

**Analysis of the local understanding of food insecurity and the socio-economic causes of  
food insecurity in Ward three of the Jozini Municipality, KwaZulu-Natal**

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## **ABSTRACT**

Although food insecurity is a major problem in South African society, there is limited community level information on what constitutes it and related causative socio-economic factors. This study fills this information gap by analysing food insecurity in Ward 3 of Jozini Local Municipality in uMkhanyakude district in KwaZulu-Natal Province of South Africa. Specifically, the study explored the local understanding of food security and its socio-economic causes. A qualitative study was conducted using Participatory Rural Appraisal (PRA) techniques through a four-day workshop, supplemented with stakeholder interviews. The techniques used were historical timeline, seasonal calendar, focus group discussions, transect walk, problem tree analysis, social and resource mapping and semi-structured interviews. A four-day workshop was conducted with 44 participants that included traditional leadership, adult men and women, and young members of the community.

The people of Ward 3 of Jozini Municipality regarded food insecurity as hunger that resulted in many socio-economic effects such as collapse of household unity and stability that enhanced erosion of dignity among household members. Hunger was commonly associated with “not eating enough”. Other effects of hunger included household heads, especially men resorting to alcohol and drug abuse as a way of escaping from indignity. The youth were said to be involved in crime, prostitution and alcohol abuse. As result of hunger, sick people defaulted from taking treatment against tuberculosis and Acquired Immunodeficiency Syndrome (AIDS). Indicators of food secure households were access to funds, ownership of cattle, possession of arable land and access to water. Very irregular emissions of smoke from kitchens of food insecure households indicated that they had nothing to cook and eat. The people of Ward 3, Jozini revealed the choices made in the context of limited income to buy food. The choices included migration to urban areas in search of employment, women resorting to sex work, livelihoods activities such as gardening and craftwork. In the absence of an adult, many child headed households were said to be food insecure.

The socio-economic factors causing food insecurity were poverty, the Human Immunodeficiency Virus (HIV) and AIDS pandemic, unemployment, illiteracy, low household food production, limited access to resources such as water and land. The HIV and AIDS pandemic exacerbated food insecurity at household level. Furthermore, poverty forced women into sex work which places them at high risk of contracting HIV and spreading it to

their multiple partners. In addition, as a coping mechanism men committed crime such as poaching of animals from game reserves which further expose them to loss of livelihoods and food security options.

The socio-economic factors contributing to food insecurity were so intertwined such that an integrated approach is recommended as the best approach for solving the compounded problems. Further local population should be engaged to define solutions to the problems. To enhance self-reliance and self-drive among communities, adult basic education training should be incorporated to reduce the high illiteracy rate. The local leaders should be engaged to bring the large tracts of land owned by old people into full utilisation. The non-government, government and institutions working in the area should strengthen and diversify livelihoods to promote livelihoods sustainability and enable communities to survive shocks by reducing asset poverty.

## DECLARATION

I, ~~Marvis Nyakurimwa~~ declare that:

- The research reported in this mini-dissertation, except where otherwise indicated, is my original work;
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As supervisor, I agree to the submission of this mini-dissertation for examination.

Signed: .....  ..... Date: .....

Prof Sheryl L. Hendriks |

As co-supervisor, I agree to the submission of this mini-dissertation for examination.

Signed: ..... Date: .....

Mrs Kirthee Pillay

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# **1 THE PROBLEM AND ITS SETTING**

## **1.1 Introduction to the research problem**

The World Bank (2003) ranks South Africa as the seventh biggest country in Africa with a surface area of 1 219 090km<sup>2</sup> and a population density of 34 people per km<sup>2</sup>. Despite large mineral reserves, first world development and technological advancement in South Africa, overcrowding, unemployment, poor services, ill-health and poverty continue to be some of its major challenges. While food production is adequate to feed the nation, food distribution is inadequate, leading to unacceptably high levels of food insecurity and malnutrition (Hendriks, 2005). According to Statistics South Africa (STATS SA, 2001), almost 53% of South Africa's population of 44.8 million people experienced abject poverty at the turn of the century.

Although food insecurity is a problem in South African society, there is limited community-level information related to the causative socio-economic factors. This study fills this information gap by analysing the household food security situation in Ward 3 in the Jozini Municipality. The information generated is vital to inform the design of appropriate location-specific interventions relating to household food security.

## **1.2 Importance of the study**

Mkandawire and Matlosa (1993) discussed the importance of studying food security. They argued that the task of poverty eradication, which is at the root of food insecurity at household level, should not be left to government officials only. In addition, Mkandawire and Matlosa (1993) believe that scholars and researchers have a role to play, not simply as commentators of food insecurity but as providers of alternative intervention strategies.

Although South Africa produces sufficient food to feed the population, household food insecurity and malnutrition still exist (Bonti-Ankomah, 2001). Ensuring access to food at the household level depends on secure food supply and adequate purchasing power. The absolute prevalence of food insecurity in South Africa is not known. Hendriks (2005) reported that the scant available data suggests that between 35% and 73% of South Africans may experience food insecurity. At least 15% of the population consumes less than adequate energy. Hendriks estimated from existing literature that stunting rates could be between 22%

and 25%, with wasting being 3.7% of the population and approximately 30% of households experiencing hunger (Hendriks, 2005). The KwaZulu-Natal province (home to about 9 426 020 people) is one of the poorest in South Africa (Government Communication information System (GCIS), (2001), and has the highest antenatal clinic HIV and AIDS prevalence in the country - 39.1 (National Department of Health, 2007).

The uMkhanyakude District is situated in the north-eastern part of KwaZulu-Natal, extending from the Mfolozi River to the Mozambique border, bordered in the east by the St Lucia Wetlands Park. The district includes some of the poorest and most underdeveloped regions of KwaZulu-Natal (Rothaug 2003). It has a population of 573 341 (STATS SA, 2001). Five local municipalities, namely Jozini, Umhlabuyalingana, Matubatuba, Hlabisa and the Big Five False Bay make up the district. The Umkhanyakude District Integrated Development Programme of 2005 reports food insecurity as a major problem in the area, exacerbated by the high rates of HIV and AIDS and poverty. A study that focused on the status of orphans and vulnerable children in Jozini (The Crisp Trust, 2005) showed that the quality of life of orphans and/or vulnerable children in the Municipality was very poor. Coping mechanisms were almost depleted. However, there is limited information on the factors that contribute to food insecurity in the uMkhanyakude district and Jozini Municipality. Such information is needed to identify the local understanding of what constitutes food insecurity as well as knowledge of locals with regards to socio-economic factors that lead to food insecurity. The findings of this study are important to improve development programming, especially in Ward 3 of the Jozini Municipality.

### **1.3 Statement of the research problem**

This study investigated the local understanding of food insecurity and the socio-economic causes of food insecurity in Ward 3 of the Jozini Municipality.

To address the study problem, two sub-problems were investigated. These are as follows:

**Sub-problem 1:** What do people of Ward 3 in Jozini Municipality regard as food insecurity?

**Sub-problem 2:** What are the socio-economic factors identified by local people that cause food insecurity in Ward 3 in the Jozini Municipality?

#### **1.4 Study limits**

The study was limited to Ward 3 of the Jozini Municipality. Thus, the results may not be generalised to communities in other Wards in the Jozini Municipality or elsewhere. Language was a limitation especially when translating *isiZulu* to English. In some cases what the participants actually meant was lost.

#### **1.5 Assumptions**

It was assumed that all the targeted participants would actively participate and give accurate information. It was also assumed that gender did not influence the perceptions of individuals.

#### **1.6 Outline of the mini dissertation**

The mini dissertation constitutes six chapters. The first chapter outlines the research problem and the importance of the study. Chapter two reviews the relevant literature, starting with the definition of food security followed by evidence of food security in sub-Saharan Africa, South Africa, KwaZulu-Natal Province and uMkhanyakude district, respectively. In Chapter three, the food security programme implemented by Oxfam in uMkhanyakude district is described. In Chapter four, the research methodology is laid. Chapter five is used to discuss the results of the study. Lastly, Chapter six is used to provide the conclusions and recommendations based on the study results.

## 2 LITERATURE REVIEW

### 2.1 Introduction

This chapter reviews definitions of food insecurity and its related features. Food security is discussed in terms of its origins and trends. Within the context of the definition of food security, food availability, food access and food utilisation are explained.

Table 2.1 shows different definitions of food security from the perspectives of various authors over time. The shift in definitions of food security shows the shifts in thinking on the topic since the concept was coined in 1974. It is evident that, with changing times, the focus of food security changed from production to access and then entitlement. The definitions of food insecurity cover from global, national and lastly, household-level availability of food trends. The use of the term, food security, at national and global level emphasized supply of food. However, availability of food at the national level does not assure access and enough energy for a health and nutritional diet at individual level. This implies that initially, definitions did not consider the distribution of available food. Thus, ‘access’ has been included - focusing on availability and ability of a household to access food.

This second shift in food security reflects a shift from a ‘food first perspective’ to livelihood perspective. The shift is thought to have been triggered by the African famine of 1984-5 when Sudanese opted not to sell their animals (Devereux and Maxwell, 2003). This reflected an issue of time preference, when people choose to go hungry at that point in time to avoid going more hungry in future. Thus, Maxwell (1988) pointed out that livelihood security is a necessary and sufficient condition for food security.

Within the context of the definition of food security, three distinct variables stand out as central to its attainment. These are availability, access and utilization. Food availability is achieved when sufficient quantities of food are consistently available to all individuals within a country (Riley *et al.*, 1999). Food access is assured when households and all individuals within them have adequate resources to obtain adequate foods for a nutritious diet (Riley *et al.*, 1999). Food utilization refers to the proper biological use of food, requiring a diet that provides sufficient energy and essential nutrients, potable water and adequate sanitation (Riley *et al.*, 1999).

**Table 2-1: Definitions of food security**

<b>Author (s)</b>	<b>Definition</b>	<b>Major Indicators or Features</b>
United Nations , 1975	Availability at all times of adequate world supplies of basic food-stuffs...to sustain a steady expansion of food consumption and to offset fluctuations in production and prices.	Adequate world supplies of basic food stuffs
Siamwalla and Valdes, 1980	Ability to meet target levels of consumption on a yearly basis.	Target level of consumption per given time.
Kracht, 1981	Everyone has enough to eat at any time, enough for life, health and growth of the young and for productive effort.	Enough for life, health and growth of the young and productive effort.
Valdes and Konandreas, 1981	The certain ability to finance needed imports to meet immediate targets for consumption.	Ability to finance needed imports to meet immediate targets for consumption.
FAO, 1983	Ensuring that all people at all times have both physical and economic access to the basic food they need.	All the people have physical and economic access to basic food.
Heald and Lipton, 1984	The stabilisation of access or of proportionate shortfalls in access to calories by a population.	Stabilisation of access or of proportionate shortfalls in access to calories by a population.
Oshaug 1985	A basket of food, nutritionally adequate, culturally acceptable, procured in keeping with human dignity and enduring over time.	Basket of food, nutritionally and culturally acceptable.
World Bank, 1986	Access of all people at all times to enough food for an active and health life.	Equal access to enough food and leading a healthy life
United States Agency for	People having access to sufficient food at all times to meet their	Meeting dietary needs for a productive healthy

<b>Author (s)</b>	<b>Definition</b>	<b>Major Indicators or Features</b>
International Development, 1986	dietary needs for productive and healthy living.	life.
Barracrough and Utting, 1987	An assured supply and distribution of food for all social groups and individuals adequate in quality and quantity to meet their nutritional needs.	Assured supply and distribution of food for all social groups, individuals adequate in quality and quantity.
United Nations World Food Council, 1988	Adequate food availability to all people on a regular basis.	Adequate food availability.
United Nations World Food Council, 1988	Adequate food available to all people on regular basis.	Regular availability of adequate food
Sahn, 1989	Adequate access to enough food to supply the energy needed for all family members to live a healthy, active and productive lives...	Adequate access to enough food supplies for family members.
Staaaz, 1990	The ability... to assure, on long term basis, that the food system provides the total population access to a timely, reliable and nutritionally adequate supply of food.	To assure on long term- basis... food system provides the total population.
Kennes, 1990	The absence of hunger and malnutrition.	Absence of hunger and malnutrition
Gillespie and Mason, 1991	Self-perceived ability of household members to provision themselves with adequate food through whatever means.	Self-reliance in food provision
Frankenberger and Goldstein, 1991	Viability of the household as a productive and reproductive unit threatened or not threatened by food shortage.	Viability of household and removal of threat of food shortage

<b>Author (s)</b>	<b>Definition</b>	<b>Major Indicators or Features</b>
Maxwell, 1996	A country and a people are food secure when their food systems operate in such a way as to remove fear that there will not be enough to eat.	Removal of fear of not having enough to eat
FAO, 2001	All people at all times have both physical and economic access to the basic food they need.	Physical and economic access

Food insecurity refers to the opposite of food security. The term food security is used as per international literature and refers to the goal of achieving reduction of hunger and poverty for the sake of readability.

## **2.2 Food insecurity trends in sub-Saharan Africa**

Table 2.2 presents historical global food insecurity trends, showing a decreasing rate of growth in cereal production. Food imports increased by 230% and food aid increased by 340% (FAO, 2005). Food aid depressed domestic agriculture production either through market forces or by driving prices too low or government neglecting their farmers (Devereux and Maxwell, 2003). Negative environmental conditions such as massive floods and prolonged dry spells were reported as factors that contributed to food insecurity during the last three decades. In addition increased food prices exacerbated food insecurity in sub-Saharan Africa.

In sub-Saharan Africa, the proportion of undernourished people has decreased in the last two decades, but the numbers of hungry people have been rising (FAO, 2009). World Food Programme (WFP) and FAO missions undertaken in the Southern African Development Community (SADC) region in 2002 showed that 14 million people were living on the brink of starvation and faced serious food shortages (WFP/FAO, 2002). In 2010, the Millennium Development Goal Report showed that the number of people in developing region living on less than \$1.25 a day was reduced from 1.8 billion in 1990 to 1.4 billion in 2005 (U.N, 2010).

Devereux and Maxwell (2003) claim that food insecurity and hunger were closely related to poverty and the inability to purchase food. Poverty is highlighted as a significant cause of food insecurity. While food security does not capture all dimensions of poverty, food security may indicate poverty and is an important indicator of well being (Food and Nutrition Technical Assistance (FANTA, 2002). Devereux and Maxwell (2003) described undernourishment as a manifestation of poverty. The 2005 World Bank estimates showed that 50.9% of sub-Saharan African people lived below the international poverty line (\$1, 25 per person per day) (World Bank, 2007). In most countries in sub-Saharan Africa, poverty results from various factors that include unemployment, limited access to productive resources, poor policies, poor governance, high population persistent droughts. The number of food-insecure people doubled during the 1980s from about 22 million people in 1979/81 to 39 million in 1990/92 (Drimie and Mini, 2003). A close correlation was found to exist between the number of hungry people and poverty (Rahman, 2006).

**Table 2-2: Historical timeline for food insecurity in sub-Saharan Africa**

<b>Period</b>	<b>What happened</b>	<b>Source of information</b>
1960-1970	18.5 million people were affected by drought in 1960's and 24.4 million were affected in the 1970's.	Zondi (2004)
	In 1970, Africa moved from exporter of basic food stuffs in 1960 to a net importer in the late 1970s. Net exports of staple food from 1960-1970 period averaged 1.3 million tons/yr but 1970 sub-Saharan Africa imported 4.4 million tonnes a year.	Zondi (2004)
	Per capita food and cereal production were high enough to meet the food income of an average household in sub-Saharan Africa.	Abalu and Hassan (1999)
	Labour decreased by an average of 7% during 1970's because of urbanisation.	Zondi (2004)
	Limited growth in agriculture production and imports filled the gap.	Devereux and Maxwell (2003)
	Cereal yields for Southern Africa fell to 85%.	Dyson (1999)
1970-1980	An annual increase of 2.2% in domestic food consumption.	FAO (2005)
	Food Aid depressing domestic agriculture production either through market forces by driving prices too low or government neglecting their farmers.	Devereux and Maxwell (2003)
	Increase in imports of 10 million tonnes of cereals.	Zondi (2004)
	HIV pandemic deepened the food crisis in sub-Saharan Africa.	Clover (2003)
	Food import increased by 230%. Food aid increased by 340%.	FAO (2005)
	Increased food imports due to change in consumer taste and preference where rice was consumed more often.	Zondi (2004)
1980-1990	The 5 year average peaks of cereals fell from 374kg to around 350kg.	Dyson (1999)

Period	What happened	Source of information
	SADC population increased by 3% annually.	Mkandawire & Matlosa (1993)
	Decline in agriculture in Southern Africa is attributed to environmental degradation.	Abalu & Hassan (1999)
	Southern Africa decline in agriculture attributed to political instability, neglect of agriculture by governments.	Dyson (1999)
	In sub-Saharan Africa, the labour force decreased by 10-26%.	Clover (2003)
	Increase in food imports from US 44.2 billion to US 47 billion.	Rukuni (2002)
1990-2000	The sub-Saharan region's average per capita cereal output was only 146kg.	Dyson (1999)
	Massive floods and intense drought in some parts of southern Africa.	United Nations (2006)
	Total area under major crops increased from 139 million hectares in 1987 to 160 million hectares in 1995 (1.7% per annum).	Rukuni (2002)
	Food price index soared almost four fold from 100 in 1987 to 289 in 1996.	Rukuni (2002)
	AIDS undermining food security through its impact on incomes and purchasing power, people's ability to engage in agriculture for food and cash and its negative effects on livelihood strategies.	De Klerk <i>et al</i> (2004)
2000-2010	Prolonged dry spells in SADC region.	United Nations report (2006)
	14.4 million people were food insecure.	United Nations (2006)
	Malnutrition prevalence rate of 29.6% of children under the age of 5 in Southern Africa. A total of 5.5 million children aged 0-17 year olds orphaned in SADC as result of HIV and AIDS pandemic.	World Bank 2007 UNAIDS 2005

Period	What happened	Source of information
	3.1 million food insecure people in six countries; Lesotho, Malawi, Mozambique, Swaziland, Zambia and Zimbabwe.	United Nations (2006)
	Highest levels (36.8%) underweight reported for age 6-59months in Mozambique.	United Nations(2006)
	Human poverty index Southern African countries; South Africa- 30.9%, Namibia- 33%, Botswana- 48.4%, Zimbabwe- 45.9%, Swaziland- 52.9%, Lesotho- 47.6%, Angola-41.5%, Malawi- 43.4%, Zambia 46.4%, Democratic Republic of Congo 41.4%, Mozambique 49.1%.	World Bank (2007)
	Introduction of biofuels, created competition for land thus threatening food security.	Spiertz and Ewert (2009)
	Rapid food price inflation in 2008 that increased the number of food insecure people globally from 900 million to more than 1 billion.	FAO (2009)
	Food prices in most low-income food deficit countries remain above the pre-crisis level, negatively affecting access to food by vulnerable people.	FAO (2010)
	Developing countries account for 98% of the world's undernourished people.	

