
<b>2.4 Households' Risk Spreading Strategies</b>	<b>41</b>
<b>2.5 Risk-Spreading Strategies and Vulnerability to Poverty</b>	<b>46</b>
<b>2.6 Conclusion</b>	<b>47</b>

**CHAPTER 3**  
**THE NATIONAL, PROVINCIAL AND DISTRICT MUNICIPALITY CONTEXTS OF  
THE STUDY AREA, TSIANDA VILLAGE**

<b>3.1 Introduction</b>	<b>49</b>
<b>3.2 National Context, South Africa</b>	<b>50</b>
3.2.1 Demographic Profile	50
3.2.2 Poverty and Vulnerability in South Africa	54
3.2.3 Strategies and Interventions of Reducing Vulnerability in South Africa	57
<b>3.3 Provincial Context, Limpopo Province</b>	<b>58</b>
3.3.1 Demographic, Poverty and Vulnerability Profile of Limpopo Province	59
3.3.2 Strategies and Intervention of Reducing Vulnerability in Limpopo Province	61
<b>3.4 Vhembe District Municipality</b>	<b>63</b>
3.4.1 Demographic, Poverty and Vulnerability Profile of Vhembe District	63

3.4.2 An Overview of Makhado Municipality	67
3.4.3 Tsianda Village	67
<b>3.5 Conclusion</b>	<b>70</b>

## **CHAPTER 4**

### **ANALYSIS AND INTERPRETATION OF DATA**

<b>4.1 Introduction</b>	<b>72</b>
<b>4.2 Risks faced by households</b>	<b>74</b>
4.2.1 Risks Identified by Households	74
4.2.2 Causes of Risks identified by Households	76
4.2.3 The Household Responding Time when Realizing Eminent Risk	79
4.2.4 The Household Categorization of Risks In Terms of Occurrence Time Frame	81
<b>4.3 Households Vulnerability to Poverty</b>	<b>83</b>
4.3.1 Households Perception of Vulnerability to Poverty	84
4.3.2 The Household Levels of Vulnerability	85
4.3.3 Aspects of Vulnerability identified by Households	87
4.3.4 Influencing Factors of Vulnerability Identified by Households	90
<b>4.4 Household Risk-Spreading Strategies</b>	<b>94</b>
4.4.1 Risk-Spreading Strategies Identified by Households	94
4.4.2 The Capacity of Risk-Spreading Strategies to De-Concentrate the Risks Associated with Poverty	97
4.4.3 The Capacity of Risk-Spreading Strategies Reduce or Intensify the Household Level of Vulnerability	98
<b>4.5 Risk-Spreading Strategies and Vulnerability to Poverty among     Rural Households</b>	<b>100</b>
4.5.1 The Effectiveness of the Risk-Spreading Strategies on Reducing Household Level of Vulnerability to Poverty	101
4.5.2 The Ability of the Household Risk-Spreading Strategy in Dealing with the Level of Vulnerability to Poverty	102

4.5.3 Recommended Intervention to Mitigate and Minimize the Risks and the Level of Vulnerability to Poverty by Households	104
<b>4.6 Conclusion</b>	<b>104</b>

**CHAPTER 5**  
**CONCLUSIONS AND RECOMMENDATIONS**

<b>5.1 Introduction</b>	<b>106</b>
<b>5.2 Findings of the study</b>	<b>107</b>
<b>5.3 Recommendations</b>	<b>112</b>
<b>5.4 Conclusions</b>	<b>114</b>
<b>REFERENCES</b>	<b>116</b>

<b>APPENDIX A: THE RESEARCH QUESTIONNAIRE SURVEY FOR THE HOUSEHOLDS</b>	<b>121</b>
<b>APPENDIX B: INTERVIEW SCHEDULE FOR THE KEY INFORMANTS</b>	<b>129</b>
<b>APPENDIX C: SOUTH AFRICA’S PROVINCIAL MAP</b>	<b>130</b>
<b>APPENDIX D: LIMPOPO PROVINCIAL MAP SHOWING DISTRICT MUNICIPALITIES</b>	<b>131</b>
<b>APPENDIX E: VHEMBE DISTRICT MAP SHOWING THE LOCATION OF LOCAL MUNICIPALITIES</b>	<b>132</b>
<b>APPENDIX F: MAKHADO MUNICIPAL MAP</b>	<b>133</b>
<b>APPENDIX G: TSIANDA VILLAGE MAP</b>	<b>134</b>

## LIST OF TABLES

<b>TABLES</b>	<b>PAGES</b>
Table 2.1: Asset Based Approach to Climate Risks	23
Table 3.1: South Africa's Population Distribution by Provinces	48
Table 3.2: Population Distribution among Districts in Limpopo Province	56
Table 3.3: Distribution of the Population among Municipalities in the Vhembe District	61
Table 3.4: Percentage of People with No Schooling across the Districts in Limpopo Province	66
Table 3.5: Percentage of People between the Age of 20 and Above without Schooling Experience and those who Attended Primary School in the Vhembe District	68
Table 4.1: The Proportion of Households' Perception of Vulnerability to Poverty	85
Table 4.2: The Capacity of Risk-Spreading Strategies to De-Concentrate Risks Associated with Poverty	97

## LIST OF FIGURES

<b>FIGURES</b>	<b>PAGES</b>
Figure 4.1: The Proportion of Risk Identified by Households in Tsianda Village	75
Figure 4.2: The Proportion of Causes of Risks Identified by household	77
Figure 4.3: The Proportion of Household Responding Time when Realizing Eminent Risk	80
Figure 4.4: The Proportion of Household Categorization of Risks In Terms of Occurrence Time Frame	82
Figure 4.5: The Proportion of Household Levels of Vulnerability	86
Figure 4.6: The Proportion of Aspects of Vulnerability identified by Households	89
Figure 4.7: The Proportion of Influencing Factors of Vulnerability to Poverty	92
Figure 4.8: The Proportion of Risk-Spreading Strategies Identified by Households	95
Figure 4.9: The Capacity of Risk-Spreading Strategies to Reduce or Intensify the Household Level of Vulnerability	99
Figure 4.10: The Effectiveness of the Risk-Spreading Strategies on Reducing Household Level of Vulnerability to Poverty	102
Figure 4.11: The Ability of the Household Risk-Spreading Strategies in Dealing with Households Level Vulnerability to Poverty	103

## CHAPTER 1

### INTRODUCTION AND BACKGROUND TO THE STUDY

#### 1.1 Introduction and Background

Poverty and its outcomes in rural areas remains the most influential aspect affecting rural households in their daily lives (Calvo, 2007; Jalan & Ravallion, 1999; May & Norton, 1997). Poor housing conditions, lack of income and food are some of the risks that rural households continuously face and have to deal with (Parker, 2006; Taylor & Mackenzie, 1992). In South Africa and throughout the world, rural households are exposed to a variety of risks and hazards that continuously persist in aggravating the level of their vulnerability to poverty. In the light of this exposure to dangerous events, rural households have commonly adopted different strategies to spread the concentration of risks that they face in their daily lives. However, there is an opinion that the strategies that rural households adopt do not necessarily reduce the risks concentration but instead introduce them to new risks that broaden the scope of their exposure (Parker, 2006; Taylor & Mackenzie, 1992).

The main argument for the study, which correlates with the said opinion, is that rural households risk-spreading strategies are too complex and informal to be able to spread the concentration of the risks and reduce people's level of vulnerability to poverty. For example, the majority of people in rural areas face the risk of shortage of food, and by trying to spread such a risk they go to informal money lenders to loan money to buy food, but because of limited income sources to repay the money, they end up falling into the risk of debts, and subsequently lose their properties.

Risk-spreading strategies are practised in rural areas by heterogeneous groups of people whose situations are characterised by complex sets of social and economic hardships. The socio-economic conditions of rural areas make it seem impossible for people to adopt risk-spreading strategies that are effective enough to reduce their level of vulnerability to poverty. The socio-economic situation in the rural areas also makes it more difficult for people to cope with risks associated with disastrous socio-economic impacts, for example, floods.

Blaikie, Cannon, Davis and Wisner (2004) argue that the implication of disaster in worsening people's vulnerability to poverty depends on the people's attitude towards the approach to respond to disaster. Two approaches to disaster explained by Blaikie et al. (2004) are, namely, the Technocratic view and the Political Economic view of disaster. The adoption of one of these approaches plays a prominent role in the view of risk-spreading strategies that households might adopt to respond to disaster impacts. Technocratic view states disaster as the unexpected events in which only their natural causes are given prominence. It also states that disaster is an unprecedented, unexpected, unmanaged and unforeseen natural event for which people were unprepared and unaware. The implication of the technocratic view to disaster is that, people are not aware of or able to see warnings when the disastrous event is to occur; moreover, they cannot come up with measures to prevent, reduce or mitigate the impact of the disastrous event when it occurs. The technocratic view was criticized for putting more focus on the impacts of disaster after the event has occurred, than on having an idea of how to prevent, manage or develop measures to mitigate the impacts (Blaikie et al., 2004). In contrast, the Political Economic view focuses on preventing, mitigating and providing warning of protection before a disaster happens.

The latter view is believed to play a critical role in the selection and adoption of strategies that reduce the risks of being vulnerable to poverty during and after disaster events occur.

The South African rural situations are not an exception to the risks concentration that people face in their areas. Even after the first South African democratic election in 1994, about 15 years ago, the majority of South African citizens are still based in rural areas where socio-economic conditions are poor when compared to those in urban areas. The legacy of the apartheid colonial government comprised the forced removals of Blacks (Africans, Coloureds and Indians) to places of less economic potential is still to blame, when looking at the settlement patterns in the rural areas. Lack of economic opportunities, employment and education were the major implications of the apartheid government for black marginalised citizens. Moreover, these social ills still deal a huge blow on the strategies that rural households adopt to spread the concentration of risks of being vulnerable to poverty.

Limpopo Province is one of the nine provinces of South Africa that is more rural than urban in terms of population distribution. According to the Community Survey (2007), 88% of the population in the province is based in rural areas (Statistics South Africa, 2007). In such rural areas, subsistence agriculture is still the pillar to every day survival. In light of this context, risk-spreading strategies that people in Limpopo adopt, have, in one way or another, to deal with income and food production based on agricultural practices. Evidence of this scenario is Tsianda Village, located in Makhado municipality. The village has a high rate of poverty and people are faced with many risks, ranging from income to food insecurity and also debts. Moreover, the

households in Tsianda village are practicing risk-spreading strategies, ranging from borrowing from friends to loaning money from local money lenders.

## **1.2 Statement of the Problem**

Rural areas are identified with sentiments of economic and social hardships, risks and vulnerability to poverty. These sentiments continue to be associated with household's depression in the poorest section of rural areas (Calvo, 2007; Jalan & Ravallion, 1999; May & Norton, 1997; Parker, 2006; Taylor & Mackenzie, 1992). To respond to the socio-economic hardships they face, and also to spread the risks' concentration, rural households adopt different risk-spreading strategies aimed at spreading the concentration of risks in their households. Such strategies, which are believed to be complex and informal, differ from one place to the other, depending on the socio-economic situations of such areas. People adopt the strategies to uplift households from the risks they face; however, the implementation of the objective of uplifting such households is evidently questionable. Risk-spreading strategies of the poor are practiced in deep rural areas where poverty concentration is deepened. The study currently established the practicality of the rural household risk-spreading strategies' effectiveness and capacity to de-concentrate and reduce vulnerability to poverty among rural households.

Using South Africa as an example, the country is dominated by a majority of rural areas with a high prevalence of poor people who face different risks every day. Reinforced by settlement patterns designed during the apartheid era, such rural areas are located in remote locations where service provision and delivery is not accessible. Facilities like advanced schools and clinics are still lacking in this areas. Furthermore, the socio-economic conditions of these areas limit

households from practicing risk-spreading strategies that are effective enough to reduce the risk of exposure to the vulnerability to poverty. Limpopo Province, for instance, is one of the poorest provinces in the country, and is the best example to focus on to describe the high level of risk concentration in the rural areas. Focusing on Tsianda Village as a chosen area for the study, the place is dominantly rural and the majority of people are faced with risks associated with income and food insecurity. To spread the concentration of these social ills, people in Tsianda adopt a variety of risk-spreading strategies to spread the concentration of risk so as to reduce their level of exposure to poverty. The main theoretical argument for the study is that rural households' risk-spreading strategies are complex but too informal to spread the concentration of risk and reduce people's level of vulnerability to poverty. The study therefore uses Tsianda Village to uncover evidence to support the said argument and also to determine the practicality of the theoretical perception with evidence from Tsianda Village.

### **1.3 Research Questions**

The study formulated the primary research question as follows:

- How do rural households' risk-spreading strategies affect their level of vulnerability and exposure to poverty?

Four questions are drawn from the primary research question as follows:

- What risks do rural households face?
- What risk-spreading strategies do rural households adopt?
- What is the level of vulnerability and exposure to poverty among rural households?

- In which ways do rural households' risk-spreading strategies affect their level of vulnerability to poverty?

#### **1.4 Aim and Objectives**

The primary aim of the study was to investigate rural households' risk-spreading strategies in order to determine ways in which they affect households' level of vulnerability and exposure to poverty.

From its aim, the study draws several objectives such as the following:

- To investigate the risks that rural households face;
- To identify the risk-spreading strategies that rural households adopt;
- To examine the level of vulnerability to poverty among rural households;
- To study the ways in which rural households' risk-spreading strategies affect their level of vulnerability and exposure to poverty;
- To explore the extent to which risk-spreading strategies help mitigate levels of poverty in the study area; and
- To make recommendations on the support measures that could improve the effectiveness of the rural households' risk-spreading strategies and reduce the level of vulnerability and exposure to poverty.

#### **1.5 Definitions of Terms**

**Risk** can be defined as the expression of the chance or probability of danger or hazard taking place (McGill, 1999). This definition, adapted to the study, is critical to identify risk as future potential condition that, if not taken care of, can lead to harm, severe damage, loss of property

and interruption of activities. Risks confronting households differ from one location to another, given the natural, social and financial context of the individual household in the area. The range of risks, particularly in the rural areas, include food insecurity, income insecurity, ill health, debts and losing property due to disastrous event such as floods.

**Poverty** is deprivation of common necessities that determine the quality of life, including food, clothing, shelter and safe-drinking water, and may also include the deprivation of opportunities to learn, to obtain better employment to boost households economic condition, and/or to enjoy the respect of fellow citizens (Barnett, Barret & Skees, 2008). Poverty is regarded as a multidimensional concept. Indeed, many factors have been cited to explain why poverty occurs, and these include environmental, economic, social, institutional, political and cultural factors. These factors are believed to create conditions that determine the level of vulnerability and exposure to different risks, including those that are related to poverty. The negative effects of poverty differ from one place to another. Those living in poverty lack access to essential basic services, are exposed to a variety of hazards, such as hunger and starvation, as well as mental and physical health problems, all of which make it harder for them to improve their situation, thus making them vulnerable.

**Vulnerability** is the characteristic of a person or group, in terms of their capacity to anticipate, cope with, resist, and recover from the impact of social, economic and natural shock or hazard (Blaikie et al., 2004). It operationally attempts to focus on the degree and types of susceptibility to different natural events. It involves a combination of factors that determine the degree to which someone's life and livelihood are put at risk by a discrete and identifiable event in nature

or society. The term vulnerability refers more to people than to an area, building or agricultural system. It is a statistical condition that applies to people during normal (pre-disaster) life but that is not realized and tested until triggered by a natural event. Also vulnerability captures the process of change; the multifaceted nature of changing socio-economic well-being; and the circumstances and concerns of the people; in addition to external factors such as shocks/stress/adversities which precipitate vulnerability; and the ability to cope and recover from such depends largely on the entitlements such as assets or resources (May & Norton, 1997). However, vulnerability is also related to disaster impacts such as floods and drought.

**Disaster** is the consequences of social, economic and natural events or hazards (for instance volcanic eruptions, earthquakes, or landslides) that affect human activities. Human vulnerability, exacerbated by lack of planning or lack of appropriate emergency management, leads to financial, environmental and human losses to disaster (Blaikie et al, 2004). The resulting loss depends on both the capacity of the population to support or resist the disaster and their reliance (Blaikie et al, 2004). The effects of disastrous events are more visible to poor people because of the poor social, economic and environmental characteristics which do not allow them to mitigate or prevent the adverse impacts of the event. Although the event can affect everyone and play an important role in increasing vulnerability, poor people are made more vulnerable from such a web of circumstances that makes them prone to the effects of disaster. The social, economic and environmental characteristics of the people also determine the coping mechanism that people adopt when a disaster event occurs.

**Risk-Spreading** can be defined as the ways in which people organize activities and resources in order to spread the risk that they face (Anderson, 2002). The process of risk-spreading, particularly in the rural areas, differs from one community to the other, and also from household to household, given the natural and socio-economic context of such a community or household. Therefore, the whole process of risk-spreading is complex and frustrating, particularly to the poorest households in the rural area. The risk-spreading process, which includes borrowing, piecework and credit, is a practice performed by the most vulnerable males and female-headed households with no access to farm income and limited/irregular urban income (Sen, 1981; Devereux, 1999)

**Household** is a domestic unit consisting of the members of a family who live together along with nonrelatives such as servants. However, it can also be regarded as the income-sharing unit that most closely, though not perfectly, captures resource sharing. The major components include the family (all related members sharing the same dwelling unit) and can also include all members, related or unrelated, who share the same dwelling unit. Hence, the family is the most natural sharing unit (Smeeding & Weinberg, 2001).

**Rural Area** is an area which is not a town or a city. It is often a farming or agricultural area. These areas are sometimes called "the country" or "countryside". People who live "in the country" often live in small villages, but they might also live somewhere where there are no other houses nearby. Rural is the opposite of urban, which means places such as cities where buildings and places where people work and live are all close together. Rural areas are not crowded with concrete constructions all over. Houses are rather widely spaced with ample room for fields and gardens. Rural areas are some of the only areas fortunate enough to house the

greens. People in rural areas live in close proximity with nature. Apart from people, there is room for pets and grazing animals that help maintain equilibrium in nature. However, these areas are characterized by a majority of poor households with limited economic opportunities (Anderson, 2002).

## **1.6 Research Design and Methodology**

The research design can be defined as a set of guidelines and instructions to be followed in addressing the research problem. It is the means of connecting the research question to the data; moreover, it enables the researcher to anticipate what the appropriate research decisions should be so as to maximize the validity of the eventual results (Dane, 1990).

### **1.6.1 Research Design**

Two research approaches are commonly identified in research projects, namely qualitative and quantitative approaches to research. The study adopts both qualitative and quantitative research approaches for data collection and data analysis. Qualitative measures provide information on how households feel about the situation, how things are done and how people respond to an intervention (Dane, 1990). The study further uses the qualitative approach to describe the nature and types of risks that rural households encounter in the village, the risk-spreading strategies they adopt and also to describe their level of vulnerability to poverty and other related risks. It is also used to assess the household's conditions of living, social, environmental and economic situations of the households. Degrees of conceptual levels of vulnerability created in this study include, Low, Moderate and High, and these levels are determined on the base of a relevant system of ideas in the literature, as well as by the judgment made by households regarding the situations and risks they face.

Quantitative methods provide the answers to “how much and how many”, and the results thereof are expressed in absolute numbers, percentages and ratios. The Quantitative approach is used after the collection of data to analyse and interpret the data in terms of statistical values (Dane, 1990). The study adopted a quantitative approach to create records of the demographic profile on different households; and the frequency of change after households adopted some of the risk-spreading strategies. The quantitative approach is also important in determining the proportion of households that are exposed to various risks in the village and also the number of risk-spreading strategies adopted in the village.

A Case Study approach is adopted for the purpose of this study. A Case Study is believed to be an empirical inquiry that examines a recent or contemporary phenomenon within its real life context, using multiple source of evidence (Dane, 1990). The study uses the Case Study approach to compile evidence that is relevant towards addressing the research question. The Case Study for this study is Tsianda Village located in Makhado Municipality, Vhembe District in Limpopo Province. The choice of the area, as a case study, was purposive because of the high prevalence of risks in the village. Tsianda is a remote village, with Makhado as its main town, and it is dominated by households characterized by a population which is made up of a majority of unemployed people who depend on subsistence agriculture, social grants and livelihood strategies. The high prevalence and concentration of risk in Tsianda Village inevitably force people to adopt and practise risk-spreading strategies aimed at spreading and de-concentrating the risks of being vulnerable to poverty.

### 1.6.2 Data Collected

The data for this study was collected by first gathering the conceptual information on risks, risk-spreading strategies, the level of vulnerability among rural households and also the relationship between the risk-spreading strategies and the level of vulnerability to poverty among rural households. To collect these data, literature was reviewed, analysed, understood and synthesized. The said information was collected from books, journal articles, and government policy and development documents. Data was also collected from individual respondents from each rural household selected in the village by seeking information about their household's demographic profile and also the socio-economic conditions of the household. The data was also collected on the types and the nature of risks that the individual households are facing, including the types and the nature of risk-spreading strategies which they are adopting and also their level of vulnerability to poverty.

### 1.6.3 Target Population

A study population is that group of people about whom the research draws its conclusions (Punch, 2000). Tsianda Village is comprised of about four hundred and eighty (480) households and all such households were the target population for the study. These included key informants, elderly people who provided information on the historical background of risks faced in the village before and also risk-spreading strategies which were in the past adopted by different households in the village. The government officials who work close to the community in the village also form part of the targeted population, for example, Community Development Workers and also Civic Members.

#### 1.6.4 Sampling Design

Since it is generally impossible to study an entire population in the study area, the study relied on sampling procedure to acquire a selection of the population to participate in an experimental and observational study. Dane (1990) refers to sampling as the process of selecting participants for research project. The advantage of using sampling is that a researcher's collection of data using a sample is less time consuming and less costly, and it is the only practical way to collect data when the population is extremely large. This study selected a sample through Systematic Sampling method. Sampling intervals were also determined for the purpose of selecting the target population for this study. The total number of households in the village was four hundred and eighty (480) of which 20% (100) of the households were selected for the questionnaire survey. This decision was based on the calculation of the costs involved in the fieldwork. Therefore, the sampling interval was four hundred and eighty (480) divided by 100 which equals 4.8. The interval meant that, every fourth household, starting from an arbitrarily chosen point was selected in the sample. Within each household selected for the sample, the information was solicited from household's guardians, for example, those people responsible for the household. All key informants, including Community Development Workers, elders in the village and Civic Members were surveyed with the supplement of snowball sampling method, so as to have as many key informants as possible.

#### 1.6.5 Data Collection and Analysis

Data from households was collected through an assisted questionnaire (Appendix A). The field worker assisted the respondents in answering the questions. This decision was made because of the high rate of illiteracy in the village. Interviews (Appendix B) were conducted with key

informants, including Community Development Workers, to allow an open process of probing. The study created classification of risk, risk-spreading strategies and vulnerability, based on the system of ideas in the relevant literature. Conceptual categories, together with other measures, were used to capture survey results into a Statistical Package for the Social Sciences (SPSS). SPSS program was used to generate summary statistics such as, percentages, averages, frequencies, as well a tables and graphs, which defined the prevalence of risks, adoption of risk-spreading strategies and levels of vulnerability to poverty among rural households of Tsianda Village. The output of the study is interpreted in accordance with the qualitative narration that was compiled from individual household respondents and key informants. From the interpretation, it was possible to determine whether the various risk-spreading strategies adopted by the rural households in Tsianda Village are increasing or decreasing their level of vulnerability to poverty and other related risks.

#### 1.6.6 Questionnaire

A questionnaire is a series of questions addressed to individuals to obtain statistically useful information about a given topic. When used properly constructed and responsibly administered, questionnaires become a vital instrument by which statements can be made about specific groups or people or entire populations (Dane 1990). For the purpose of this study, the questionnaire designed comprised five sections. Section A was crucial to solicit the demographic information of each of the households selected for the study. Section B helped to gather information of the risks that households are facing in Tsianda Village, hence section C focuses on collection of the information on the household vulnerability to poverty. Section D helped to gather the information on different risk-spreading strategies that are adopted in Tsianda Village and the last

section, section E, focuses on the collection of information on the relationship between risk, risk-spreading strategies and levels of vulnerability to poverty among households in Tsianda Village.

## **1.7 Structure of the Dissertation**

The dissertation consists of five chapters, including this introductory chapter, as follows:

**Chapter 1:** This chapter introduces the topic of the study, and describes the research purpose, rationale, problem and study procedures followed in compiling the material covered in the dissertation. The chapter also deals with the significance of the study and also ethical considerations.

