

**ASSET PORTFOLIOS AND FOOD ACCESSIBILITY IN A  
VILLAGE IN SEKHUKHUNE, LIMPOPO PROVINCE**

by

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## **ABSTRACT**

This study aims at investigating household food accessibility categories (food insecure, vulnerable, marginal and food secure) of rural households in Sekhukhune district of Limpopo province. The study is based on five wards in Mamone village in the Limpopo province of South Africa. Ten households from each ward were randomly selected for the study. Structured questionnaires administered by enumerators were used to collect information from household heads. In all 50 household heads constitutes the sample size for the study. Data was collected from 20 August 2007 to 25 August 2007. Responses in the questionnaires were tabulated, coded and processed using Statistical Package for Social Sciences (SPSS) programme. Based on comprehensive food security and vulnerability analysis the study showed that over 70 per cent of the sampled households were food insecure. Lack of education, income sources, water source, and infrastructure were some of the important factors contributing to food insecurity. The government should also give special attention to policy measures that guide towards the provision of household assets. It is recommended that special attention be given to measures that will provide the necessary factors that negatively affect household food security and vulnerability.

**Keywords:** Household food security, Sekhukhune, Limpopo province, South Africa, Education, Income sources, Water sources, Infrastructure, Household assets and Policy.

## DECLARATION

I declare the dissertation hereby submitted to the University of South Africa for the degree Master in Human Ecology has not previously been submitted by me for the degree at this or any other University, that it is my own work in design and execution, and all material contained therein, has been duly acknowledged.

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*Segodi weeeeeee! Boela Mawetse! Boela Bonghwaonghwao Tlou!*

## **ABSTRACT**

This study aims at investigating household food accessibility categories (food insecure, vulnerable, marginal and food secure) of rural households in Sekhukhune district of Limpopo province. The study is based on five wards in Mamone village in the Limpopo province of South Africa. Ten households from each ward were randomly selected for the study. Structured questionnaires administered by enumerators were used to collect information from household heads. In all 50 household heads constituted the sample size for the study. Data were collected from 20 August 2007 to 25 August 2007. Responses in the questionnaires were tabulated, coded and processed using Statistical Package for Social Sciences (SPSS) version 15 programme. Based on comprehensive food security and vulnerability analysis, the study showed that over 70 per cent of the sampled households were food insecure. Lack of education, income sources, water source, and infrastructure were some of the most important factors contributing to food insecurity. The government should also give special attention to policy measures that guide towards the provision of household assets. It is recommended that special attention be given to policy measures that will provide the necessary factors that negatively affect household food security and vulnerability.

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## CHAPTER 1

### INTRODUCTION

#### 1.1 Background of the study

It was estimated that about 73 million people would be added to the world's population yearly between 1995 and 2020, and there would be an increase of 300 million in global rural population during the same period (Andersen, *et al*, 1999). This increase was estimated to have an effect on food production. About 850 million people in the world are estimated to be chronically hungry due to food insecurity (FAO, 2003). The current understanding of food security also places emphasis on assets investment, ownership or accessibility which rural households can use to reduce food insecurity (Ellis and Freeman, 2004).

Much concern about food security in Africa has focused on national food security issues such as constraints on expanding food production. However, over the past decade, policy makers, researchers and donors have increasingly recognized that hunger; malnutrition and family food insecurity are to a large extent caused by lack of assets such as land, water and income at the household level (DFID, 1999).

At national level, South Africa is a food secure nation (StatsSA, 2002). This means the country produces its main staple food and exports its surplus food and imports what it needs to meet its requirements. Yet, the situation at household level is a concern to government and non government organisations. Research conducted on rural households suggests that attention should be paid to household assets and how they interact. This interaction of assets and activities that generate income, cultural and social choices will, in turn determine food access (Ellis, 2000).

According to Siegel (2005) valuable assets that can determine the accessibility of food in the household can be summarized as follows:

### *1.1.1 Human capital*

The level of education, health status of family members and skills enable people to pursue different livelihood strategies and achieve food security. Education is a key asset determining households' ability to access higher return activities (whether agricultural or other) and therefore escape food insecurity. Education enables households to learn more about how to access food, learn about food storage and preparation techniques from others within the community. Human capital also improves households' access to healthy and nutritious foods through health and sanitation education.

### *1.1.2 Social capital*

Social capital is associated with issues of trust, networking and membership within the community. Through social capital, rural households are able to voice their concerns, expectations, disappointments and experiences. This can be achieved through connections and networking with local organization, like agricultural organisations, burial societies and informal savings group. This creates awareness and people who can provide assistance are able to act relating to problems affecting their households.