Rukuni (2002) in his paper focusing on addressing the growing threats of food security, highlighted poverty as a causative factor of food insecurity and suggested that African nations should prioritise agriculture and rural development in order to reduce poverty. Rukuni (2002) stressed the fact that policy reform was emphasised in Africa but there is a gap in policy analysis and capability to develop local capacity in economic management. He emphasized that reduction of poverty was the main strategy to reduce food insecurity and malnutrition. Among the strategies that Rukuni (2002) pinpointed were increases in rural income and employment generation, food aid and public feeding and work programmes.

Drimie and Mini (2003) reported that the food crisis in Southern Africa had partly resulted from the accumulation of poor harvests over a long period of time. These authors reported that food output and availability in Southern Africa was affected by various factors such as economic problems; inflation, mismanagement; poor governance and erratic rainfall as opposed to the 1992 drought that was caused by complete lack of rainfall. Drimie and Mini (2003) attributed food insecurity to macro-economic performance, inconsistent food policies, successive years of conflict, chronic malnutrition and the highest HIV/AIDS prevalence rates in the world. This was supported by Maxwell (2003), when he said food insecurity in sub-Saharan Africa was a product of low agricultural production and low incomes, policy failure as well as institutional failure. Rahman (2006) had a different view, suggesting that food insecure people in the region had few or no assets, were unemployed or earning inadequate wages and limited access to food even when it is available locally.

Clover (2003) argued that food insecurity in sub-Saharan Africa is a complex issue that encompasses a wide range of internal and external inter-related economic, social and political factors, which challenged the ability to address food security. She argued that hunger was a political creation, requiring a political solution. This argument was based on the fact that viability, access, and affordability were all elements of food security. Her argument was centred on the fact that Africa's vulnerability to food insecurity and hunger was due to a failure of understanding and failure of interventions.

Both Zondi (2004) and Jooma (2005) have pointed out migration and low agriculture production as factors affecting food security. A study by Zondi (2004) focused on historical trends that were mentioned as the roots of food insecurity. Zondi (2004) said as white farmers prospered in commercial agriculture, the 'native reserves' were continuously degenerating

due to overcrowding, overgrazing, poor soil and neglect. Zondi (2004) blamed food insecurity on pre-independence policies, while Rukuni (2003) isolated lack of political wisdom to give priority to agriculture and rural development as the problem.

Zondi (2004) has also attributed food insecurity to a decline in productivity caused by detrimental trends in food trade where African export products were not competitive. Evidence of decline in agriculture productivity was reported by Clover (2003). Africa shifted from a key exporter of agricultural commodities to being a net importer despite having the highest proportion of undernourished people.

### **2.2.1 The land issue**

This section discusses the land issue as an important factor of food security in sub-Saharan Africa. The effects of landlessness, land reform are discussed highlighting socioeconomic factors contributing to low yields resulting in food insecurity.

The Integrated Food Security Strategy of the South African government and the Land Reform Policy of the Zimbabwean and Namibian governments highlighted land, among other things, as an important factor in food security (Moyo, 2006). Matshe (2009) said there cannot be smallholder production and household food security without access to land of enough quantity and quality to make a difference in either the quantity produced or the amount of income generated from the output.

According to von Braun (1995), the rural poor were mostly landless or had farms too small to yield an adequate income and food. Von Braun (1995) discussed landlessness as a factor contributing to food insecurity, highlighting the poor's access to credit as a factor that exacerbates food insecurity. Von Braun (1995) advocated for land reform, arguing that it would lead to increased productivity because there is an inverse correlation between farm size and output per unit of land. Von Braun (1995) concluded his discussion by saying that land reform was a necessary, but not sufficient criterion for poverty reduction and food insecurity. While Matshe (2009) had similar views as von Braun about land reform, this author argued that land reform on its own does not make people food secure. Matshe (2009) said evidence from the Zimbabwean situation provided an example in that provision of land on its own, without empowering smallholders to establish agriculture production livelihood

strategies, will not achieve food security. This illustrates that land reform is necessary but not a sufficient condition for food security on its own.

Rahaman (2006) supports von Braun's views (1995) that food insecurity in rural areas is caused by landlessness. Von Braun claims that inadequate holdings of high potential land result in inadequate food production. Von Braun (1995) mentioned ownership of ecologically stressed land including dry land, erosion prone sloping land, low fertility land, low lying land, saline land or land with over constraints such as low water table as unproductive land that leads to food insecurity.

Many millions of people who are ranked the poorest of the poor in the developing world only have access to poor quality land, or are landless or work on land owned by others (Dudley, Madeley and Stolton 1992). Matshe (2009) claims that the largest proportion of the hungry was concentrated among the world's landless, or smallholder farmers whose plots are too small to provide for their needs. These facts were based on the FAO (2008) revelation that 50 % of the world's hungry are smallholder farmers, 20% were landless rural, 20% were pastoralists, fishers and forest dependent and 20% were the urban poor. Poor quality land leads to poor yields and food insecurity.

Socioeconomic factors such as lack of access to technology, inputs, markets and supportive policies also exacerbate food insecurity (Rahman, 2006). Rahman argued that besides landlessness, lack of gainful employment in the agricultural sector leads to denial of both physical and economic access to food. Ghimire (2001) argued that there is need to reform land tenure systems in order to reduce rural poverty and hunger in developing countries. The argument was based on the fact that small farmers, tenants, sharecroppers and workers are among the social groups most vulnerable to hunger and poverty and usually have inadequate access to land and other productive resources. Land reform is perceived as a strategy that could lead to greater food security, income and family welfare for many groups of socio-economically marginalised rural population including women and indigenous communities (Ghimire, 2001). The impact of lack of access to land goes beyond food security and affects access to shelter, employment and improved livelihoods necessary for minimum human dignity (Ghimire, 2001).

Low production yields in rural areas were due to the fact that modernization of agricultural production did not benefit a large number of rural farmers (Rahaman, 2006). These farmers farm ecologically unproductive lands of low fertile soils, semi arid climates, erosion prone slopes and experienced socio-economic constraints such as unavailability, affordability of technology services or inputs. Rahaman (2006) concluded that the most important strategy for addressing food security of currently excluded vulnerable rural poor is to improve the productivity of low potential lands through sustainable intensification. Rahaman's fact can be safely concluded by saying that sustainable maximum utilisation of the low fertile soils will improve food security.

### **2.3.2 Lack of employment**

Von Braun (1995) has said the challenge of creating jobs in low income countries where the workforce is expanding rapidly, is already tremendous. The labour force is growing while other resources such as land and capital are becoming increasingly scarce. The problem of underemployment in developing countries often meant lack of food security (von Braun, 1995). Matshe (2009) has also mentioned unemployment as one of the drivers of food insecurity and suggested significant non-farm set of livelihoods strategies in Southern Africa.

Case studies conducted in Botswana and Tanzania by Teklu (1995) indicates a close link between labour and poverty, especially in regions with low and variable agriculture production and limited off season, non-farm employment for the poorest households. Households with low labour endowments and few inputs such as livestock; low levels of education and unimproved farm technology often face poverty and food insecurity (Teklu 1995).

It is widely accepted that food insecurity is as a result of poverty, limited access to food, shortages and food supply and limited food availability (Dreze and Sen 1998). Rapid population growth and increased scarcity of land limit the earnings of the rural poor (von Braun, 1995). In the context of structural adjustment, the cost of unskilled labour fell relative to the cost of capital in many low-income countries, particularly in Africa (von Braun, 1995). Retrenchments caused by structural adjustment programmes exacerbated food insecurity and increased social ills like crime, destitution and disintegration (von Braun, 1995).

On average 7-10 people living in rural areas in Southern Africa are not employed (Rukuni, 2002). In his paper on addressing growing threats to food security, Rukuni (2002) recommended that governments devise rural development programmes that can fulfil the triple objectives of providing jobs, increasing the purchasing power to purchase food and develop rural infrastructure. Rukuni (2002) recommended that governments develop policies and programmes that concentrate on increasing the rate of agriculture growth and spreading employment opportunities throughout rural economy.

Food-for-work help generate employment during off-seasons when demand for labour in crop production is low, providing food security to insecure households and individuals, creation of community assets, natural resource conservation and improvement of physical infrastructure such as roads that improve access to markets and other institutions (von Braun, 1995). Lessons learnt from such programme are that job creation in poor communities ensures food security. Tackling employment is an effective means of addressing the food insecurity but programmes should not lose sight of the key role of agriculture and rural growth stimulation for poverty reduction and food security (Rukuni, 2002). Von Braun (1995) recommended a combination of long term efforts to improve human resources, especially education, agriculture growth and short and medium term strategy of job creation for building up and maintaining resources.

### **2.3.3 Population growth**

Population growth in developing countries increased at the same rate as poverty estimated at (2%) annually (Chen, Datt and Ravallion 1993 cited by Scherr, 1999). Between 1995 and 2020, the global population is expected to increase by 35%, reaching 7.7 billion people of whom 84% will be in developing countries (Scherr, 1999). Africa's population is expected to double, significantly increasing the demand for food by 4-5% per year (Scherr, 1999). Smil (2000) has argued that food crises in Southern Africa are a result of imbalance between high population growth rates and stagnating or declining food output.

Population growth can affect food supplies by changing potential labour force size, quality and inputs, demand for land, quality of land as it will be degraded by soil erosion (Ronald, Aurthur, Kelley, Allan, Rodger and Srinivasan 1989). Population growth puts pressure on available land, causing expansion of land into virgin land by clearing the forest and initiating

land degradation (Ronald *et al*, 1989). Rukuni (2002) reports rapid population growth that increased pressure on food supplies and natural resource base, including fisheries, fuel wood and grazing land for wildlife and livestock. Rapid population growth necessitates that expansion of efficient food production to be the cornerstone of food security strategies in sub-Saharan Africa (Rukuni, 2002). Besides population growth, food insecurity in sub-Saharan Africa is exacerbated by the HIV and AIDS pandemic.

#### **2.3.4 HIV and AIDS**

In sub-Saharan Africa, HIV and AIDS emerged against a backdrop of extreme poverty, hunger, conflict and inadequate infrastructure (Drimie and Mini, 2003). People living with HIV in Africa represent 63% of the 39.5 million infected people globally (FAO, 2006). Research carried out in Tanzania, indicated a 15% decrease in per capita food consumption in poorest households following the death of an HIV infected adult (United States Agency for International development (USAID) (2003).

UNAIDS and the Regional Inter-Agency Coordination Support Office (RIACSO) (2002) reported that the devastating impact of HIV/AIDS in Southern Africa was complicating the task of fighting hunger and strengthening livelihoods of the poor. The report discussed how the pandemic was creating large new vulnerable groups and rapidly eroding food and livelihood security. The United Nations report of 2005 showed that the 2002/03 food crisis in Southern Africa was influenced by HIV/AIDS related morbidity and mortality, which exacerbated the food crisis, creating a dual tragedy. The report highlighted the major impact of AIDS as a serious depletion of human resources, diversions of capital from agriculture, loss of farm and non-farm income and other psycho-social impacts that affected productivity. Jooma (2005) and van Lierre (2002) carried out similar studies on assessment of impact of HIV/AIDS on food security. Jooma's (2005) paper's point of departure from van Lierre's was the mention of three significant impacts of HIV and AIDS. The first being migration in search for food that further increases the spread of HIV and AIDS. The second was loss of transfer of knowledge of agricultural skills as orphaned children are left without sufficient "know how" and gender inequality. The AIDS pandemic increased women's workload by caring for the sick in addition to physical workload in crop cultivation, food preparation and water and firewood collection. Lastly, the lack of women's power to negotiate sexual relationships (or survival sex) is increasing the spread of HIV. Van Lierre (2002) looked at

the epidemic as a development problem with a long wave disaster that negatively impacted households by increasing orphans and changing farming systems, reducing economic growth and leading to breakdown of institutions and culture. Drimie and Mini (2003) noted the breakdown of households due to labour migration in times of food insecurity and the exchange of sex for money or food during crises, increased vulnerability.

The impact of AIDS on food supply is thought to operate primarily through illness and deaths in the productive age group, causing rural labour shortages and the decline of agricultural production (Edstrom and Samuels, 2007). Edstrom and Samuels (2007) reported that households affected by adult morbidity, mortality and high demographic dependency ratio were significantly more vulnerable to food security shocks than other households. The households suffer from reductions in agricultural production and income generation leading to decline in food security (Edstrom and Samuels, 2007). The impact of food shortages and inadequate nutrition intakes among HIV infected was reported to lead to faster progression of AIDS (Gillespie and Kadiyala, 2005).

### **2.3.5 Nutrition and HIV and AIDS**

Gillespie and Kadiyala (2005) discussed impacts of HIV and AIDS on nutrition, highlighting the fact that malnutrition increases both susceptibility to HIV infection and vulnerability to poverty. People living with HIV have increased nutritional requirements, particularly with regard to protein - up to 50% more protein is required and approximately 15% more energy (Piwoz and Preamble, 2000). Gillespie and Kadiyala (2005) showed that the onset of disease and even death might be delayed in well-nourished HIV positive individuals who consume diets rich in protein, energy and micro-nutrients. While this recommendation is true, poverty-induced malnutrition in sub-Saharan Africa leads to the earlier on-set of AIDS due to increased susceptibility to opportunistic infections (Drimie and Mini, 2003).

### **2.4 Food Security in South Africa**

South Africa ranks among the countries with the highest rate of income inequality in the world (World Bank, 2006). Compared to other middle income countries, South Africa has extremely high levels of absolute poverty. While South Africa may be food secure as a country, large numbers of households within the country are food insecure (Hendriks, 2005).

The Reconstruction and Development Programme (RDP) drafted by the African National Congress (ANC)-led government in 1994 as a national programme of action for the government, identified food security as a priority policy objective and a basic human need (Rhind, 1997). The ANC recognized poverty and food insecurity as legacy of the apartheid socio-economic and political order. To address the food insecurity problem, a policy was drawn from Section 27 of the Constitution that states; “Everyone has a right to have access to sufficient food and water and social security.” (South African Government Information System (2009). Furthermore, the Constitution, in Section 28, states that every child has the right to basic nutrition, shelter, basic health care services and social services. The Department of Agriculture and Land Affairs set up the Food Security Working Group in 1996 and in the same year the government signed and committed itself to the World Food Summit Declaration (Department of Agriculture of South Africa, 2002).

In the year 2000, South Africa formulated a national food security strategy that streamlined, harmonized and integrated the diverse food security programmes. The Department of Agriculture stated in its Integrated Food Security Strategy for South Africa (IFSS, 2002) that government food security strategies included programmes such as school feeding schemes, child support grants, free health services for children between birth and 6 years old, pregnant and lactating women, old age pension funds, public works and community food gardens. The primary objective of the IFSS was to overcome rural food insecurity by increasing the participation of food insecure households in the productive sector. The strategy aims at creating an environment in which all South Africans have physical, social and economic access to sufficient, safe and nutritious food at all times to meet their dietary needs (IFSS, 2002).

Despite a good strategic plan, adequate production at the national level and significant food exports, South Africa is faced with food security challenges at household level (Bonti-Ankomah, 2001; Chaminuka *et al*, 2006). Millions of South Africans are food insecure and the social security system has failed to provide income security for the majority of the unemployed (Taylor, 2002; Samson, 2004). A review of social security reform found that in April 2001, an estimated 3.5 million South Africans received a social security grant (Samson *et al.*, 2002), yet it is estimated that more than 22 million people in South Africa live in poverty (Development Bank of Southern Africa, 2005).

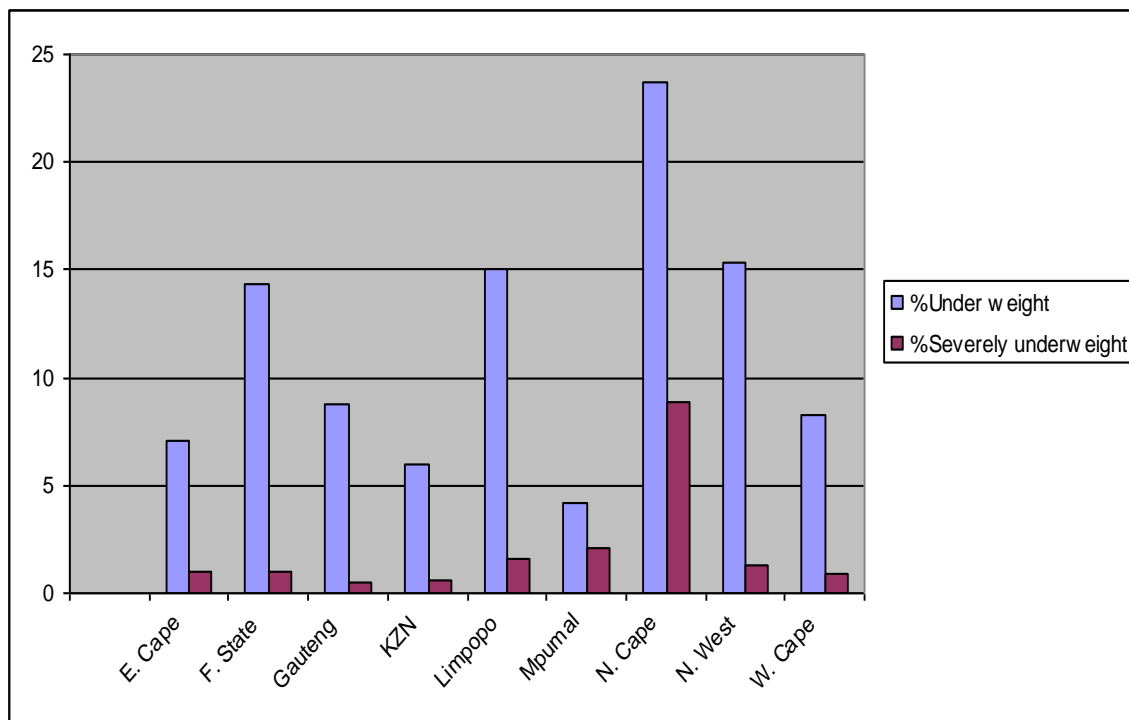
The study by Chaminuka *et al* (2006), on the impact of HIV and AIDS on agriculture and food security in Limpopo province showed that 70.2% of households were in an acute level of vulnerability, 28,9% of households were classified as coping households and 0,9% were classified as emergency level category. Despite the existence of social grants, the majority of households experienced acute levels of food insecurity (Chaminuka *et al.*, 2006).