**Chapter 2:** This chapter presents the review of the literature on the risks, risk-spreading strategies and the levels of vulnerability to poverty among rural households. The effect of risk-spreading strategies to vulnerability to poverty among rural households is also discussed in this chapter.

**Chapter 3:** This chapter presents the background to the study area, the risks that households face and also the strategies they adopt in the National, Provincial, Local and Village context in South Africa.

**Chapter 4:** This chapter comprises the analysis and interpretation of the data on the risks, risk-spreading strategies and the levels of vulnerability to poverty among rural households. The effect of risk-spreading strategies to vulnerability to poverty among rural households is also analysed and interpreted in this chapter.

**Chapter 5:** This chapter presents the conclusion reached on the reality of the practical issue in the study area comparing it to the literature reviewed. It also makes recommendations on the improvement of the socio-economic conditions of the households in the rural areas in order to reduce the high level of vulnerability to poverty among households.

### **1.8 Significance of the Study**

Theoretically the study is believed to contribute to the debate on the relationship between risk-spreading strategies and vulnerability to poverty among rural households. From the practical point of view, the study uncovered a hidden reality of risk, risk-spreading strategies and vulnerability to poverty among rural households, which could help in improving interventions that target rural households. The results could also help the households in the village with how they can tackle the issue related to the poor socio-economic conditions prevailing in their households.

### **1.9 Ethical Considerations**

Confidentiality and anonymity of the sensitive information from the targeted population in the village was considered in this study. The process of collecting data did not cause any physical or emotional harm to any of the respondents, and participation in this study was voluntary.

## **1.10 Conclusion**

Spreading the risks with which rural households and individual residents must deal is a continuing task that has not become much easier, in spite of the development of better methods and new instruments. This study aimed at exploring the risks, risk-spreading strategies and vulnerability to poverty among households. The study adopted both qualitative and quantitative research approach, in order to solicit and explore information in the village both qualitatively and statistically. A Case study approach was used to examine information in the specific location, hence, in this study Tsianda Village was used as a case study. The target population comprises households in the specified village. A systematic sampling procedure was used to create sampling intervals to solicit information across the study area. The importance of the study is to uncover relevant information on the rural households risk-spreading strategies in order to determine ways in which they affect a household's level of vulnerability and exposure to poverty.

## CHAPTER 2

### THE CONCEPTUAL FRAMEWORK OF THE STUDY

#### 2.1 Introduction

The rural households have to grapple with both adverse events and their limited capacity to address such adverse events (Anderson, 2003). In combination, households face the risks of income fluctuations and sudden assets depletion which threaten their access to food and income security. The households which are already in the periphery or under the poverty line or those already vulnerable to poverty are more exposed to these risks, because a minor hazard can push them deeper into absolute poverty. However, households in the rural areas have their own informal risk-spreading strategies, aimed at de-concentrating risks associated with poverty, for instance, borrowing and loaning of money and food, piece jobs, and also labour migration. The above-mentioned strategies are perceived to be limited to only addressing one-time, low impact shocks such as minor accidents or small illnesses, but they are inadequate to address more adverse complicated risks, for instance, the risk of loss of life and catastrophically impacting events such as floods and famine (Anderson, 2003; Calvo, 2008).

The risk-spreading strategies practised by rural households have a small reach and range. Moreover, they can negatively affect the entire household's psychological systems, because they can endanger the existing household productive assets (Carney, 1998), for instance, a food insecurity risk may force the household to sell their available food production source which is

land, to get money and buy food, and after the money is depleted, the household ends up having no food for that moment and none for the future. Risk-spreading strategies are quite unsustainable in addressing risks that affect the household across the board such as floods and drought (Calvo, 2003). Moreover, the rural household risk-spreading strategies significantly reduce the ability of the household to withstand future risks, limit the household income and food sustainability and thus, introduce the household to new risks that intensify the household vulnerability to poverty. The discussion of the adverse risks faced by rural household forms the basis of the presentation of this chapter, and includes the factors which influence the household vulnerability to poverty and their effects. Interventions in the form of risk-spreading strategies aimed at spreading and de-concentrating the risks among the rural household also form part of this chapter. The chapter concludes with the discussion of the relationships between risks, risk-spreading strategies and vulnerability to poverty among rural households.

## **2.2 Risks Faced by Rural Households**

The rural poor are exposed to many risks while often lacking instruments to manage them adequately and thus, are highly vulnerable to poverty (Anderson, 2003). The reason for household failure to manage such risks is based on the low economic potential of areas where rural households are located. Households in rural areas face a variety of risks associated with food and income insecurity and also adverse climate change. Hence, they are forced to formulate risk-spreading strategies aimed at de-concentrating the level of their vulnerability to poverty. Risks associated with the outlined scenarios are discussed in detail in this section, while

including the factors which influence the risks and their impacts on the household vulnerability to poverty.

### 2.2.1 Risks Associated with Food Insecurity

Food insecurity is one of the main concerns of the majority of households in the rural areas. Agriculture, the main source of food in the rural households, plays a major part in this regard; thus, risks associated with food insecurity range from crop failure, livestock losses and limited fertile land for agricultural practices (Fraser, Mabee & Figge, 2005).

Agricultural practices seem to be the main source of food in the rural areas; however, they are subject to many uncertainties such as drought, floods, pests attack, untimely rains and price fluctuations (Anderson, 1979; Ellis, Kutengule & Nyasulu, 2003). The principal food crop grown and the staple diet for the rural population is maize, thus, households' food security depends, as the primary objective, on securing sufficient maize. Agriculture risks vary among agro-climatic conditions, types of crops grown, type of irrigation facilities and also pest and disease control in the rural areas. The implications to sustain these control measures is difficult in the rural areas and rural households that only practice subsistence agriculture for food security. Limited harvesting or a total crop failure are the common outcomes which expose rural households to food insecurity. The adverse crop failure is not only reinforced by the combination of the factors illustrated above, but is also linked to the limited land that households hold in the rural areas, hence land plays a major part in the adoption of risk-spreading strategies in the rural areas (Anderson, 1979).

Secure access to land is a crucial factor in the eradication of hunger and poverty in the rural area; however, secure access to land is frequently not easy and is a complex process that can even constitute violent conflicts in the rural areas (Food & Agriculture Organization, 2005). Limited access to productive land has a huge effect on food insecurity in the rural areas. Moreover, in the rural setup most of the land is communal, and access to such land is determined by the contribution and close connection of the household to the traditional authority. Also, in the rural context access to land is often related to social identity, and the right to land may be used as a political exploitation of tension, and the ownership of land is concentrated in the hands of the minority, whether based on class or ethnicity (FAO, 2005). These scenarios disadvantage the poorest households in the rural areas, because of their low class, limited connections and contribution to the local traditional authority. Most of the households in the rural areas own less than 0.5 ha of the land and thus, securing enough food to survive throughout the dry seasons is a nightmare. Moreover, Ellis, Kulangule & Nyasulu (2003) argue that subsistence agriculture can be the sum of the optional choice for food security in the rural areas, but cannot solve adequate food security problems for families holding less than 0.5 ha of land. So, a food security gap at the household level would persist and can be addressed by means of diversifying the agricultural practice to also include growing livestock (Ellis, Kulangule & Nyasulu, 2003).

The distribution of livestock is more equitable than land among rural households. Eriksen & Silver (2008) argue that livestock in rural areas not only augments income, employment and food security but also serves as store house of capital and insurance against shocks. Livestock, unlike

maize production, does not need much of the fertile land to survive; however, it suffers risks such as infectious diseases and animals dying during the dry seasons (Bebbington, 1999; Fleisher, 1990). During dry seasons livestock losses are prevalent among rural households. The death of animals, for example, sheep, cattle and goats, a risk of stoppage of milk yield, non availability of fodder and outbreak of livestock diseases (for example, the outbreak of foot and mouth diseases in the year 2001-2002) are a few risks that can be mentioned. The risks associated with food security are adverse and sometime chronic in the rural areas, thus, inevitably demand of households to diversify their risk-spreading strategies to the ones which include income earning.

### 2.2.2 Risks Associated with Income Insecurity

Income earning activities have currently come into dominance in rural areas; such activities are reinforced by the visibility of many risks associated with land and subsistence agriculture for food security (Bebbington, 1999; Fleisher, 1990). However, income earning activities also have their own risks and insecurities, and such are multidimensional and they complement each other. Issues like the premature death of the income earning family member leads to severe income reduction or even severe income loss in the household. Risks associated with income insecurity can be caused by either sudden illness, accidents or many other scenarios which limit the household income earning capacity (Reardon & Vosti, 1995).

For households with limited or no productive assets, labour is the primary source of income and for such households illness or even small accidents represents an ongoing threat to household

income earning capacity. Reardon and Vosti (1995) write that, accidents and ill-health are the source of anxiety among the poorest section of rural areas, because they contribute to loss of work days and limit monthly wage and directly affecting loan repayment, current consumption, savings and potential for building assets. This scenario indicate that accidents and ill-health directly limit the household capacity to have enough money to secure for food, school fees and medical expenses, thus, making the household more vulnerable to poverty. The direct costs of the ill-health treatment also forced affected households to borrow and loan money and thus, introduce the household to the new risk of debts. Barnett, Barret and Skees (2008) argue that, accidents and ill health can lead to disability; for instance, caused by snake bite, and that can increase the household costs in terms of medical expenses for the disabled household member. On the other hand, ill-health can have a huge negative economic implication depending upon whether in the course of the sickness, hospitalisation was required. In the case of hospitalisation Reardon and Vosti (1995) argue that losses of wage of the ill patient also need to be taken into account. The most common sicknesses, prevalent in rural areas, are waterborne diseases, for instance, cholera, reinforced by the limited access to protected water among the majority of households and that affects poorer households than better off households because of unequal service delivery or access to productive assets in the rural areas (Barnett, Barret and Skees, 2008; Reardon, 1995).

Owning assets such as huts, tools, livestock and carts plays a major part in securing a sustainable income in the rural households (Ellis, 2000; Robinson & Barry 1987). Current understanding of poverty places considerable emphasis on ownership or access to productive assets that can be used as building blocks for households to construct their own route out of poverty (Ellis, 2000).

However, the risk of losing these assets can bring the household to adverse income insecurity that is or has not been anticipated. Jalan and Ravallion (1999) argue that, even when these assets are low priced, hence, repairable and replaceable, losing one or two of the income productive assets distracts the process of getting enough income to secure for the household. Moreover, Ellis, Kulangule and Nyasulu (2003) emphasize that theft of household productive assets such as the sewing machine, loss of fishing nets, boats and boat engine breakdown at the fishing village are the major risks that a household faces concerning income insecurity. Some of these risks of losing assets are also believed to be reinforced by the changing climatic conditions, for instance, floods which destroy and wash away houses and also damage some of household's productive assets.

### 2.2.3 Risks Associated with Climatic Change (Climate Risks)

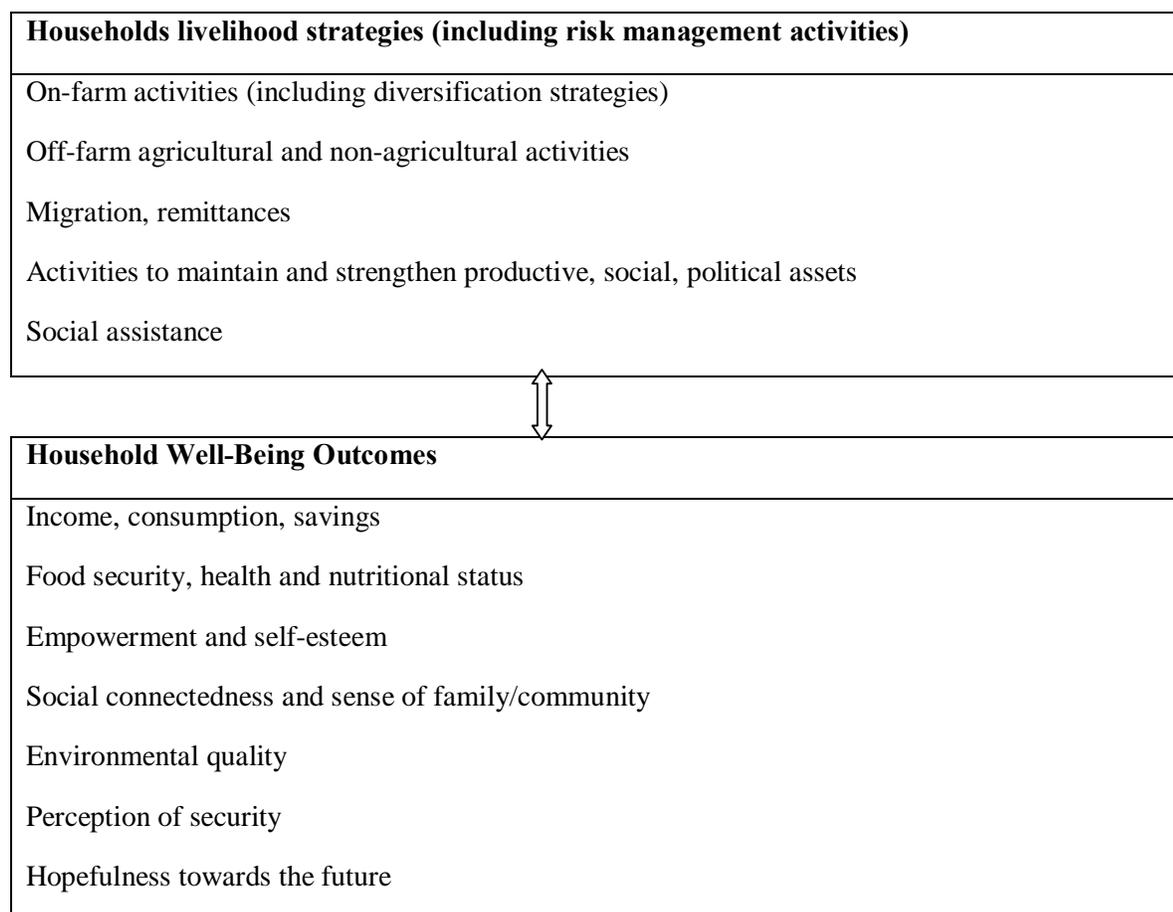
Households in the rural areas have a long record of adapting to climate risks and climate change; moreover, household asset portfolio and livelihood choices are shaped by the need to manage climatic risks, especially in rural areas where a household's income is low and unsustainable (Hetbert, Siegel & Jorgensen, 2009). Climatic change places a major risk on the sustainability or loss of assets in the rural households whose income earning depends on self employment, and the growing of crops and vegetable gardens. The most vulnerable households to climatic risks in the rural areas are those with geographic exposure, reliance on climate sensitive sectors, low incomes and weak adapting capacity (Hetbert, Siegel & Jorgensen, 2009; Tran & Shaw, 2007). Climate events can result in irreversible losses of human and physical capital and may cause poverty traps. Moreover, the cost for rural households to cope with climate risks is high,

particularly for households whose livelihoods, diversification and assets are exposed and sensitive to climate change, for instance, those whose household's livelihood is based on land related issues, especially if the hazards experienced are floods, drought and storms (Tran & Shaw, 2007). In rural areas, all households are exposed to risks associated with climate change and could potentially be rendered vulnerable, but the poorer households are the most at risk (Hahn, Riederer & Foster, 2009; Hetbert, Siegel, & Jorgensen, 2009). The direct impact of the climate change related risks is damage to natural resources and reduction of environmental quality, and that indirectly contributes to the increase of unsustainable income production opportunities for the poorest households in the rural areas. However, households with diverse asset portfolios seem to survive when the aforementioned scenarios have affected them.

The asset based approach (Table 2.1) adapted by Siegel (2005) clearly indicates how the household asset portfolio contributes to the ability of households to respond to risks associated with climate change. Hetbert, Siegel, & Jorgensen (2009) emphasize that, households often use their assets to cope with shocks but this interferes with their ability to maximize productivity, in the sense that, at times of need, households often have few coping options apart from drawing their assets. In order to preserve the ability to use assets for short-term risk-coping, households often prefer relatively secure and liquid asset portfolios to the detriment of expected returns and long-term adaptation (Hahn, Riederer & Foster, 2009).

Table 2.1: Asset Based Approach to Climate Risks

Households Assets			Policy and Institution Context		
Productive	Social and Political	Location		Community and local	National global
Human Natural physical financial	Social and political networks	Agro-ecology proximity to markets access to infrastructure  		Community and local institutions  norms and customs  services (e.g. education, health, water etc)  Exclusion  Discrimination	Government,  Governance,  Institutions  Economic policies  Regulatory and legal framework  Property right



Source: Adapted from Siegel (2005)

The asset based approach clearly indicates the different assets that the households have, for instance, productive, social and political contexts of the area and also the location, which is perceived very crucial for households in order to cope with the risks related to climate change. The asset based approach also clearly illustrates that household's livelihood approach is related to the well-being of the households, in terms of critical aspects that can be secured when the climate risks are threatening the household. The approach is also understood by Hetbert, Siegel, and Jorgensen (2009) to broadly include productive assets, for instance, human, natural, physical, and financial assets; social and political assets; and location assets, which are perceived critical to guide the household to make precise decisions on how to accumulate and allocate important assets to respond to the climate risk. However, the said elements are profoundly influenced by the external policy and institutional context and also by the type of climate risk. Household livelihoods, livelihood resilience and well-being as illustrated in (Table 2.1) depend on the interface between risks, assets, policy, institution, and structural context (Hetbert, Siegel, & Jorgensen, 2009). The characteristics of climate related risks are also believed to be dependent on these assets and policies.

Climate is always perceived to be risky; hence, the ongoing climate change, changes in the risks profile and interventions are highly costly in the rural context and are dependent on the adverse impacts of the risk event. The direct and indirect risks are believed to be diverse in the local areas (Hetbert, Siegel, & Jorgensen, 2009). The direct impact of the risks on agricultural production, for instance, will have indirect consequences for incomes, food price, labour demand, health and nutrition and access to drinking water. This scenario clearly indicates that climatic risks can directly damage the household's physical portfolios, but also indirectly affect

the household entire socio-economic system. Many direct and indirect risks associated with climate change tend to interact and reinforce each other, particularly, in the rural households, in a manner that will potentially result in worsening vulnerability over above what would have resulted from individual risk (Hahn, Riederer & Foster, 2009).

The other devastating characteristic of climate risk is that climate change can increase the frequency of climatic fluctuations, including extreme weather events and repeated droughts. Ericksen and Silver (2009) further argue that more frequent, repetitive risky events could exhaust households and community responses, as well as government risk management options. It is stressed that in such situations, households will need to rebuild assets and livelihoods at shorter intervals, which may prove impossible for poor households and communities (Hetbert, Siegel, & Jorgensen, 2009). The adaptation to assess the impact of the risks in the rural households is proved to be impossible too, in the sense that the most vulnerable households in the rural areas do not have measures that can provide them with warning on the adverse impacts risks can have on their households. Hence, the socio-economic status of the individual household plays a major part in the risk-spreading strategies that they adopt.

The rural household's uncertain socio-economic conditions play a major part on the maximum impact of climate change to intensify the household vulnerability to poverty. The asset based approach states it clearly that the household's ability to respond to the climate risks is driven by the productive, social and political contexts and also the location of the household which determines the agro-ecology, proximity to market and access to infrastructure. All these aspects

are limited and unavailable in the rural areas (Ericksen & Silver, 2009; Heltberg, Siegel, & Jorgensen, 2009). The impact of climate related risk is huge in the rural area; hence, affecting the majority of the general population because of the socio-economic conditions that prevails in these areas (Hahn, Riederer & Foster, 2009; Heltberg, Siegel & Jorgensen, 2009). The factors influencing risks differ from one community to the other, for instance, the roles of men and women in the rural areas and also limited provision of basic social service in these areas.

### 2.2.3 Factors which Influence Risks in the Rural Households

Risks faced by rural households are influenced by a variety of different factors based on the location of the areas where they are situated, for example, the influence of gender (men versus women related risks) and also the unsustainable provision of social services. These two, amongst other factors, are crucial when determining the level of vulnerability to poverty related risks among rural households.

The households headed by women or which are characterized by a large number of women face extreme risks compared to the male dominated households. Ellis, Kulangule and Nyasulu (2003) assert that women and young girls face risks associated with financial expenses and health risks related to pregnancy, child birth and also infertility treatment. The risk of widowhood and abandonment of wife and children too are common in the rural areas, causing disruptions of income streams, though such scenarios are harder to predict (Ellis, Kulangule & Nyasulu, 2003; Jalan & Revallion, 1999). The exposure to risk of domestic violence inducing injuries is another risk that affects regularities and capacity to work among women. Jalan and Revallion (1999)

state that even though some of these women related risks are managed through social support networks, for example, extended families sharing wages and food, it becomes impossible in the extreme rural setup where income and food are a community-wide problem. The gender issue, especially marginalisation of women, which influences food and income related risks are thought to be driven and reinforced by the risks that are faced by men in the rural area.

The most practical influence of food and income insecurity to men related risks is alcoholism and drug addiction, which constantly results in loss of work-days and dismissal from income earning jobs (Jalan & Ravallion, 1999). These scenarios divert limited household income towards unproductive expenses, contribute to ill-health and expenses for treatment and thus, increase household debts. Related to female associated risks, domestic violence also has a side effect that reduces the income of the man, namely, unproductiveness at work, due to stress (Jalan & Ravallion, 1999). Also male infertility treatment and injuries during hard labour are common risks associated with men. The male and female associated risks are interrelated and also correlate with increased food and income insecurity in the rural households, and further reinforced by the issue of poor service delivery.

Limited provision of basic social services such as water, electricity and health facilities is also a common factor influencing risk in the rural areas. Such abnormalities are said to have a huge influence on health related risks, such as exposing the household to more dangerous risks, for instance, the use of paraffin and coal for energy, causing respiratory related risks and the exposure to cholera caused by the use of filthy water (Jalan & Ravallion, 1999; Ellis, Kulangule

& Nyasulu, 2003). The limited provision of sustainable houses is also the driving force for the adverse impact of environmental disaster events in the rural areas. The risks that households face in the rural areas inevitably continues to contribute to the high level of vulnerability to poverty among households; thus, limiting the capacity to work among breadwinners. This instance also contributes to low productivity, increased abstinences from work, reduced household food consumption and also contributes to homelessness, aggravates the overall deprivation and increases human poverty among rural households (Anderson, 2003; Jalan & Ravallion, 1999).

### **2.3 Rural Household Vulnerability to Poverty**

Specific characteristics of vulnerability in rural areas evidently vary from one area to the other. The social, economic, political, institutional, environmental, technological and cultural context of the specific rural area plays a major part in determining the level of vulnerability to poverty among households. The importance of analysing these contextual factors is prerequisite to determining the people's capacity to respond to the exposure to poverty (Eriksen & Silver, 2008). Factors influencing vulnerability and their effects also form part of the discussion.

#### **2.3.1 Factors Influencing Vulnerability among Rural Households**

Social factors such as mortality and morbidity incur costs that are typically covered by depression of household productive and financial assets (Cohen, 1998; O'Brien, Quinlan & Ziervogel, 2008). In general, the social vulnerability factor such as mortality leads to the increased household vulnerability to poverty. This is particularly the case if the deceased was a

productive household member. For example, AIDS related adult mortality can yield degradation of nearly all forms of capital in the household (O'Brien, Quinlan & Ziervogel, 2008). The household can lose human capital and that in turn results in lowered productivity, in loss of financial capital if the deceased was the breadwinner, in which case the household incurs expenses and potential debts related to sickness, drugs, burial and transport costs and also social capital by the weakening of institutions and the stigma associated with the illness (Cohen, 1998). The households which have lost a breadwinner are likely to harvest woods for energy rather than buying, consequently exploiting environmental resources and degrading environmental sustainability.

Natural resources are under increasing pressure in the rural areas, threatening health and development (Hinrichsen, 2000). Water shortage, soil exhaustion, loss of forest and water pollution afflicts many rural areas. The environmental situations in the rural areas plays a major part in determining the level of vulnerability among rural households. Also the population growth in the rural areas, without concurrent improvement of living standard poses a huge threat to the environment (Hinrichsen, 2000). Due to limited service provision in rural areas, the rural households tend to overuse and exploit the natural resources to meet their present needs, and destroy the resources needed for the future, thus contradicting the process of sustainable development *development of the present without compromising the future to meet their own needs* (Hinrichsen, 2000:9). However, these scenarios are relatively influenced by the unawareness among rural communities regarding the issues of sustainable development. The political factor which creates unequal access to information among rural households is to blame in this regard.