### *1.1.3 Natural capital*

Land ownership is closely linked to crop and livestock production and as such is expected to influence participation and generation of income from those activities. It also allows households to obtain collateral, which is a pledge for the repayment of a loan if households cannot procure enough funds to repay and thus diversify other rural income generating activities, particularly non farm activities. Firewood remains the major source of energy in rural areas. Electricity in some villages is not available and villagers have no option but to collect firewood for lighting and cooking.

Natural forests play a very important role as a source of energy for food preparation. Biodiversity can also provide the basis for natural product development, ecotourism and other activities which are important for income generation in local economies. This in turn enables households to acquire additional income to buy extra food. Households can also access wild foods from the forest for consumption.

#### *1.1.4 Physical capital*

One basic asset to which households have access in order to generate income is their own labour. For poor households, this is sometimes their only asset. Most households in rural areas live without machinery, equipment and buildings needed in production. The absence of production equipment and machinery has a negative implication on the development of the community. Households with greater access to electricity, roads, communication and other forms of infrastructure will have a broader range of economic opportunities compared to those with less access to above mentioned assets and this will increase their different range of activities involved to access food.

#### *1.1.5 Financial capital*

Rural households have limited access to financial assistance, which is the key feature of any functioning agricultural economy. Most households lack financial capital to access inputs such as pesticides, mechanization and hired labour which require monetary payment. Food access and assets are usually inversely related to each other: the more assets are available, the higher the likelihood of food access (Hutton and Redmond, 2005). The availability of household assets can help poor rural households to acquire adequate food and other basic necessities for their families.

### **1.2 Problem statement**

The world food situation is changing from time to time. For example, a lot of imbalances have occurred in the past in terms of food shortage, affordability and accessibility problems. The situation is likely to continue unless an opportunity to advance food accessibility is created. It must be noted that there is no other human deprivation that affects as many people as does food shortage, which makes it impossible to live a normal life. Food shortage stands for compromised health, lack of physical vigor, limited intellectual achievement and shortened life expectancy (Smil, 2004).

In South Africa just over half of all people (65%) are found in rural areas and 78% of those are likely to be chronically poor (Woolard and Leibbrandt, 2002). There is also a decline in

resource flow to rural areas and this refers mostly to agriculture rather than other sectors due to the dependence on the agricultural sector in rural areas. This in turn will have a negative bearing on national food security because without resources or assets rural households will become more vulnerable to changes in climate and economic trends (Machete, 2004).

According to Statistics South Africa, 80% of the population in Limpopo (a province situated in the north east of South Africa) lives in rural areas (StatsSA, 2002). The spatial distribution of the rural population corresponds with the former homelands, but a large number of people also still live on farms as laborers (StatsSA, 2002). However their living conditions are affected by poorly functioning markets, lack of labor, lack of ownership of productive implements and low level of education attainment. This in turn leads to food insecurity because food accessibility cannot be attained while there is lack of these assets (StatsSA, 2002).

Sekhukhune district which was declared by the President of South Africa during an address at the National Council of Provinces in Limpopo, as one of the districts that is food insecure, is one of the poorest in the country (Mbeki, 2005). In this district, 33% of the population still depends on natural water supply. Unemployment is at 61.1% with 7% having no formal sanitation (StatsSA, 2003). On a national scale, only 19% of the total South African population still depends on natural water supply; unemployment is at 25.2 % and 33 % lack basic sanitation services (StatsSA, 2006).

Such adverse circumstances increase households' chances of disability, illness, poor education, suffering, violence, abuse and unemployment, eventually resulting in households' inability to produce enough food to feed their families. Thus, it is important to seek strategies to improve the food access in Sekhukhune. In order to address the food access in Sekhukhune it is important to compile an asset portfolio of a sample of the households. Asset portfolio will help in planning future food access strategies.

The main research problem was to analyse asset portfolios and food accessibility in a village in Sekhukhune in order to identify gaps existing in food security issues among households in the area.

### **1.3 Research objective**

From the above discussion, the primary objective of this study is to determine how household assets and food access are linked.

Other specific objectives of the study are to:

- i. Differentiate categories for household food access in terms of household assets.
- ii. Undertake comparative analysis of different food access categories in terms of asset capitals.
- iii. Identify gaps that currently exist in determining household food access in terms of household assets.