Food price increases have a devastating impact on the living standards of the poor (Watkinson and Makgetla, 2002). Most households in South Africa depend on food purchases (Watkinson and Makgetla, 2002). The Labour Force Survey conducted between 2000 and 2004 (Aliber, 2005) showed that the proportion of households that practised agriculture as a main source of food declined from 33% to 6%, despite the fact that subsistence farming was being promoted to improve household food security. About 2.5 million households are engaged in some kind of own production, of which approximately 300 000-400 000 are full-time subsistence farmers (Altman *et al.*, 2009). Bathethi and Jacobs (2009) have highlighted the fact that subsistence food production is the best readily available route to food provision. Subsistence farming reduced dependence on markets purchase, especially among the rural poor as they can exploit natural resources for food or generate income (Baphethi and Jacobs, 2009). However, their paper points to evidence of decline of subsistence farming in rural areas.

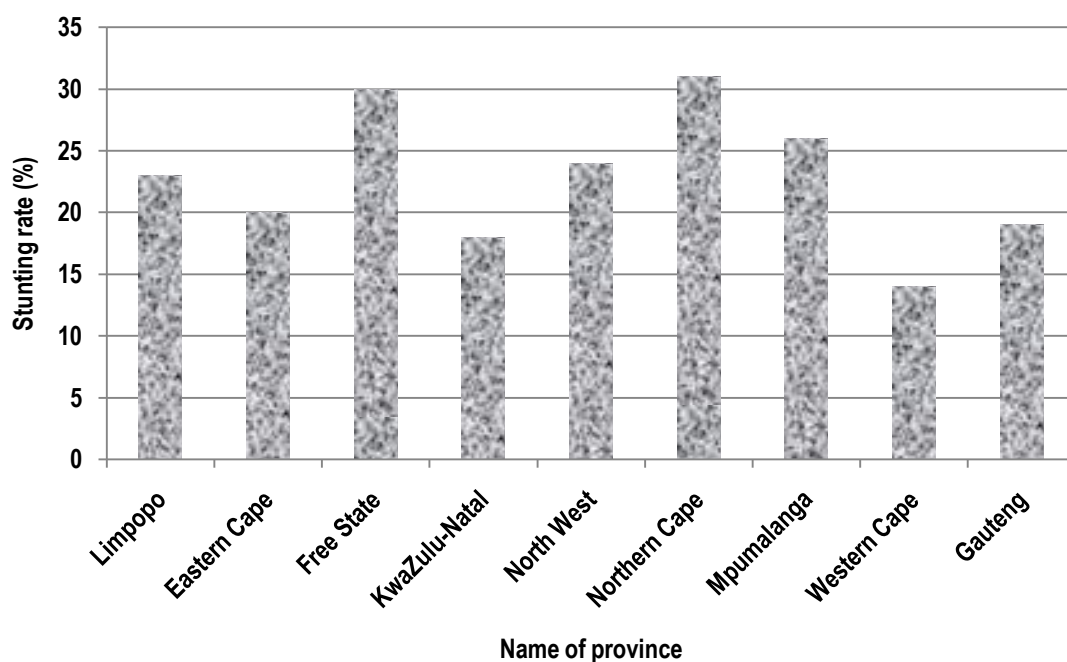
The 1999 South African National Food Consumption survey of children aged one to nine years was the first primary study to determine nutritional status and attempt an estimation of experiential food security in South Africa through development of a hunger scale (Hendriks, 2005). The limitation of the survey is that it focused on a limited age group of one to nine years, therefore, the results do not indicate the extent to which the country as a whole was food insecure. Figure 2.1 shows the proportion of children who were underweight and severely underweight while figure 2.2 shows stunting rates per province.

The National Food Consumption Survey Group (2000), reported anaemia and marginal vitamin A status as widespread micronutrient deficiencies. Anaemia and marginal vitamin A status affects between 20% and 30% of young children. The South African Vitamin A Consultative Group (SAVACG) conducted the first national study of nutrition in South

Africa in 1994 SAVACG 1994). The study showed that nearly one in four children was stunted and one in ten was underweight (SAVACG 1994).



**Figure 2-1: Proportion of children aged one to nine years who were underweight and severely underweight in South Africa in 2000.** (National Food Consumption Survey group, 2000)



**Figure 2-2: Stunting rates per province in South Africa in 1999** (National Food Consumption Survey group (2000) cited in Bonti Ankomah (2001 page 3)

The absolute prevalence of food insecurity in South Africa is not known. However Hendricks (2005) reported that the scant available data suggests that between 58.5% and 73% of South African households may experience food insecurity. In addition 15.9% consume less than adequate energy, stunting rates (1999 figures) could be between 22% and 25%, wasting may occur in 3.7% of the population and approximately 30% of households experience hunger.

Fraser *et al* (2003) conducted surveys in Eastern Cape investigating poverty levels and expenditure patterns. The study found out that household that had access to reliable income sources (grants, salaries and wages) experienced transitory food insecurity. These households experienced food shortages towards the end of the month. The ultra poor experienced chronic food insecurity and reportedly never had enough food. Poor households were reported to liquidate assets after poor harvests, reduce the number of meals per day or gather traditional vegetables in times of hunger. The study indicated food insecurity, increased hunger and an increase in dependence on money to purchase food (Fraser *et al.*, 2003).

The results of de Swart (2003) study are similar to those by Aliber and Modiselle (2002) in a study commissioned by National Department of Agriculture to investigate the impact of price

volatility for low income households. Households reported significant increases in food prices over the period of six months of the study period. The study showed that a high proportion of respondent households experienced anxiety over future food acquisition, dietary quality and sufficiency. The households engaged in a variety of coping strategies. Some of these strategies include food gardens that contribute to improvement of nutrition and creation of livelihoods (Aliber and Modiselle, 2002).

## **2.5 Food Security in KwaZulu-Natal**

The KwaZulu-Natal Income Dynamics Study (KIDS) conducted in 1993, 1998 and 2004 is the only food security related longitudinal panel data available (May, Agüero, Carter and Timaeus 2006). The KIDS study showed that 22% of households surveyed in 1998 were poor, 19% had experienced a decrease in their level of material wellbeing and 11% had experienced an improvement, indicating that 41% of households had remained poor or experienced erosion of material wellbeing between 1994 and 1998. The prevalence of under nutrition (wasting) in 1994; for two age group 4-5 years and 8-11 years was 4.8 (boys) and 3.0 (girls) and 5.2 (boys) and 7.1 (girls) respectively. The figures of 1998 were higher indicating an increase in under nutrition (May *et al.*, 2006).

A study by Nkosi (2005) on household food security and health behaviours in rural communities of KwaZulu-Natal examined how food deprivation influences health behaviours. The study used a hunger scale question to determine the level of food security of 95 families represented in a focus group. The study showed that many families lack resources necessary to enable them to acquire food commodities and experienced chronic food shortages. About 85% of households were food insecure, 6% were hungry and only 4% were food secure. The study showed that even when drugs became readily available for the sick, hunger and starvation deterred participants from completing the course of medication for serious illnesses, including tuberculosis.

A study on the potential role for wild vegetables in household food security (Modi, Modi and Hendriks, 2006) conducted in Umbumbulu showed that limited knowledge of use of wild vegetables prevented the community from utilising the natural resources to enhance household food security. However, rural South Africans (>35 years) still hold indigenous knowledge of wild vegetables. The study attributed poor utilisation of wild vegetables to lack

of knowledge about how to access quantities that can satisfy human food requirements and the fact that modern agricultural systems have succeeded in providing calories, but in the process, they have increased “hidden hunger” (micronutrient malnutrition) by displacing edible local plants (Modi *et al.*, 2006).

## **2.6 Food Insecurity in uMkhanyakude District**

Umkhanyakude District is located in KwaZulu-Natal Province, South Africa. The Statistical Office of South Africa has reported Umkhanyakude is the poorest District in KwaZulu-Natal. The district has a scattered rural population of 542 953 people (Umkhanyakude District Municipality, 2005/06). The population is spread unevenly among the five local municipalities, namely Jozini, Umhlabuyalinagana, Big Five False Bay, Hlabisa, and Matubatuba. Jozini Municipality has the largest (32%) population of the total population. Umkhanyakude district is reported to have the highest HIV (39.1%) prevalence in KwaZulu-Natal province (Health System Trust 2007). Aliber (2009) stated that, in four district municipalities, 57% to 72 % of black households are engaged in farming at some level. The four districts were uMkhanyakude district in KwaZulu-Natal, Vhembe in Limpopo, Alfred Nzo in KwaZulu-Natal and OR Tambo in the Eastern Cape.

A study conducted in Umkhanyakude district by Welz *et al* (2007) on HIV infection found that 27% of female and 13.5% of male residents were infected. The study showed HIV prevalence of 51% among resident women aged 25-29 years and 44% among resident men aged 30-34 years; with highest infection rates of 57.5% among 26 year old women. The HIV prevalence among antenatal clinic clients was 31.7% (Smith, 2009). Community vulnerability to environment change is caused by poor health caused by exposure to disease, malnourishment and under nutrition, weak public health institution and interventions (Drimie and Van Zyl, 2005).

Umkhanyakude district is vulnerable to a number of shocks including health related and environmental change shocks, exacerbated by the rapid increase in TB (Drimie and Van Zyl 2005). A maternal and child health survey conducted in Ubombo, Jozini district of Umkhanyakude district (1998), found that out of 646 children, 6% were of low birth weight, 1.2% wasted, 26% stunted and 6.3% were under weight. The nutritional status patterns from the survey were consistent with those recorded in rural pre-school children over the previous

10-15 years (Tsoka and le Suer, 1998). This confirmed that chronic under nutrition was a predominant problem in the study area. In addition, the prevalence of worm infestation was above 70% (Tsoka and le Suer, 1998).

A study carried out by Schroder and Nicola (2006) on the adoption of HIV/AIDS orphans and food security in rural Ingwavuma, South Africa showed how gender affects household food security. Two thirds of the interviewed respondents were females. Females were also the majority of household heads. Mothers headed 46% of the households in the sample and grandmothers 5% of the households. Fathers were the heads of only 35% of households. The female headed households were more food secure, by virtue of the fact that women allocate proportionately more resources to food. The research showed that home grown food contributed to 50% of household food supply. Pre- and post- harvest pest damage and livestock (cattle and goats) were identified as factors that reduce crop yields. The likelihood of food insecurity increased with household size and households that adopted HIV/AIDS orphans. The empirical results showed a negative correlation between food security and income. This means that the meagre income that households received does not seem to have improved the food security of households in Ingwavuma. The study concluded that the anticipated increases in children orphaned by HIV in rural subsistence-dependent communities may have possible long-term health effects if primary nutrition care and food security are not ensured (Schroder and Nicola 2006).

The Crisp Trust (2005) conducted a study on the status of orphans and vulnerable children in Jozini in uMkhanyakude district. Poverty was found to have multi-fold effects, as it relates to the well-being of families, in particular children. The research showed that the absence or death of the maternal figure and difficulties inherent in the loss prove to be a challenge for many children. There was visible evidence to support the correlation between a lack of proper nutrition and poor health. Indicators of poor nutrition and poverty included cracked feet, subdued disposition, skin rashes, badly infected sores, scabies, patchy and discoloured hair growth, disintegrated nails and stunted growth. Many learners were forced to take on additional work to supplement their own/family income. Learners are faced with additional stress arising from competing priorities such as attending school and working to support themselves (The Crisp Trust 2005).

Further understanding of food security and the coping systems adopted by households is needed to design effective interventions to address food insecurity in rural areas such as Jozini. This study seeks to address this knowledge gap.

### **3 THE OXFAM AUSTRALIA FOOD SECURITY PROGRAMME**

Oxfam Australia is a donor organisation that works in partnership with community-based and non-governmental organisations to address development issues affecting communities. The Oxfam Australia Food Security programme started in 2005 in the uMkhanyakude District, in KwaZulu-Natal, South Africa. The aim of the food security programme in Umkhanyakude district is to improve food security. Under this project, organisations are funded to implement development projects. The only study of the project was one desk top study on food insecurity carried out in the area before programme implementation (Oxfam Australia, 2006).

This study analyses factors causing food insecurity to inform the second phase of Oxfam Australia strategic plan. In addition, the information could be used by other development agencies working in the area. The information could also be used as a baseline for the monitoring and evaluation of existing and future projects. Participatory Rural Appraisal (PRA) was applied. Besides being user friendly, PRAs added value to programming by adopting tools that emphasize community participation in the design, planning and decision making of development initiatives that best suit their needs.

The aim of the Oxfam programme was to strengthen community food and nutrition security responses within the context of a high incidence of HIV and AIDS in the uMkhanyakude District. The programme objectives were to:

- Ensure that the most vulnerable (people infected and/or affected by HIV, AIDS) have access to the quality and quantity of culturally appropriate food for healthy and productive lives
- To influence government legislation, policy and implementation to protect the most vulnerable people by advocating for improved policies related to food security.
- To strengthen the capacity of communities and families to protect and care for their most vulnerable members by providing social, economic and other support.
- To ensure development of partner capacity to implement such programmes.

Since programme inception, Oxfam Australia has worked in partnership with eleven non-governmental organisations to improve food security in the uMkhanyakude district. The partner organisations were: Maputaland Development Information Centre (MDIC),

Ingwavuma Orphan Care (IOC), Fancy Stitch, Ubombo Drop-In Centre, Ithembalisizwe, The Crisp Trust, Alliance for Children's Entitlement to Social Security (ACCESS), Hluhluwe Advent Hope, Ophondweni Youth Development Centre, Sibambisene and Biowatch South Africa. The partner organisations addressed food security through various interventions, including:

- Relief aid in the form of food parcels and feeding schemes for orphaned and vulnerable children (OVC) and the sick
- Establishment and improvement of crop and cattle production and income generating projects.
- Advocacy for improved food security support by the government of South Africa.

The organisations and activities funded by Oxfam Australia are briefly described below. The information about these organisations was retrieved from Oxfam Food Security Programme annual reports of 2006 to 2009.

The **Maputaland Development Information Centre (MDIC)** equips members of livelihoods projects with skills and supporting a food security networking forum (MDIC, 2010). The MDIC's objectives are to empower emerging business by training and coaching, to increase community participation in policy making processes and facilitate establishment of multi-partnerships to eradicate poverty. The organization implemented a skills development programme that involved assessing community initiatives. Skills deficiencies among the project members were identified and training offered to make the initiatives viable. In addition, MDIC investigated the strengths of the projects and facilitates scaling up of those projects considered potentially viable, including Nguni (beef) cattle production, beekeeping and development of indigenous seed bank (Oxfam Australia, 2008).

The **Sibambisene Project** addresses the needs of orphans and vulnerable children and established community and household gardens that improved household food supply. The project aims to reduce the vulnerability of families and children experiencing the impact of HIV and AIDS. The project assists orphans and vulnerable children with social grant applications and provides food to child-headed households waiting for approval of social grants. They also provide food parcels to the terminally ill. As patient health improves and they gain strength, they are weaned from handouts and trained to establish household

gardens. The Jozini area has experienced recurrent drought. Therefore, water harvesting was included in the projects. Tanks are installed to harvest rain water for home consumption and irrigation of gardens (Oxfam Australia, 2008).

**Ingwavuma Orphan Care (IOC)** is an organisation that provides physical, emotional, psychological, spiritual, economic and palliative care services to people of Umkhanyakude through direct support and community mobilisation to improve health (IOC, 2010). The organisation implemented household and communal gardens for HIV/AIDS infected and affected households. In addition, they promote livelihood activities such as furniture making and sewing. In the last two years IOC reached 156 families involving 768 children (368 boys and 400 girls). IOC worked with schools to establish school gardens. IOC reported that gardening proved to be beneficial as fresh vegetables provided the necessary vitamins and minerals that boosted immune system and improved efficacy of treatment (South African Institute of International Affairs SAIIA 2010). The food gardens were sustaining school feeding scheme through provision of vegetables to the Government School feeding scheme. The diets of Orphans Vulnerable Children (OVC) improved and it was reported that children were improving their performance in school due to improved access to nutritious food. (Ingwavuma Orphan Care Food Security report, 2009) The Ingwavuma area continues to experience persistent drought. Therefore, water harvesting techniques such as use of tanks to harvest rain water adds value to food security activities. IOC embarked on promotion of fruit tree production in schools and at the household level. This initiative promoted environmental conservation due to the increased ground cover by plants. It is a conservation measure that prevents soil erosion, promotes soil fertility and promotes biodiversity (Oxfam Australia, 2008).

**Ubombo Drop-in Centre (UDC)** provides care and support for families infected and affected by HIV and AIDS living in the Ubombo District. The centre was funded to provide food to OVC's who were in urgent need of food support. An OVC feeding scheme was established. A garden project that produced vegetables to supplement the feeding scheme with supply fresh vegetables was established (Oxfam Australia, 2008).