The interaction between policies formulated by political authorities in the country about the use of natural resources has been shown to be important in the understanding of people's vulnerability in the rural area. Political instability and misunderstanding among the political structures concerning the use of natural resources is another extreme factor which causes conflicts in many countries, thus, aggravating the level of vulnerability to poverty among households, particularly in the rural area (Fraser, Mabee & Figge, 2005; McCulloch & Calandrino, 2003). Fighting for power not only frustrates the political activists but also the community at large, in the form of civil wars and such scenarios devastate the rural households through distractions of social networks and also community displacement and thus, promoting refugee camps in the neighbouring communities and countries (McCulloch & Calandrino, 2003). The loss of life during political conflicts wreak social and economic havoc on households and create a destructive legacy of psychological and social trauma. In other cases, children run the risk of becoming child soldiers and going to fight, and that destroys their school programs, creating psychological scars which permanently destroys their future prospects (Fraser, Mabee & Figge, 2005; McCulloch & Calandrino, 2003). The political influence of vulnerability not only destroys the social networks in the local area, but also inflicts confusion on the institutions guiding the behaviour of households among communities.

Issues of functional markets, legal systems, rights to organise, and land tenure arrangements, are some of the institutional prospects which have effects on the level of vulnerability to poverty among rural households (Fraser, Mabee & Figge, 2005). The institutional structures are meant to

guide the behaviour of the individual and household members. However, in most of the rural areas, some of social groups and households are excluded from the applications of this institution. Households become vulnerable to poverty when they are excluded from practising their legal rights and from the access to land, particularly by the powerful group in the community, for example, when state institutions deliberately discriminate in their laws, policies or programs. For instance, in the Kingdom of Lesotho, women have until recently been disadvantaged through the law - they could not inherit land or property (Fraser, Mabee & Figuee, 2005; McCulloch & Calandrino, 2003). Also in many countries, certain state benefits are denied to non-citizens, leaving them vulnerable to destitution (McCulloch & Calandrino, 2003). The institutional obligations are not only exclusive in their own form, but also reinforced by the cultural beliefs and customs; particularly, in the rural areas.

The status of women, prescribed roles of men and women, the value of children, are the cultural influencing factors that determine the exposure of household to poverty. Poverty outcomes are greatly affected by social norms, values and customary practices. The community and markets influenced by these norms, values and practices lead to the exclusion of women, ethnic and racial groups among the rural households; particularly, the socially disadvantaged groups (Heitzmann, Canagarajah & Siegel, 2002). Moreover, Heitzmann, Canagarajah and Siegel (2002) argue that women headed households are commonly excluded in community decision making and that affects their household operations. While the cultural influence of gender inequality varies greatly across societies, in almost all communities the majority of women and girls are disadvantaged in terms of their relative power and control over material resources and so they often face more risks of insecurity. The cultural beliefs, customs and cultural values are a major

contribution to the vulnerability of households, particularly, those headed by women, thus influencing the economic inequality in rural area.

Changes associated with economic liberation, such as commodity price fluctuations and the privatization of the state enterprise can further set the rural household at a high level of vulnerability to poverty (Anderson, 2003; Heitzmann, Canagarajah & Siegel, 2002). Changes in market price and inflation fluctuations caused by the economic meltdown, impact severely on the conditions of households in the rural areas in terms of the inability to buy enough food and other household basic necessities. Economy-wide risks are often the hardest for the rural communities and households to cope with, particularly, when the risks experienced are perpetual and persistent (Anderson, 2003). To manage the risks of being vulnerable to economic poverty in terms of local trade shocks is fundamental; however, more difficult for the households with the limited economic opportunities. Making investment and insurance arrangements in normal times can also reduce personal costs when disaster occurs, but to the most primitive rural village, such investment opportunities are rare and limited and also household income scarcity plays a major part in the failure to contribute to such investment programs (Anderson, 2003; Heitzmann, Canagarajah & Siegel, 2002). However, the limited information dissemination about the economic opportunities that people can invest in, is perceived to be another factor; lack of technology in rural areas is also to blame in this regard.

Many households in rural areas are poor, such that they lack the simplest technology, such as radios and televisions, for communication, production and transportation. This lack of

technology is yet another factor which contributes to slow local economic development in the rural areas, thus, making households more vulnerable to poverty (Anderson, 2003; Carter, 1997). Development initiatives stagnate in the rural areas because of slow communication progress and also because of lack of technological equipment. The technological context of the rural areas has a huge impact on risk that people face, assessing the responding mechanisms that are adapted to risks. The limited accesses to telephonic networks also contribute to the vulnerability of households, particularly, to those who depend on labour migration. This is so because households are unable to communicate easily with those people who migrate, when there are emergency calls, such as concerning funerals. However, Carter (1997) argues that the technological factors' impact on the vulnerability in the rural areas is more on food production, particularly, on the farming households. During dry seasons local farmers lack irrigation systems that can assist in sustaining their crops, thus, crop failure is common in these areas. Carter (1997) also argues that lack of technology, for instance, machinery to cultivate large spaces of land also plays a major part in increasing households' vulnerability, as households usually cultivate only a small plot of land, hence, producing limited food to cover the entire seasons.

The social, economic, political, institutional, environmental, technological and cultural influencing factors of vulnerability are critical to examine and to interpret, in order to determine the level of exposure to poverty among rural households and also to determine aspects that households are vulnerable to.

### 2.3.2 Aspects of Vulnerability in Rural Households

It is critical to examine the factors discussed above in order to determine aspects that households are vulnerable to. In rural areas households are exposed to diseases such as HIV/AIDS, violent conflicts, drought and also floods.

HIV/AIDS is already one of the sources of insecurity in the rural households, particularly because of its extreme demand for money for treatment, time and also for burial after the sick person has deceased (Cohen, 1998). Poor food security and loss of productive time are the impacts of HIV/AIDS; moreover, households tend to sell their animals to cater for medical expenses of the illness. While the immediate, devastating effects are at the individual level, the consequences are much broader, for instance, from the intolerance strains on traditions and the child fostering mechanism, to extreme pressure on health systems and also loss of productive labour (Mtika, 2001). Moreover, Mtika (2001) also argues that the disease contributes to psychological strain including depressed families, stress, suicide, isolation, self pity, stigma and hatred. Social impacts, such as marriage breakdown during sickness, economic impacts such as decreased productivity levels are also common in the households affected by the pandemic. Rural households are vulnerable to HIV/AIDS because of the social exclusion that is extreme in the rural areas. Moreover, households are remote from health centres where they can obtain sexual education on how they can protect themselves against diseases during sexual engagements (Cohen, 1998; Mtika, 2001). Households are vulnerable to HIV/AIDS in the rural area and this thus increases the mortality rate. This scenario is said to be reinforced by the limitation of income to sustain the treatment and also poor consumption of nutritious food reinforced by crop

failure, is also to blame in this regard. However, drought is a common occurrence intensifying crop failure in the rural areas.

The more direct the common dependant of rural population is on the natural resource base, particularly land, the greater the exposure to poverty and lack of productivity, which destroys such a natural resource base (Anderson & Dillon, 1992). Drought is a normal part of climate and is characteristic of the drier area and is perceived to be extreme unfavourable when there are unusual rainfalls. Households are vulnerable to drought in the dry lands where water sources is not timely available and rains are limited and it trigger a disasters event such as famine. Households are vulnerable to drought through erosion, loss of livestock, crop failure and thus, leading to huge food insecurity in the rural areas. Anderson and Dillon (1992) argue that, vulnerability to drought is complex and yet essential to understand and thus to formulate appropriate risk-spreading strategies requires a huge local economic base. The most disturbing aspect of drought is that, on many occasions after a long season of drought the affected area becomes vulnerable to floods that destroy all the available social networks in the area.

Floods which contribute to the destruction of infrastructure, closure of schools, damage to the traditional dwellings and sometime loss of lives amongst others, is perceived to be one of the most dangerous disaster events that expose rural households to absolute poverty (Hahn, Riederer & Foster, 2009; Khandlhela, 2006). Even though, floods affect everyone and play a critical role in vulnerability, poor households are made more prone to the effects of floods because of the socio-economic characteristics existing in the rural area (Khandlhela, 2006). Most of the

households in the rural area reside in traditional dwellings with thatched roofs and walls constructed from sun-baked bricks and wattle and mud daub and as such, contribute to the total household wash away and damage of all assets during floods when the house collapses. However, floods as a disaster event also have the potential long term effects, particularly if the household loses things like identity documents, because people in the household may fail to access grants and other aid which depends on presenting such a document to the officials. Khandlhela, (2006) emphasises that floods can damage property and also expose households to health problems, for example, cholera, malaria and also malnutrition. The influence of households being vulnerable to illnesses such as cholera is reinforced by the fact that floods usually destroy the community sources of water and hence, people start using water from the rivers that are unprotected. The direct consequences of floods making households vulnerable is losing dwellings and assets, people getting injured and the spreading of health problems, a decrease in household income opportunities, loss of crops and livestock and also damage of land. However, after disastrous events such as floods, households are vulnerable to violent conflicts due to limited access to land for production, particularly, if this disaster event required people to relocate.

Households are vulnerable to violent conflicts in many relations in the rural areas; however, the most common root of the disputes is over the access to land (FAO, 2005). Nevertheless the FAO (2005), also believe that even when land tenure is not a fundamental cause of violence, land disputes may add to the tensions in the rural areas. The violent conflicts, regardless of their origin, have a widespread effect on the households such as massive displacements; and they also contribute to landlessness. The most vulnerable groups almost inevitably include women and

children and also include ethnic or political minorities, those who are marginalized in the rural areas. As the source of food in the rural setup, agricultural land is believed to be limited to few people in the rural areas, thus, violent conflicts are accelerated in the process of securing land for agricultural practices (FAO, 2005). The areas affected by violent conflicts end up not having roads, infrastructure and potential areas for practicing livelihoods. Recovering those important networks is extremely difficult, because it can require addressing the mass dispersal of people from their current land. Widespread injuries within the community, widespread mistrust and continued fear and threats of other violence that commonly persist increase the level of vulnerability among the households who are affected. The other most common influencing factor of violent conflict is control over natural resources such as oil, diamonds and timber. However, besides the factors of violent conflict enumerated by FAO (2005), other factors include social, economic and political discrimination against groups in the society, whether the minority or majority, who are already socially marginalised. However, the immediate cause of conflicts are not easy to diagnose, for instance, the conflict may arise from leaders who are not willing to formulate peaceful resolutions, but rather continue to discriminate against the most poor households in the rural areas (Ellis, Kulangule & Nyasulu, 2003; FAO, 2005).

Households in the rural areas are vulnerable to many risks which ultimately drive them to absolute poverty and yet they are required to formulate risk-spreading strategies that will try to reduce the intensity and level of vulnerability and exposure to poverty.

## 2.4 Households' Risk Spreading Strategies

Managing the important risks with which rural households and individual residences must deal with, is a continuing task that has not become easier, in spite of the development of better methods and new instruments (Anderson, 2003). In this sense, providing risk-spreading instruments and supporting the critically vulnerable is thus one key pillar in effective and sustainable rural poverty alleviation. Risk-spreading strategies are in many cases practised in rural areas where agriculture is the key sector for food production (Anderson, 2003; Ellis, Kulangule & Nyasulu, 2003). However, Anderson (2003) argues that agriculture or particularly subsistence agriculture is an intrinsically risky strategy for households' food security in the rural areas. So the risk-spreading strategies practised by the rural households are in one way or another influenced by the failure of agricultural practices to sustain food security (Barnett, Barret & Skees, 2008). At the community and also the household level, risk-spreading strategies range from rural to urban migration, borrowing and loaning of money and food, sales of assets and also involvement in the informal employment or piece jobs. These strategies are practised with the intention of bridging the gap of food and income security, particularly in the poorest households of the rural areas (Anderson, 2003; Ellis, Kulangule & Nyasulu, 2003; Frayne 2004).

Borrowing of food is very common in rural areas where the socio-economic condition of the households does not sustain and allow the household potential to secure enough food during dry seasons. Borrowing is explained by Frayne (2004) as common practice during the times of economic and social stress to spread and de-concentrate the risk of food insecurity. When food within the household is very limited or not available, children and adults tend to go to their

neighbours and relatives with the expectation to borrow or sometime being offered food to eat for that moment (Devereux, 1999; Parker & Kozel, 2006). The limitation of this practice is that people tend to visit close neighbours and relatives in the same areas or the same village, who are facing the same risks of food insecurity and that becomes ineffective to sustain. Moreover, Anderson (2003) argues that the borrowing process is done when there is an absolute food crisis, thus, the limitation and failure of the borrowing process leaves the households even more vulnerable to poverty and many other risks. The whole process of borrowing food is very unlikely to be sustainable in the rural context, thus, diversifying to other strategies such as borrowing money becomes the optional practice in the rural households.

Loaning of money is very common in the years of drought and famine, because of the extreme shortage of food and other household necessities (Parker & Kozel, 2006). Households visit informal local money lenders to acquire loans in order to have money to buy household basic needs, in particular food. The danger of this strategy explained by Frayne (2004) is that households fail to adhere and repay the loans; either due to the high interest rate attached to the acquired loan or limited household income and that introduces the household to new risks, for example, debts and the inability to receive some of government entitlements. The most common example to this scenario, is when the household borrows money from the money lender using their identity documents as security clearance, and when they fail to pay such a loan, the money lender tends to keep their identity document, and so prevents them from receiving social grants and food parcels because of the absence of their identity document. The loaning of money as a risk-spreading strategy is perceived to be more risky than many other strategies; however, labour

migration is used as the optional strategy to supplement loaning money (Frayne, 2004; Parker & Kozel, 2006).

Labour migration as a risk-spreading strategy is more common in the rural areas as a supplement to diversify the limited income source in the rural households. Potential household members migrate to urban areas looking for employment with the intention to send money to their households monthly, for food and other basic necessities of the household. Traditionally labour migration has been used as a social security mechanism by small households in the absence of insurance markets to cover production risks in their subsistent agricultural business (Anderson, 2003). However, Frayne (2004) argues that, many rural residences migrate in the slack season to the neighbouring intermediate cities to find employment with the perception of diversifying income source and make up for the lost income from their agricultural work. Agricultural practices are perceived seasonal and temporal to secure enough food security; hence, labour migration brings income which initially secures not only food, but also other basic necessities of the household. However, the danger of households who depend on labour migration, explained by Frayne (2004), is that, migrants, particularly, the potential young women and men, tend to neglect their traditional obligations to support their elderly parents, especially if they do not intend to return to their native village. The said instance is common when the young labour does not intend to inherit any sizable items and have no reciprocal insurance commitments with their parents. The failure of labour migration in the rural areas brings frustrations and the households tend to sell their valuable and sometimes productive assets as a risk-spreading strategy, to cover money for food in the household (Frayne 2004; Parker & Kozel, 2006).

Sales of assets, particularly productive assets are very common during the years of economic hardships and disaster seasons, where food insecurity is adverse. The most valuable assets like land in exchange for food and money is more common in the community with a mixture of poorer and better-off households (Parker & Kozel, 2006). The other important assets that households tend to sell, include fishing boats and fishing nets in the fishing villages and also the sale of sewing machines. This strategy of selling productive assets is argued to be effective in the short run; however, it exposes the households to more risks after the food and money acquired during the sale is finished. The outcomes of this strategy are disastrous, because the household ends up not having any productive assets to rely on, for both income and food security. Sometimes, to diversify the income source, engaging some of the household members in informal employment or piece-jobs is used as an alternative.

In the remote rural areas where physical access to markets is costly and sometimes unavailable, as mentioned before, households diversify their income source by engaging in informal employment or piece jobs. Informal employment, for instance, gardening, house cleaning and grass cutting are common practices for food and day income in the rural areas. However, Barret, Reardon and Webb (2001) argue that in the farming communities non-farm earnings (piece jobs) are crucial means for overcoming working capital constraints to purchasing necessary variable inputs for farming (e.g. fertilizers, seeds and equipments) or to making capital improvement (e.g. buds, ridges and irrigation). The unemployment rate is high in the rural areas, thus, the majority of people engage in day piece jobs to get immediate wages (limited) which will sustain their food

consumption for the day. However, informal employment is believed to have a distinct role of diversification to cope with income risks that the households face in the rural areas. For instance, when crops fail or livestock dies, households relocate their labour to other pursuits (informal employment) that could generate income to buy food for the household (Barret, Reardon & Webb, 2001; Frayne 2004; Parker & Kozel, 2006). The limitation of informal employment as a risk-spreading strategy is that it is too informal, unreliable and unsustainable to guarantee the household's needs and sometimes only few people in the household benefit from the wage acquired by this practice (Barret, Reardon & Webb, 2001). The other limitation is that the majority of people in the rural areas are relatively poor, thus, households who can afford to employ people for piece jobs are limited and sometimes not available; hence, in other communities even food can be used to pay people, who practise informal employment, particularly, to the poorest communities in the rural areas.

Households' risk-spreading strategies are significant in response to the low impact short term risks; hence, they are limited to the high impact risks which can cause disaster events such as drought and famine. Rural households continuously practise these strategies even though in many instances, they expose themselves to many other risks. These households have limited options to diversify the strategies, and with limited effects, because of their poor socio-economic condition.

## **2.5 Risk-Spreading Strategies and Vulnerability to Poverty**

Risk-spreading strategies, which include borrowing, are practised by households in their local area, and such practices are largely performed by the most vulnerable households with no access to formal income and enough land to secure food security. According to Anderson (2003), diversification of different risk-spreading strategies is a means of survival during the socio-economic hardships and during disasters. However, Ellis, Kulangule and Nyasulu (2003) argue that, the natural context that the rural households are located in, does not allow them to diversify to the sustainable risk-spreading strategies; moreover, the strategies they practise introduce them to new risks which ultimately make the household more vulnerable. The adverse effect of risks that households face in the rural areas is above and beyond their socio-economic capacity to respond positively to risks; thus, the initiatives they take increase their vulnerability to poverty.

The social, economic, political, institutional, environmental, technological and cultural contexts in which rural households exist, determine the risks they face, the risk-spreading strategies they adopt and also their level of vulnerability to poverty. Individual households in the rural areas are exposed to different risks associated with food and income insecurity, due to either their poor political stability in the area, their limited access to technology or their exposure to an unsustainable degraded environment. In some cases, their 'primitive' cultural beliefs, their institutional setup and their poor socio-economic conditions play a major part in determining their level of vulnerability to poverty. The capacity of the households to protect and sustain their livelihoods and productive assets during economic hardships is therefore ultimately determined by the factors mentioned above. Jalan and Ravallion (1999) emphasise that, even when all the

said factors limit and block the rural households' ability to sustain their food and income security in the rural areas, households tend to be involved in a wide range of informal risk-sharing and spreading arrangements, with the aim to de-concentrate and spread the risks that they are facing every day. The risk-spreading strategies that the households adopt are, however, too informal to actually spread the risks they face, thus, making households even more vulnerable to poverty.

## **2.6 Conclusion**

Households in the rural areas face a variety of risks and hazards during the times of severe economic and social hardships and such a situation makes them vulnerable to poverty. This contributes to stress, health and nutritional problems, little or no education for the children and also shelter problems. Risks which vary from location to location can be of high or low frequency, depending on the socio-economic conditions in which the households find themselves. However, adoption of different risk-spreading strategies is very common in the rural context to de-concentrate the risk. Unfortunately, the strategies they adopt are not only perceived as inadequate but they further contribute to the weakening of the potential of the household to alleviate the level of vulnerability in the future. Crop losses, livestock losses, premature death, accidents and ill-health are some of the common risks that households face. HIV/AIDS, drought, floods and violent conflicts are the common aspects that households are vulnerable to; hence, borrowing, piece jobs, borrowing money, are some of the risk-spreading strategies that households in the rural areas adopt to de-concentrate different risks.. All these scenarios, the risks, the level of vulnerability to poverty and the risk-spreading strategies that the

households adopt, are determined by either the social, political, institutional, environmental, economic or cultural contexts of the households in the rural areas.

## CHAPTER 3

### THE NATIONAL, PROVINCIAL AND DISTRICT MUNICIPALITY CONTEXTS OF THE STUDY AREA, TSIANDA VILLAGE

#### 3.1 Introduction

The prevalence of risks associated with poverty is still significant in South Africa, one of the known developing countries in the southern region of Africa. Moreover, the high level of vulnerability is not exceptional in this regard. The visibility of risks and vulnerability to poverty among households is more prevalent in the poorest section of the rural areas, where the socio-economic conditions do not allow people to escape poverty. Risk-spreading strategies aimed at de-concentrating the risks among households are adopted in the country's rural households; however, the political, social, environmental, cultural, technological and institutional contexts that rural households find themselves in, are not in any way allowing the households to effectively de-concentrate the risks.

This chapter deals with the following aspects aimed at giving a clear outlook on the study area where the research is conducted. First, the discussion focuses on the national context, South Africa as a whole, focusing on the demographic profile, the social, economic, climatic and environmental state of affairs in the country. Next, the discussion cascades information in the provincial context, Limpopo Province, sequentially going down to the district, the municipality and concluding with the specific village of Tsianda, the case study for this research. The

discussion then specifically looks at the risks and risk-spreading strategies or other strategies used to reduce vulnerability to poverty among households, either at national, provincial, district, local or at the village level of South Africa.

### **3.2 National Context, South Africa**

South Africa is located on the southernmost tip of the African continent, bordering Namibia, Botswana, Zimbabwe, Mozambique and the kingdom of Lesotho, which is an independent enclave surrounded by South African territory. The country is divided into nine provinces namely Limpopo, Gauteng, North West, Free State, Kwazulu Natal, Mpumalanga, Northern Cape, Eastern Cape, and also Western Cape (Appendix C). The population numbers of these provinces differ. The socio-economic conditions of each province are also different; however, the sentiments of poverty are prevalent amongst all the provinces in South Africa.

#### **3.2.1 Demographic Profile**

South Africa is estimated to be the home of about 48million people, distributed around the nine provinces into which the country is divided (Table 3.1) (Stats SA, 2007). The country is also divided into 52 districts, 6 metropolitans and 46 districts municipalities. South Africa is regarded as the fastest growing country in Africa, in terms of population; this scenario is further reinforced by a high birth rate and mass migration of foreigners into the country. The country is also regarded as having an accelerated economic growth (Stats SA, 2007).

Table 3.1: South Africa's Population Distribution by Provinces

<b>Provinces</b>	<b>Numbers</b>	<b>Percentage</b>
Eastern Cape	6 527 747	13.6%
Free State	2 773 059	5.7%
Gauteng	10 451 713	21.5%
KwaZulu- Natal	10 259 230	21.2
Limpopo	5 238 286	10.8
Mpumalanga	3 643 435	7.6
Northern Cape	1 058 060	6.7
North West	3 271 948	2.2
Western Cape	5 278 585	10.9
<b>South Africa</b>	<b>48 502 063</b>	<b>100%</b>

Source: Stats SA (2007)

Economically, South Africa is regarded as a middle-income country with an abundant supply of resources, with well developed financial, legal, communications, energy and transport sectors. The country is also said to have a stock exchange that ranks among the top twenty in the world and also a modern infrastructure supporting an efficient distribution of goods to major urban

centres throughout the entire region. The economy of the country is originally built on natural resources, with mining and agriculture as the major industries to grow the Gross Domestic Product (GDP) (Stats SA, 2007). In the mining sector, the country is rich in minerals such as coal, iron, copper, gold and platinum. Although these minerals are distributed across the country, the most economically important deposits (gold, coal and platinum) are found in Gauteng Province, the most populous and influential area in South Africa; whereas the other influential economy generation industry, agriculture, is found in the poorest provinces of South Africa, for example, Limpopo Province (Stats SA, 2007).

Agricultural wise, South Africa is regarded as having a large such sector on the continent, and is also regarded as the net exporter of farming products. There are almost a thousand agricultural cooperatives and agri-businesses throughout the country and the agricultural exports are estimated to constitute about 8% of the South African total exports. The agricultural industry contributes around 10% of formal employment in the country; which is, however, low compared to the other parts of the African continent. South Africa also provides work for casual labourers and contributes around 2.6% of the country's GDP. The country is estimated to be using a large part of the land for agriculture and around 12% of the potential land is cultivated, whilst, about 86% is natural Field (Stats SA, 2007).