### **1.4 Justification of the study**

The study intends to highlight the potential role household assets can play in accelerating food access in Mamone village. It hopes to highlight the fact that household assets can secure and strengthen adequate food access in Mamone village. Through different types of assets, households can engage in farming production, labour market, informal sector and input markets for survival.

### **1.5 Sampling**

The data for the study was obtained from the randomly selected households. Sampling of households involved obtaining a sample frame of households from the chief. Households were then randomly selected. The study was conducted in one village, Mamone. This village was selected purposively because of poor socio-economic development. Five wards were identified namely Matsoke, Ga Manyaka, Manyelethi, Magolwaneng and Maroteng, which have approximately the same number of households. Ten households from each ward were randomly selected in all fifty household used in the study.

### **1.6 Ethical consideration**

The researcher was introduced by local authorities to the chief of the community. The aims and objectives of the study were explained. All participants had the right of informed

consent, right to anonymity, right to confidentiality and right to discontinue taking part in the research. The study observed all these ethical considerations.

### **1.7 Research Methodology**

Data were collected making use of structured interviews. The interviews were conducted on the 50 randomly selected households. Household heads were requested to answer a set of structured questions. The respondents were given the opportunity to consult with other household members if problems were encountered during interviews.

The main analytical technique used was descriptive statistics. This technique was used especially to determine and compare demographics, development, commercialization, infrastructure and support service needs.

Validity of the study was determined by asking open- and closed- ended questions. Sometimes the researcher asked the same questions in different ways or repeated it at a later stage in the interview to test for consistency in the response.

### **1.8 Limitation and delimitation of study**

The social sensitivity towards household income and expenses was encountered during the study. Most rural households were not willing to give information regarding their day to day income. Another limitation was that the study was confined to a small section of Sekhukhune district in Limpopo province, and thus the results may not reflect the situation in the whole Sekhukhune district.

The delimitation was that the analysis could be skewed due to the small sub-samples, and that the research could be repeated making use of a larger sample of each of the sub-samples. However, the analysis was sufficient in addressing the objectives of this research. This study could therefore be used within the village to strategise the improvement of households' access to food by focusing on gaps that exist in determining food access.

## **1.9 Chapter layout**

Chapter two contains the review and critical analyses of the theory and past research regarding assets portfolios and food accessibility.

Chapter three is aligned with the research design. The chapter describes the decision on samples and measurements.

Chapter four reflects an in-depth analysis of the data obtained in this study.

The last chapter portrays confirmation of the results both based on the literature and empirical information. It also provides recommendations on primary future research in this field, where assets investments may serve as a fundamental platform.

## **CHAPTER 2**

### **LITERATURE REVIEW**

*“Give a man a fish and he'll eat for a day. But teach a man to fish and he'll eat a lifetime' .... is the greatest half-truth ever spoken, for if the man has no tools to fish with nor a place to fish, all knowledge in the world will not produce the next day's catch”*  
(Anon, 1992)

#### **2.1 Introduction**

As the year 2015 is being approached, the milestone set by the World Food Summit in 1996 to reduce global hunger by half is being questioned. According to Rosen and Shapouri (2005) there is an increase in the number of people living on less than one dollar per day and Africa particularly shows a great increase in food insecurity. This concern is also raised by FAO (2006) which says that the number of people without food remains high in the past five years. Over 60% undernourished live in Asia and a quarter in Africa. It also states that the proportion of people who are hungry is greater in Africa (33%) than anywhere in the world. There are many factors contributing to this, with lack of household assets being the main contributor.

Rural households need to build and strengthen their assets so that they can escape the poverty cycle and contribute positively to the economy and society. A diverse portfolio of assets is not only critical for households to cope with unexpected shocks, but can free access to a range of consumption patterns that are vital for them to access food over time (Aryeetey, 2004).

It must also be noted that for rural households, access to productive assets is important as they can generate income and place food on the table for the family. This explains why there are problems of poverty, social unrest and environmental degradation as a result of lack of assets (Ellis, 2000). Access to assets is of critical importance to the economic viability of rural households and rural households need to have a wider access to affordable and improved quality of services in health, education, water, sanitation and

electricity (Motsebelane, 2004). Healthy and educated households can introduce good nutrition, sanitation and primary health care education on how to access food thus improving their livelihoods.

The world would be food secure if every individual could be assured of access to food at all times. Household availability of food requires that food be available at local, regional or national level, which is determined by infrastructure, markets and information (Anderson and Lorch, 1999). The household's situation is further conditioned by income: the poor commonly lack adequate means to secure their access to food. Empowering households to have access to remunerative employment, productive assets such as land and capital, and to productivity enhancing resources such as appropriate technology, credit, education and health care is essential.