**Hluhluwe Advent Hope** is a community based organisation that started as a soup kitchen for vulnerable and malnourished young people, many of whom were HIV positive. The organisation was initiated as a community based response to an increase in the number of

children who were not receiving adequate nutrition. The organisation has a school and home based care projects. The organisation's vision is to ensure that the most vulnerable members of their community have access to the quantity and quality of food that supports their wellbeing. They provide food to children in need and bed-ridden terminally ill patients. The organisation established a school garden and gardens for HIV- infected households (Oxfam Australia, 2008).

**Ophondweni Youth Development Initiative** is a community based organisation that provides psychosocial and economic support to young people and supports poverty reduction projects. It provides care and support to people infected and affected by HIV and engages young people in sports and recreational projects Oxfam Australia funded the poverty reduction projects that are small scale irrigation scheme and community garden projects (Oxfam Australia, 2008).

**Hot Girls Fancy Stitch** is a self-help income generating and skills development group for women living in the rural areas of the Jozini Municipality (Fancy Stitch, 2009). The aim of the organisation is economic empowerment and development of women living in poverty. The livelihood project had a membership of 450 women at the time of this study. It generated income from the artistic fancy stitched articles sold locally and internationally. In addition, the project makes paper for greeting cards. An organic production garden for their HIV support group was also established. Stories of significant impact have been documented and shared with other organisations (Oxfam Australia, 2008).

**Biowatch** is an organisation working with grassroots communities to improve food security and has a strong advocacy component essential to raising awareness and building the capacity of communities to influence policies related to promotion of sustainable solutions for agriculture (Biowatch Watch, 2008). The organisation believes that there are broader policies that prevent community members from achieving food security and food sovereignty. Biowatch focuses on agro-ecological training, advocacy and infrastructure and organisational support. Oxfam funded the KwaZulu-Natal projects on agro-ecological training, advocacy for promotion of non-genetically modified crops and development of gardens to improve household food security (Oxfam Australia, 2009).

**Ithembalisizwe** is an organisation that provides care for people living with HIV and AIDS, orphans and vulnerable children. Oxfam funded the children's feeding scheme, food parcels for the terminally ill and livelihoods projects. A bakery and a garden project were implemented. The garden produced vegetables that were used in the feeding scheme. Surplus vegetables were sold to the nearby communities. The bakery project generated income that was used by the organisation to generate income for orphaned children (Oxfam Australia, 2006).

**The Crisp Trust** received funds to facilitate a networking forum and carry out research that served as a tool for developing further strategies for helping Oxfam partner organisations and other nongovernmental organisations (NGOs) in their relationship with municipalities to implement food security initiatives for OVC and other households affected by HIV and AIDS. The research served as a basis for creation of an enabling environment for municipalities and NGOs in the area to work together and avoid the fragmentation of service delivery so as to ensure greater programmatic impact (Oxfam Australia, 2008).

The **Alliance for Children's Entitlements to Social Security (ACCESS)** was funded by Oxfam Australia to develop a collective network to strengthen the impact of advocacy for social security in the uMkhanyakude district. The objective was to strategically recruit stakeholders from the district to review policy, service and advocacy initiatives. Their objective was only partially achieved as only phase one of the planned activities was completed (Oxfam Australia, 2006).

## **4 STUDY METHODOLOGY**

This chapter focuses on the description of study area, and research methods used to collect and analyse data. The research used participatory methodologies for data collection.

### **4.1 Description of the study area**

As described in Chapter 2, uMkhanyakude District is the poorest District in KwaZulu-Natal (Stats SA, 2001). This District has a scattered rural population of 542 953 people. Figure 4.1 shows the map of uMkhanyakude District. In addition, the district is known for having the highest (45.7 per 10 000) malaria incidence in South Africa (Health Systems Trust, 2005). Poor malaria control in neighbouring Mozambique makes it difficult to effectively control the disease (Health System Trust, 2005).

Vermark (2004) reported that there were large numbers of orphans and child-headed households in the area, attributed to a high incidence (40%) of HIV/AIDS in the area. The HIV/AIDS prevalence rate was obtained from antenatal care records. Unemployment is 54% of total population and more than half of all households lack access to clean water and sanitation (Umkhanyakude District Municipality, 2005). It is, therefore, not surprising that uMkhanyakude experiences frequent cholera outbreaks.

Jozini is one of the five local municipal area found in uMmkhanyakude District. Jozini lies in the north-eastern part of KwaZulu-Natal and forms the national borders with Mozambique to the north east, and Swaziland to the north. Jozini Municipality is composed of 16 Wards and a total population of 184 091 (Stats SA, 2001). The population is largely made of people aged 15-34 years (34%). There were more females (53%) than males recorded in the national census of 2001 (Stats SA, 2001). This could have been due to the fact that men temporarily migrate to other areas in search of employment (Umkhanyakude District Municipality 2005). Brummer (2002) established that the migrant population is more infected with HIV and AIDS than the less mobile proportion of the population. High rates of HIV continue to increase the number of orphans. Ward 3 of Jozini Municipality was selected for the study. The uMkhanyakude Integrated Development Programme (IDP) Review of 2004 found that 70 566 people were not economically active and 14 136 people were unemployed.



**Figure 4-1: Map of KwaZulu –Natal indicating the research area as uMkhanyakude District** ([www.kzntopbusiness.co.za/site/municipal-structure](http://www.kzntopbusiness.co.za/site/municipal-structure))

## 4.2 Data collection

Both primary and secondary data were used for this study. A four day workshop was held in the Ophansi village of Ward three in Jozini. Pre-implementation planning of the research workshop involved meeting with political and traditional leadership to seek permission to carry out the study.

The workshop preparation involved organising for the community members to come to the Ophansi Hall for the PRA exercise. The workshop participants included traditional leadership, adult men and women, and young (18-30) members of the community. Inclusion of different categories of people helped to get people's different views. Different views and opinions matter in development programming and listening to these ensures that the aspirations of different people are fulfilled and programming is appropriate (Francis, Kilonzo, Masela and Musyoki, 2006). The research team (made up of women and men of diverse backgrounds and skills) included community development workers, were trained by Professor Joseph Francis in participatory methodologies.

The community played an integral and central role during information gathering and analysis. As a quality control measure in data collection, participants were given enough time to do the PRA exercise without being guided. Researcher explained each tool thoroughly before she asked participants to carry out the exercise while watching from a distance. In addition the guidelines agreed upon enhanced participation. Table 4.2 is a summary of the data collection tools. Participatory rural appraisal (PRA) techniques including seasonal calendars; transect walks, problem tree analysis, social mapping and resource mapping and semi-structured interviews with key informant focus group were used. Use of so many tools helped triangulate data. Triangulation refers to use of many data collection methods or tools to gather the same type of data. Triangulation of data helped to avoid biases (Francis, Kilonzo, Masela and Musyoki, 2006).

The semi-structured questions (Appendix A) were used in interviews focused on key informants that included traditional leadership, political leadership, organisations working in the Ward such as the Departments of Health and Agriculture and other stakeholders.

**Table 4-1: Tools used to collect data in Ward 3, Jozini Municipality**

Research question	Data collection tool	Description	Application of method
What are the socio-economic factors causing food insecurity in Ward 3?	Seasonal calendars	All major changes that occurred within the rural year are represented including those concerned with climate, cropping patterns, livestock and labour demand. There was room on the calendar to include the types of problems and constraints and pointed out opportunities.	Availability of abundance of different resource species in a year was understood. Periods of non active or non availability were identified
What are the socio-economic factors causing food insecurity in Ward 3?	Problem tree analysis	Started with brainstorming of major problems. A tree for each problem was drawn by different groups. The tree trunk represented the problem, the roots the causes and the branches the effects. Effects developed secondary effects on secondary branches higher up. Thus a cause-effect chain was developed.	It was desirable for the identification of core problems, effects and root causes. It also clarified and device strategies for tackling the problem. It gave a simplified view of cause and effect relationship.
What are the socio-economic factors causing food insecurity in Ward 3?	Transect walk	The researcher, key informants, people from the area conducted walking tour through areas of interest to observe, listen, identify different zones and conditions and ask questions that identified problems and possible solutions.	Helped researcher to understand the socio-economic conditions of villagers, access to resources for different stakeholders groups (traditional, modern, industrial), and possible options for responsible management of natural resources. Also revealed multiple uses of various

Research question	Data collection tool	Description	Application of method
			ecosystems in the environment, influence of other sectors in the natural environment such as pollution, siltation Areas of joint use with other sectors and possible areas of conflict with other resource users were pointed out.
What do people of Ward 3 of Jozini Municipality regard as food insecurity?  What are the socio-economic factors causing food insecurity in Ward 3	Semi-structured interviews	Semi structured interviews used some predetermined questions and topics but allowed new topics to be pursued as the interview developed. The interviews were informal and conversational but carefully controlled. The researcher not only had to be an effective communicator but also a good listener and quick thinker.	They helped in studying the villagers' perceptions of resource management, changes in the resource systems and trends in resource utilization. Helped understood villagers' perceptions of causes of food insecurity. The process allowed the quieter or shy individuals to voice their opinion, which was not possible in groups.
What do the people of Ward 3 of Jozini Municipality regard as food insecurity?  What are the socio-economic factors causing food insecurity in Ward 3	Social and resource Mapping	Community participants were asked to draw a simple map or diagram of their area. This exercise generated knowledge and information regarding the physical features, infrastructure, geographical distribution of households; names of resource people in the community.	Helped to draw out the indigenous knowledge of the community with regard different resources in the area, and possible means of maximising utilization without overexploitation it.
What are the socio-economic factors causing food insecurity?	Historical timeline	This was a simple means of establishing the chronological sequence and relative	Helped to understand the cycles of change and focused on future actions and

Research question	Data collection tool	Description	Application of method
		importance of events. Major historical events and changes were dated and listed.	information required. The historical timeline explained the changes in availability of resources, down the years and villagers' response to changes in the resource composition and quantity.
What are the socio-economic factors causing food insecurity?	Wealth ranking	A simple socio-economic tool that was used to learn the ways in which people's wealth or well being differed from one another.	Ranking helped to understand the relative access of different resources to different sections of the society.
What are the socio-economic factors causing food insecurity?	Simple ranking	A tool that was used with a large group to find out community needs.	Ranking helped to understand the relative access of different resources to different sections of the society.
What are the socio-economic factors causing food insecurity?	Pair-wise ranking	A tool used to prioritise the identified needs. It focused on concerns or strengths of opinions of informants.	It helped to identify the top priority needs of the community.
What are the socio-economic factors causing food insecurity?	Venn diagramming	A tool that was used to identify organisations, groups and important persons actively involved in the development of Ward 3. The tool revealed how the organisations relate to each other in terms of interaction, cooperation, information sharing and service provision.	The tool identified the organisations working in the area and how they relate to each other.

Secondary data (reports by government departments, non governmental organisations, research papers, baseline survey reports) from available literature on food issues in Jozini Municipality was analysed. Secondary data analysis provides a cost effective way of gaining a broader understanding of issues under investigation (Francis, Kilonzo, Masela and Musyoki, 2006). The secondary data provided a baseline with which to compare primary data collection results. The process involved collection of information, statistics and other relevant reports related to demographics, agro-ecological climatic zones, poverty levels, livelihood systems, formal and informal employment, wages, education and health. The secondary information was valuable in identifying critical areas of interest that were investigated during primary data activities.

The workshop took place over four days, with each day starting with a prayer given by one of the participants. Forty four people participated in the four day workshop. On average, the daily workshop attendance was 61%. On day 1, 55% of the 44 people who participated in the PRA activities were present. The attendance increased to 70% on day 2, 61% on day 3 and 64% on the last day. Lunch was provided every day. A set of semi-structured interview questions focusing on food insecurity and HIV and AIDS was given to each group to discuss and prepare a plenary presentation. Each group selected a Chairperson and Reporter. In order to ensure that the views of each participant were not suppressed, it was imperative to set ground rules for the community engagement. Five principal ground rules were agreed upon. The rules agreed upon were:

- One person should speak or contribute to the PRA's exercise at a time;
- Everyone should be accorded an opportunity to share his/her thoughts;
- Consider and respect everyone's opinion;
- Encourage open and free discussion

A register was taken at the start of the workshop to record the profiles of participants. The register included names, village, whether youth or adult, marital status, level of education and gender. These were all fundamental demographic statistics that complemented the qualitative data. Demographic data were linked with qualitative data or views in the analysis.

On the first day of the workshop, the researcher explained the purpose of the community engagement and outlined the planned activities for the first day. Participants introduced themselves. Three groups were formed for purposes of discussing food insecurity, HIV and

AIDS issues. One group was made up of entirely young people, aged less than 35 years. The other two groups had a mixture of men and women.

After discussing the semi-structured interview questions and reporting back on HIV/AIDS, a historical timeline for the village was constructed. The historical timeline was constructed to analyze the Ward's past, with the objective of giving a quick impression of how events evolved over the years. Three groups were randomly constituted by asking the participants to count 1, 2 and 3. Those that counted 1 were grouped as group 1, 2 as group 2 and 3 as group 3. Each group was tasked with producing a historical timeline, through recalling and brainstorming the major and most significant past events dating as far back as they could remember. This information was recorded on large flipcharts, each subdivided into three columns. In the first column, the *year* when the event took place was recorded whilst in the second and third columns, the *major events* and *comments or significance* were entered. Eventually, the three historical timelines were consolidated into one, through consensus.

On day two, the research team facilitated a reflection exercise focusing on the deliberations and achievements of the first day, including identifying gaps in the information discussed. Unclear issues were explained and discussed. As was the case on the first day, three groups were constituted. One group comprised of elderly women only. This group was formed at the request of the women participants who felt they had critical information on food insecurity and HIV and AIDS, which they could not talk about in a mixed gender group. Another group was made up of young people. The last group consisted of men and women. While the women-only group was deliberating on HIV and AIDS and food security issues, the other two were each drawing a map of Ward 3.

Mapping is a tool used to gather information on community landmarks, infrastructure, social structures, settlement patterns, markets and residential areas (Francis, Kilonzo, Masela and Musyoki, 2006). Using local materials such as stones, bottles and bottle caps, among others, participants drew a map on the ground (Figure 4.2). They started by drawing the boundaries of the Ward, followed by roads, other infrastructure and environmental conditions. Drawing the map took long due to the fact that disagreements and discussions took place before certain features could be entered onto the map. Most participants were excited about being involved in such exercises and discussions, which motivated more of them to actively contribute. One male participant disagreed with the rest of his group members so much that he decided to

[illegible]

On the third day of the workshop, a seasonal calendar, group discussion on what constituted wealth and key informant interviews were used to analyze the local circumstances in the Ward. The seasonal calendar is a PRA technique used to analyze how community conditions fluctuate over the year (2006). Three random groups of community members were formed. Using seeds to represent how rainfall, food availability and income fluctuated over the year, the participants developed seasonal calendars. Months of the year were written in chronological order on the ground, after which seeds were allocated to each month based on commonly agreed arguments within the group (Figure 4.3). The seasonal calendars were then entered onto a sheet of paper. In the plenary sessions, each group presented its findings.



**Figure 4-3: A group of community members involved in seasonal diagramming of income, food and rainfall trends in Ward 3 of Jozini Municipality in Umkhanyakude District of KwaZulu-Natal Province (2006).**

To discuss the meaning of “wealth” in Ward 3, two groups were formed. One group was made up of those aged under 30 years. The other group comprised of participants who were over 30 years. This grouping was done in order to establish if age influenced the views expressed.

On the final day of the workshop, three discussion groups were formed randomly. Participants brainstormed the major causes of food insecurity and the spread of HIV and AIDS in Ward 3. Facilitators then explained how to construct problem trees. Problem tree analysis is a tool used to identify core issues, root causes and related effects (Francis, Kilonzo, Masela and Musyoki, 2006). Participants constructed the problem trees using *isiZulu*. Translation into English proved very difficult as in some cases, what the participants actually meant was lost. This was due to the fact that there were no appropriate or suitable English terms for some *isiZulu* words. On the last day, workshop participants went on a transect walk.

Instead of relying solely on ordinary community members as sources of information, officials of the Departments of Agriculture and Health were interviewed as key informants. An Agricultural Technical Officer represented the Department of Agriculture, while an HIV and AIDS Counsellor based at the local clinic were interviewed by the researcher.

### **4.3 Data Analysis**

Data analysis involved a range of processes and procedures. The data collected from PRAs on the food security situation in Ward 3 was in the form of explanations, diagrams and maps. During the process of examining the data, common trends were identified across the different PRA methods used. First, the mass of data was organized and meaningfully reduced and reconfigured. Data reduction involved a process of selecting, focusing, simplifying, abstracting and transforming the data that appear in written up field notes or transcriptions, maps, charts and pictures (Miles and Huberman, 1994). Not only did the data need to be condensed for the sake of manageability, they also had to be transformed so as to give meaning in terms of the issues being addressed.

The selective winnowing was difficult to achieve because qualitative data was very rich and took time to analyse. Words that make up qualitative data represent real people, places and events far more concretely than the numbers in quantitative data sets (Miles and Huberman, 1994). Attention was given to data relevant to answering sub problems of this study.

Conclusions were drawn by stepping back to consider what the analyzed data meant and assessing the implications for the questions at hand. Verification entailed cross-checking to verify emerging conclusions. The meanings emerging from the data were tested for their plausibility and ‘conformability’, meaning their validity (Miles and Huberman, 1994: 11).

## **5 RESULTS AND DISCUSSION**

This study investigated the local understanding of food insecurity and the socio-economic causes of food insecurity in Ward 3 of the Jozini Municipality. To address the study problem, two sub-problems were investigated. These were as follows:

**Sub problem 1:** What do people of Ward 3 in Jozini Municipality regard as food insecurity?

**Sub problem 2:** What are the socio-economic factors identified by the local that cause food insecurity in Ward 3 in the Jozini Municipality?

Forty-four residents of the Ophansi Village participated in the four-day PRA activities. However, only 11 participated in all sessions over four days. Thirteen participated in three of the four days, seven for two days and 13 for one day only. On average, daily attendance was 61%. On day one, 55% of the 44 people who participated in the PRA activities were present, which increased to 70% on day two, 61% on day three and finally, 64% on the last day.