Virtually all ecosystems in South Africa have been modified or transformed by human activities. These transformation and modification include areas placed under cultivation for commercial crops or subsistence agriculture. Overstocking, overgrazing and poor land use management,

afforestation for commercial timber production, urbanisation and informal settlement are the issues of concern in this transformation. Agriculture holds potential growth for South Africa; however, the most limiting natural resource to support these is water. Most of major rivers have been dammed or have water abstracted schemes in place in order to supply industries and domestic users. Also the issue of soil, is a limitation and concern in the country; many locations in South Africa have thin and moderately fertile soil; thus, contributing to marginalized agricultural development, environmental degradation and also soil erosion. Both agricultural development and agricultural marginalization is reinforced by the fluctuating climatic conditions which exist in the country (Stats SA, 2007).

South Africa has a generally temperate climate, due in part for it being surrounded by Atlantic and Indian oceans on three sides. By its location South Africa is located in the climatically wider southern hemisphere and due to the average elevation rising steadily towards the north and further inland. Due to this varied topographic and oceanic influence, a great variety of climatic zones exist. Apparently the climate in South Africa is typically warm and dry, with winter temperatures rarely falling below 0 degrees and summer maxima frequency above 35 degrees. The average annual rainfall is approximately 500mm (considerably less than the world average of 860mm). Most of the central and eastern parts of the country enjoy summer rainfalls; whilst, the western side of the country is a winter rainfall region. The western region is plagued by slight floods almost every year; moreover, there is a limited agricultural practice in this area. The central, eastern and northern parts are very hot during summer and sometimes too dry to sustain agricultural products, thus, drought is very common in these areas (Stats SA, 2007). The diverse fluctuating climatic conditions throughout South Africa have a huge impact on the risks that

households adopt, particularly in rural areas, and also to the risk-spreading strategies that they adopt.

### 3.2.2 Poverty and Vulnerability in South Africa

It is argued that South Africa has the seventh highest per capita income on the African continent; however, the country suffers from large income gaps and dual economy, making it an economically growing country with slow economic development. South Africa has the highest rate of income inequality in the whole world. The majority of households in South Africa are vulnerable to unemployment, social exclusion, corruption and also HIV/AIDS. These scenarios are more dominant in the rural areas than the urban areas, for instance, the issue of service delivery is scarcer in the rural areas than in the urban areas. In the South African rural setup, agriculture is still regarded as the pillar for food and income security; however, the commercial part of agriculture is practised by a few White people in these areas. The majority of Black communities are relying on subsistence agriculture practised in their small yards. A large part of potential agricultural land is used by a few elites for commercial purposes to produce sugar, grapes, maize and also other domestic fruits; while the rural households own small plots of land to produce maize for the household consumption (Stats SA, 2007).

In the South African context, vulnerability persists because rural households have limited access to fertile land, live in poor socio-economic conditions and also have limited access to economic opportunities to sustain their livelihoods. Other than producing crops for commercial benefits, growing livestock is also popular in South African rural areas. The country is estimated to produce up to 85% of all meat that is consumed in the country; however like land, the poor

households have limited livestock., Only a few elites own livestock in the rural areas. These scenarios contribute to the reason why there is high rate of poverty and vulnerability in the rural areas. Also the risks that people face such as food and income insecurity are reinforced by these situations (Stats SA, 2007).

It is clear that vulnerability is prevalent among black people in South Africa. The main reason is that a large number of blacks are located in the rural areas where they are stricken by poverty and the likelihood of households losing their potential members through migration is very high. Economic opportunities in the rural areas are thus limited; migration becomes the solution, in the attempt to diversify the household's income earnings. In the South African context, Gauteng Province is the place that attracts most migrant labourers since many industries and other income generating jobs are located there. Households are vulnerable to poverty in the rural areas because they are losing support from their intended migrant labourers due to distance. The majority of migrant labourers tend to abandon their homes and parents in the rural areas, thus, increasing rural households' vulnerability to poverty (Stats SA, 2007).

The other critical and most alarming factor of vulnerability which is affecting households in both urban and rural areas of South Africa is the spread of HIV/AIDS. It is estimated that 31% of pregnant women are found to be HIV positively infected every year. HIV/AIDS impacts are viewed to be affecting the majority of households in the rural areas, particularly the socially excluded households, because of their socio-economic status. The worst part is that the majority of people who are victims of HIV/AIDS are those who are economically active, resulting in

many families in the rural areas losing their primary wage earners. This, in turn, results in a high number of HIV/AIDS orphans. Such orphans are dependent on the state for financial and food support. It is estimated that in South Africa, about 1.2 million children are vulnerable to be orphans because of the high rate of HIV/AIDS. Roughly 5 million people are believed to be HIV infected in South Africa (Stats SA, 2007).

The issue of vulnerability in South Africa is also reinforced by the social exclusion that a rural household faces. Rural areas are characterised of a majority of unemployed young women and men who depend on informal employment and grants, because of a lack of skills and knowledge. Things like child support grant are popular among young women to depend on; thus, influencing the rate of teenage pregnancy. The engagement of some youth in criminal activities is believed to be influenced by the high unemployment rate in the country (Stats SA, 2007).

All these social-ills of vulnerability exist in the South African context, hence, increasing poverty and making people dependent on government to support them financially. A large number of people and households in South Africa are believed to depend on government for support, either through feeding schemes, grants or health and educational allowances. These strategies are believed to be having positive impacts on the rural households; however, the high level of vulnerability is still prevalent in South Africa (Stats SA, 2007).

### 3.2.3 Strategies and Interventions to Reduce Vulnerability in South Africa

Rural households' vulnerability to poverty has existed for decades in South Africa, even though strategies are implemented to alleviate poverty in the country. The majority of people are still blaming the apartheid legacy for this. The Apartheid government implemented policies based on racial segregation, political exclusion and social marginalization of black people, particularly those in the rural areas. After 1994, after the first democratic elections and the birth of freedom in South Africa, the transformation process began and strategies to redress the social ills created by apartheid were formulated and implemented. The issue of poverty alleviation projects, the RDP policy and also provision of financial support to the poorest households in the most vulnerable part of the rural areas is still implemented in South Africa.

The introduction of the RDP policy was more popular in the first years of democracy in South Africa to tackle the issues of unsustainable shelters owned by rural households and also other basic needs in the households. The RDP program was successful in some aspects of development; however, its progress was slow (Khosa, 2000). The issue of corruption and nepotism were some of the obstacles in the process of implementing the RDP program. The RDP houses were also perceived to be weak and not well structured in some parts of the country. The other projects implemented under the RDP program include the provision of the indigent policy, providing free basic needs for the most vulnerable households in the rural areas, for instance, free basic water and electricity. Even though, some people emphasise that this strategy promotes dependency, it seems to be assisting the reduction of vulnerability levels in the rural households.

The other common strategy to reduce vulnerability among rural households is the provision of different social grants. The grants include pension grant, foster grant, child support grant and also disability grant. It is believed that the process of provision of grants in South Africa is more successful than other strategies in alleviating vulnerability and poverty in the rural areas; however, this strategy is not sustainable to promote independence among these households. Some people also believe that the provision of the child support grant is the main influence of teenage pregnancy in South Africa.

The development situations in South Africa differs from one place to the other, in the sense that, some groups of people are well positioned in places with economic potential, whereas other groups of people are mostly rural residents living under poor socio-economic conditions. Even though many strategies are formulated and implemented to reduce vulnerability among those in the rural areas, such strategies are doing little to achieve their objectives. There are people in South Africa who are still struggling to get adequate food and incomes. This indicates that their livelihood strategies are ineffective to alleviate levels of exposure to poverty. South Africa has the potential to serve all its citizens; however, unequal distribution of resources is the main source of the misery among those in the most rural parts of the country (Stats SA, 2007).

### **3.3 Provincial Context, Limpopo Province**

Limpopo Province is located in the northern-most part of the country and it shares borders with Zimbabwe, Mozambique and Botswana. The province is divided into 5 Districts Municipalities and 25 Local Municipalities (Appendix D). Limpopo Province is believed to contribute

approximately 6.5% to the GDP annually; however, the level of poverty in the province is still high and the province is dominated by rural areas.

### 3.3.1 Demographics, Poverty and Vulnerability Profile of Limpopo Province

In terms of demographics, Limpopo Province is estimated to be the home of about 5 million people distributed across 5 districts found in the province (Table 3.2), hence, it is the fifth largest of the nine provinces in South Africa (Stats SA, 2007).

Table 3.2: Population Distribution among Districts in Limpopo Province

<b>Districts</b>	<b>Numbers</b>	<b>Percentages</b>
Mopani	1068572	20.4
Vhembe	1 240 030	23.7
Capricorn	1243170	23.7
Waterberg	596095	11.4%
Greater Sekhukhune	1090428	20.8%
<b>Limpopo</b>	<b>5 238 296</b>	<b>100%</b>

Source: Stats SA (2007)

The most practised livelihood strategy in Limpopo is agriculture. This includes both commercial and subsistence agriculture. In Limpopo, commercial agriculture is practiced by a few White communities, while subsistence agriculture is practiced as a survival strategy for food security by the majority of Black owned households, particularly, those on the edge of poverty. In Limpopo Province, the majority of rural households own a small piece of land where they grow crops for only the household's consumption. The households that are practicing subsistence agriculture in the province are faced with a variety of risks related to crop failure due to pest's attacks and adverse climatic changes, for instance, drought and floods. Drought is the most prevalent climatic related risk in Limpopo. It is believed that in the dry season households in Limpopo are engaged in different risk-spreading strategies trying to reduce their level of vulnerability; for example, borrowing from relatives and also selling of their valuable assets such as livestock. The income gap is too high in the province leading to most households being vulnerable to high income and food insecurity and thus forces such households to pursue costly risk-coping strategies and then apparently fall below the poverty line (Stats SA, 2007).

Labour migration in Limpopo is used as a survival strategy among poor households. The majority of households have one or two people who have migrated to the economic potential areas seeking better employment. However, this process sometimes leaves the households devastated as the intended labourer fails to support their households continuously, thus, making them more vulnerable. Furthermore,, the inability of labour migrants to support their rural families threatens the provision of basic services in these households, hence, resulting in their social exclusion. Water and sanitation are lacking in these areas and have left rural households vulnerable to diseases such as cholera and other water borne diseases (Stats SA, 2007).

Risks and vulnerability among rural households in Limpopo Province are greater than the income and food insecurity; hence, most of the households depend on social grants. The level of unemployment is high and the majority of people do not have any other income or earning opportunities, thus, they depend on informal employment and grants. The limited access to fertile land to the rural communities is the main concern of the provincial government; moreover, the strategies to relocate the land to the people who were previously disadvantaged by the apartheid government are implemented in the province through land redistribution, restitution and reform programs (Stats SA, 2007).

### 3.3.2 Strategies and Interventions to Reduce Vulnerability in Limpopo Province

Limpopo Province is believed to be the agricultural province and, hence, is known as *the Eden of Africa*. Strategies that the province must adopt are in one way or another connected to the maximisation of small scale agricultural practices in this area. Such strategies must go beyond the poverty alleviation trend but be sustainable to allow communities to benefit continuously. The land redistribution program has been implemented for some time in the province; however, the progress for people to eventually be allocated land is slow. The issue of supporting the small emerging Black farms or those people who are practising small holder agri-business is also implemented in Limpopo. However, the most limiting factor to these farmers especially those in the remote areas are the issue of poor infrastructure, such as the roads. So the strategy to support these farmers is to build an infrastructure that will increase access to markets and provide water for those who are cultivating land. The main aim of the strategy is to accelerate agricultural

employment opportunities within the small scale commercial farming sector. The strategy also aims to support the farmers by means of skills provision and resource allocations..

The main constraint of the strategy of supporting small scale farmers in Limpopo Province is the issue of limited budget. The limited capacity, particularly, personnel and institutional support is also a problem in the province. The other alarming factor is the issue of agri-business development in the province which still needs to be popularised among rural households. The majority of people perceive commercial farming as the issue of the white community and that limits participation of potential people in the agri-business programmes (Stats SA, 2007).

The Limpopo Province has the potential for growth in agriculture and a range of opportunities that people can use to sustain their households in the agricultural sector; however, the unequal distribution of land, budget constraints, lack of skills and knowledge play a major part in the limitation of such households from benefitting from agricultural practices in Limpopo Province. The majority of people practise subsistence agriculture on a small piece of land for the household's consumption only, hence, floods and drought are the primary threats for crop failure in these households. The main agricultural district in Limpopo is Vhembe District, the specific location for this research project, purposefully chosen because of its location and high prevalence of risks and level of vulnerability to poverty among households (Stats SA, 2007).

### **3.4 Vhembe District Municipality**

Vhembe District is located in the northern part of Limpopo Province, and it is the most fertile area in the province for farming activities. The district is divided into four local municipalities, namely, Makhado Municipality, Mutale Municipality, Thulamela Municipality and Musina Municipality (Table 3.3; Appendix E). The location of the district is a constraint because it limits the farmers in reaching the provincial and national markets; however, farmers prefer to transport raw materials from the district and manufacture them in the Gauteng Province where it is easy for them to distribute the products to the rest of the country and even internationally (Vhembe IDP, 2009/10).

#### **3.4.1 Demographics, Poverty and Vulnerability Profile of Vhembe District**

It is estimated that Vhembe District is the home of about 1.2 million people, distributed across four local municipalities (Stats SA, 2007). The population in the four municipalities is distributed in dispersed settlement across these areas and the majority of households are located in the most remote rural areas. Moreover, the district itself is located in a remote area in the province. The fact that the district borders on three African poor countries creates a challenge in the district. This is because there are a large number of illegal immigrants in the district seeking employment, thus, disturbing the social networks and service provision in the villages in the district (Vhembe IDP, 2009/10).

Vhembe District has a relatively limited supply of both ground and surface water. The area is comprised of few catchment areas. These are unfortunately stressed as a result of the demand of water for development activities such as agriculture and mining. However, in the northern part of the district there is the Limpopo river system, which is considered the life blood of the northern Vhembe semi-arid area and plays a major part in the provision of water in the district. The problem of water in the district results in some of the areas being affected by water borne diseases, for instance, the spread of cholera in the year 2008. Although the source of the disease was the neighbouring country, Zimbabwe, Vhembe was much affected because it is a close neighbour of Zimbabwe and it is the gate into South Africa from Zimbabwe (Vhembe IDP, 2009/10).

Table 3.3: Distribution of the Population among Municipalities in Vhembe District

<b>Municipality</b>	<b>Numbers</b>
Musina	57 195
Mutale	108 215
Thulamela	602 819
Makhado	471 805
<b>Vhembe</b>	<b>1 240 035</b>

Source: Stats SA, (2007)

The level of vulnerability is high in Vhembe District, reinforced by the high rate of illiteracy and lack of skills and knowledge among the youth. According to the Community Survey (2007), a total number of 133 076 people have not attended school in the district; however, it is better when compared to other districts in Limpopo Province (Table 3.3) (Stats SA, 2007). The most alarming factor is that there are still many people who do not have schooling experience in the district when such people are supposed to be the active persons in the community. Table 3.5 reflects the percentage of people aged 20 and above who do not have any school experience and also those who attended only primary school across the municipalities in the Vhembe District (Vhembe IDP, 2009/10).

Table 3.4: Percentage of People with No Schooling across the Districts in Limpopo Province

<b>District</b>	<b>No schooling (%)</b>
Mopani	21.9%
Vhembe	18.4%
Capricorn	14.6%
Waterberg	14.3%
Greater Sekhukhune	26.9%

Source: Stats SA, (2007)

The high rate of school dropout is also a characteristic of the district (Stats SA, 2007). The high rate of drop out is believed to be caused by both teenage pregnancy and peer pressure. The majority of the school drop outs end up engaging in criminal activities, for instance, stealing which is prevalent in the area; however, some of these school drop outs survive through low income earning opportunities in the district. The unemployment rate is high in the district. According to a Community Survey (2007), an estimated 130 549 people are unemployed in the district with 79 838 being women (Stats SA, 2007).

Table 3.5: The Percentage of People between the Age of 20 and Above without Schooling Experience and those that only Attended Primary School in Vhembe District

<b>Municipality</b>	<b>No schooling</b>	<b>Primary schooling</b>
Musina	15.3	15.1
Mutale	12.4	24.5
Thulamela	18.3	16.3
<b>Makhado</b>	<b>20.3</b>	<b>15.5</b>

Source: Stats SA, (2007)

In addition, an estimated 372 557 people in the district are believed not to have an income at all, with 207 403 being women and 165 154 men. This scenario confirms the reviewed literature, that, most of the vulnerable people are women in the rural areas. The vulnerability context can be

more illustrative by first giving an overview of the local municipality where the survey was conducted and after that focusing on the specific village, a case study which is Tsianda village.

### 3.4.2 An Overview of Makhado Municipality

Makhado Municipality (Appendix F) is the second largest municipality in Vhembe District. It is the home of an estimated 471 805 people (Stats SA, 2007). It is also estimated that the municipality comprises 114 060 households in its jurisdiction. The municipality consists of 279 villages; most of these villages are rural and consist of a variety of risks associated with poverty. The example used for this study is Tsianda village which is located in ward 27 together with Hamutsha village situated along the way from Makhado town going to Thohoyandou town.

### 3.4.3 Tsianda Village

Tsianda village (Appendix G) is located about 50km away from Makhado town and about 30km to Thohoyandou. The village falls under ward 27 of Makhado Municipality together with Hamutsha village. Tsianda is estimated to have about 480 households situated just below the mountain of Tsianda. In the village, the vast majority of households have very limited access to production assets; moreover, access to land for agriculture is very limited for the households, hence, only subsistence agriculture is practised in the village. Maize is the most grown crop in the village, particularly for those who practise subsistence agriculture in the mountain. Although large numbers of households are unemployed in the village and still regard agriculture as a food security strategy, the majority of households do not have livestock or enough space to grow

crops in the village and their practices are limited to only household consumption. Only a few elite own agricultural assets in the village, for example, a tractor, a plot of land and few livestock. Such households are regarded to be small scale farmers in the village as they have little to harvest and to sell to the community around the village.

In the village, formal employment or non-farm employment is limited among households. A large number of households' members, those who are deemed economically active are unemployed, thus, the formal employment is limited to those who work at the schools and clinic at Ha-mutsha village. The other members of those households, who are formally employed, are commuters who work at both Makhado and Thohoyandou town. In the village there are also ranges of livelihood strategies practised by individual households in the village. These livelihood strategies consist of survivalists who trade fruits, snacks and homemade food stuffs at the local schools, clinic and at the pension pay points. Selling of fire wood is another informal activity that is seasonally practiced by some of the households in the village.

As it is clearly indicated that household income is generally limited in the village, it is evident that poverty and vulnerability is still high in the village. The majority of households in the village depend on social grants, for instance, child support grant, and the most popular among the young mothers. Also the level of service provision is still limited in the village. Households receive a basic service such as water twice in a week and not all households are connected with their own taps in the house. There are households in the village who still use water from the rivers and also those who travel long distances to fetch water. The issue of sanitation is evidently

poorly provided in the village, almost all households in the village use pit latrine toilets, thus, exposed to diseases. Even though the majority of households are electrically connected, there are still those in the extended village who do not have electricity; moreover, some of those who are connected fail to use electricity because they are unable to buy electricity as it is expensive. Wood is commonly used for cooking and heating in the village and also candles and paraffin for those who are not connected and those who cannot afford to buy electricity.

Many risk-spreading strategies are practised in Tsianda village and aimed at reducing and de-concentrating the prevalence of risks associated with poverty among households. The strategies include borrowing of food from friend, relatives and neighbours. Also the issue of loaning money from money lenders is common in the village, thus, making households exposed to debts. During the dry seasons, some people are believed to be selling their productive assets to get money and buy food; however, such households are believed to be the poorest in the village. Risk-spreading strategies in Tsianda village work for the few households where as are ineffective for many, particularly the poorest in the village.

Other basic social services such as education are available in the village; however, there is a high rate of drops-outs among the youth in the village. This scenario constitutes unskilled people turned either taxi drivers or those who depend on the temporal projects which are implemented in the village. Those who are able to pass grade 12, are not able to access tertiary education due to their household's poor socio-economic conditions.

Apparently Tsianda village is still a marginalised village that is characterised by a variety of poverty and vulnerability sentiments. The general household socio-economic conditions in the village are poor and households are exposed to many risks. Much of the households depend on social grants, thus, the local economic development of the village is stagnant, because of the households' high rate of dependency on government. Even though some households practice livelihood strategies in the village such strategies are seasonal and temporary, thus not sustainable to cater for the annual household food and income security. The high rate of drop-out is also believed to be the determining factor of the high rate of unemployment and income poverty in the village. The village faces a variety of risks which ultimately make the households vulnerable to poverty. The strategies that are adopted to de-concentrate the risks are not effective due to the poor socio-economic conditions which persist in the village.

### **3.5 Conclusion**

South Africa, one of the developing countries in the African continent, is characterized by a limited progress of economic development, particularly in rural areas. The majority of rural inhabitants in the country are still poor and vulnerable to risks associated with poverty. Limpopo Province, as an example, is one of the poorest provinces in the country, the majority of people in Limpopo are poor and socially excluded and thus, unemployment rate is high in the province. Service provision is still a problem in the rural areas and the majority of people are vulnerable to poverty. Few people are benefiting from the economic opportunities that are available in the province; moreover, income insecurity is accelerating in the country. The introduction of Integrated Development Planning (IDP), implemented in the local sphere of government was

seen as the strategy by which the attempt is made to integrate plans at the local level and aimed at tackling issues with the community themselves. However, the implementation of such plans seems to be marginal in the South African context. The risks that households are facing in the rural households are diverse; hence, the risk-spreading strategies they adopt are not effective in reducing their level of vulnerability to poverty.

## CHAPTER 4

### ANALYSIS AND INTERPRETATION OF DATA

#### 4.1 Introduction

Tsianda is a rural village characterized by marginal development conditions; and, it is home to the majority of poor households. Given the poor socio-economic conditions, like in any other typical village in Limpopo Province, Tsianda village households face a variety of risks, ranging from food and income insecurity, ill-health, crop failure, marginalized businesses and debts in kind and crime. These risks which are associated with poverty are prevalent among the households in the village; however, the extent of their effects depends on the pre-existing conditions of the individual households. Consequently, different respondents identified different risks as priority issues.

Tsianda itself can be described justifiably as a 'primitive village' because it continues to be characterised by deeply traditional customary beliefs as well as conspicuous social networks, based on extended family foundations. Thus, some of the risks which households face are cumulative because of the influence of these customary beliefs. Women marginalisation in the tribal villages, for example, leads to risks such as food insecurity in households headed by women. Indeed, there are risk-spreading strategies that households in Tsianda village are adopting to respond to risks that they are facing; however, the social beliefs and socio-economic conditions of individual households are playing a major part in mitigating the effectiveness of these strategies. Thus, households that might have adopted the same strategies in responding to the same risks could produce different outcomes.

The most common risk-spreading strategies among the Tsianda village households include borrowing from neighbours and relatives in times of food insecurity, loaning money and labour migration. These strategies are adopted with the intention of spreading the risks that households are facing and also for de-concentrating the level of household vulnerability to poverty.

This chapter is meant to analyse and interpret the data that was collected from Tsianda village on the risk-spreading strategies and vulnerability to poverty among the households. The chapter examines the practical analysis of risks, risk-spreading strategies and the level of vulnerability to poverty by households in the village. One section of this chapter deals with the individual risks as identified by households in the village followed by a section that analyses the households' level of vulnerability to poverty. Furthermore, the chapter discusses risk-spreading strategies that the households are adopting. The last section of this chapter discusses the relationship between risks, risk-spreading strategies and vulnerability among the households in Tsianda village, assessing the effectiveness of the strategies in responding to risks, the capacity of the strategies to de-concentrate the level of vulnerability, as well as what the households themselves think could be done to mitigate and minimize the risks that they are facing.