One of the approaches used world-wide to determine the productive, social and locational assets of households is the livelihood based approach. Livelihood approach provides a geographic and socio-economic basis for understanding the strategies that are used to meet basic needs (Mathys, 2005).

The livelihood approach focuses on food access. Mathys (2005) further emphasises that poorer households in low income countries rely on livelihood strategies to make a living and gain access to their basic needs, including food. The livelihood approach strives principally to clarify the mechanisms by which people obtain access to food and other essential resources and services within the community (Mathys, 2005).

According to Ashley and Carney (1999) the livelihood approach is people centered as it understands the differences between groups of people and works with them in a way that is congruent with their livelihood strategies, social environment, and enables them to adapt. This means there is a similarity among people, social environment and their way of living which makes people to understand their assets in order to identify what opportunities they may offer or where constraints may lie.

A livelihood is sustainable when it can cope with and recover from stresses and shocks, and maintain or enhance its capabilities and assets now and in the future, while not undermining the natural resource base (Chambers and Conway, 1992). It is these assets,

namely human, financial, social, physical and natural that support people to achieve their own livelihood goals.

Another approach used in the study of livelihood is the asset –based approach which explores the relationship between assets, behavior and outcomes (DFID, 1999). Households can obtain food security through a combination of own production, market purchases of food and grants. The combination forms part of an asset based approach, which in turn plays a significant role of protecting vulnerable or chronically food insecure households.

According to Start (2001) financial capital linkages (financial flows and investments), human capital linkages (part time employment in rural areas), infrastructure, service linkages (transport, communications, power) and social capital linkage (social networks) have a major impact on economic behavior especially food accessibility.

Food insecurity of the poor is best explained by the rate and variability of return on human, social, financial, natural and physical capitals. It must be noted that the poor are often at a disadvantage regarding the rate and variability on return of these assets. Different approaches are required to address the rural poor's lack of access to assets and factors that provide them with opportunities to increase their returns. These factors are: appropriate governing structures, quality education, health facilities, relevant recreation facilities and functional transportation, amongst others (USAID, 2002).

The 2003 World Development Report focused on the role of institutions, in terms of property rights, government and banks. It also highlighted the strong linkages between assets and institutions (World Bank, 2002). For people to thrive, assets must thrive. A broad portfolio of assets (physical, financial, human, social and natural) needs to be managed responsibly if development is to be sustainable. The distribution of assets is critical in determining whom institutions serve. Households that lack assets tend also to lack a voice, security and a stake in the larger society, thus hampering the ability of institutions to perform their necessary coordinating functions. It is difficult, but possible, to design policies that increase access to assets (World Bank, 2002).

In a book called *The Mystery of Capital*, De Soto (2000) explains the “mystery” of the asset context interface. Capital, like energy is a dormant value in rural areas. It requires livelihood activities to transform an asset’s economic potential into a form that can be used to initiate additional production. As the case with rural people the asset context interface is the issue of property rights and their access to natural resources. It is the society that has historically decided on the property rights for rural people, oftentimes denying rural people to capitalize on their assets (De Soto, 2000). Thus, the context is determined by a wide array of policies and rural development investments and the overall efficiency, equity and transparency of strategies implemented.

According to IFPRI (2002) rural households are particularly vulnerable to critical trends (trends in governance), shocks (conflict) and seasonality of prices. Many reside on the margins of fragile ecosystems where weather risks are high (IFPRI, 2002). Few rural households have financial reserves needed to protect their incomes and welfare (IFPRI, 2002). This suggests the need for interventions that encourage opportunities and remove obstacles to asset accumulation, management and productivity.

Explaining why the poor are poor in developing countries, Valdes and Mistiaen (2001) state: “Most basically it is because they have few assets (both human and physical, including social capital) and also because productivity of their assets is low. The assets are meager not only in quantity but also in quality (for example, low levels of schooling are usually combined with poor quality of schooling). The low productivity of assets is a result of a combination of many reasons like government failures and imperfect or incomplete markets”.

Poverty and income inequality persist in South Africa despite efforts to eliminate them. Promoting the growth of smallholder agriculture could be an effective strategy to reduce poverty and income inequality. Evidence from other countries shows that with the necessary support, raising agricultural productivity and incomes for smallholder agriculture can contribute significantly to poverty alleviation. However, the other disturbing factor about poverty in South Africa is the unequal distribution of resource, income and wealth (Rwelamira, Phosa, Makhura and Kirsten, 2000).