Of the 44 participants, 75% were female. Youth and unmarried individuals constituted 34% and 61% of the total number of participants, respectively. Only two participants (5%) had never attended school, with one indicating she was an Adult Basic Education Training (ABET) learner. Three women did not disclose their highest educational qualifications. One participant was a Community Development Worker. Almost a third (32%) of the participants had matriculated. While 18% of participants had acquired primary (Grade 1-7) education, about 32% had completed secondary (Grade 8-11) school. A local Agricultural Technical Officer participated on the second day of the workshop only.

### **5.1 Overview of Ward 3 as presented by the workshop participants**

The workshop tools included a number of activities in which the participants described their environment and discussed food security. This sub-section presents the outcomes of the activities carried out. The descriptive features of Ward 3 are presented in figure 5.1. These features were derived from the natural and resource mapping; transect walk, venn diagramming and the group discussions by the workshop participants. The features included the integrated natural and agro-ecosystems observed during the study. The figure shows

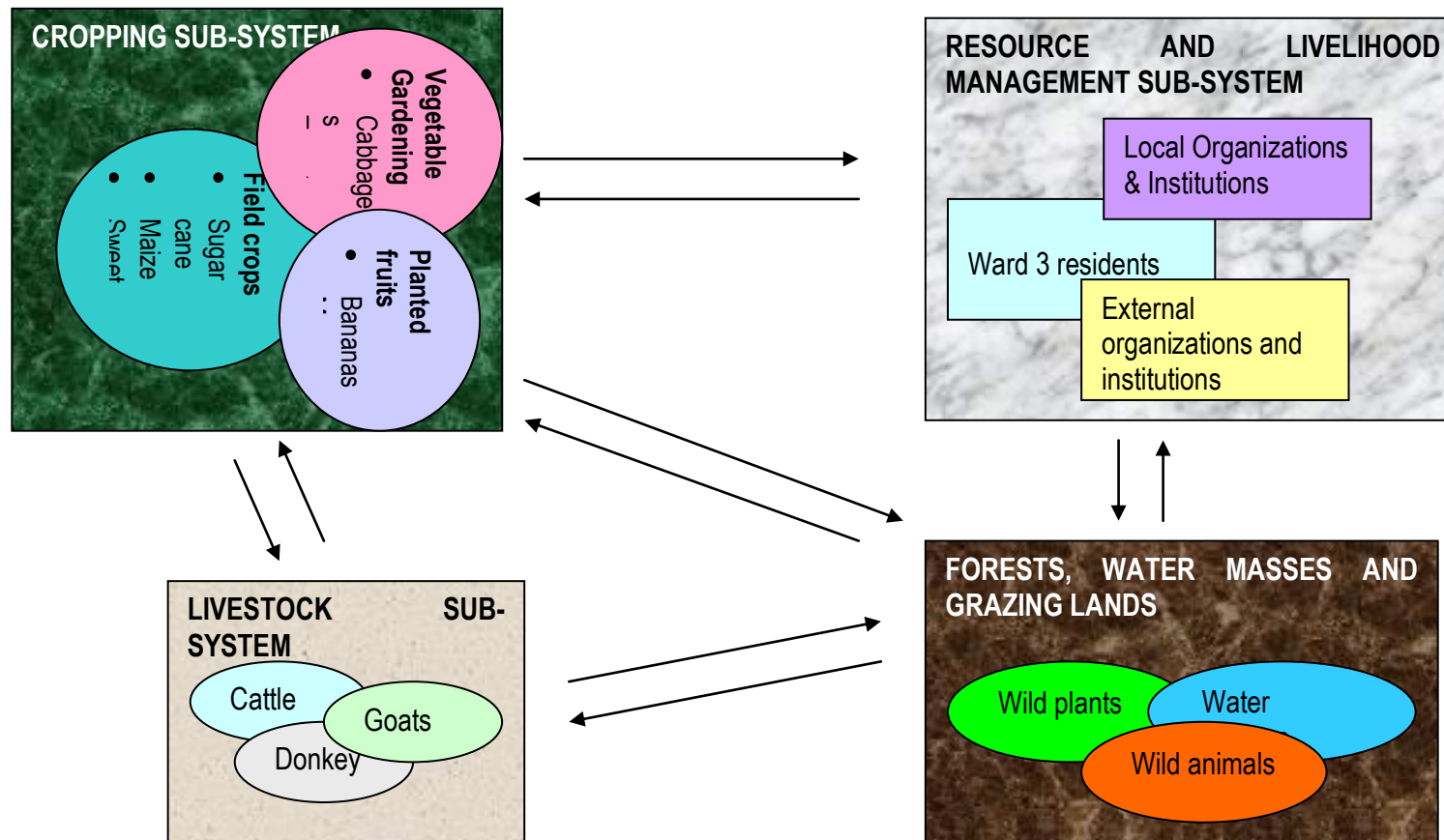
vegetation profiles, natural resources and social and essential community infrastructure, among other descriptors as described by the participants.

The homesteads in the Ward were widely scattered across Cezwane, Donsa, Ekuveleni, Ezinyokeni, Hlohlweni, Mozi, Nhlangano and Ophansi villages. The participants thought it would be very expensive to provide essential services such as electricity, water and others to the local population.

Clay bricks, cement blocks and traditional building materials (poles, mud, thatching grass) were used to construct houses. Very few houses had corrugated iron roofs. Most homesteads did not have toilets. The chances of polluting water sources with human waste were very high. This was worsened by the fact that residents fetched water for domestic purposes from local streams and rivers, all of which were unprotected.

A perennial river passed through the Ward and was a tributary of the Mkuze River. Fish, hippos and crocodiles were common in the river. Local residents relied on the river for water for domestic purposes. Because the water was of good agricultural quality (not saline), it was suitable for irrigation purposes. Four mainly wetland (flood plain) sites were observed. This was where residents established their vegetable gardens.

One part of Ward 3 was occupied by the Emakhosini forest, which was the traditional burial site for local Chiefs. *Marula* trees were abundant. Community members reported that they collected *Marula* tree seeds and initiated an indigenous tree nursery project. Trees were sold to generate income. Seeds were also collected and used to make gravy powder for cooking. Nuts were ground into powder. Plans were under way to start an *Amarula* jam project. In this respect, they had already approached a local non-governmental organization (NGO), Maputaland Development and Information Centre (MDIC), for assistance.



**Figure 5.1: The integrated natural and agro-ecosystems of Ward 3 of Jozini Municipality showing the interrelatedness of the sub-systems (2006).**

The *Tamboti tree*, a strong and termite resistant tree, was prevalent. Locals made construction poles out of it. Livestock relied on Tamboti trees for browse, especially during the dry season when feed was least available. There were also false Tamboti trees, which were used to make trays used for serving meat.

*Acacia trees* were also common in the forests. Many green thorn trees (*Umnulu*) were observed. Community members made steam pots and spoons out of this tree. Another thorn tree growing in Ward 3 was the Buffalo thorn (*Umlahlankosi*), which was of great traditional value. Local mothers used the sausage tree (*Mvongothi*) as traditional medicines. *Umviyo* and *Uqondo* trees were also observed. *Fig trees* were mainly concentrated close to riverine or swampy areas.

The sisal plant was found growing in many parts of the Ward. Doormats and table mats were made out of it. The ‘mother-in’s law tongue’ plant was regarded as an outdoor flower. Its other uses were medicinal, particularly treating ear infections. The fever tree (*Umkhanyakude*) was widespread in local forests. The uMkhanyakude District is named after this tree.

Local residents reported that they extracted medicines for treating stomach ailments or other diseases using the widespread orange monkey thorn tree and red spark thorn trees. The *Natal Mahogany* was also a major feature of the forest vegetation. It was disclosed that a mixture of the berries of the Mahogany and sweet potatoes was commonly consumed by the local people.

Kikuyu grass and *Sporobolus pyramidalis* were predominant. While Kikuyu grass is valuable grazing for domestic and wild animals, *Sporobolus* is not. Instead, it is a vigorous invader species which reduces the grazing value of the natural veld. It is always advisable to manage grazing lands such that the population of *Sporobolus* is substantially reduced (Teklu, Neggesse and Angassa, 2010).

Three main roads linked Ward 3 with surrounding areas. Two roads, namely R22 and D820 that led to Mkuze Game Reserve, were tarred, while the remaining one (DA20) was gravel. Two major bridges were found on the R22 and D820 roads. In addition, there is the old Mozi dirt road which links the Ward to Mbazwana town.

One clinic served Ward 3. In addition to this, there were three mobile clinic points. Six nutrition garden projects were said to be vital to the health and wellbeing of local residents. The 23 tuckshops, a cattle sale site, dip tank and a small hardware shop were classified as critical economic establishments.

Various administrative, educational, sporting and spiritual establishments existed in Ward 3. These included the following:

*Administrative:* Tribal (traditional leadership) office;

*Educational:* six crèches; five primary schools; one secondary school; and one high school;

*Sporting:* eight open football fields;

*Communication:* mobile post office and phone service point;

*Social amenities:* a community hall; and

*Spiritual:* four churches.

Through Venn diagramming, participants in the PRA exercises also identified Government Departments (Welfare, Agriculture and Health), Traditional leaders, community volunteers and health workers, the Community Development Workers (CDW), churches (especially Pastors), *Isiphephelo sejuba* (food garden for the infected and affected households) and Ubombo Drop-in Centre, Water Users Association and Jozini local Municipality as the most critical institutions and organizations that were working with the residents of Ward 3 to address food insecurity and HIV and AIDS issues. The residents did not identify the local Councillor, including the Ward Committee, as critical stakeholders.

### **5.1.1 Wealth and livelihoods**

According to the participants, a wealthy person was an individual who had everything he/she wanted. In general, youth (<30 years old) and adult (aged >30 years) groups had similar views on what constituted wealth and poverty. However, as shown in Tables 5. 1 and 5.2, it seemed there were slight but distinct perceptions.

**Table 5.1: Age-disaggregated indicators of wealthy households in Ward 3 of Jozini Municipality in Umkhanyakude District of KwaZulu-Natal Province**

Signs	Discussion Group highlighting the sign	
	<30 year olds	>30 year olds
1. Having a lot of money	✓	
2. Owning a large beautiful house	✓	✓
3. Owning livestock	✓	✓
4. Owning many cars	✓	
5. Children attending expensive Schools	✓	
6. Employing domestic workers	✓	
7. Owning large fields	✓	✓
8. Having many wives	✓	
9. Having businesses	✓	✓
10. Good job		✓
11. Owning tractors		✓

**Table 5.2: Age-disaggregated indicators of poverty households in Ward 3 of Jozini Municipality in Umkhanyakude District of KwaZulu-Natal Province**

Signs	Discussion Group highlighting the sign	
	<30 year olds	>30 year olds
1. Children do not attend school because of lack of money	✓	
2. Unemployed	✓	
3. Begging from neighbours		✓
4. No decent clothing		✓
5. Homelessness/no shelter		✓
6. Lack of food	✓	✓

The residents of Ward 3 kept cattle, donkeys and goats. A considerable number of households in Ward 3 did not own livestock. Although not much information was made available on the roles they played in the local agro-ecosystems, both cattle and donkeys were

reported to be sources of draught power for crop cultivation and transportation of goods, respectively.

According to local Zulu culture, a herd of 10 cattle was normally paid to the bride's parents as *lobola* payment or dowry. Ownership of cattle was an indicator of wealth. This was revealed by the participants during the wealth ranking exercise. Cattle were often sold in times of need, for example to raise cash for school fees and buying food. Recurrent droughts, violent winds and storms, floods and other natural catastrophes killed large numbers of livestock, thereby further plunging affected households into poverty and food insecurity.

Maize, sweet potatoes, sugar cane and horticultural crops (mangoes, bananas, tomatoes, spinach, sweet potatoes, beetroot and cabbages) were commonly grown in Ward 3. Runner beans were observed growing in some household backyards. The vegetables listed above were mainly grown in *Isiphephelo* Community Gardens. Individual families established vegetable garden crops on river banks. Some vegetable garden owners talked to during the transect walk on day four of the workshop indicated that gardens were critical in providing food for their families and also generating income for household use. The soils on which the vegetables were grown were so fertile that the owners did not see it fit to apply any manure or commercial inorganic fertilizers.

Sugar cane was considered the main crop. Local residents used it for brewing beer. It was reported that sugar cane grew higher in the local fields compared to commercial farms. The local residents attributed this to the highly fertile soils where the crop was planted and the wider spacing of the plants. Although the farmers could market the sugar cane at a nearby mill, most growers did not have transport to ferry it. At harvesting time, they collectively hired trucks to transport the cane to the mill. However, petty squabbles made it difficult to organize and collectively transport the sugar cane.

The Mkuze Game Reserve is bordering the Ward. Unemployed men from the Ward poached animals in the Game Reserve. This was said to be a food insecurity-mitigation strategy employed by local residents.

### **5.1.2 Major Past Events in Ward 3**

Table 5.3 shows a historical timeline constructed by the residents of Ophansi Village, covering the period 1912-2005. The timeline shows a wide range of life-improving events and critical shocks that shaped people's livelihoods in the area. Various natural vagaries namely floods, locust invasions and droughts, diseases (e.g. HIV and AIDS) as well as man-made situations (establishment of Mkuze Game Reserve and construction of Jozini Dam) entrenched the local population in food insecurity and poverty.

The most common shock was the impact of HIV and AIDS on community livelihoods. Lack of food among the infected people led to faster AIDS progression and death especially of breadwinners. Thus many households with deceased parents were reported food insecure. Household food insecurity was also exacerbated by the prolonged drought.

Although the game reserve and Jozini Dam were designed to improve the people's livelihoods, the intended beneficiaries remained bitter because they had not yet significantly benefited from them. Actually, Mkuze Game Reserve was a major source of the community's anger and source of feelings of betrayal. The historical timeline highlighted many painful experiences and sorrows of the local population. The information distilled by the residence of Ward 3 answered the research questions investigated in this study.

### **5.2 What do people of Ward 3 in Jozini Municipality regard as food insecurity?**

This section summarises what participants regarded as food insecurity. Table 5.4 summarises answers to critical questions asked on food insecurity. Food insecurity was regarded as a problem that led to collapse of the household unit and eroded dignity of household members. Many problems were attributed to food insecurity. These were alcohol and drug abuse by men due to frustration. The sick were said to have defaulted from taking treatment against ailments such as tuberculosis and AIDS due to lack of food.

Households that were reported food insecure were child-headed, households with diseased breadwinners and households without land for crop production. The participants said very irregular smoke was seen from kitchens of food insecure households, indicating that they had nothing to cook. The coping mechanisms of food insecure households were begging from

neighbours, harvesting of natural resources such as grass and fish for sale, poaching wild animals, brewing and selling traditional beer and working in other people's fields for payment in the form of food.

Food insecurity was reported to be most critical between May and September (Figure 5.2). Forage for cattle which mainly relied on natural grazing was limited during this period. Though participants were not aware of policies and programmes that were dealing with food insecurity, they suggested interventions that would help in addressing food insecurity.

Food insecurity was most serious in Ezinyokeni village. This situation was attributed to the predominantly granitic sands in the village, which could not support high crop production. There were no vegetable gardens. Nhlanganano village had more fertile soils than other villages and there was a more reliable water supply. Thus, the food security situation was far better than other villages in Ward 3. Although water was readily available in Mozi village, there was very little agricultural activity, mainly because its residents were lazy (participants' perception). Added to this was the fact that there was no technical support from the Department of Agriculture. Although water was available, a lot of land in Ophansi village was not utilized. This was due to the fact that older people who owned most of the land were too old to utilize it. Worse still, they did not want to let the able-bodied people make use of the land.

This section summarises what was regarded as food insecurity by the people of Ward 3 of Jozini Municipality. Food insecurity was regarded as hunger that resulted in many socio-economic effects such as collapse of household unity and stability that enhanced erosion of dignity among household members. Hunger was commonly associated with "not eating enough". Other effects of hunger included household heads, especially men, resorting to alcohol and drug abuse as a way of escaping from indignity. The youth were said to be involved in crime, prostitution and alcohol abuse. As a result of hunger, sick people defaulted from taking treatment against TB and AIDS. Very irregular emissions of smoke from kitchens of food insecure households indicated that they had nothing to cook and eat. The people of Ward 3, Jozini revealed the choices made in the context of limited income to buy food. The choices included migration to urban areas in search of employment, women resorting to sex work, livelihoods activities such as gardening and craftwork. In the absence of an adult, many child headed households were said to be food insecure.

**Table 5.3: Major events that took place in Ward 3 of Jozini Municipality over the years and their significance**

<b>Year</b>	<b>What happened</b>	<b>Significance or comment</b>
1912	Mkuze Game Reserve was proclaimed. Fencing started.	People were no longer allowed to hunt and collect natural resources.
1934	Swarm of locusts.	Vegetation and food crops were destroyed.
1955-1962	Expansion of Mkuze Game Reserve.	Forced removal of people from their original home areas.
1960-1970	Construction of Jozini dam.	People died during the construction of dam. Animals died in sand holes dug in rivers to help animals get water to drink. Severe drought was perceived to have been brought about by dam construction.
1982	Construction of Ophansi clinic, mainly for family planning and immunisation.	People were now treated locally and no longer travelled long distances. Significant improvement in health care.
1983	Construction of Traditional Authority Offices (the then Tribal Authority).	Court proceedings were now conducted under sheltered structures.
	Severe drought.	Death of livestock. Nothing was harvested from the fields. Severe starvation.
1984	Demonia floods.	Many people and livestock drowned. Homes were destroyed; Fields were washed away and sand was deposited on fields. The resulting poor soil fertility demanded more effective soil fertility management.
1985	Construction of Mabandleni High School.	School close to homes and many children could go to school. Fewer dropouts.
1993	Theft of cattle: War between cattle thieves and community.	People were arrested and some killed. Loss of cattle worsened food insecurity.
1994	First free and fair election:	Democratic South Africa but tractor incident

Year	What happened	Significance or comment
	Tractor transporting elderly people to from a voting station overturned and all passengers died.	dampened the celebrations.
1998	Five teachers from one school were killed by gangsters.	One teacher organized the killing because he was fired for using fake qualifications. This was another black day in the community's life.
1999	Training of volunteers by Department of Health focusing on home-based care for HIV and AIDS infected and affected people.	People became more and more aware of HIV and AIDS issues, including prevention, care and support.
	Pipes were laid down for water supply from Jozini dam.	Till today, water has not yet reached the community.
2000	Floods	Roads were washed away. Houses, fields and animals were destroyed. Food security greatly compromised and poverty worsened.
	People started dying of AIDS in the community.	Death of breadwinners exacerbated poverty and created a social burden for the community to care for orphans and vulnerable children.
2001	Construction of Ophansi community hall.	Various community events could now be held in the hall.
2005	Construction of bridge to Mkuze Game Reserve.	Creation of craftwork market. Tourists passing village to Game Reserve buy crafts. Improved access to Game Reserve, making it easier to poach animals.
2006 Onwards	Escalating food prices	Many households became food insecure.