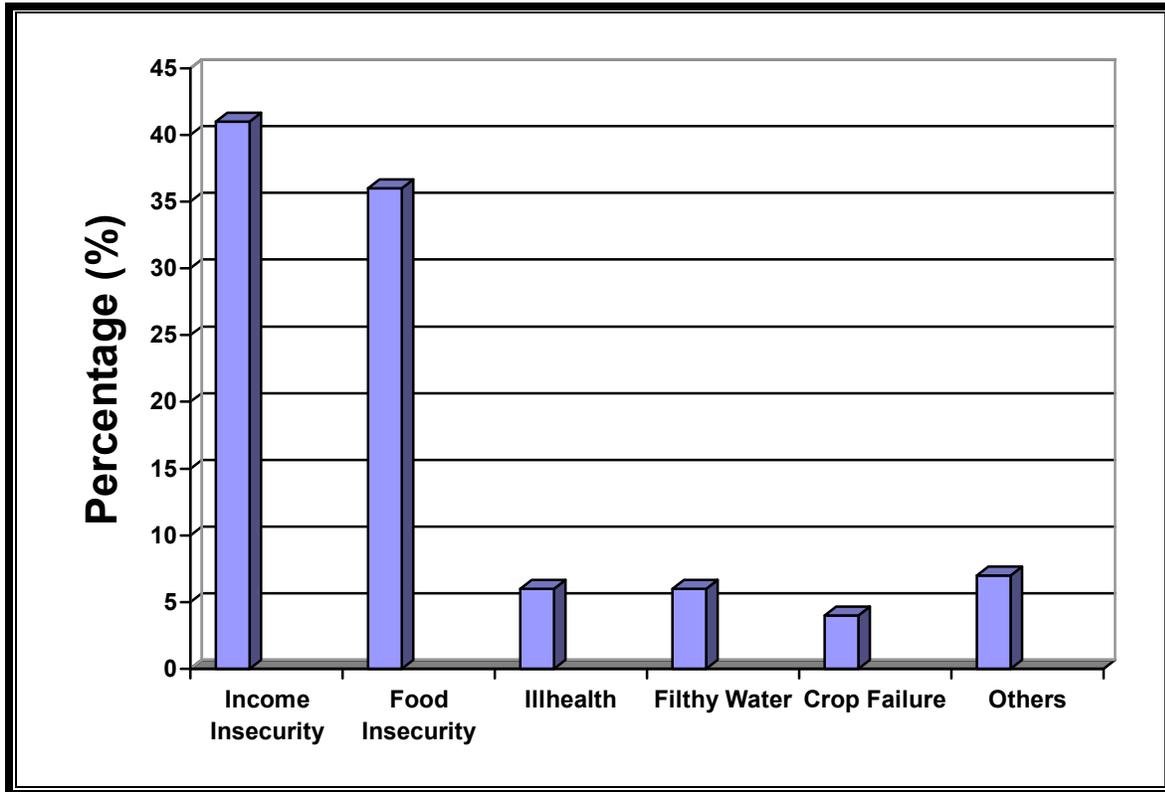
## 4.2 Risks faced by households

Tsianda village is characterised by a variety of risks ranging from food and income insecurity, ill-health, crop failure, filthy water, debt in kind and also crime. These risks affect a significant proportion of households in the village in many different ways. Different households prioritise different risks as more dominant and more significant in terms of their effects, due to the differences in the pre-existing household socio-economic conditions.

### 4.2.1 Risks Identified by Households

The most prevalent risks identified by respondents in the Tsianda village survey are income (41%) and food insecurity (36%) (Figure 4.1). The majority of respondents emphasised that the risk of incomelessness and income insecurity is severe because it means that they are unable to provide for basic household needs throughout the months. That is, they argue that even accessing food is now based on the ability to generate sufficient income because they are no longer able to cultivate food crops for the survival of households. Indeed, providing basic household needs such as electricity for those who are connected to the grid or paraffin for those without electricity is a matter of priority concern among many households in the village. However, food insecurity is identified as the second most important risk among the respondents. As already indicated, the majority of respondents feel that food insecurity is connected to income insecurity in the sense that most households are no longer able to depend on subsistence agriculture for food provision because of severe drought and the high prevalence of crop failure in the village. As a result, not having enough money is identified as the most significant contributor to the limitations on a household's capacity to provide for food and to cater for other basic human needs.

Figure 4. 1: The Proportion of Risk Identified by Households in Tsianda Village



A few other risks were identified by low proportions of respondents as significant. These risks included ill-health (6%), filthy water (6%), crop failure (4%) and a variety of others (7%) including crime, debt in-kind and marginalised businesses. The risk of crop failure is perceived to be caused by limited access to fertile land, especially among households that continue to rely heavily on subsistence farming and hopeless food crops on rocky and mountainous terrain. Ill-health is prioritised largely by those households that are located in the extended section of Tsianda village. Those households do not receive any social services as yet; instead, they depend on the older sections of the village for accessing basic services such as water. Unfortunately, these households are sometimes forced to use filthy water from the river which exacerbates the

conditions of ill-health. Inevitably, most of the households in the extended section remained vulnerable to the risk of poor sanitation.

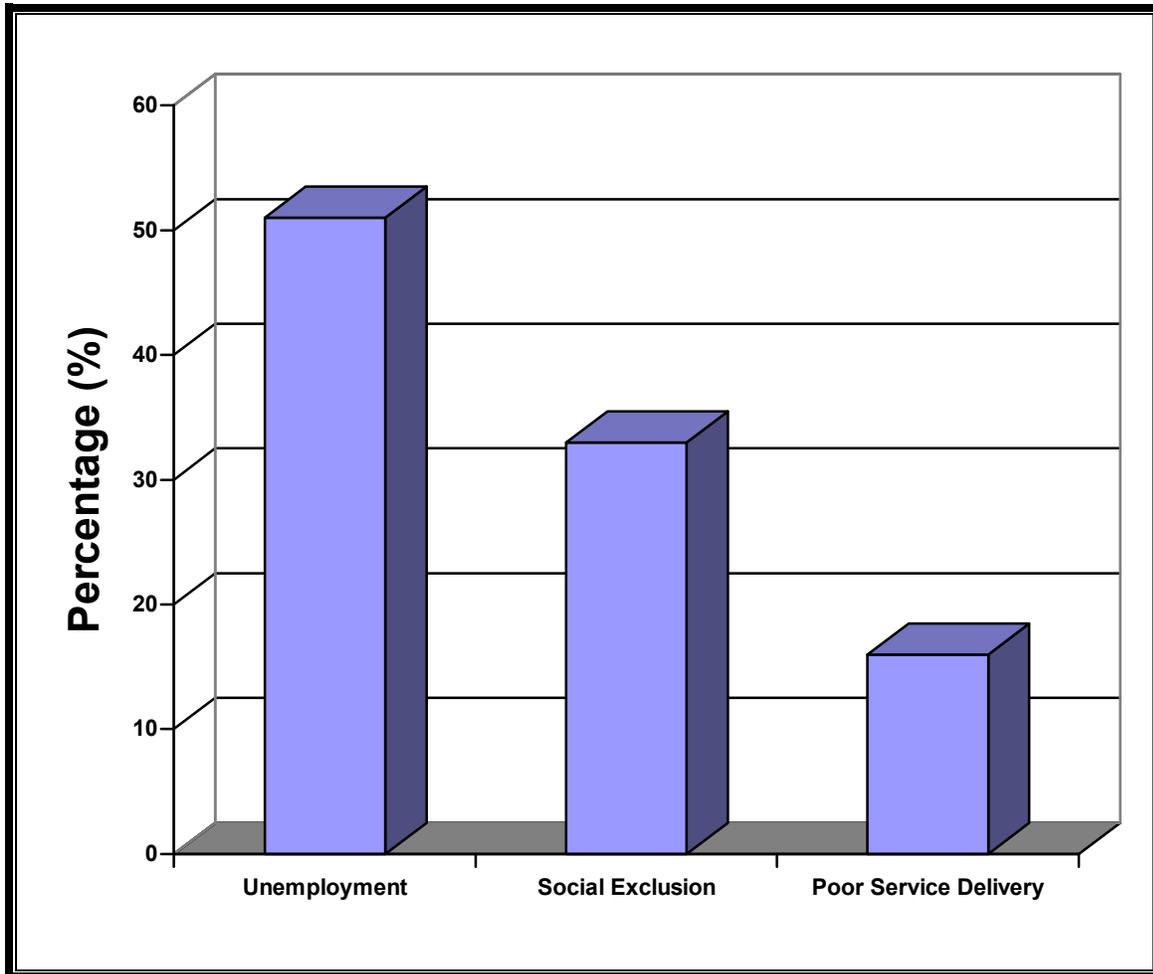
Among the risks specified as 'other' by respondents are crime (3%), debt in-kind (2%) and marginalised business (2%). Negligible proportions of respondents identified these risks. Risks such as crime and debt in-kind were mentioned by the few respondents whose own small businesses in the village. Despite being forced to take loans to build and sustain their businesses, the poor circulation of money and precarious household socio-economic conditions in the village further marginalize these economically weak businesses, which are inherently non-viable. The survey results appear to confirm one of the well-established theoretical principles (Chapter 2) which points to food and income insecurity as the most typical risk associated with poverty in rural areas within the developing world. Indeed, it appears that a range of other risks are cumulative in the sense that, they tend to be amplified by the food and income insecurity risks even in Tsianda village.

#### 4.2.2 Causes of Risks identified by Households

The most significant cause of risks faced in Tsianda village is unemployment (51%). The majority of respondents emphasized unemployment as prevalent because of the skewed unequal distribution of income among households in the village. Apparently, most of the monthly income of households is drawn from social grants, self employment and piece jobs. Unemployment seems significantly more prevalent than other poverty related social illness in Tsianda village

(Figure 4.2). Hence, it contributes to income insecurity, one of the prevalent identified risks in Tsianda village.

Figure 4.2: The Proportion of Causes of Risks Identified by households



Social exclusion (33%) is identified as the second most important cause of risks among households. The majority of respondents feel that social exclusion contributes to high illiteracy rate and lack of skills; hence, the majority of a household's members are limited in terms of economic opportunities because of lack of skills. The most socially excluded in the village are the poor households whose socio-economic conditions are in the periphery of poverty. The

household members of these households are marginalised and not considered when socio-economic decisions of the village are made and the economic opportunities are given to other people. One respondent stated that, there are specific people who are well-known in the village, who when economic opportunities are available in the village, are expected to participate, whereas the poor households are left out.

Other than unemployment and social exclusion as causes of risks, a negligible proportion of respondents identified poor service delivery (16%) as the significant cause of risk in the households. Limited provision of water, electricity and proper health care is the concern of these households. Apparently, the households in the extend portion of the village are significantly affected. As already indicated, the household in the extension of Tsianda Village do not receive any social services as yet; hence, they identified poor service delivery as the significant cause of the risk they face. One respondent in the extension of Tsianda emphasised that;

*“The village was extended about seven years ago and since we stayed here we never tasted fresh water in our households or even lighting electricity in our yards. Thus, we also travel many km to fetch water either in the old households or the next village and it expose us to other risks such as car accidents, because we have to pass the main road to get water and the road has lots of cars”*

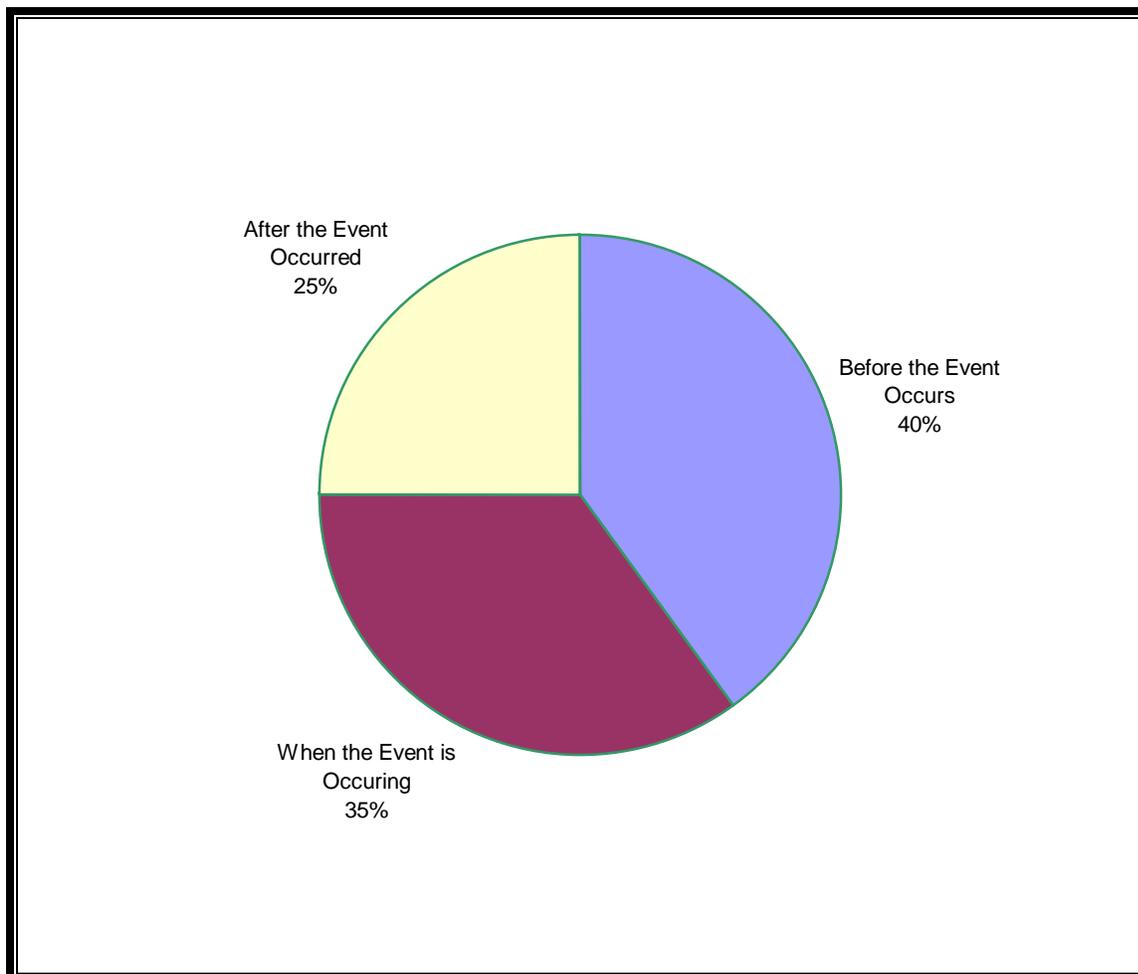
Unfortunately lack of service delivery, particularly lack of water in the village extension of Tsianda village seems to pose a new risk of accident among households. Moreover, the majority of these households are the poorest in the village. Indeed, it appears that the causes of risks differ from one household to another in the village; however, the high rate of unemployment seems to be the prevalent cause of the risks in the village.

#### 4.2.3 The Households Responding Time when Realising Eminent Risk

Many respondents in the village believe that responding to the risks before they occur is significantly important (Figure 4.3), because it allows them to have enough time to prepare and devise different options to respond to the risks effectively; moreover, that reduces stress when implementing the risk-spreading strategy. However, the pre-existing socio-economic conditions mitigate the household capacity to respond effectively before the risk event occurs.

The other majority of household respondents emphasise that they respond to risks while the event is occurring. The same respondents indicated that, sometimes they realize eminent risks before the event occurred, but the capacity of the household to respond to the risk before it occurs is limited; moreover, they try to respond to the risk when it is occurring. However, the majority of such respondents emphasize the process of responding to the prevalent risks while it is occurring is frustrating. The household social connections and networks can be destroyed in the process. The responding time to risk while the event is occurring is also identified as unfortunate because it leads to unnecessary future household expenses. The households, who are desperate to respond to food shortage, are forced to buy on credit at the shops with high interest and credit fees. Significantly, debts are the outcome of this scenario.

Figure 4.3: The Proportion of Household Responding Time when Realizing Eminent Risk



A negligible number of respondents, particularly those in the village extension of Tsianda, emphasised that they respond to the risk after the event had occurred. Furthermore, the poor pre-existing socio-economic conditions of these households seem to be playing a major part in this regard. The large numbers of these households are characterised by high unemployment rate, they do not own any productive assets and they do not receive social services. The majority of these respondents emphasise that they face many risks at the same time; hence, to respond effectively to the risk immediately is not possible. Unfortunately, even when they try to respond

to the risk event when it has already occurred, it is not feasible because they are the most vulnerable group in the village. The above description attests to the literature that emphasises that the most vulnerable households in the rural areas are the ones who face many risks at the same time, while at the same time they lack instruments to respond to the risk immediately.

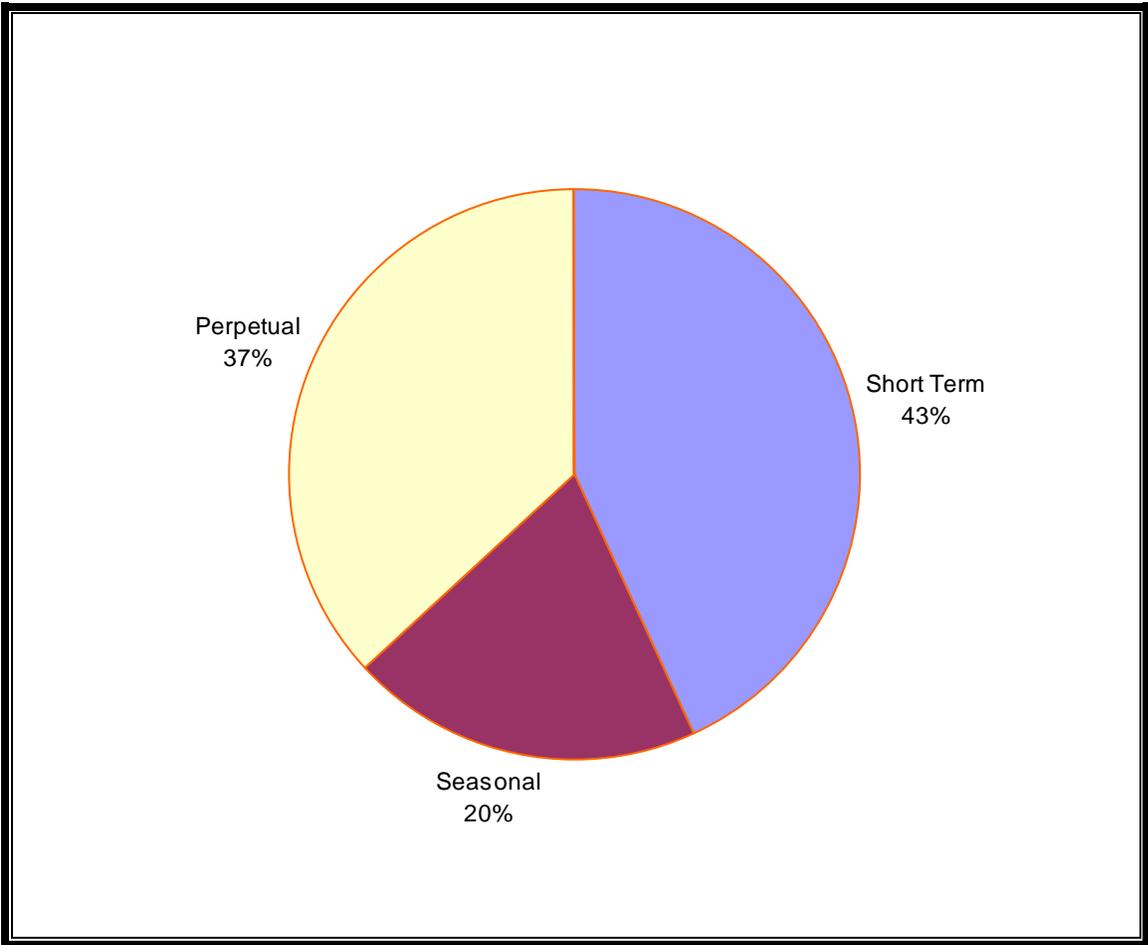
#### 4.2.4 The Household Categorisation of Risks In Terms of Occurrence Time Frame

The risks faced by households in Tsianda village are diverse and differ in terms of the prevalence. A significant number of respondents identified the risks households face as income and food insecurity. Apparently, the majority of these households' members (43%) feel that the risks they face are short term (Figure 4.4). The same respondents emphasize that the risks they face occur in a short term and have a low effect on the levels of vulnerability to poverty. The other proportion of the respondents (20%), particularly those practising subsistence farming, emphasise that, the risks they face are seasonal. Those households with members who are employed as seasonal labour on the farms around the village also form part of those facing seasonal risks. The labourers work on the farms during harvesting time and they are retrenched when the harvesting season ends, wait for the following year to be employed again.

A marginal proportion of the respondents feel that the risks they face are perpetual; hence, they face the same risks continuously. Some respondents (37%) emphasise that they have to grapple with food insecurity every month in the household because they lack adequate sustainable employment. The other respondents, particularly in the village extension, emphasised the risk of perpetually using filthy water because they are unable to travel to get water in the next village,

and thus, forced to use water from the river and that poses a risk to the household associated with water borne diseases. The above mentioned scenario confirms with the theoretical principle which states that the poorer households in the rural areas face perpetual risks that make them vulnerable to many aspects of poverty.

Figure 4.4: The Proportion of Household Categorization of Risks In Terms of Occurrence Time Frame



The risks that the household respondents identified to be faced in Tsianda village seem to attest to the theoretical argument discussed in Chapter 2, which demonstrates that there are many

different risks that rural communities face in the household level due to poor socio-economic conditions. The survey of the risks in the village also demonstrated clearly the interrelated relationship that the risks attribute to each other, particularly, if the risks are not dealt with in time. For instance, the risk of using dirty water can contribute to ill-health, and also food insecurity is reinforced by income insecurity. The survey also made it clear that the prevalence of significant risks in the rural areas affect the general population in the village; however, those with poor socio-economic conditions grapple with many risks at the same time. The high unemployment rate, social exclusion and unequal provision of social services in the rural villages are believed to be the cause of the prevalence of significant risks.

### **4.3 Households Vulnerability to Poverty**

It is important to analyse the levels of exposure to poverty in the rural villages such as Tsianda, in order to recommend viable and sustainable strategies to reduce the high level of vulnerability which exists among rural households. The literature illustrates factors which influence vulnerability in the rural household such as, social, economic, political, environmental, technological, cultural and also institutional factors ; however, the extent to which each factor influences levels of vulnerability differs from individual households. Households in the rural areas are vulnerable to diseases such as HIV and AIDS, disaster events such as floods and drought and also violent conflicts.

#### 4.3.1 Household Perception of Vulnerability to Poverty

The high levels of vulnerability among households in Tsianda village are not exceptionally influenced by the factors identified above. The majority of respondents feel that the levels of vulnerability to poverty are connected to these factors. First, Tsianda village is apparently predominantly governed by traditional beliefs and customary law. The village is lead by a traditional leader whose obligations require cultural beliefs and customs to guide the way people live in the village. The traditional roles of women and men are generally accepted in the village; and women are more marginalised than men. Similarly, the institutions guiding human behaviour in the village are related to the different levels of vulnerability among households, namely, whether headed by men or those headed by women.

The majority of respondents (60%) identified that their households are vulnerable to absolute poverty. However, such households appear to be those who are institutionally marginalised, for instance, the households headed by women. The respondents who identified that their households are vulnerable also emphasise that the environment surrounding them is not viable to practice any sustainable food production livelihoods and they are vulnerable to food and income insecurity. However, other respondents (26%) feel that they are not ultimately vulnerable to poverty, even though they sometimes face relative risk (Table 4.1). These respondents who are confident that they are not relatively vulnerable to poverty seem to be those formally employed and those whose socio-economic conditions are better when compared to other households. Such households are regarded as the better-off ones in the village; thus, they continuously enjoy

different economic benefits than the poorer households whose socio-economic conditions are deteriorating to absolute poverty on a daily basis.

Table 4.1: The Proportion of Households' Perception of Vulnerability to Poverty

<b>Vulnerability</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	60	60%
Neither/nor	14	14%
No	26	26%
Total	100	100%

The other negligible number of respondents (14%) feels that the conditions of their households make it difficult for them to judge whether they are vulnerable to poverty or not. The majority of these households are those with a middle income and are able to cater for a number of their households' basic needs; moreover, they are confronted by a limited number of risks. Service delivery is accessible to these households, and their households' socio-economic conditions are moderate.