Farming constitutes a major source of income and plays a major role in poverty alleviation for many rural communities in South Africa. This role could be enhanced by making appropriate investments in the prime movers of agricultural development: human capital, physical capital, natural capital, financial capital and social capital (Makhura, 2004). Such investments have proven effective in promoting smallholder agriculture in other countries such as India. They also largely explain the success achieved in developing the agricultural sector in South Africa (Machete, 2004).

High levels of poverty in rural areas of South Africa are partly due to the labor system whereby males migrated to factories and mines in urban areas. Women and men rights, responsibilities and identities in the rural areas of South Africa need to be improved from socio-economic depression characterised by unemployment, lack of land and high food insecurity. In improving socio-economic depression, investments in rural services users and providers, healthy environment for rural governance and financial support promotion are some of the strategies required (Ndwandwa, 2004). A lot of efforts and determination are required to address shocks and vulnerability in rural areas. For these efforts to be relevant, the government should listen to rural voices who know what they need.

Table 2.1 shows the type of information that might usefully be gathered through an asset portfolio study (DFID, 1999):

**Table 2.1: The distribution of assets and activity profiles in a population over time**

Economic Information	Assets	Livelihood strategies	Access to services
Production levels	Productive assets	Remittances received	Service providers
Income (cash)	Quality health	Migration patterns	Standards of delivery
Consumption levels	Access to infrastructure	Income by source	Fees and charges
Cash costs	Access to education	Access to rural resources	
Non – cash costs	Household labour	Seasonal variations	
Seasonal prices	Nutrition		
Seasonal wages	financial services		

Source: DFID, 1999.

According to DFID (1999) information from the table above can be used in the following ways:

- i. Calculation of total household income and seasonal variation.
- ii. Division of household income between sources, between subsistence and cash income between different household members.
- iii. Improved understanding of the household structure and intra-household assets.
- iv. Comparison of different communities and wealth groups for pattern of income sources.
- v. Comparison of levels of critical assets between different groups.
- vi. Identification of the major constraints in accessing service.

In this section some studies and issues related to asset portfolios and food accessibility are reviewed. The chapter defines household assets and food accessibility. This is followed by household access to assets, the effect of assets on households, statistics on asset portfolios and statistics on food accessibility.

## **2.2 Household assets**

Asset ownership plays a key role in a food security context because assets ownership enables households to engage in other income generating activities like leasing of land and tractors when income is insufficient. Additional income can be used to acquire some assets and food for households. Households can also sell some of their assets to compensate shortfalls in consumption or other household assets.

The combination and improvement of household assets enables greater productivity and prosperity of households. According to Eloff and Ebersohn (2006) the improvement of well-being requires management of a diverse portfolio of these assets – physical, human, financial, social and natural.

### *2.2.1 Human capital*

Rural households have accumulated far less human asset than their peers in urban areas (Verner and Verner, 2005). Education is key to poverty reduction. Increased education attainment can improve the livelihoods of the poor and reduce the likelihood of becoming poor (Heckman, 1999). Many rural households are specifically handicapped by illnesses which lead to reduction in ability to adjust to future shocks. Basic health care (immunization, sanitation and family planning) are essential building blocks and should be accessible at a reasonable cost (Heckman, 1999).

Despite the progress in education and health in Africa over the past century, both the volume and quality of human asset have been acknowledged as insufficient to meet challenges of the 21<sup>st</sup> century (UNECA, 2007). Poor households in Africa face complex, multiple constraints in accessing food (Sharma and Zeller, 1998). They often lack education, health, information and communication skills which help them to overcome poverty, thus increasing food access.

South Africa has yet to produce critically skilled and highly trained people capable of initiating and sustaining a dynamic development path (Ngcuka-Mlambo, 2006). It is noted from the above statement that South Africa's capacity to generate knowledge and participate in the knowledge society has continued to decline. This reflects a lot of disparities because only those with skills will be able to join the mainstream of the economy and afford to access food. According to StatsSA (2006) the distribution of human assets is highly unequal both among and between provinces. These disparities are greatest between the poor and the non-poor.

### *2.2.2 Natural capital*

According to Eloff and Ebersohn (2006) natural assets are part of a comprehensive strategy to reduce poverty and empower rural households. Natural assets include amongst others; the land (on which animals and humans live and grow food), water (for drinking and irrigating crops, generating electricity) and trees (for firewood) (Eloff and Ebersohn, 2006).