**Table 5.4: Critical questions on food security that were answered by the participants at Ophansi Community Hall, Ward 3 of Jozini Municipality in uMkhanyakude District of KwaZulu-natal Province (2006)**

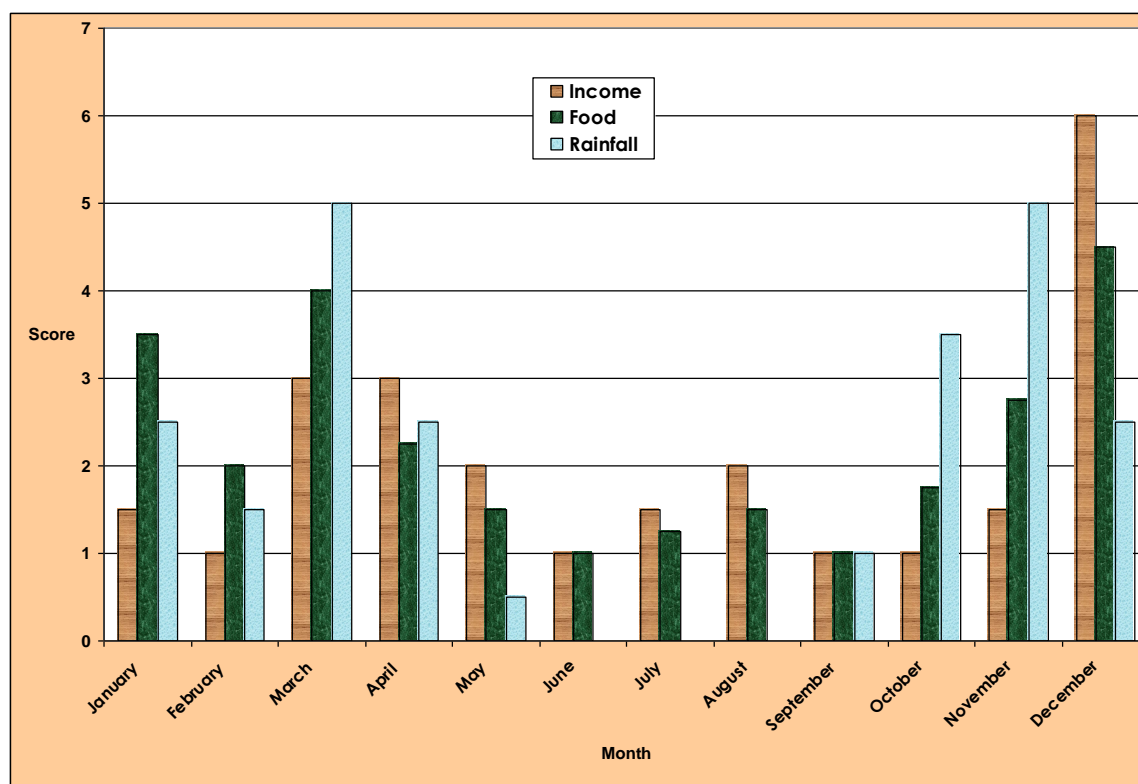
Question		Answers from participants
1	What does food security mean?	<p>The participants answered the question by mentioning the outcomes of food insecurity as follows:</p> <p>Collapse of household unit and stability;</p> <p>Erosion of dignity of household members;</p> <p>Frustrated household heads especially men, with most of them resorting to alcohol and drug abuse as a way of escaping from the indignity;</p> <p>Youth involvement in crime, prostitution and alcohol and drug abuse;</p> <p>People defaulting from taking treatment against ailments such as tuberculosis and AIDS;</p> <p>Compromising defence against diseases and thus many opportunistic infections were common in the area; and</p> <p>High levels of crime (e.g. theft)</p>
2	What are the indicators of food-secure household?	<p>At least one member of the household working, who provides basic necessities;</p> <p>Owning livestock (cattle and small stock such as goats);</p> <p>Possession of arable land;</p> <p>Peace and happiness in the household;</p> <p>Physical appearance of household members: those from food-secure households are bright skinned and clean since they have cash to buy soap and clothes (<b>point emphasized by young people</b>)</p>
3	What type of households are not food secure?	<p>The many child headed households;</p> <p>With diseased breadwinner;</p> <p>Without land for crop production- cultivated very small portions that yielded almost nothing ( growing crops for survival);</p> <p>Very irregular smoke from kitchens of households indicated they had nothing to cook and eat;</p> <p>With pale-skinned and physically weak family members;</p> <p>Members wear poor and cheap clothing</p> <p>Without shelter;</p>

Question		Answers from participants
		Earning a living from child support grants of only R190 per month, old age pension and disability grants; and Survive on selling handicrafts only.
4	Why are some households not food secure?	Have no access to cash to buy food; Sick people who are not physically strong enough to work; Orphans living on their own ( at times some are too young or sick to take care of themselves); and Laziness.
5	How do food insecure household cope?	Begging from neighbours; Growing vegetables gardening for home consumption and selling surplus produce; Working in other people's fields in return for payment in the form of food; Harvesting natural resources, e.g. grass, fish, etc. for sale; Brewing and selling traditional beer; Selling water and Poaching wild animals.
6	Which local organisations are helping the food insecure households?	Isiphephelo Sejuba (food garden for infected and affected households).
7	Which external organisations are helping the food insecure households	Government Departments ( Social Welfare; Agriculture; Health); Ubombo Drop-in Centre.
8	Which months of the year is food insecurity a major problem?	Food insecurity was reported to be most critical between May and September, with the latter being the worst months (Figure 5.2). Apart from cereal deficit, forage for cattle which mainly relied on natural grazing was also limited. As a result, cows produced very little milk, with many household members being deprived of cheap and readily

Question		Answers from participants
	Why?	available milk for consumption.
9	Where do we find food insecure households?	Along sandy soils such as Hlohlweni, Donsa, Ekuveleni, Ezinyokeni and Mozi villages. Water availability was very low and unreliable. Most people in these areas were said to be sick. Community members argued that it seemed that inadequate water exacerbated. Sickness among community members.
10	Which policies and programmes are dealing with food insecurity?	Grants (foster care and disability) were mentioned not the actual policy. Uzibambele, which focused on poverty reduction and involved community in cleaning roads (implemented by Department of Transport); and Xoshindlala; implemented by the Department of Agriculture involved construction of small dams and community gardens.
11	How do you think the government can address food security issues?	Through creating a conducive environment for local people to access funding for agricultural projects, seeds, fencing materials for arable fields, etc. Introducing irrigation schemes; and Developing community projects or programmes.
12	How do you think the local leadership can help in addressing food insecurity?	Allocating land to needy members of the community; Creating networks that communities could tap into, for example bringing together government departments and nongovernmental departments (NGO's), among other major players to work collaboratively for the good of the community; and Facilitating community and problem solving.

### 5.3 What are the socio-economic factors that cause food insecurity in Ward 3 in Jozini Municipality?

The PRA tools used to identify the socio-economic factors affecting food insecurity in Ward 3 were the seasonal calendar, problem tree analysis, transects walk, social and resource mapping, historical timeline, ranking, venn diagramming and focus group discussions. The key socio-economic factors that were causing food insecurity in Ward 3 of Jozini municipality were poverty; HIV/AIDS; unemployment; illiteracy; low crop production due to drought; limited access to resources such as water and arable land and the breakdown of family social fabric. The participants revealed the major changes in food, income and rainfall availability that occurred within the rural year through participation in seasonal calendar activity. The activity provided room to identify problems, constraints and opportunities. The Ward seasonal calendar is described below.



**Figure 5.2: Changes in rainfall, household food and income availability in Ward 3 of Jozini Municipality in Umkhanyakude District of KwaZulu-Natal Province.**

**Food:** Food availability was high in January, with stokvels and remittances being the major contributors. There were also food supplies from fields. Less food was said to be available in February because households had over spent during the festivities, as well as school-

related expenses such as fees and uniforms in January. In March and April, there was enough food in the household. This was obtained from fields. Between May and September/October, food shortage was most critical because crop harvests were so poor that they could not last until the next growing season. Quantities of maize were very small. Gardens provided vegetables during this period.

The supply of food starts to increase in October and peaked in December. Stokvels and remittances from working relatives boosted the food supply. Pumpkins from fields complemented the household food supply.

**Rainfall:** The rainy season extended from September to early May (Figure 5.2). In November and March, the highest amounts were received. It was argued that the rainfall pattern was so erratic that it was not easy to predict or make informed decisions with respect to when to carry out critical crop farming activities such as planting. Unlike in the past the September and October rains insufficiently soaked soils and were insufficient to promote seedling emergence and germination. The rains received in March caused the dry maize to germinate before being harvested, thus adversely reducing yield and quality.

**Income:** In January, there was very little available cash in the household because of expenses incurred on festivities and school fees. Social grants were the only major recognizable source of cash in February. Towards the end of March, cash was generated through the sale of onions and spinach. These sales increased in April and May. In June, there was very little available cash. Sale of sweet potatoes brought considerable amounts of cash into the households in July. In August, spinach and cabbages contributed to most of the available cash. Land preparation and field crop input expenses took away most of the cash in September and October. Thus, serious cash flow problems were experienced during these months. In November, there was an upturn in cash availability, mainly contributed by migrant workers, who normally received their annual bonuses during that time. Lastly, in December, households had large amounts of cash at their disposal. Bonuses, stokvels and remittances from migrant working relatives, among others, were the principal contributors of the available cash.

## **Views of Agricultural Technical Officer**

The Agricultural Extension Officer was one of the key informants interviewed. He revealed that food insecurity in Ward 3 emanated from droughts experienced, leading to crop failure. Only those people who were participating in irrigation schemes such as that at Ndumo were food secure. These people achieved high crop yields and production, and even had surplus, which they sold. Some families could not afford one decent meal a day. Ward 3 was one of three most food-insecure areas in Jozini Municipality. The others were Wards 14 and 16.

Households coped with food insecurity through incomes from old age pensions and other social grants. Men poached animals from Mkuze game reserve. Heavy beer drinking was a major contributor to the spread of HIV, since intoxicated men forgot to protect themselves when they had sex. Poverty made many families and individuals vulnerable. High levels of illiteracy and limited skills did not offer locals many choices to earn a decent living. Desperate women resorted to risky commercial sex.

Some women travelled from the Ward to Jozini town to sell vegetables and craftwork. When they failed to sell and raise enough cash for their own upkeep and to return to their villages, they ended up engaging in commercial sex (at times, unprotected). HIV and AIDS exacerbated food insecurity, especially when households sold their assets in an effort to seek treatment for sick family members.

Thus the need to develop the capacity of Municipality employees such that they became development-oriented was emphasized. This argument originated from the perception that the municipal integrated development plan (IDP) did not address the actual needs and aspirations of local residents. Also, it was claimed that too many surveys were being carried out, with very little meaningful action thereafter.

Political tension between Inkatha Freedom Party (IFP) and the ruling African National Congress (ANC) members was hindering implementation and effectiveness of development initiatives. Furthermore, corruption in government, especially in Municipalities was rife.

The Department of Agriculture was said to be grossly understaffed. Few people preferred to work in areas that were as remote and rural as Jozini Municipality since there were no

incentives such as “hardship allowance” or staff development opportunities for them. Employees who died or resigned were never replaced. Lastly, the Agricultural Technical Officer believed that the challenges of food insecurity exacerbated by HIV and AIDS that prevailed in Ward 3 required a holistic approach to resolving them. No one organization or institution had the capacity to competently deal with them.

### **5.3.1 HIV/AIDS in Ward 3 of Jozini Municipality**

HIV/AIDS was a factor that perceived as a most significant factor affecting food insecurity in Ward 3 of Jozini municipality. The impact of HIV on community food security was clearly elaborated by workshop participants. The historical timeline (Table 5.3) indicated the year that the HIV/AIDS problem started in Ward 3 Jozini Municipality. Through participation in social and resource mapping, participants’ identified Mozi and Nhlangano villages as the most HIV and AIDS-affected. It was explained that the HIV and AIDS prevalence in the two villages resulted from the fact they were most visited by tourists. The tourists were usually observed picking up women from the villages, especially at night. Mozi village had the largest population in the Ward. Yet, there was limited agricultural activity in the village nor was there a clinic and noticeable local HIV and AIDS education. It was also reported that there were no HIV and AIDS volunteers and care givers in the village. Residents of Mozi and Nhlangano were moved from their original homes to pave way for the establishment of Mkuze Game Reserve.

Ophansi village occupied the centre of the Ward. The residents of this village were also moved from their original homes to pave way for Mkuze Game Reserve. The village was home to a clinic, HIV and AIDS volunteers and care givers. Tourists were passing through the village using the new road to the Game Reserve. Commercial sex was rife, with camps established by road construction workers serving as sex havens, especially at night.

Another village in Ward 3 was Cezwane. The community seriously lacked knowledge on HIV and AIDS. This was due to the absence of HIV and AIDS awareness campaigns in the village. Table 5.5 reveals the general community perceptions about HIV /AIDS and food security and the relationship between the two.

The focus group discussion revealed that women underlined the fact that the burden of food insecurity and HIV and AIDS rested more upon them than men. Apart from being the principal food producers in the arable fields, women were also expected to provide for children and other family members every day.

Men blamed women for their children's bad behaviour. They also blamed their wives when family members (especially children) were HIV infected. The argument advanced to the extent that it was said that mothers were 'the eyes of the households' that should serve as watchdogs for everything that threatened them. This put women in a very difficult position as peer pressure amongst young people made them disobey their mothers' wise counsel and advice.

After completing school young people migrated to urban areas in search of jobs that were scarce. Because of the high cost of living in urban areas, not many relatives were prepared and able to meet the basic needs of their inexperienced job-seeking relatives for long. Quite often, the job-seekers ended up resorting to various ways to make a living. For example, young women job seekers ended up staying with boyfriends and through unsafe sexual practices, some of them contracted HIV. When they returned home sick, they did not normally disclose their status. Thus, in most instances, their mothers ended up caring for them and getting infected because of not taking any protective measures. As treatment for the sick was sought, family assets such as livestock were sold to raise cash. Such assets were critical in fighting poverty and food insecurity. Worse still, taking care of the sick also heavily competed for labour with productive activities such as crop cultivation. As a result, critical tasks were either completed late or never undertaken at all. When the sick relatives died of the disease, their families were usually left much poorer and more food insecure. One woman participant in the PRA exercise commented as follows in IsiZulu: *uma uphuma ekhaya kubengathi ushiya ijazi lensimbi elisindayo emahlombe akho, uma ubuya ingathi uyaliqhoka futhi isihogo*, whose English version is: *If I leave home it feels like taking off a big, heavy steel coat on my shoulders. When I come back, it's like I am putting on it again.*

**Table 5.5: General perceptions of HIV and Food insecurity of participants at Ophansi Hall in Ward 3 of Jozini Municipality (2006)**

Question		Answer
1.	How did HIV and AIDS affect the community?	By increasing number of orphans and vulnerable children; Exacerbating poverty; Increased crime as orphaned children resorted to criminal activity as a survival strategy; and Worsening unemployment: So girls became sex workers and men abused alcohol and drugs, resulting in them engaging in unprotected sex.
2.	What were the major reasons for the spread of HIV?	Reluctance of people to practice safe sex or abstain altogether; Not making use of free voluntary and counselling at the local Voluntary Counselling and Testing Centre; Unsafe sex; Lack of knowledge, alcohol and drug abuse resulted in people practicing unsafe sex; and Multiple sexual partnerships were common.
3.	In what way did HIV and AIDS exacerbate the food insecurity situation of the community?	Women's workload was increased as they took care of the sick and household chores. Taking care of the sick reduced the number of people who could be involved in productive field work;  Bread winners were dying, leaving behind young and vulnerable children.
4.	What relationship existed between the spread of HIV and food insecurity?	Desperate women were forced into commercial sex work, resulting in them getting infected, dying and leaving behind orphans;

Question		Answer
		Orphans were vulnerable as they had no access to wise counsel and guidance and restored to anti-social behaviour such as abuse of drugs and alcohol. Some of them got involved in unsafe sex, became infected with HIV and died of AIDS.
5.	What policies were addressing people who were infected and affected	The following interventions were mentioned instead of the policies; Disability grants; Disclosure: protection of individuals rights; and. Labour laws that emphasized non- discrimination at workplace.
6.	If the community became food secure, how do you think the spread of HIV would be reduced?	Reduction in number of sex workers; Less exposure to HIV; Immune system of the sick would be boosted through improved nutrition; and Community would be empowered to make choices and thus its members would be less vulnerable.

Lack of food led to infected people getting AIDS fast. Food-insecure people abused drugs and alcohol as a way of consoling themselves. Household heads were often frustrated by the many problems that emanated from poverty and lack of income. When they got drunk they engaged in unsafe sex. Some female youth used sex to secure groceries. This was said to be a coping mechanism for some households in the Ward. Mothers were no longer strict with their girl children who were bringing food, even though through illicit and abominable ways. Accepting the illicitly-secured groceries caused them mental stress because they always felt guilty of perpetuating evil. It was clear that the desperate situation prevailing in Ward 3 was eroding cultural values and morals, apart from destroying some families.