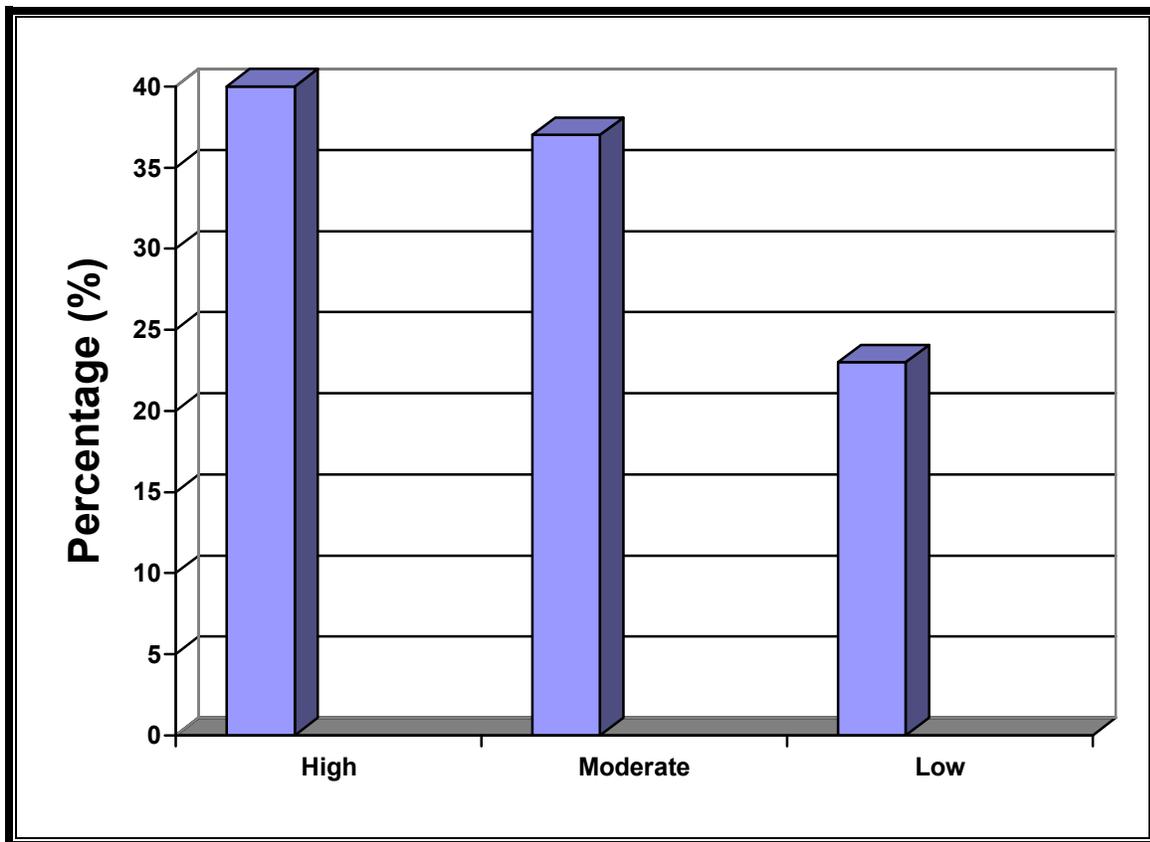
#### 4.3.2 The Household Levels of Vulnerability

It is clear why the majority of respondents in Tsianda village emphasise that their households' level of vulnerability is high (40%) (Figure 4.5). Indeed, the majority of households' socio-economic conditions are poor. The majority of respondents emphasise that their households are

on the verge of falling into poverty trap; thus, their households' level of vulnerability is high. Some respondents even confessed to be already absolutely poor. One of the respondents mentioned that;

*“My household is extremely poor, a live with my four children and my mother, we all depend on my mother’s pension grant for all the basic necessities of the households. The food is extremely limited in the household and whenever I try to apply to receive food parcels from the traditional office, I am told that it is impossible because we have a person who is getting pension grant in our home”*

Figure 4.5: The Proportion of Household Levels of Vulnerability to Poverty



The other significant number of the respondents (37%) emphasise that whilst they feel that they are vulnerable to poverty, their household's exposure to poverty is minimal; hence, they feel moderately vulnerable. However, these households seem to be those with the capacity to sustain crucial household basic needs, even though not in a satisfying manner. These respondents feel that diversifying livelihood strategies play a major part in minimising the level of vulnerability to poverty among the households.

A negligible number of respondents (Figure 4.5) believe that the levels of vulnerability to poverty among their households are minimal, in the sense that they have a sustainable income and food secured in their households. Some of these households even confessed to be relatively better-off and not exposed to poverty at all; hence, they face marginal risks that they are able to deal with instantly.

#### 4.3.3 Aspects of Vulnerability identified by Households

In Tsianda village the majority of respondents (49%) feel that their households are vulnerable to drought (Figure 4.6), the village is currently experiencing limited rain that is insufficient to sustain the crops that households plough on the mountain. The irrigation systems are not easy to install and utilize on the mountain, thus, for crops to survive they rely on rain that is currently limited and households experience huge crop failures yearly. The majority of respondents believe that because the available land in the village is the mountain, it limits them from having big plots to cultivate, because the other part of the mountain consists of rocks. However, the soil is fertile in these areas, but the limited rain and limited land for farming tend to reinforce the

impact of drought in the village. The other alarming factor explained by the respondents, is the spread of HIV and AIDS in the village.

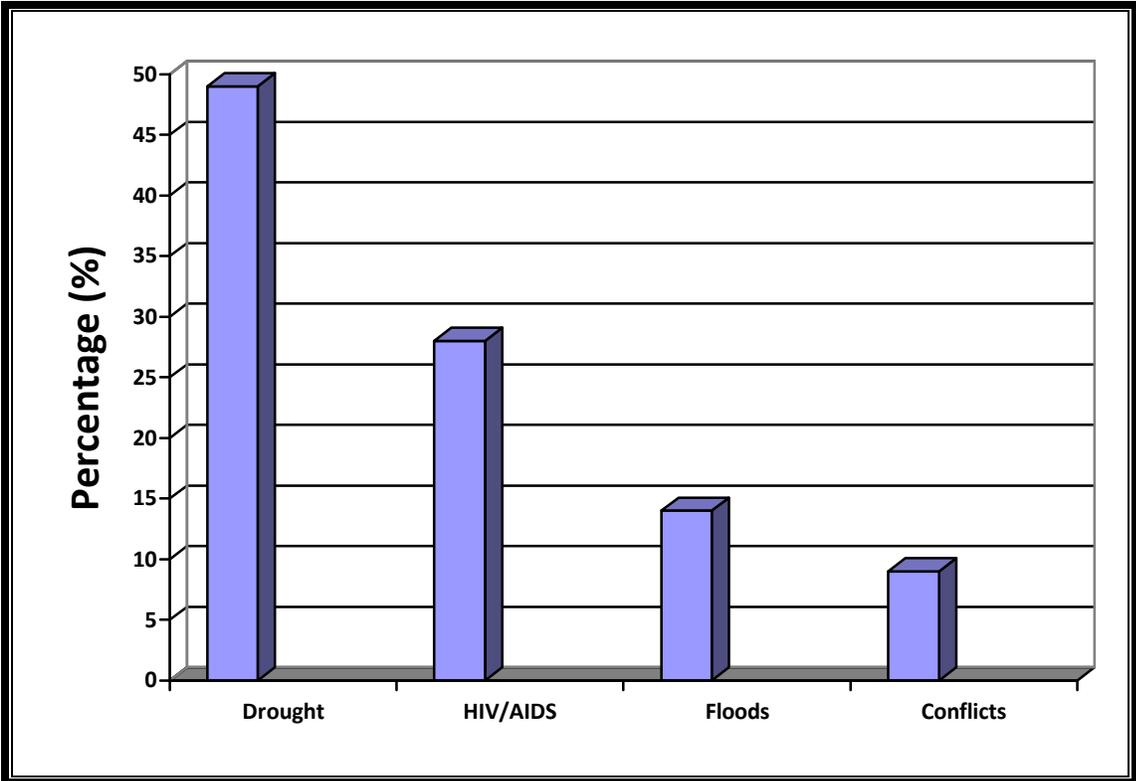
Many respondents (28%) mentioned limited health education among youth in the village as the cause of the extreme spread of the disease; however, the accessibility of condoms is also limited in the village because there is no clinic. The accessible clinic is in the neighbouring village, far from many households in Tsianda village. The majority of respondents (28%) feel that the prevalence of HIV and AIDS among households, exposes them to many risks, particularly food and income insecurity. However, the HIV affected households receive social grants, but the grant is believed to be limited to sustaining medication for treatment and adequate food required to boost the immune systems of those affected. Further, the issue of households' frustration to bury the HIV/AIDS deceased, was mentioned as a problem in the village. One of the key informants emphasises that the spread of HIV and AIDS in Tsianda is the result of food insecurity, seeking an income and unemployment among some of the youth. He emphasises that

*“Girls are engaged to sexual relationship with people looking for money in the village, the most targeted men are those driving taxis and big trucks which pass by the village going to Thohoyandou town”.*

The cited scenario was also blamed for the accelerating high rate of pregnancy and also young girls being kidnapped in the village. The key informant explained that, many young girls are

becoming pregnant in the village with unknown fathers, and the kidnapping of girls is accelerating. However, the other aspects of vulnerability emphasised by only a few respondents, include floods and violent conflicts (Figure 4.6).

Figure 4.6: The Proportion of Aspects of Vulnerability Identified by Households



Many respondents (14%) who mentioned floods as a threat to the households emphasised that, their houses are too fragile to remain standing if floods come. However, floods are not seen as a priority vulnerability aspect because the last time they experienced the problem was in the year 2000. The respondents (14%) who identified as being vulnerable to floods emphasised that in the year 2000 their houses were washed away and they lost many assets such as televisions and radios and some important documents were destroyed by water. The households also emphasised that during floods they are also vulnerable to diseases such as cholera and diarrhoea. The

eruption of violent conflicts was also identified as an aspect of vulnerability by a low proportion of respondents (9%) in the village. These households respondents emphasise that the unequal provision of basic services in the village can be the influencing factor that can stimulate violent conflicts in the village, particularly, on the part of those in the extended section of village that are continuously not receiving basic services and have not for about seven years now. The unequal distribution of agricultural land was also identified by some households as causing violent conflicts; because, only few elites are given land for farming, particularly, those who have money to contribute to the traditional authority. The above scenario concurs with the literature that emphasises that households in the rural areas are vulnerable to many disasters such as floods, drought and HIV/AIDS. Hence the most vulnerable are the ones already on the periphery of poverty.

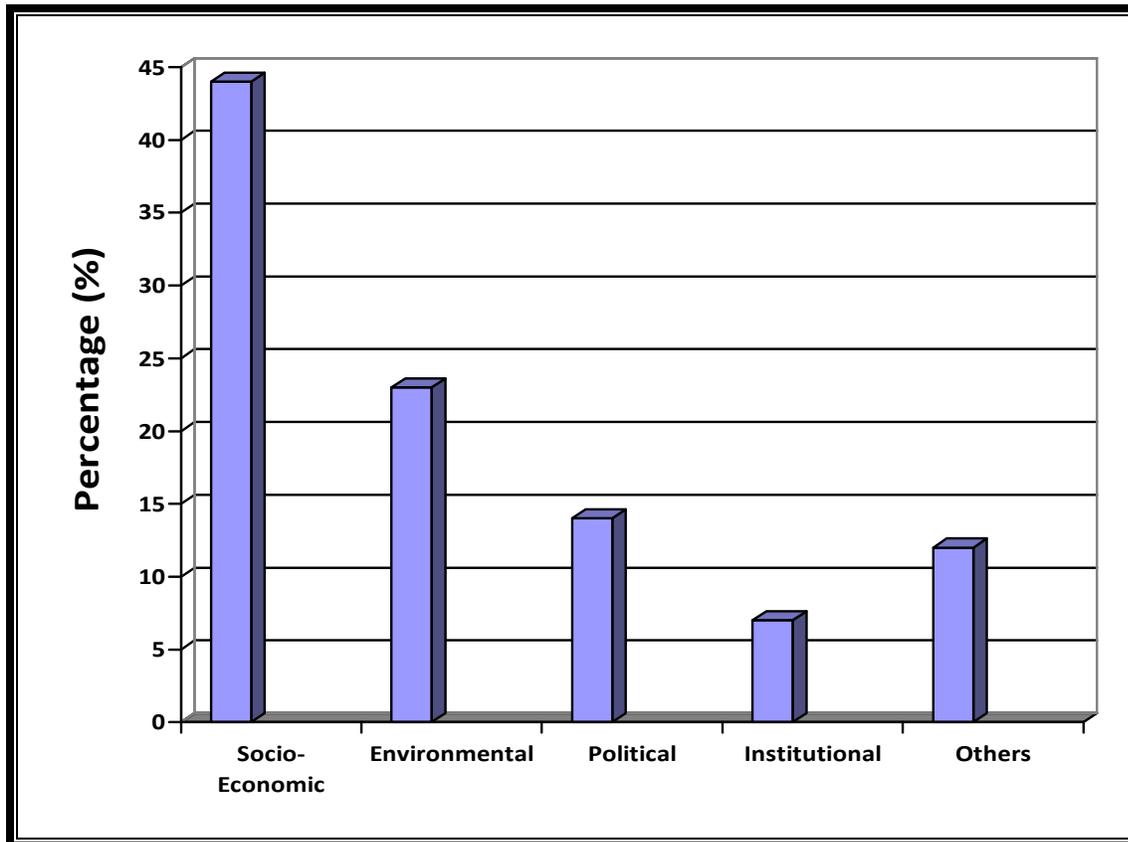
#### 4.3.4 Influencing Factors of Vulnerability identified by Households

Most of the respondents (44%) in Tsianda village feel that the poor socio-economic conditions in the village are the main reasons for high levels of vulnerability among households (Figure 4.7). The limited economic opportunities, the unemployment rate and the high rate of illiteracy among the youth are the main socio-economic issues of concerns in the village. The majority of respondents (44%) identified that many of their household members depend on informal employment and government grants; and thus their households receive a limited amount of income at the end of every month.

The social aspect of a high mortality rate among potential youth is believed by a significant number of respondents in the village to be a contributing factor of vulnerability.. A number of respondents (23%) feel that the state of the environment surrounding the village is influencing vulnerability among the households. The environment in the village is relatively exploited, and thus poses a threat to the sustainability of the livelihood practices in the village. The majority (23%) of respondents emphasise that a forest is non-existent in the mountain because people are practising agriculture there. The water in the rivers is heavily polluted, because there is no rubbish collection in the village and all the rubbish is thrown into the rivers. The political influence of vulnerability was also emphasised by some respondents (14%). They pointed out that there is no clear platform for sustainable development strategies implemented by the political structures supported by the traditional authority in the village. The traditional authority in the village seems to have a lot of disagreements on the structure of developments which are proposed by the politicians in the village. However, when the two political structures agree on the implementation of the development initiative, the process is slow and few households benefit from such initiatives.

Seven percent of the respondents declared that the institutional factor (Figure 4.7) is the main influencing factor of vulnerability in the village. The governance of households in the village is guided by traditional institutions which are discriminative in nature. In the village it is an obligation that every project which has economic potential must preferably be led by a man than a woman, thus limiting women from advancing their households with adequate benefits from the project.

Figure 4.7: The Proportion of the Influencing Factors of Vulnerability identified by Households



The other influencing factors identified by a small proportion of respondents include cultural (6%) and also technological (6%) factors influencing vulnerability. These respondents feel that some of the cultural obligations limit them from improving their household economic structure in order to practise a sustainable livelihood. One respondent pointed out that their household is obliged to contribute to the traditional authority when practising some of the household's livelihood strategies:

*“In the village it is a cultural obligation that when the household brew traditional beer, must take a 20litre basket to the chieftaincy as an honour to the chief”*

This respondent mentioned that the practice is a historical obligation which unfortunately affects the profit of the households and takes from their livelihood because the prices of the ingredients for brewing traditional beer are high. Other respondents identified limited access to technology to be a factor influencing vulnerability among the households. Communication is a problem in the village because the majority of households do not own a phone; moreover, some households do not have radios or televisions to access information. The poor technological advancement was also emphasised as playing a major part in the agricultural crop failure which in turn impacted negatively on food security among the households in the village. Apparently, only a few elite households own technological agricultural equipment to maximize their agricultural activities and they also have irrigation systems in place.

Households in Tsianda village are vulnerable to poverty in different ways, assessing the socio-economic, political, institutional, environmental and cultural context of the village. The majority of people in these households are unemployed, illiterate, not politically active, socially marginalized and still oppressed by the traditional customs and beliefs that are discriminatory in nature, thus making them more vulnerable to poverty. The literature on rural households vulnerability mentioned factors such as HIV and AIDS, drought, floods and violent conflicts as the major aspects of vulnerability in the rural area. The situation in Tsianda village confirms the literature; as such aspects discussed in the relevant literature were mentioned by the majority of

respondents. Households in Tsianda village seem to believe that their high level of vulnerability is reinforced by socio-economic exclusion, environmental degradation, political misunderstanding between the traditional authority and politicians, and cultural oppression which exists in the village. Vulnerability in Tsianda is thus diverse; it affects different households at different levels.

#### **4.4 Household Risk-Spreading Strategies**

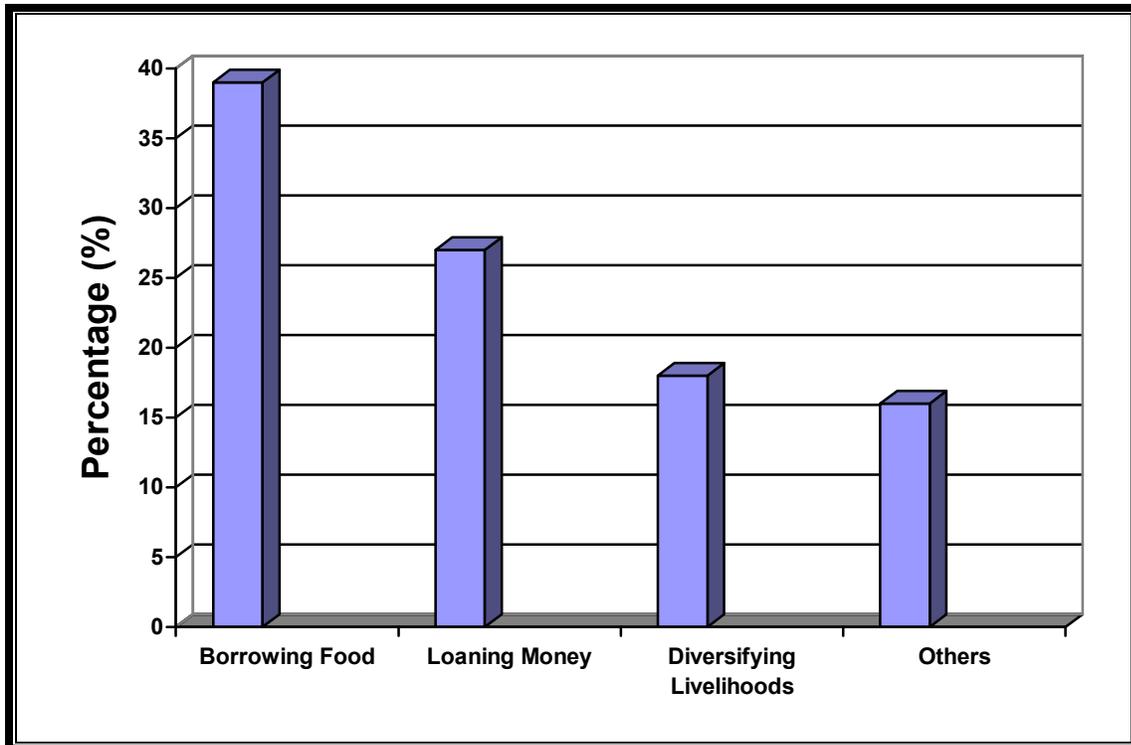
The household ability to respond to risks they face is crucial in order to de-concentrate and reduce their level of vulnerability to poverty. In the rural context risk-spreading strategies are practised by households with the aim of spreading the concentration of risks that they face. However, in most cases such strategies become ineffective because of poor socio-economic conditions which exist in these areas. In Tsianda village, the adoption of risk-spreading strategies to de-concentrate those risks seems to be more of a frustration factor than a survival one. The majority of households adopt risk-spreading strategies which end up complicating their social network and the households' ability to sustain some of the normal conditions of the household therefore households adopt other strategies such as selling of productive assets to buy food.

##### **4.4.1 Risk-Spreading Strategies Identified by Households**

The most common risk-spreading strategy identified by respondents (39%) in Tsianda village, particularly for food insecurity, appears to be borrowing food from neighbours, relatives or friends (Figure 4.8). Borrowing food was, in fact, mentioned by almost all the respondents; this is understandable because food insecurity was mentioned as one of the priority risks in the

village. The second most important identified risk-spreading strategy is borrowing money (27%), either from relatives or informal money lenders. The majority of the respondents emphasized that they prefer to borrow from a relative than from the money lenders, because relatives do not require security items, for instance, an identity document, for providing the loan; the requirement is only a promise to pay back the money at the set agreed time; however, honesty and loyalty play a major part in this regard. Unfortunately, borrowing money from relatives is limited because they can only offer a small amount of money; hence, households are forced to borrow from money lenders if they want a large amount of money. However, they are forced to provide security items and pay interest on the loan and that creates debts for the household.

Figure 4.8: The Proportion of Risk-Spreading Strategies Identified by Households



A few other risk-spreading strategies were identified by a small number of respondents. These include diversifying livelihoods (18%) and others that include selling of assets (2%), labour migration (6%) and then there are those households who do nothing (8%) when they face risks. Those who diversify livelihoods emphasised selling homemade food, fruits and sweets at the schools, clinic and pension pay-outs as a risk-spreading strategy to get an income. The respondents who selected this strategy, complained about the limited progress of the strategy because of the poor socio-economic conditions of the village. They emphasise that they get marginal profits and sometimes lose the stock because of the limited market for their strategy.

The other lesser strategies adopted in the village include labour migration and selling of households assets. The majority of respondents emphasize that they no longer rely on labour migration as a risk-spreading strategy because people who migrate tend to support them for few months and abandon them after that. The respondents pointed out that the migrants, particularly the young adults tend to come home only once in December for a few days and disappear the whole year after that, without supporting them. Some respondents emphasised selling assets as a risk-spreading strategy; particularly, when the household is desperate for food and income. However, other respondents declared that they do not do anything when they face risks. The above cited scenarios confirm the literature which states that households in the rural areas are forced to adopt different risk-spreading strategies, even though some of these strategies are not effective enough to reduce the risks.

#### 4.4.2 The Capacity of Risk-Spreading Strategies to De-Concentrate the Risks Associated with Poverty.

A significant proportion of respondents feel that the risk-spreading strategies they adopt are not effective enough to de-concentrate the risks they face. These respondents (42%) stated that they do not practise the strategies as a form of survival but as a desperate measure to try to spread the risk of being vulnerable to poverty (Table 4.2). However, (31%) of household respondents feel that the risk-spreading strategies they are adopting are de-concentrating the risks. These respondents, however, emphasise that the strategies are only effective to de-concentrate risks with less effect that only last for a short period. Some of these respondents pointed out that the risk-spreading strategies they adopt are effective in de-concentrating some risks, whereas, they are not effective to de-concentrate others.

Table 4.2: The Capacity of Risk-Spreading Strategies to De-Concentrate Risks Associated with Poverty

<b>De-concentration</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	31	31%
Neither/ nor	27	27%
No	42	42%
Total	100	100%

A smaller group of respondents (27%) felt that the risk-spreading strategies that they adopt are not having any effect on de-concentrating the risks they face. These respondents feel that they are not able to detect whether the strategy they adopt helps or worsens the risks they face. Moreover, the strategies they adopt are too complex to determine, because they can be effective in one scenario and be ineffective in the other scenario even when responding to the same risks. The above cited analysis confirms the theoretical principle discussed in chapter 2, which states that many of the risk-spreading strategies adopted by rural households are not effective to de-concentrate the risk, instead, they introduce households to other new risks.