Food production is the most water-intensive activity in rural households and water is the number one food-limiting factor in many parts of the world (Gerbens- Leens and Nonhebel, 2004). Access and ownership of land is vital to the rural social and economic structure. Through land ownership, rural households can produce and manage crops and livestock. Majority of people in rural areas rely on wood for domestic energy requirements like cooking and heating purposes.

In most rural parts of Africa, majority of people experience persistent food deficits as a result of reduced food production due to poor rains, infertile soils and deterioration in forests (Jere, 2007). Floods and drought are the most frequent natural disasters, but drought is by far a greater threat in terms of geographical range and economical effects. The above disaster leads to food insecurity and the complete loss of the ability to earn a livelihood.

The food crises in South Africa have prompted researchers to reflect on their cause and dimensions (Wiggins and Maunder, 2007). Rural households without natural assets to escape poverty are unable to acquire enough food for a healthy diet. They have limited access to clean water and they have no land and forest to continue with their normal life. Access to water for livestock, and particularly for the irrigation of crops, is one of the ways poverty and food insecurity can be reduced. The benefits associated with the use of natural assets have not yet been realized in South Africa.

### *2.2.3 Physical capital*

Livestock is an important form of physical asset for rural households worldwide (De Sherbinin, *et al*, 2007). It is estimated to contribute to livelihoods of at least 70 percent of the world's poor (Ashley, Holden and Bazeley, 1996). They also have the ability to generate income in the short term through sale and renting for animal traction.

Traveling distances through animal traction is shortened and it enables market access to poor households. More than half the populations in many African countries live below the poverty line subsisting on less than US\$1 per day (Lugoe, 2007). Since physical assets such as own labour, equipment, roads, buildings are the means of income generation in rural areas, access to these assets is vital in moving people out of poverty. Rural

households also use livestock as a means of saving money in times of crises. Livestock provides food and natural fertilizers.

#### *2.2.4 Financial capital*

According to Lipton and Eastwood (2001) most of the world's poor will remain rural for at least three decades. Accessing and raising productivity of resources by rural people have enabled them to be more food secure – especially to produce food for local use (Lipton and Eastwood, 2001). Sustainable livelihoods require empowerment of the poor by creating assets and enhancing savings; this in turn can pave way for households to participate in economic activities (Gass and Heierli, 2001).

Africa is one of the poorest continents in the world, with most of its population living in rural areas (Bee, 2007). Rural households' access to financial assets is very limited and puts households at a disadvantage because of their inability to make use of other assets, such as land, labour and skills. In light of Africa's condition as one of the poorest continents, encouraging assets creation (including savings) is more important than the simple provision of income. Poor households prefer to keep cattle and goats which they convert into cash and deposit it into local financial institutions for saving in times of crises (Ellis, 2000).

The state of financial assets in South Africa is worsening daily. Fifty three percent (16.4 million) of South Africa's adult population is excluded from formal financial services (Financial Scope, 2005). It must be noted that 99% of those without access to financial services are black, 49% of these people live in rural areas and 55% are women (Financial Scope, 2005). It is very clear from the above statistics that rural households' ability to save and invest is minimal. This is a serious problem that rural households face because without access to financial service, they will experience a lack of production opportunities, employment scarcity and an inability to build an assets base. It is also important for the rural household to save for other reasons such as reducing exposure to shocks or minimizing their consequences for helping families and friends in times of need and for meeting future needs and improving their livelihood. The notion of assisting families and friends in time of need is closely linked to the social capital.

### *2.2.5 Social capital*

The notion of social capital was popularized by Robert Putnam's work on the making of democracy in modern Italy (Putnam, 1993). He said one of the key resources in rural areas is their social asset which is the interaction of individuals within formal and informal networks that builds trust, communication, participation and a cultural dimension. He also argued that the more developed these social networks, the greater is the stock of social capital.

The state of social assets in Africa is worsening. Trust, sharing, networking among the community is no more the first priority compared to the past decades. According to Harsh (2006) the role and benefits of social capital should be re addressed to find out how social capital has changed. This will enable people to see how social capital affects their food security and welfare.

South Africa has a society that still suffers a legacy of ineffective social assets and blocked pathways of upward mobility that leaves large numbers of people trapped in poverty (May, *et al* , 2006). Levels of social assets which is the degree of participation in rural areas, pro-activity in a social context, family and friends connections, tolerance of diversity, value of life and work connections play an important role in advancing sustainable livelihood for rural households ( May , *et al* , 2006).