HIV positive widowed people remarried and never disclosed their health status. It was reported that many wives in polygamous marriages were unfaithful because their husbands were failing to satisfy their sexual desires and needs. Also, wealthy people were spreading HIV by 'buying' sex.

In Zulu culture, a man is the head of family. Cases of men refusing to use a condom when having sex with their wives were many. The men argued that by virtue of having paid a huge dowry when they married, they were not prepared to use condoms during sexual intercourse. If the wife refused to have sex because of the argument over the use of a condom, she was liable to be sent back to her parents. This matter would be resolved only when the wife's parents paid a fine (in the form of a cow). On the other hand, if a man insisted on using a condom against the wishes of the wife, he was also liable to pay a similar fine. This culturally prescribed punishment made it very difficult to address HIV and AIDS issues among the Zulus in Ward 3 of Jozini Municipality.

Although numerous educational campaigns and other HIV and AIDS awareness thrusts had been run in Ward 3, local people continued to attribute AIDS to witchcraft. Most Zulu people normally consulted a *Sangoma* (traditional doctor) when a family member fell sick, died or something bad befell the family. Healing and wellness of a person was considered more of spiritual healing than a physical development. The population's denial of AIDS because of cultural beliefs and practices remained a critical challenge that should be addressed if its spread is to be contained.

## **Views of the HIV and AIDS Counsellor on Food Security and HIV**

The Ophansi clinic Nurse-in-Charge was one of the key informants interviewed. Only the main issues are distilled and presented here. The Nurse-in-Charge felt the issue that was being investigated focused on food security that had been exacerbated by the HIV and AIDS pandemic. Thus the HIV and AIDS Counsellor was perceived to serve as a key informant. A list of the major issues highlighted during the interview is presented below:

- Food insecurity was widespread and enhanced progression HIV to AIDS;
- Unemployment was rife;
- In general, local families were large (some up to 20 members), some not having any source of income. Social grants (e.g. the R190 child support grant) were not enough to meet basic needs of households;
- The HIV infection rate was decreasing mainly because men were migrating less since employment opportunities were now more limited than was the case in the past;
- Statistics available at the local clinic showed that those infected by HIV were mainly aged 17-66 years;
- Antiretroviral (ARV) treatment was offered, starting at the hospital. The clinic only took over this responsibility after the patient had been discharged from hospital;
- Food parcels were given to people with severe weight loss;
- People with CD4 counts of <200 were being assisted to access grants;
- The clinic had a community nutrition garden;
- Most cases of malnutrition in the Ward were closely associated with HIV-related illnesses
- The need for empowering community members to take care of their own lives through assisting them to start income-generating activities was evident. The practice of giving food parcels created dependency on external assistance, in the process destroying communities' innovation to deal with their challenges.

### **5.3.2 The land Issue in Ward 3 of Jozini Municipality**

There were vast and highly fertile tracts of land in the vicinity of rivers. In general, this land was not used for agricultural purposes. Most land belonged to a few old people who were too old to use it. Further away from rivers, sandy soils, not suitable for crop cultivation, were prevalent. However, these soils were valuable for brick making. Soil degradation and erosion

were distinctly pronounced, with huge gullies developing in some crop fields. Because of drought conditions, huge tracts of arable lands were no longer cultivated.

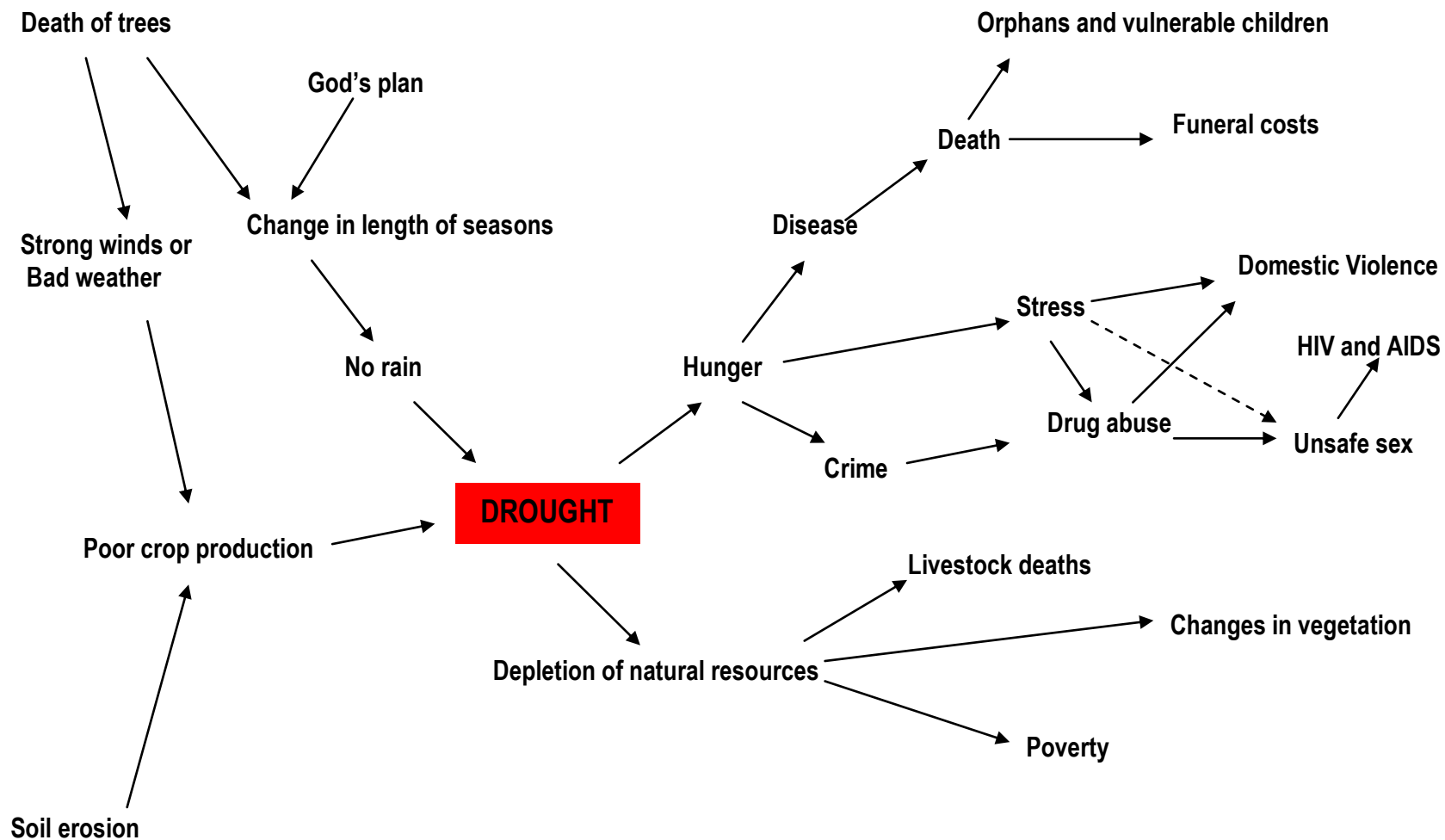
Some people had migrated and abandoned their cropping lands resulting in considerable underutilized hectareage. It was also reported that some older people leased out their land. When the lessees realized high production, the lessors demanded their land back before the end of agreed lease periods.

Through social and resource mapping backed up by the transect walk, it was evident that some portions of Ward 3 were composed of arable underutilised land. Other natural features that could enhance crop production included a perennial river that passed through the Ward that was a tributary of the Mkuze River. The water was of good agricultural quality (not saline) and it was suitable for irrigation purposes. Four, mainly wetland (flood plain) sites were observed. This was where residents established their vegetable gardens.

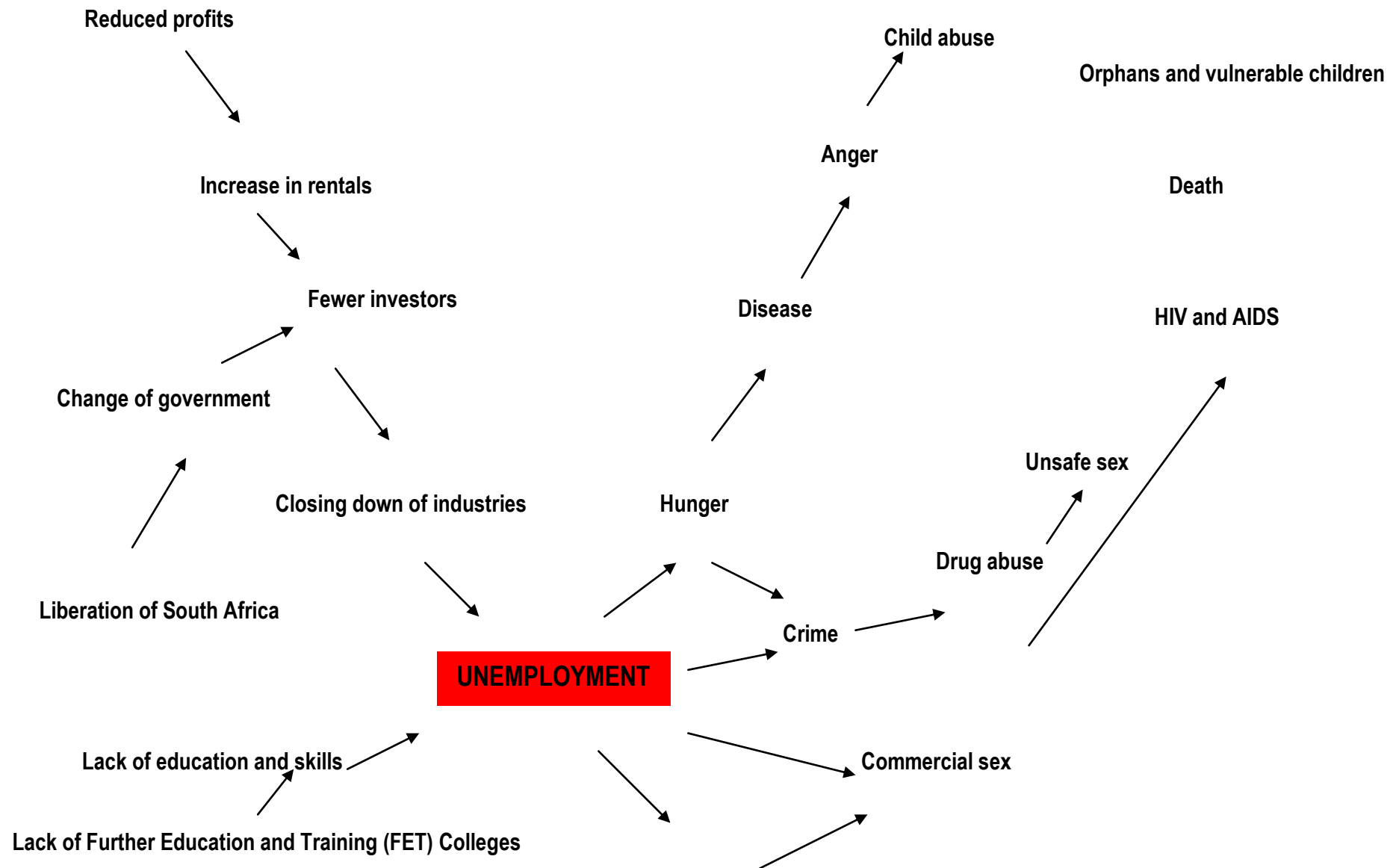
### **5.3.3 Unemployment and Hunger in Ward 3 of Jozini Municipality**

Unemployment and hunger within households often resulted in men being so frustrated and helpless that they resorted to abuse of alcohol. When intoxicated, the men engaged in sex without any protection. Men were also said to be abusing alcohol because of their anger as a result of the fact that they could not provide for their families. Retrenched men were also frustrated and resorted to heavy beer drinking sprees. They were easily irritable and were usually violent over small issues. Unemployment was high and droughts were recurrent.

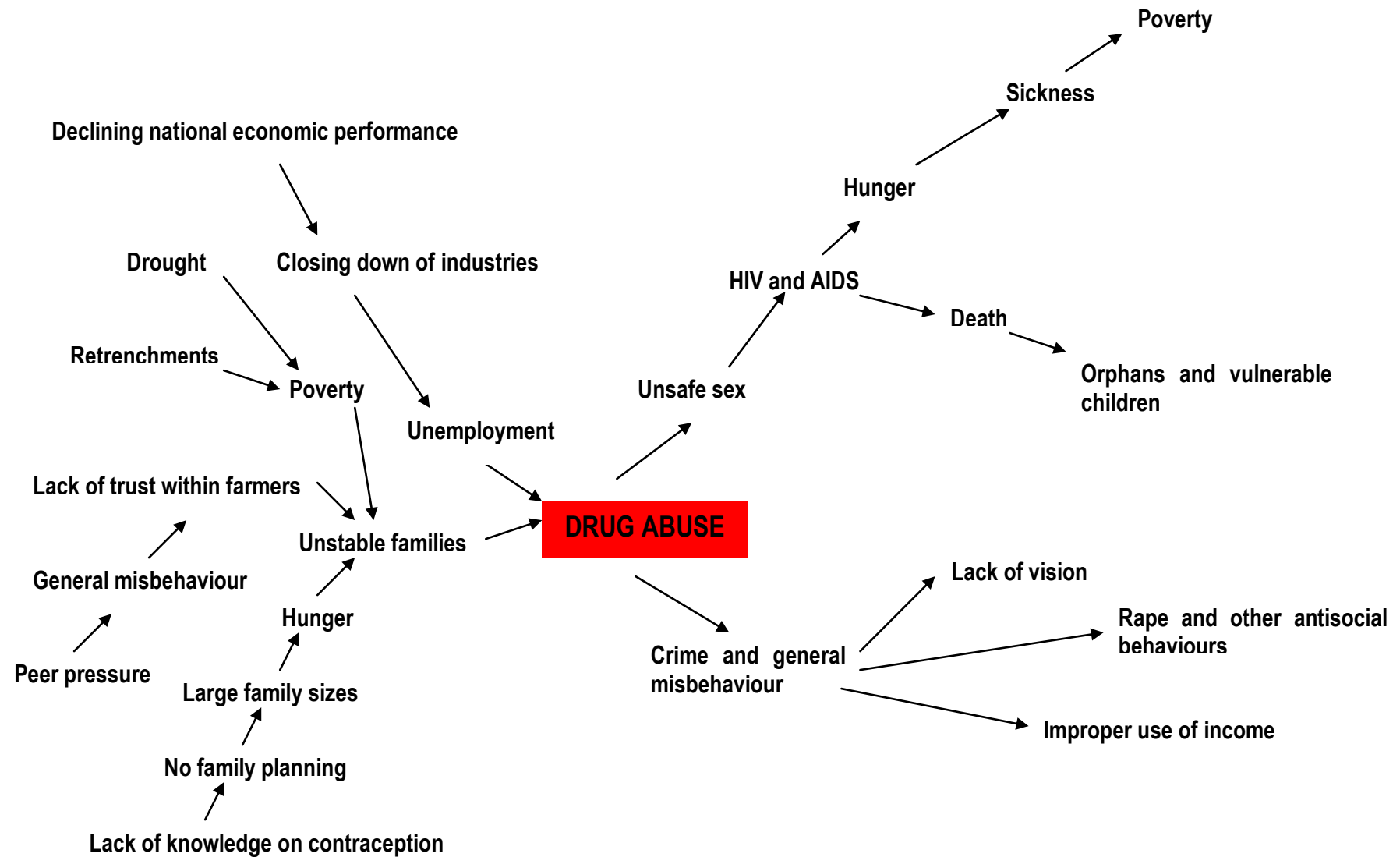
Drought, unemployment and drug plus alcohol abuse were the principal problems that demanded urgent attention. As shown in Tables 5.4 and 5.5, the problems were so intertwined that an integrated approach to their root causes would help to deal with them simultaneously. One of the most significant revelations of the problem tree analysis exercise was depth and extent of residents' knowledge as well as understanding of the nature and causes of local poverty-inducing problems. Figures 5.3 to 5.5 shows the grass root community-perceived causes and effects of drought, unemployment and drug abuse respectively in Ward 3 of Jozini Municipality.



**Figure 5-3: Grassroots community-perceived causes and effects of drought in Ward 3 of Jozini Municipality in Umkhanyakude District, KwaZulu-Natal in South Africa**



**Figure 5-4: Grassroots community-perceived causes and effects of unemployment in Ward 3 of Jozini Municipality in Umkhanyakude District, KwaZulu-Natal in South Africa**



**Figure 5-5: Grassroots community-perceived causes and effects of drug abuse in Ward 3 of Jozini Municipality in Umkhanyakude District, KwaZulu-Natal in South Africa**

#### **5.3.4 Summary of Results**

The results of the study revealed that food insecurity was regarded as hunger that resulted in many socio-economic factors such as collapse of household unity and stability. Other effects of hunger included household heads especially men, resorting to alcohol and drug abuse as a way of escaping indignity. The youth were said to have resorted to crime, prostitution and alcohol abuse. The socio-economic factors causing food insecurity were poverty; HIV/AIDS; unemployment; illiteracy; drought; limited access to resources such as land and the break down of family social bonds. Access by communities to unprotected water sources increased disease outbreaks such as cholera. The agro-ecosystem of Ward 3 of Jozini Municipality was not fully utilised to address food insecurity.

## **6 SUMMARY, CONCLUSION AND RECOMMENDATIONS**

The study was designed to explore the socio-economic causes of food insecurity in ward 3 of Jozini Municipality. The sub-problems investigated were:

Sub-problem 1: What do people of Ward 3 in Jozini Municipality regard as food insecurity?

Sub-problem 2: What are the socio-economic factors identified by the local people that cause food insecurity in Ward 3 in Jozini Municipality?