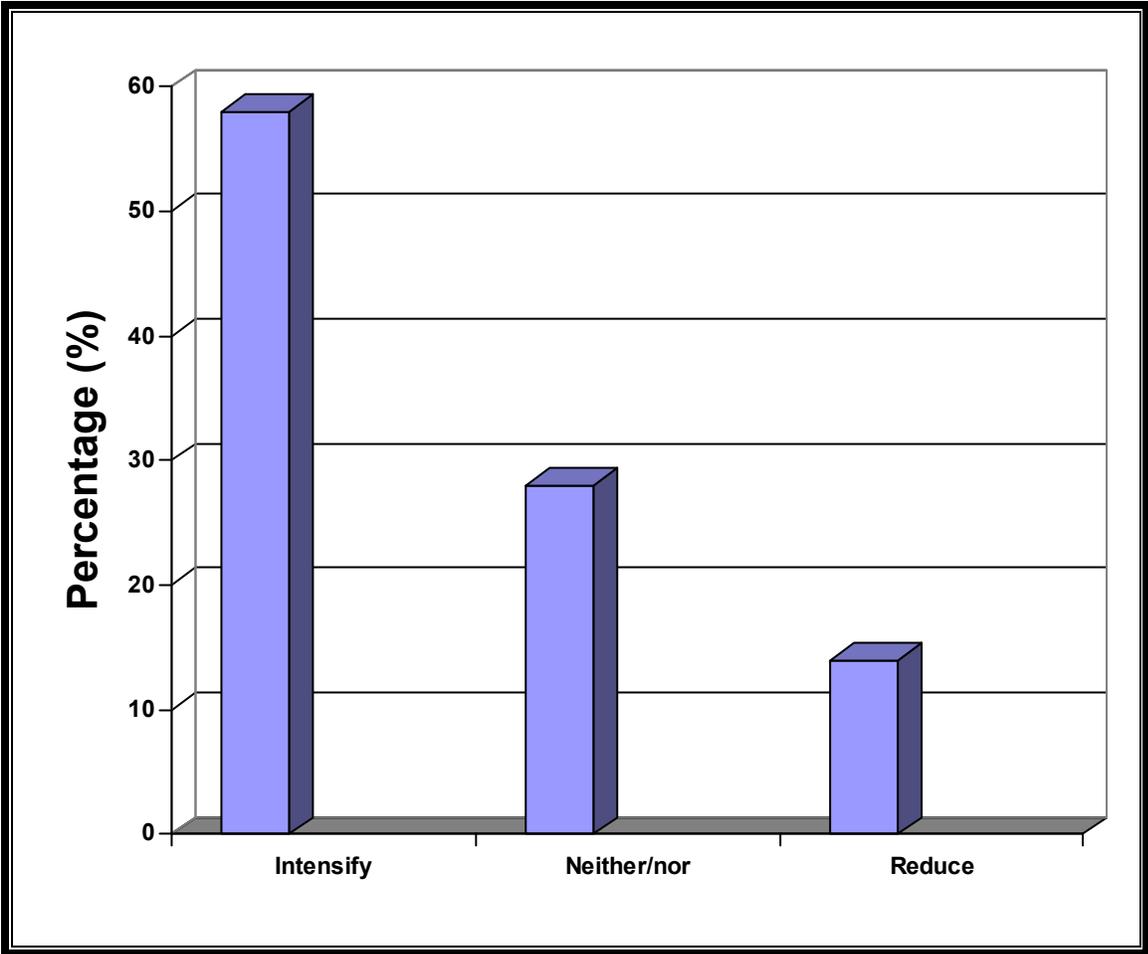
#### 4.4.3 The Capacity of Risk-Spreading Strategies to Reduce or Intensify the Household Level of Vulnerability

In Tsianda village, most of the respondents (58%) appear to feel that the risk-spreading strategies that they are adopting tend to intensify the risk they are facing (Figure 4.9). The majority of these respondents pointed out that the strategies they are adopting either worsen the effect of the risk, negatively affect the livelihood strategies they adopt or introduce the household to new risks. For example, the household that adopts selling productive assets like a sewing machine during the times of extreme hunger, after the money acquired is finished, the household is exposed to hunger again and also unable to sew clothes as a livelihood strategy and that affects the household's ability to get an income in the future.

A number of respondents (28%) stated that it is not easy to judge whether the risk-spreading strategies they adopt reduce or intensify the risks that they are facing. These are the households

that adopt different strategies at the same time. Some of these respondents, however, assert that the risk-spreading strategies they adopt do sometimes reduce the risks, but also intensify the risk on other occasions.

Figure 4.9: The Capacity of Risk-Spreading Strategies Reduce or Intensify the Household Level of Vulnerability



A small number of respondents (14%) said that the risk-spreading strategies they adopt are helping to reduce the level of vulnerability to poverty. The majority of these household

respondents are those who face limited risks and those whose risk-spreading strategies require small investments to alleviate or eradicate the imminent risks. Such households' socio-economic status prevents the risk to be concentrated in the households, thus, they take many years to confront an imminent risk. Apparently, the majority of these households are the better-off ones and those who own small scale agricultural plots in the village.

The risk-spreading strategies in Tsianda village are effective in those households with better socio-economic conditions than those who are already poor. There are many households who are supported by government through grants and food parcels in the village; however, such households are failing to adopt risk-spreading strategies that are effective to reduce the level of vulnerability among households. The situation in Tsianda village confirms the findings of the relevant literature on the risk-coping strategies that households adopt in the rural areas, namely, that they are only effective to low affecting short-term risks and that they are not effective for those households whose socio-economic conditions are marginalised compared to the better-off households.

#### **4.5 Risk-Spreading Strategies and Vulnerability to Poverty among Rural Households**

It is important to analyse the relationship between risk, risk-spreading strategies and vulnerability to poverty in order to determine the appropriate measures with which to respond to the frustrating factors of vulnerability affecting households in the rural areas. In Tsianda village, the connection between risk, risk-spreading strategies and vulnerability is easy to detect. Apparently, the majority of households who are vulnerable to poverty are those who are facing a

variety of risks and also those whose risk-spreading strategies are not effective enough to de-concentrate the risks associated with poverty, because of the poor socio-economic conditions in this area. The political, social, economic, cultural, technological, environmental and institutional contexts of the village play a major part on the different levels of vulnerability among households.

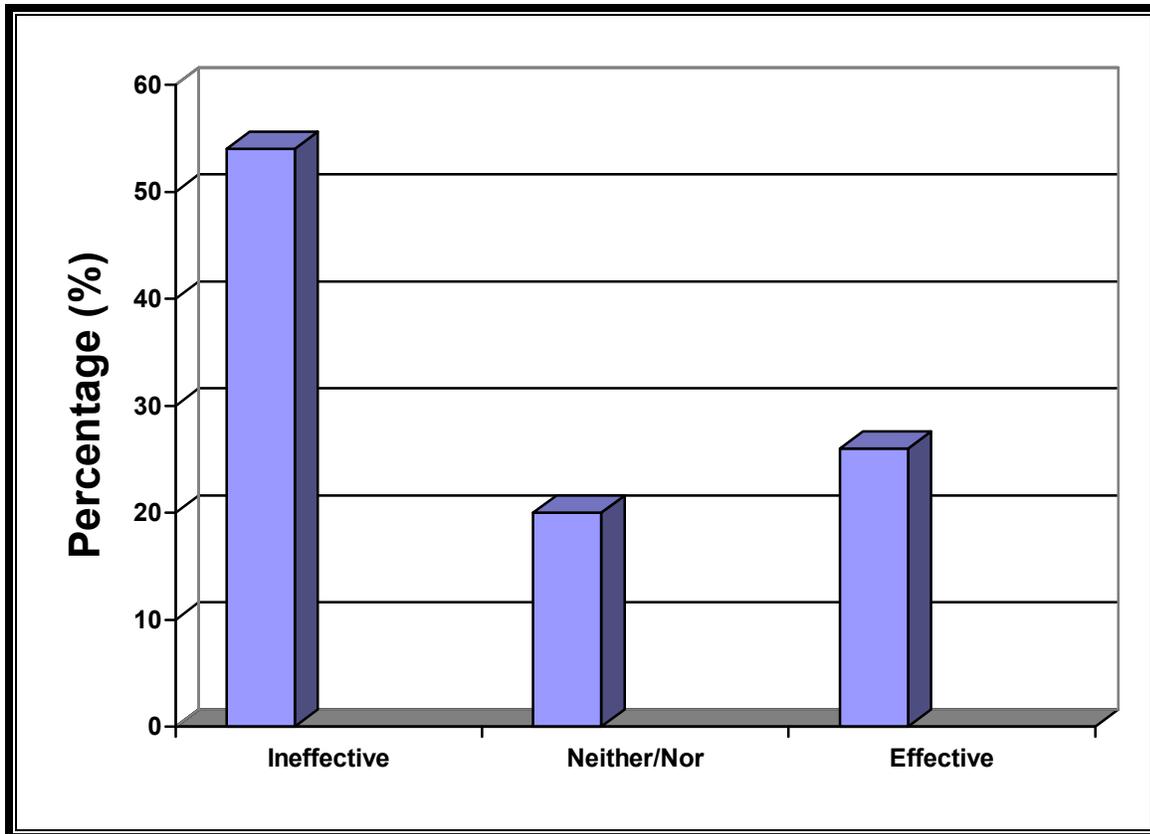
#### 4.5.1 The Effectiveness of the Risk-Spreading Strategies on Reducing Households' Level of Vulnerability to Poverty

In Tsianda village, it appears that the majority of respondents (54%) feel that the risk-spreading strategies that households are adopting are not effective to reduce households' levels of vulnerability (Figure 4.10). A significant number of the respondents stated that the risk-spreading strategies adopted are not effective at all; particularly, those aimed at reducing the households' exposure to extreme food and income insecurity. These respondents felt that the long term implications of the strategies that they adopt are frustrating and sometimes even more complicating, and so expose the household to future financial threats. However, the same respondents also felt that the risk-spreading strategies that they adopt are not optional; they adopt them when they are frustrated and need to de-concentrate the risk they face.

A small proportion of respondents (20%) felt that the risk-spreading strategies that they adopt are neither effective nor ineffective because they sometimes reduce the risk whereas sometimes they increase the exposure to risk. Moreover, the fluctuating socio-economic conditions among households are to blame in this regard. The other respondents (26%) identified that the risk-

spreading strategies they are adopting to be effective; however, only on the low affecting short-term risks.

Figure 4.10: The Effectiveness of the Risk-Spreading Strategies on Reducing Household Levels of Vulnerability to Poverty



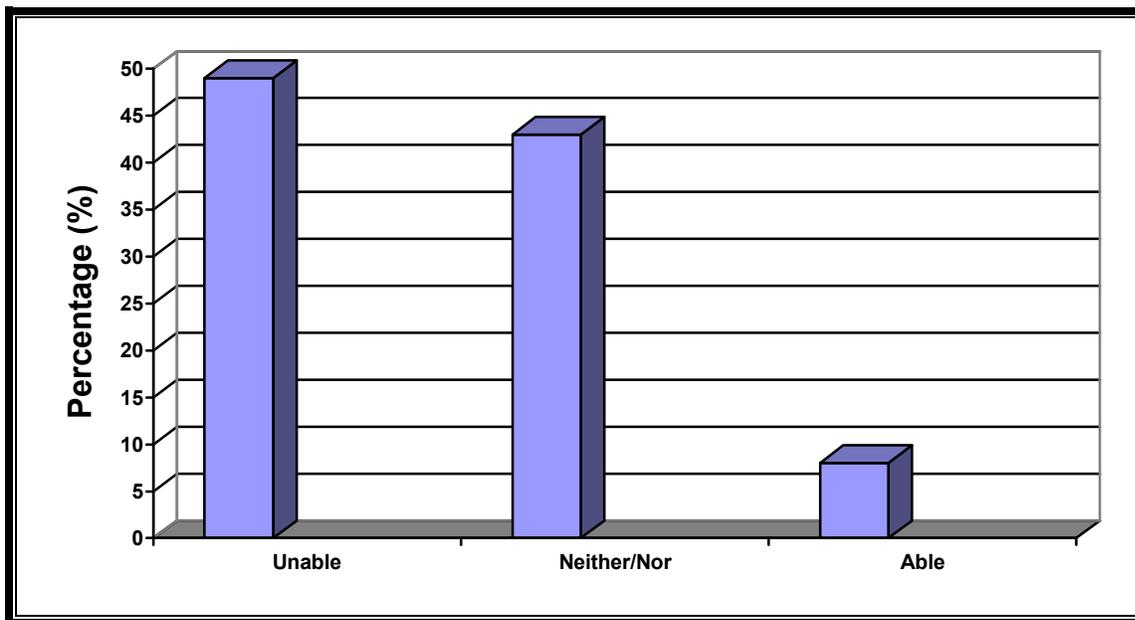
#### 4.5.2 The Ability of the Household Risk-Spreading Strategy in Dealing with Households Level Vulnerability to Poverty

A significant number of respondents (49%) in Tsianda village emphasise that their risk-spreading strategies are not able to deal with the high level of vulnerability to poverty prevailing in their households (Figure 4.11). The main reason stressed by the respondents is that the majority of

these households are already poor; hence, poor service delivery worsens the exposure of households to poverty.

However, the other respondents (43%) felt that the risk-spreading strategies they adopt are sometimes able to reduce the risks, whereas sometimes they are unable to. The different socio-economic conditions which exist in households play a major part in this regard. A small number of respondents (8%) felt that the risk-spreading strategies that they are adopting are able to effectively deal with the risks that they face (Figure 4.11). These households emphasise that they face few risks that they are able to deal with instantly; moreover, their households' socio-economic conditions are better when compared to other households in the village.

Figure 4.11: The Ability of the Household Risk-Spreading Strategy in Dealing with Households' Level Vulnerability to Poverty



#### 4.5.3 Recommended Intervention to Mitigate and Minimize the Risks and the Level of Vulnerability to Poverty by Households

Most of the respondents in Tsianda village appear to feel that the root of the risks they are facing, the ineffectiveness of risk-spreading strategies they adopt and the high level of their households' vulnerability to poverty is attributable to the high unemployment rate in the village. Household members acknowledge the fact that income provision strategies such as social grants adopted by government play a critical part in de-concentrating the risks they are facing; however, these government strategies are limited to catering for a few households' basic necessities, particularly, to those households that have large numbers of household members. The highest priority set by the households was for government to provide employment opportunities that will boost the households' economic conditions. However, some of the respondents felt that if the grants they are getting are maximally increased the risk and high level of vulnerability to poverty among their households will be decreased. The key point for dealing with the poor socio-economic conditions in Tsianda village respondents believe to be that government should make sure that people are formally employed in the village or equally provided with economic opportunities. This scenario will reduce and alleviate the food and income insecurity which is seems to be extremely adverse in the village.

#### 4.6 Conclusion

The poor socio-economic conditions, accompanied by high income inequality seem to be the most alarming factors leading to a high rate of risks and vulnerability to poverty among the households in Tsianda village. A large number of households are facing a variety of risks

attributed to poverty, while the socio-economic conditions of individual households guide the ability of the households to respond to these risks. Food and income insecurity seem to be more common risks in the village, particularly, to the most vulnerable households in the village. The better-off households are faced with marginal risks with low impacts, and thus are able to respond to them without any frustrations. Risk-spreading strategies that are adopted by the poor households are clearly irrelevant and informal to spread the concentration of the various risks that the households face. The most vulnerable households in Tsianda village are those in the village extension, where service provision is still more a fantasy than a reality. The ability of these households to adopt any active strategy is minimal, thus impossible. They tend to adopt strategies which introduce the households to other new risks. The analysis of the case of Tsianda village clearly illustrates risks, risk-spreading strategies and vulnerability to poverty among rural households and its finding correlate with those in the literature reviewed in Chapter 2. The situation in Tsianda bears out the literature in that the risk-spreading strategies of rural households are too informal to spread the risks, hence, they introduce households to many other new risks.

## CHAPTER 5

### CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Introduction

Households in the rural areas are characterised by poor socio-economic conditions; hence, they are exposed to a variety of risks and a generally high level of vulnerability to poverty. This is why households adopt a variety of risk-spreading strategies aimed at reducing and de-concentrating the risks they face; however, the strategies that households adopt are perceived to be ineffective in de-concentrating the targeted risks, thus, increasing the households' level of vulnerability to poverty. The study was aimed at exploring the reality of the risks that the households face in Tsianda village, the effect of risk-spreading strategies on the level of vulnerability among households and also determining the relationship between the risks, risk-spreading strategies and the levels of vulnerability to poverty among the households in the area. This chapter focuses on the findings of the study, the conclusions and also recommendations to address risk, vulnerability and other socio-economic ill perpetuating in Tsianda Village.

To guide the systematic process of the study, the study adopted both qualitative and quantitative research approach, in order to solicit and explore information in the village in both a qualitative and statistical way. A qualitative research approach was used to collect information in terms of how people feel about the situation prevailing in the village and the risks they face, the risk-spreading strategies they adopt and their level of vulnerability to poverty. A quantitative method was adopted to analyse data in terms of frequencies and number on the risks and risk-spreading strategies that people are adopting in the village. A case study approach was used to examine information in the specific location, hence, in this study, Tsianda village was used as a case study

and also the target population comprises households in the specified village. The study collected data through a literature review, where elements of risk, risk-spreading strategies and levels of vulnerability among households were described in the theoretical context. Books, journal articles and government documents were used in this regard. The information in the village was collected through an assisted questionnaire survey; moreover, a systematic sampling procedure was used to create a sampling interval to solicit information across the whole village. The Statistical Package for Social Science (SPSS) was also used to analyse information to create frequencies, percentages and graphs.

## **5.2 Findings of the Study**

The study was conducted in Tsianda village with the aim of exploring and uncovering practical knowledge about the risks; risk-spreading strategies and the level of vulnerability to poverty among households in the rural areas and the study has found the following:

- Households in Tsianda village are faced with a variety of risks ranging from income and food insecurity, crop failure, ill health, marginalized businesses, filthy water and also crime. The outlined risks are concentrated in the majority of households in the village, particularly, in the poorer households than in the better-off households, those with better socio-economic conditions. The better-off household appears to experience short term risks that are easy to respond to, whereas the poor household faces perpetual risks that are difficult to respond to; thus, the latter are highly vulnerable to poverty.

- Risks faced by households in Tsianda village appear to be caused by the high rate of unemployment among members of households. The high rate of unemployment is believed to be reinforced by the high rate of illiteracy among the active people in the village; moreover, such people lack skills and knowledge to get formal employment that could maximize their households income and boost the socio-economic condition of the household.
  
- The unequal distribution of social services in the village was also believed to be another cause of risk in the village, particularly, to those households in the extended section of the village. These households do not receive any services; hence, they are the most vulnerable households in the village. The same households are believed to be exposed to many risks at the same time because of their poor socio-economic conditions.
  
- The study found that the majority of the households are marginalised in the village, particularly the impoverished households. Moreover, the different households time taken to respond to the risks varies in the village. The better-off households seem to be able to respond to risks before they occur, while the poorer households wait for the event to occur to respond, or sometime respond when the risk has long occurred because of their poor socio-economic conditions. Such a scenario is believed to bring frustrations to the poorer households because they do not have many options with regard to the risk-spreading strategies that they adopt; hence, their strategies are believed to introduce them to new risks and intensify their level of vulnerability to poverty.

- The study found that the majority of households in Tsianda village seem to be highly vulnerable to poverty. The political, social, institutional, environmental, economic and cultural contexts which guide the behaviour of the people and their practicing of livelihoods play a major part in the households level of vulnerability to poverty. However, these factors seem to have implications on the conditions of individual households in the village, in the sense that there are different levels of vulnerability to poverty among households; some households seem to be highly vulnerable, some are moderate and few feel that their levels of vulnerability are low.
- The study found that in Tsianda village households are likely to be vulnerable to drought, HIV and AIDS and violent conflict. However, drought is believed to have a greater effect because it leads to crop failure and ultimately introduces households to food insecurity. The survey also found that drought, which seems to be perpetual in the village, affects subsistence agriculture which is generally practised for food security in the rural areas. Drought is perceived to be reinforced by limited rains, and, crop failure is also reinforced by infertile land in the mountain where households practise subsistence agriculture.
- The exposure to HIV and AIDS in the village is apparent among the youth because of the limited health education to the sexually-active age groups. Also the unavailability of a clinic in the village plays a major role in the level of vulnerability to HIV and AIDS among the youth. However, the most vulnerable youth are young girls who are engaged in sexual relationships with a variety of people for money.

- Households are believed to be vulnerable to violent conflict in the village because of the unequal distribution of services among households. There are households in the village who are still not receiving any basic social service; hence, they are the most vulnerable. However, the land tenure system; particularly for agricultural purposes is believed to be a possible route that can reinforce violence conflict in the village. Few elites own plots of potential agricultural land for farming in the village, whilst, the majority of households in the village are practising agriculture on limited spaces in the mountain.
  
- The study found that the risk-spreading strategies adopted in the village include borrowing food from friends, relatives and neighbours, borrowing money from relatives and money lenders, diversifying of livelihoods, labour migration and also selling of assets. However, borrowing food and borrowing money seem to be the most commonly adopted in the village to de-concentrate food and income insecurity. The aforementioned commonly adopted strategies have been identified with flaws. They are believed to introduce households to new risks and intensify the household's level of vulnerability. The borrowing of money is said to contribute to debts, while borrowing of food is limited because the majority of households face the same risk at the same time.
  
- The study found that labour migration as a risk-spreading strategy is marginally considered currently because the majority of the intended migrants fail to support their families continuously; thus, their households become more vulnerable to income insecurity. The selling of assets was said to be a frustration strategy because it is adopted by few poor households during times of extreme hunger.

- The survey also found that the risk-spreading strategies adopted by households in Tsianda village are not all effective in reducing the level of vulnerability to poverty among households; instead, they make people more vulnerable to poverty. Few respondents believe that the risk-spreading strategies that they adopt are effective; however, they emphasise that these strategies are effective to reduce the intensity of short-term low impacting risks. The majority of respondents believe that their risk-spreading strategies are not effective enough to de-concentrate the risks; instead, they introduce the households to new risks.

Judging from this finding, it can be declared that the survey results from Tsianda village attest to the theoretical knowledge about the risk, risk-spreading strategies and level of vulnerability to poverty in many ways. It is indeed true that the social, political, technological, institutional, environmental and cultural contexts of the rural areas play a major part in the risks that households face, the risk-spreading strategies they adopt and their level of vulnerability to poverty. However, the said factors in the rural areas create situations where the poor households are marginalised and exposed to many risks, and therefore, the risk-spreading strategies that they adopt are not effective enough to reduce and de-concentrate the risks and the households' level of vulnerability to poverty. Thus they are continuously vulnerable to poverty.

### 5.3 Recommendations

Drawing from the analysis and the findings of the study related to Tsianda village, the following are the recommendations proposed to address the socio-economic ills that are prevalent in the village:

- The risks that households are facing in the village should be critically and continuously examined in order to develop relevant measures that can reduce their intensity, particularly, for the poor marginalised households.
- It seems that the basis of the risks in the village is unemployment. Apparently, employment opportunities should be created for all in the village. However, people should be encouraged to finish school and acquire skills and knowledge which will make them employable. For those who drop out capacity building centres should be established in the village.
- The issue of social exclusion which exists in the village should be dealt with immediately; all people should be treated the same and have the same benefits. Moreover, basic service provision also needs to be accessible to all. Those in the extension of the village need to be provided with alternatives to get clean water immediately so as to minimise their exposure to water-borne diseases. Furthermore, interventions to provide them with all the other basic services should be considered as soon as possible.

- The social, political, economic, environmental, institutional and cultural contexts of the village too, should be examined and further analysed, to ascertain how they can be redressed to be favourable to all households in the village. The issue of gender marginalisation, reinforced by institutionsøguiding behaviour in the village, needs to be critically addressed. Both men and women headed households should be treated the same. Moreover, economic opportunities should be provided to all without class bias. The poor households should participate in economic opportunities in order to maximise their income sources and reduce their exposure to risks associated with poverty.
  
- In order to reduce householdsøexposure to HIV and AIDS, particularly the youth, sex education programs should be continuously provided at schools and other youth accessible public places. The distribution of condoms should not only be limited to the clinics because the local is for from the village; but they should also be distributed to other places closer to the people.
  
- In order to avoid possible violent conflicts in the village, households that are not receiving basic social services should be prioritised to get them as soon as possible. Water and electricity, the major social services, should be provided to all households continuously. The distribution of agricultural land in the village needs to be redressed in order to avoid future violent conflict..
  
- The risk-spreading strategies adopted in the village should be continually assessed and examined, in order to develop measures to maximise them. However, optional strategies

which have a low negative impact on household's level of vulnerability should be developed, particularly, for the poor households whose risks are concentrated and perpetual. Since the majority of households are facing food and income insecurity as a risk, income earning opportunities and subsistence agriculture should be given financial prominence to support the most vulnerable households in the village.