### **2.3 Food accessibility**

Food access depends on the ability of households to obtain food from their own production, stocks, purchases and food transfers (from relatives, community members, government and donors). A household's access to food is also determined by the resources available to it and the opportunities it has to utilize or exchange these resources to meet its food and material needs (FAO, 2003).

Over the past two decades, the number of food emergencies has risen from an average 15 per year in the 1980's to more than 30 per year from 2000 worldwide (FAO, 2006). This is a very serious economic problem because the ability of households to afford and access available transportation networks, food prices, healthy food, individual knowledge regarding healthy eating and household budget is compromised. As such, people from the developing world have a reduced ability to secure food financially compared to those in the developed world (FAO, 2006). Re-establishing rural institutions, enhancing access to assets and land, reviving of rural financial systems, strengthening the labor market and social rehabilitation programmes are some of the strategies to consider when addressing food productivity enhancement.

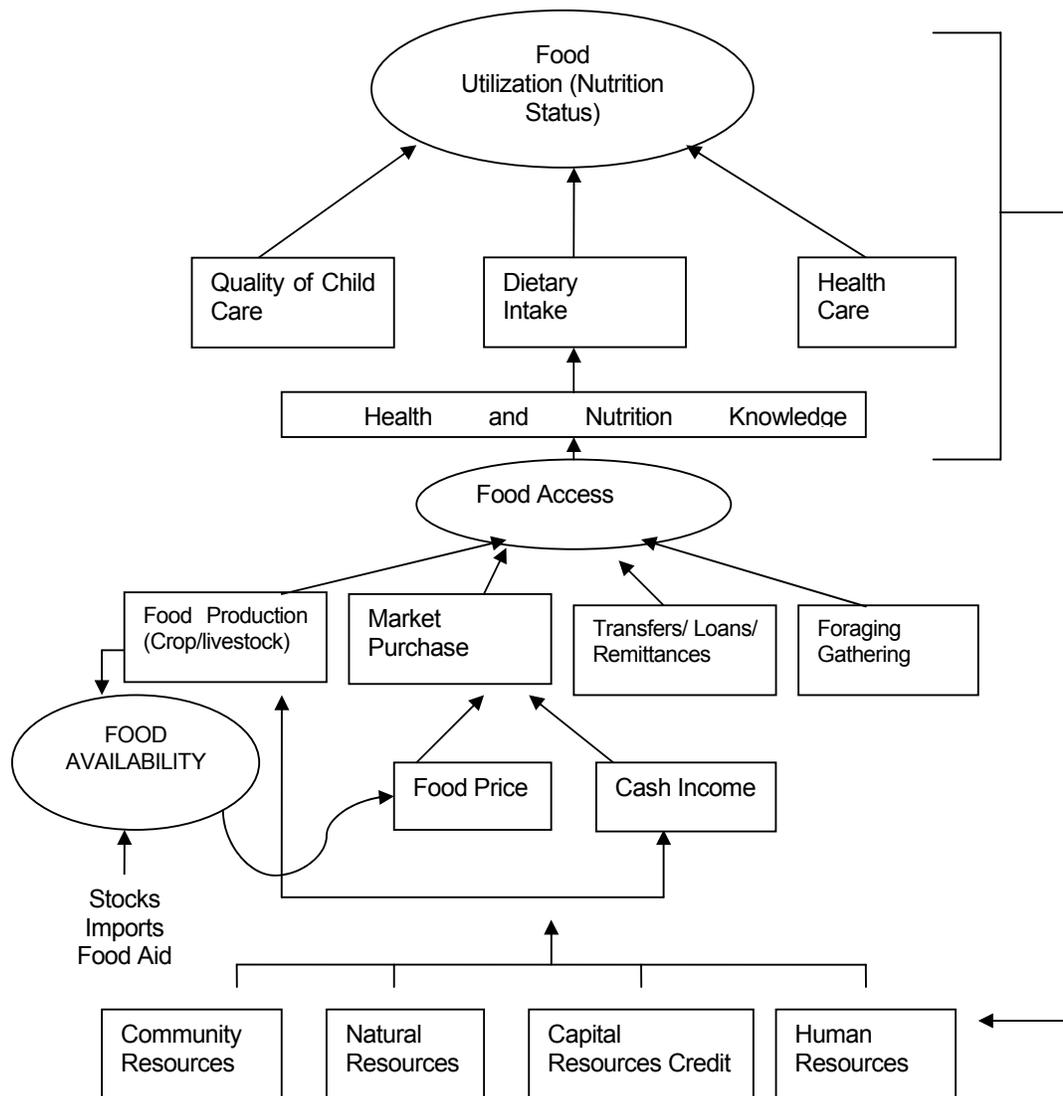
Poor households in Africa are typically characterized by few income-earners, and many dependants. Households are particularly vulnerable because of their lack of economic activities in close proximity to their communities, constraints in gaining access to employment, lack of information and lack of transport (Sahn, 1996). In most of the African countries, ownership of assets does not necessarily lead to improved levels of living; this is due to factors such as missing markets, access to markets and high transaction costs. This leads to households' inability to access food and thus this hampers their livelihood.