Jozini Municipality is one of the five district municipalities of the uMkhanyakude District in KwaZulu-Natal, South Africa. Jozini Municipality is composed of 16 Wards. Ward 3 of Jozini Municipality is one of the poorest Wards and thus was selected for the study. UMkhanyakude district is reported to have the highest HIV prevalence that has exacerbated food insecurity. In addition, the district is vulnerable to several shocks including health related and propelled environmental change that were exacerbated by the rapid increase in tuberculosis. Various government and nongovernmental organisations are working in uMkhanyakude to address these developmental problems. Oxfam Australia is one of the organisations working in the area.

Both primary data analysis and secondary data collection were undertaken. A team of five professional men and women were involved in conducting a PRA exercise through a four-day workshop with 44 participants from Ward 3 of Jozini Municipality. The PRA techniques used were seasonal calendars, problem tree analysis, transect walk, semi-structured interview, social resource mapping, historical timeline, wealth ranking, sample ranking and Venn diagramming. Analysis included examining data collected from PRA tools by identifying common trends across the tools. Data was reduced through a process of selecting, focusing, simplifying, abstracting and transforming data that appeared in transcriptions, field notes, maps, charts and pictures. Conclusion was drawn by considering what the data meant in relation to the research questions.

The demographic characteristics of the 44 participants were 75% female, 34% youth, 6 % unmarried participants, 2% had not attended school while 18% acquired primary (grade 1-7) education and 32% completed secondary (Grade 8-11) education. Only 5% had never attended school, with one indicating she was an Adult Basic Education Training (ABET)

learner. Three women did not disclose their highest educational qualification, instead preferred to state that they were home-based care givers. One participant was a Community Development Worker (CDW).

The people of Ward 3 of Jozini Municipality regarded food insecurity as hunger that resulted in many socio-economic effects such as collapse of household unity and stability that exacerbated erosion of dignity among household members. Hunger was commonly associated with “not eating enough”. Other effects of hunger included household heads, especially men, most of them resorting to alcohol and drug abuse as a way of escaping from indignity. The youth were said to be involved in crime, prostitution and alcohol abuse. As result of hunger, sick people defaulted from taking treatment against tuberculosis and AIDS. Indicators of food secure households were access to funds, ownership of cattle, possession of arable land and access to water. Very irregular emissions of smoke from kitchens of food insecure households indicated that they had nothing to cook and eat. The people of Ward 3, Jozini revealed the choices made in the context of limited income to buy food. The choices included migration to urban areas in search of employment, women resorting to sex work, livelihoods activities such as gardening, craftwork. In the absence of an adult, many child headed households were said to be food insecure.

This study found that the key socio-economic factors causing food insecurity in Ward 3 of Jozini Municipality were poverty; HIV/AIDS; unemployment; illiteracy; drought; limited access to resources such as water and arable land; and the breakdown of the social family fibre. As a result of the impact of the HIV and AIDS pandemic, high numbers of orphans and vulnerable children were reported. These children were reported food insecure.

The existing agro-ecosystem was not fully utilised to address food insecurity. The participants revealed that access to unprotected water sources and lack of proper sanitation resulted in increased disease outbreaks such as cholera. Disasters such as floods and drought contributed to food insecurity in Ward 3 of Jozini Municipality.

## **6.1 Conclusion**

In Ward 3 of Jozini Municipality, Food insecurity is regarded as hunger that has destroyed family unity and the family social fabric. The socio-economic factors causing food insecurity

were poverty, the HIV and AIDS pandemic, unemployment, illiteracy, drought, limited access to resources such as water and land.

Participants actively participated in the PRA exercises and it was valid to assume that gender would not influence the findings. Findings from the PRA exercise had similar facts regardless of gender.

## **6.2 Recommendations**

There is need for further engaging the local population with the goal of ensuring that they defined the solutions to their problems. Local residents were already addressing the food insecurity and HIV and AIDS challenges. This demonstrates vital self-reliance, self-drive and collective community action that outsiders should enhance. The enhancement should incorporate a component of Adult Basic Education and Training (ABET) as illiteracy was high. It was evident that what the residents of Ward 3 required were support systems that enhanced their capacity to work collectively in resolving common issues that negatively affected them resulting in food insecurity. The volume of information displayed in the cause-effect diagrams demonstrated the rich local knowledge that should be harnessed and properly used to develop interventions for resolving the residents' problems.

The fact that older people owned large tracts of farmland that they were not using or prepared to lease out to those who wanted to farm, was a critical causative agent of food insecurity. Thus, there is urgent need for the local leadership to address this problem.

The non-governmental organisations, government and institutions working in the area need to strengthen and diversify livelihoods as an explicit focus. Households are only viewed as being sustainable if they can adjust to threats without compromising their future ability to survive shocks to their livelihoods.

Food insecurity was most severe between May and September, suggesting that this was the most critical period when food parcels would have the most significant beneficial effect. Also, any interventions that sought sustainable solutions to food insecurity should focus on how local residents would have sufficient food during this period. The problems of Ward 3 were intertwined suggesting that an integrated approach to their root causes would help to

deal with them simultaneously. Piecemeal interventions that ignored their inter-relatedness would not be appropriate and were likely to yield insignificant results.

It was reported that the orphaned and vulnerable children was a new social group and phenomenon that was fast growing. Both short-term and long-term solutions were urgently required to deal with the food insecurity challenge.

Many natural disasters (droughts, floods, fires, etc) afflicted the local population, which dictated the need for comprehensive disaster prevention, management and control strategy that clearly stipulated the roles of various players, including those of the local population.

Men abused drugs and alcohol to escape shame and ridicule because of their inability to provide for their families, resulting in them engaging in unsafe sex and abusing women and children. This suggests that food insecurity and the spread of HIV and AIDS could not be contained through piecemeal 'lone ranger' strategies. Rather, multi-stakeholder approaches were desirable. Oxfam Australia could play an integrative role in Ward 3 and ensure that this multi-pronged response strategy is developed and effectively implemented. To achieve this, there is need to carry out a comprehensive audit and social capital analysis of the major role players in food security and HIV and AIDS work in Ward 3.

The Department of Agriculture should address the problem of understaffing and improve incentives to attract agriculturists to work in remote areas such as Umkhanyakude district. It was recommended that the Municipality should develop the capacity of employees to become development-oriented and improve integrated development planning with a view to improve the needs and aspirations of local residents. Continuous support of HIV and AIDS prevention, care and treatment is integral to the success of development efforts.

### **6.3 Recommendation for further research**

The study was limited to Ward 3 of Jozini Municipality and results may not be generalised to other communities in other Wards in Jozini Municipality. Further research in other Wards of Jozini Municipality is recommended to analyse the food insecurity situation. A quantitative data collection study in Ward 3 is recommended to back the qualitative data collected in this study.

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## **Appendix A**

### **Semi-Structured Interview Questions**

- 1) What does food insecurity mean?
- 2) What are the signs of food secure households?
- 3) Do you have households that are not food secure?
- 4) What categories of households not food secure?
- 5) Why are they not food secure?
- 6) How do these households cope without food?
- 7) Which external organisations are helping the food insecure households?
- 8) Which months of the year is food insecurity a major problem? Why?
- 9) In this area, where do we find most food insecure households?
- 10) How do you think the local leadership can help in addressing food security issues?

## APPENDIX B: PARTICIPANT ATTENDANCE REGISTER

**Date:** 26 June 2006

**Venue:** Ophansi Hall

Name	Name of Area (village)	Male	Female	Youth or Adult	Marital Status	Age	Highest qualification
1.Joba Nondumiso	Opansi		✓	Youth	single	22	Grade 12
2.Duze Maggie	Opansi		✓	Youth	single	22	Grade 12
3.Mbyazi Annadetta	Opansi		✓	Youth	single	23	Grade 8
4.Gumede Bongelani	Opansi	✓		Youth	single	27	Grade 12
5.Zulu Thembinkosi	Opansi	✓		Youth	single	33	Grade 12
6.Ntshangase Rebecca	Opansi		✓	Adult	married	53	Community Development Worker
7.Joba Gugu	Opansi		✓	Youth	single	24	Grade 12
8. Zwande Sifiso	Opansi	✓		Youth	single	23	Grade 12
9.Mdletshe Zanele	Ophansi		✓	Youth	single	29	Grade 12
10.Nkumalo Emelia	Ophansi		✓	Adult	Yes	40	Grade 10
11.Ngubane Bridget	Ophansi		✓	Adult	single	40	Grade 11
12.Gumede Nobuhle	Ophansi		✓	Youth	single	24	Grade 12
13.Mathuli Zephana	Ophansi	✓		Adult	married	75	nil
14.Nyawo Absalom	Ophansi	✓		Adult	married	44	Grade 10
15.Mnthambo B.J	Ophansi		✓	Adult	married	46	Grade 1
16.Mtembu Thokozile	Ophansi		✓	Adult	married	44	Grade 7
17.Mafuleka Judith	Ophansi		✓	Adult	married	44	Grade 9
18.Nyawo Joyce	Ophansi		✓	Adult	married	56	Home based care
19.Gumede Themba	Ophansi	✓		youth	single	34	Grade 9
20.Nomatambo Buthelezi	Ophansi		✓	youth	single	34	Grade 12
21.Mgambi Florence	Ophansi		✓	Adult	single	42	Home based care

<b>Name</b>	<b>Name of Area (village)</b>	<b>Male</b>	<b>Female</b>	<b>Youth or Adult</b>	<b>Marital Status</b>	<b>Age</b>	<b>Highest qualification</b>
22.Manukuza Thelma	Ophansi		✓	Adult	single	54	Home base care
23.Madida Jabu	Ophansi		✓	Adult	single	46	Grade 2
24. Mlambo Khanyi	Ophansi		✓	youth	single	24	Grade 11

## PARTICIPANT ATTENDANCE REGISTER

**Date:** 27 June 2006

**Venue:** Ophansi Hall

Name	Name of Area (village)	Male	Female	Youth or Adult	Marital Status	Age	Highest qualification
1.Mlambo Khanyisile	Opansi		✓	Youth	single	25	Grade 12
2.Joba Gugu	Opansi		✓	Youth	single	24	Grade 12
3.Zulu Thembinkosi	Opansi	✓		Youth	single	33	Grade 12
4.Gumede Nopbuhle	Opansi		✓	Youth	single	24	Grade 12
5.Ntshangase Jabu	Opansi		✓	Youth	single	24	Grade 12
6.Joba Nondumiso	Opansi		✓	Youth	single	22	Grade 12
7.Duzo Maggie	Opansi		✓	Youth	single	23	Grade 12
8. Dlamini Sipho	Opansi	✓		Adult	married	43	Grade 10
9.Nxumalo Jim	Ophansi	✓		Adult	Yes	65	Nil
10.Nxumalo N.D	Ophansi		✓	Adult	Yes	42	Grade 4
11. Mthembu Khonzie	Ophansi		✓	Youth	single	27	Grade 11
12.Malethse Zanele	Ophansi		✓	Youth	single	29	Grade 12
13.Muthembu Mxolisi	Ophansi	✓		Youth	single	25	Grade 12
14.Dhlamini Irene	Ophansi		✓	Adult	married	45	Grade 4
15.Gumede Thandi	Ophansi		✓	Adult	married	46	Grade 10
16.Ntshangase Rebecca	Ophansi		✓	Adult	married	53	Community Health worker
17.Mafuleka Judith	Ophansi		✓	Adult	married	44	Grade 9
18.Mgabhi	Ophansi		✓	Adult	married	42	Grade 3

<b>Name</b>	<b>Name of Area (village)</b>	<b>Male</b>	<b>Female</b>	<b>Youth or Adult</b>	<b>Marital Status</b>	<b>Age</b>	<b>Highest qualification</b>
Florence							
19.Mnthambo Buyisiwe	Ophansi		✓	Adult	married	46	Grade 2
20.Nyawo Joyce	Ophansi		✓	Adult	married	52	Grade 6
21.Mthembu Thokozile	Ophansi		✓	Adult	married	36	Grade 7
22.Nyawo H.B	Ophansi		✓	Adult	married	32	ABET
23.Gumede Sibongile	Ophansi		✓	Adult	single	37	Grade 12
24. Gumede Doreen	Ophansi		✓	Adult	single	39	Grade 9
25. Mosondo Fikile	Ophansi		✓	Adult	single	30	Grade 8
26.Hlabisa Magret	Ophansi		✓	Adult	single	41	Grade 5
27.Nyawo Absulon	Ophansi	✓		Adult	married	44	Grade 10
28.Dlamini Thulusiwe	Ophansi		✓	Adult	married	37	Grade 11
29.Ngubane Bridget	Ophansi		✓	Adult	married	40	Grade 11
30.Khumalo Emelina	Ophansi		✓	Adult	married	40	Grade 10
31.Ntshangase Khanyisile.	Ophansi		✓	Adult	single	31	Grade 11
32.Mngomezulu Dumisane	Ophansi	✓		Adult	married	53	Technician

## PARTICIPANT ATTENDANCE REGISTER

**Date:** 28 June 2006

**Venue:** Ophansi Hall

Name	Name of Area	Male	Female	Youth or Adult	Marital status	Age	Highest qualification
1.Duza Maggie	Ophansi		✓	Youth	single	22	Grade 12
2.Gumede Bongelani	Ophansi	✓		Youth	single	27	Grade 12
3.Joba Gugu	Ophansi		✓	Youth	single	24	Grade 12
4.Gumede Thandi	Ophansi		✓	Adult	married	46	Grade 11
5.Molethse Zanele	Ophansi		✓	Youth	single	29	Grade 12
6.Mthembu Mxolisi	Ophansi		✓	Youth	single	25	Grade 12
7.Buthelezi Nomathemba	Ophansi		✓	Youth	single	34	Grade 12
8.Mtambo Buyisiwe	Ophansi		✓	Adult	married	46	Grade 2
9. Mafuleka Judith	Ophansi		✓	Adult	married	44	Grade 11
10. Mthembu Thokozile	Ophansi		✓	Adult	married	36	Grade 7
11. Nyawo Joyce	Ophansi		✓	Adult	married	52	Grade 7
12.Masondo Fikile	Ophansi		✓	Adult	married	30	Grade 8
13.Mgabhi Florence	Ophansi		✓	Adult	married	42	Grade 3
14. Hlabisa Magaret	Ophansi		✓	Adult	single	41	Grade 4
15.NyawoAbsalom	Ophansi	✓		Adult	married	44	Grade 10
16.Nxumalo N.D	Ophansi		✓	Adult	married	42	Grade 4
17.Ntshangase Khanyisile	Ophansi		✓	Adult	single	31	Grade 11
18.Dhlamini Florence	Ophansi		✓	Adult	married	45	Grade 6
19.Mthembu Khonzie	Ophansi		✓	Youth	single	27	Grade 11
20.Joba Nodumiso	Ophansi		✓	Youth	single	22	Grade 12
21.Ntshangase	Ophansi		✓	Youth	single	24	Grade 12

<b>Name</b>	<b>Name of Area</b>	<b>Male</b>	<b>Female</b>	<b>Youth or Adult</b>	<b>Marital status</b>	<b>Age</b>	<b>Highest qualification</b>
Jabulile							
22.Gumede Nobuhle	Ophansi		✓	Youth	single	24	Grade 12
23. Gumede Sibongile	Ophansi		✓	Adult	single	37	Grade 12
24. Gumede Sipho	Ophansi	✓		Adult	single	34	Grade 9
25.Mthebu Thulisiwe	Ophansi		✓	Adult	single	36	Grade 12

## PARTICIPANT ATTENDANCE REGISTER

**Date:** 29 June 2006

**Venue:** Ophansi Hall

Name	Name of Area	Male	Female	Youth or Adult	Marital status	Age	Highest qualification
1.Joba Gugu	Ophansi		✓	Youth	Single	24	Grade 12
2.Buthelezi Nomathemba	Ophansi		✓	Youth	Single	34	Grade 12
3.mgabhi Florence	Ophansi		✓	Adult	Married	42	Grade 3
4.Masondo Fikile	Ophansi		✓	Adult	Single	30	Grade 8
5.Mthembu Thokozile	Ophansi		✓	Adult	Married	36	Grade 7
6.Nyawo Goyce	Ophansi		✓	Adult	Married	53	Grade 7
7.Gumede Thandi	Ophansi		✓	Adult	Married	46	Grade 11
8.Hlabisa Magret	Ophansi		✓	Adult	Single	41	Grade 4
9.Ntshangase Khanysile	Ophansi		✓	Youth	Single	31	Grade 11
10.Gumede Busie	Ophansi		✓	Adult	Single	38	Grade 3
11.Mdleshe Zanele	Ophansi		✓	Youth	Single	29	Grade 12
12.Mntambo Buyisiwe	Ophansi		✓	Adult	Married	46	Grade 5
13.Duze Maggie	Ophansi		✓	Youth	Single	22	Grade 12
14.Gumede Bongelani	Ophansi	✓		Youth	Single	27	Grade 12
15.Joba Nondumiso	Ophansi		✓	Youth	Single	22	Grade 12
16.Mthembu Mxolisi	Ophansi	✓		Youth	Single	25	Grade 12
17.Gumede Sipho	Ophansi	✓		Youth	Single	34	Grade 9
18.Mafuleka Judith	Ophansi		✓	Adult		44	Grade 9

<b>Name</b>	<b>Name of Area</b>	<b>Male</b>	<b>Female</b>	<b>Youth or Adult</b>	<b>Marital status</b>	<b>Age</b>	<b>Highest qualification</b>
19.Nxumalo Nomasanto			✓	Adult		42	Grade 4
20.Mthembu Thulisiwe	Ophansi		✓	Adult	Single	37	Grade 12
21.Nxumalo J.M	Kwa-jobe	✓		Adult	Married	65	Grade 8
22.Ntshangase Jabulile	Ophansi		✓	Youth	Single	24	Grade 12
23.Nyawo Absalom	Ophansi	✓		Adult	Married	44	Grade 10
24.Zulu Thembnkosi	Ophansi	✓		Youth	Single	33	Grade 12
25.Gumede Nobuhle	Ophansi		✓	Youth	Single	24	Grade 12
26.Mlabo Khanyisile	Ophansi		✓	Youth	Single	25	Grade 12
27.Gumede Sibongile	Ophansi		✓	Adult	Single	37	Grade 12