- Lastly, government officials working close to the community should continually analyse and examine the socio-economic conditions of individual households in the village, in order to detect possible risks that they could face and develop measures that will minimise the impact of the risk event when it occurs. Risk-spreading strategies which are practised by individual households should be reconsidered in order to develop measures which are more effective to tackle the risks and reduce a household's level of vulnerability to poverty. Government must adopt an interventionists approach based on action-research or evidence-based interventions to develop measures and strategies which are relevant to the current situation of the study area.

## **5.4 Conclusions**

Households in the rural areas are faced with a variety of risks, while lacking effective measures to deal with them. The risk-spreading strategies they adopt are not only perceived as irrelevant, but also radical, in introducing the households to new risks which ultimately widen their scope of vulnerability to poverty. The main finding of this study suggests that the social-economic, political, environmental, technological, institutional and cultural conditions where rural households exist have a major impact on the risks that households face, the risk-spreading

strategies they adopt and their level of vulnerability to poverty. However, the most vulnerable households are those poor marginalised households in the rural areas. Unequal service provision in rural areas was also mentioned as the influencing factor in this regard. The study recommends that influencing factors of vulnerability should be redressed; while basic social services should be provided to all households in order to de-concentrate the number of risks that households face and their level of exposure to poverty. The provision of economic opportunities to all is also recommended because of the high rate of unemployment in the village and to tackle food and income insecurities among rural households.

## REFERENCES

Anderson, J.R., & Dillon, J.L. (1997) *Risk Analysis in Dry Land Farming Systems: Farm System Management Series 2*. FAO, Rome.

Anderson, J.R. (1979) Impacts of climatic variability in Australian agriculture: a review of marketing and agricultural economic, *Australian Journal of Agric Economics*. Vol. 31, pp. 147-177.

Anderson, J.R. (2003) *Risk in Rural Development: Challenges for Managers and Policy Makers*. World Bank, Washington DC.

Barnett, B., Barret, C., & Skees, J.R. (2008) Poverty traps and index-based risk transfer product. *World Development*, Vol. 36, No. 10, pp. 1766-1785.

Barret, C.B., Reardon, T., & Webb, P. (2001) Nonfarm income diversification and household livelihood strategies in rural Africa: concept, dynamics, and policy implications. *Food Policy*. Vol. 26, pp. 315-331.

Bebbington, A.J. (1999) Capital and capabilities: a framework for analyzing peasant viability, rural livelihoods and poverty. *World Development*. Vol. 27, No. 12, pp. 2021-2044

Blaikie, P., Cannon, T., Davis, I., & Wisner, B. (2004) *At Risk: Natural Hazards, People's Vulnerability and Disaster*. Routledge, London.

Calvo, C. (2007) Vulnerability to multidimensional poverty: Peru, 1998-2002. *World Development*. Vol. 36, No. 6, pp. 1011-1020.

Carney, D. (1998) *Implementing the Sustainable Rural Livelihoods Approach*. Overseas Development Institute, London.

Carter, M.R. (1997) Environment, technology and social articulation of risk in West African agriculture. *Economic Development and Cultural Change*. Vol. 45, No. 3, pp. 557-590.

Cohen, D. (1998) *Socio-Economic Causes and Consequences of HIV Epidemic in Southern Africa: A Case Study of Namibia*. UNDP HIV and Development Programme. Namibia.

Dane, F. (1990) *Research Methods*. Brooks/Cole Company, California.

Devereux, F. (1999) *Making Less Last Longer: Informal Safety Nets in Malawi*. University of Sussex, Brighton.

Ellis, F. (2000) *Rural Livelihoods and Diversification in Developing Countries*. Oxford University Press, Oxford.

Ellis, F., Kulengule, M., & Nyasulu, A. (2003) Livelihoods and rural poverty reduction in Malawi. *World Development*. Vol. 31, No. 9, pp. 1495-1510.

Eriksen, S., & Silver, J.A. (2008) the vulnerability context of a savanna area in Mozambique:

household drought coping strategies and responses to economic change. *Environmental Science & Policy*. Vol. 12, pp. 33-52.

Fleisher, B. (1990) *Agriculture Risk Management*. Lynne Rienner, Boulder.

Food and Agriculture Organization (FAO) (2005) *Access To Rural Land and Land Administration after Violent Conflicts*. FAO Information Division, Rome.

Fraser, E.D.G., Mabee, W., & Figge, F. (2005) A framework for assessing the vulnerability of food systems to future shocks. *Futures*. Vol. 37, pp. 465-479.

Frayne, B. (2004) *Migration and Urban Survival Strategies in Windhoek, Namibia*. Queen's University, Canada.

Hahn, M.B., Riederer, A.M., & Foster, S.O. (2009) The livelihood vulnerability index: a Pragmatic approach to assessing risks from climate variability and change-a case study in Mozambique. *Global Environmental Change*. Vol. 19, pp. 74-88.

Heitzmann, K., Canagarajah, R.S., & Siegel, P.B. (2002) *Guidelines for assessing risk and vulnerability*. SP Discussion Paper 0218. Social Protection Unit, Human Development Network. The World Bank, Washington, D.C.

Heltberg, R., Siegel, P.B., & Jorgensen, S.L. (2009) Addressing human vulnerability to climate change: towards a no-regret approach. *Global Environmental Change*. Vol. 19, pp. 89-99.

Hinrichsen, D. (2000) *Population and the Environment Change: The Global Challenge*. Population Information Programme, Baltimore, USA.

Jalan, J., & Ravallion, M. (1999) Are the poor less insured? Evidence on vulnerability to income risks in rural china. *Journal of Development Economics*. Vol. 58, pp. 61-81.

Khandhela, M., & May, J. (2006) Poverty, vulnerability and the impact of flooding in the Limpopo Province, South Africa. *Net Hazards*. Vol. 39, pp. 275-287.

Khosa, M.M. (2000) *Discretionary Fund Projects of the Reconstruction and Development Programme: In Empowerment through Service Delivery*. Human Sciences Research Council, Pretoria.

May, J., & Norton, A. (1997) 'A difficult life': the perception and experience of poverty in South Africa. *Soc Indic Res*. Vol. 41, NO 1-3, pp. 95-188.

McCulloch, N., & Calandrino, M. (2003) Vulnerability and chronic poverty in rural Sichuan. *World Development*. Vol. 31, No.3, pp. 611-628.

McGill, S. (1999) *Environmental Risk Management*. University of Toronto, Toronto.

Mtika, M.M. (2001) The AIDS epidemic in Malawi and its threat to households food security. *Human Organization*. Vol. 60, No. 2, pp. 178-188.

O'Brien, K., Quinlan, T., & Ziervogel, G. (2009) Vulnerability interventions in the context of multiple stressors: lessons from the Southern Africa Vulnerability Initiative (SAVI). *Environmental Science & Policy*. Vol. 12, pp. 23-32.

Parker, B. (2006) *Poverty in Rural India: The Contribution of Qualitative Research in Poverty Analysis*. World Bank, Washington D.C.

Parker, B., & Kozel, V. (2006) Understanding poverty and vulnerability in India's Uttar Pradesh and Bihar: A Q-squared Approach. *World Development*. Vol. 35, pp. 296-311.

Punch, K.F. (2000) *Developing Effective Research Proposal*. Sage, London.

Reardon, T.J., & Vosti, S.A. (1995) Links between rural poverty and the environment in developing countries: asset categories and investment poverty. *World Development*. Vol. 23, pp. 1495-1506.

Robinson, L.J., & Barry, P.J. (1987) *The Competitive Firm's Response to Risk*. Macmillan, New York.

Sen, A. (1981) *Poverty and Famines: An Essay on Entitlements and Deprivation*. Clarendon, Oxford.

Siegel, P.B. (2005) *Using an asset-based approach to identify drivers of sustainable rural growth and poverty reduction in Central America: conceptual framework*. WPS 3475. The World Bank, Washington, D.C.

Smeeding, T.M., & Weinberg, D. (2001) Towards a uniform definition of household income. *Review of income and wealth*. Vol. 47, No. 1, pp. 1-24.

Statistics South Africa. (2007) *Community Survey 2007*. Stats SA, Pretoria.

Taylor, F., & Mackenzie, F. (eds.) (1992) *Development from Within: Survival in Rural Africa*. Routledge, London.

Tran, P., & Shaw, R. (2007) Towards an integrated approach of disaster and environment management: a case study of Thua Tien Hue Province, Central Viet Nam. *Environmental Hazards*. Vol. 7, pp. 271-282.

Vhembe District Municipality. (2009) *Vhembe District Integrated Development Plan*. Development & Planning Department, Thohoyandou.

# **APPENDIX A: THE RESEARCH QUESTIONNAIRE SURVEY FOR THE HOUSEHOLDS**

## **RESEARCH QUESTIONNAIRE**

Master of Administration in Development Management Research Project

Research Project Title: Risk-spreading strategies and vulnerability to poverty among rural households: a case of Tsianda village in Makhado Municipality, Limpopo Province.

This questionnaire is meant to collect information on the risk-spreading strategies and vulnerability among rural households in Tsianda village. This research project is registered with the Department of Development Studies at the University of Limpopo, Turfloop campus. The survey results will be used solely for academic purpose. No information will be used against any member of your household and the community at large. Anonymity of the respondents is guaranteed, and you do not need to write your name on this questionnaire.

Thank you



9) How reliable are the sources of income in the household (Tick with an X)

Reliable	Neither /Nor	Unreliable

Explain

10) Identify the nature and type of your household dwellings (shelters) (Tick with an X)

Shack	Mud	RDP	Cements/Corrugated	Face Bricks/Tile	Others

11) Identify the sources and use of energy in the household.

Source	Lighting	Heating	Cooking
Electricity			
Paraffin			
Candle			
Gas			
Wood			
Coal			
Animal Dung			
Crop Residual			
Others			

12) Identify sources and use of water in the household.

Source	Cooking	Washing	Gardening	Others
Tap in the Household				
Communal Tap				
Rainwater Tank				
Household Borehole				
Community Borehole				
Others				











## **APPENDIX B: INTERVIEW SCHEDULE FOR THE KEY INFORMANTS**

### **RESEARCH INTERVIEW SCHEDULE**

#### **FOR KEY INFORMANTS IN TSIANDA VILLAGE**

Master of Administration in Development Management Research Project

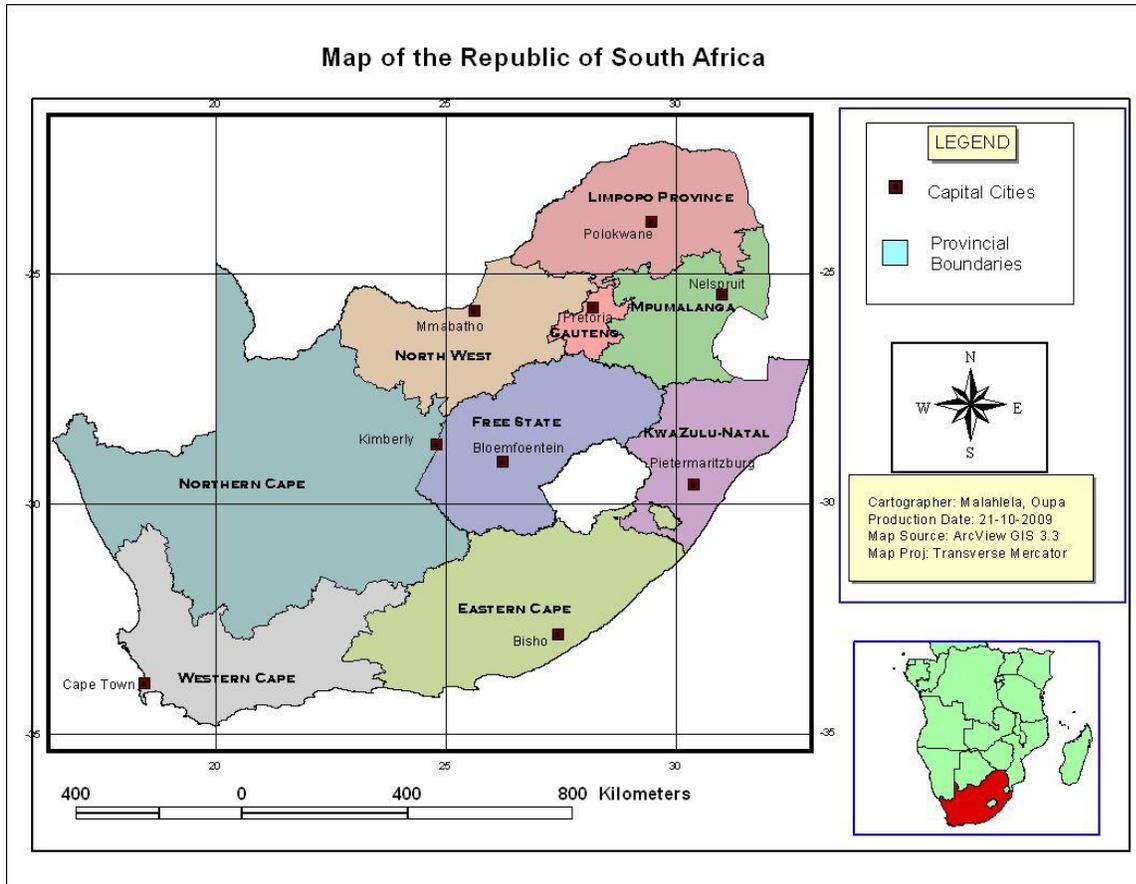
Research Project Title: Risk-spreading strategies and vulnerability to poverty among rural households: a case of Tsianda village in Makhado Municipality, Limpopo Province.

This interview schedule is designed for probing and soliciting community-wide information from key informants. As key informants, you are required to provide an overview of the risks associated with poverty and the overall vulnerability levels in the community. At the most, you could provide us with your stand in the community; and you are guaranteed anonymity.

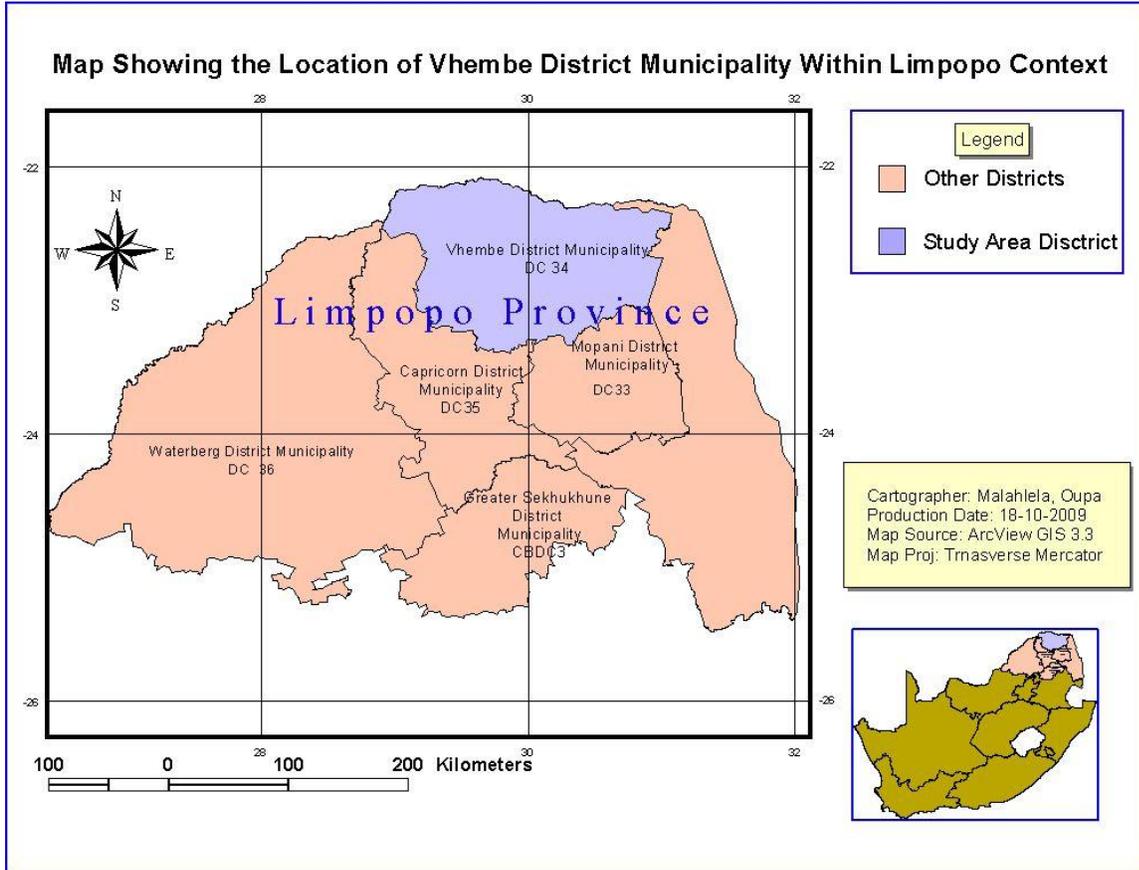
- 1 How would you describe the status of poverty in the community of Tsianda village?
- 2 Could you please identify and explain the risks that households face in Tsianda village?
- 3 What do you think are the causes of the risks prevalent in the village?
- 4 Could you please identify and explain the risk-spreading strategies that households adopt in Tsianda village?
- 5 How effective do you think the risk-spreading strategies adopted in the village are in de-concentrating and reducing the level of vulnerability to risks associated with poverty?
- 6 What do you think could be done to mitigate and minimize the risks that households face in the village?
- 7 What do you think should be done to strengthen the risk-spreading strategies that households adopted in the village?

Thank you

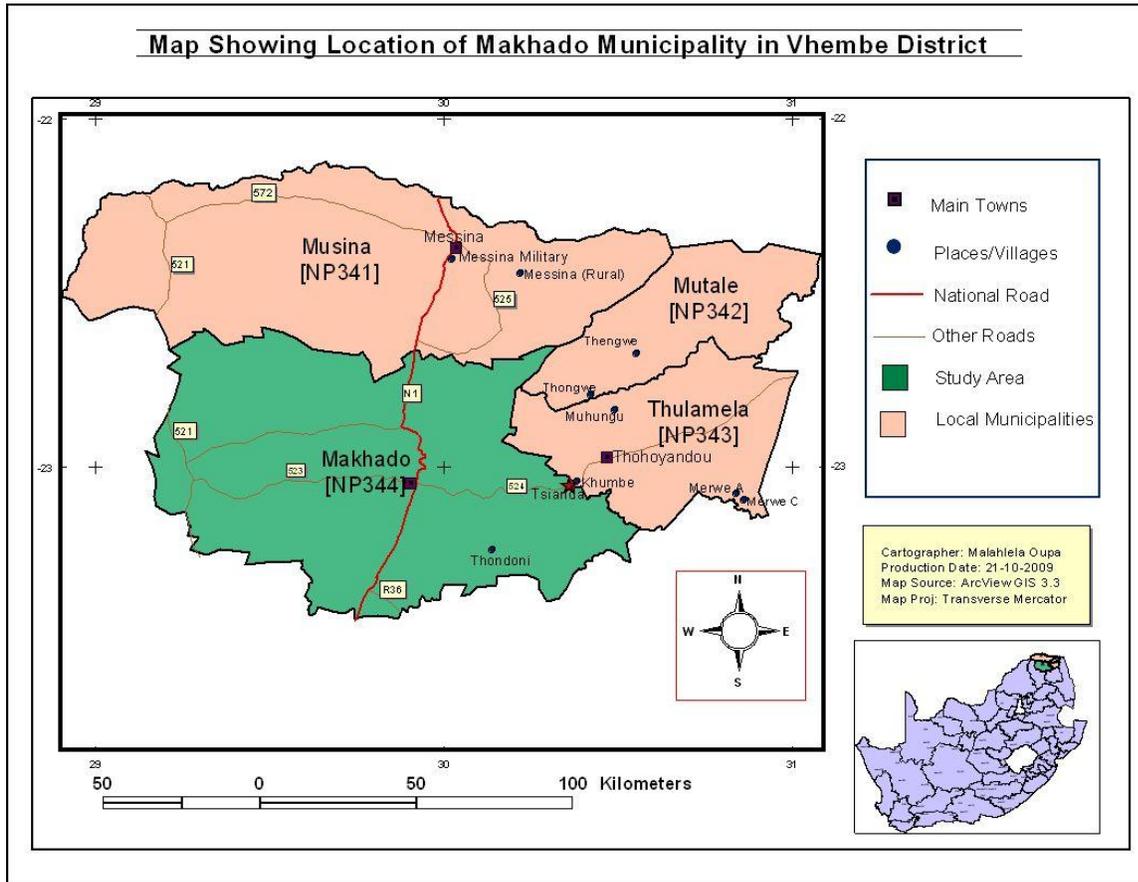
## APPENDIX C: SOUTH AFRICA'S PROVINCIAL MAP



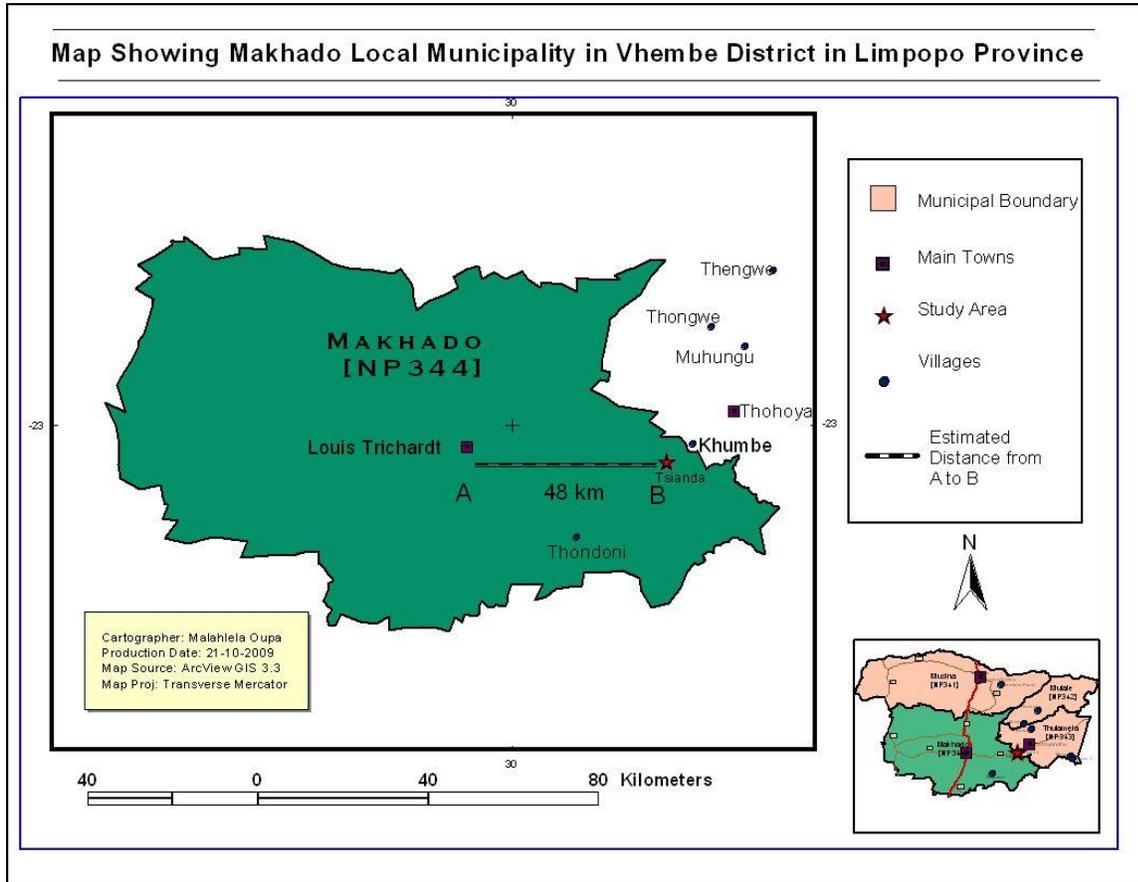
**APPENDIX D: LIMPOPO PROVINCIAL MAP SHOWING DISTRICT MUNICIPALITIES**



**APPENDIX E: VHEMBE DISTRICT MAP SHOWING THE LOCATION OF LOCAL MUNICIPALITIES**



# APPENDIX F: MAKHADO MUNICIPAL MAP



## APPENDIX G: TSIANDA VILLAGE MAP