Statistically, South African food production is well developed and is involved in the world market. About 15 million hectares, 12% of the land area, is under cultivation and about 10% of this is under intensive irrigation (Countrystudies, 2003). Besides the country's relatively stable situation with sufficient resources to feed the nation, the population suffers from increasing food insecurity. According to StatsSA (2004), 14.3 million people are vulnerable to food insecurity and 43% of households suffer from food poverty.

Increasingly, poor rural households rely on purchased food due to unavailability of land to produce food. This in turn increases the chances of the households to be vulnerable to food inflation. For them, rising food prices are relatively more severe as they have to spend a much bigger share of their money on food (Sahn, *et al*, 1997). They are forced to make difficult decisions between food, water, medicines, school fees and transportation. This food insecurity is clearly a failure of livelihoods to guarantee access to sufficient food at the household level and not primarily agricultural failure (Sahn, *et al*, 1997). Household

food accessibility is therefore fundamental in the promotion of sustainable livelihoods. There is a need to create opportunities for food insecure people to make sustainable improvements in their livelihood and to ensure immediate access to adequate food for those who cannot support themselves.

The figure 2.1 below presents the relationship between assets and food security. The relationship can be at a national or household level.



**Figure 2.1: Food security conceptual framework (Riely, et al, 1999)**

It is clear in figure 2.1 that household resources have an influence on food accessibility. Households with more resources provide access to a wider range of livelihood options and improved decision making. Households can be involved in food production, can use cash income to participate in the market, and can receive remittances / transfers / loans from friends and relatives. All of the above strategies increase households' chances of accessing food. Lack of resources can in turn make it difficult for households to access food.

Figure 2.1 further indicates that households cannot have good health care and quality dietary intake if the human asset is not addressed. The human asset can be addressed by introducing adult education, nutrition education, primary health care and good sanitation practices. This practice will in turn lead to a high nutritional status and will increase food utilization. Improvement in food access facilitates greater consumption of food.

#### **2.4 Effects of assets on households**

The effects of assets on households have a negative influence on livelihood. Social assets influence well-being by mediating access to food and employment. Friends or relatives provide information about jobs and advice on how to access food. Lack of human assets presents severe obstacles to the establishment of secure livelihoods. Human assets investments like adult education, nutrition education, primary health care, sanitation practices and employment-oriented skill training are important to raise capabilities of the poor, thus decreasing negative effects (Greeley and Chaturvedi, 2005).

Lack of access to financial assets places a severe burden on the poor households. These households usually seek credit to meet basic needs like food rather than investment purposes (FAO, 2003). Owning livestock and land is an important livelihood strategy for households. The loss of livestock and land is a major shock to their livelihoods. Lack of natural assets like forests means households will not be able to have firewood for cooking. The same applies to lack of water, which will hamper households' ability to engage in production activities.

**Table 2.2: Effects that lack of assets have on households**

<b>Household Assets</b>	<b>Effects on Household</b>
1. Human Capital	Loss of knowledge, practices and skills. Reduction in school enrolment. Increase in school dropout rate.
2. Natural Capital	Decline in quality of permanent crops. Reduction in soil fertility. Renting or Leasing out of portions of land.
3. Physical Capital	Deterioration in housing conditions. Deterioration in animal traction activities. Inability to generate income in the short term.
4. Financial Capital	Reduction in income from farm and non farm activities. Change in wage earnings. Change in income-generating activities.
5. Social Capital	Change/ disruption of extended family patterns (widow abandonment by extended family). Disruption of social support groups. Unwillingness to support educational and nutritional needs.

Source: FAO, 2003

## **2.5 Conclusion**

Households' assets have implications for food accessibility. Unemployment continues to increase and households' incomes are too low to sustain. Water for irrigation remains a big problem since rural household still rely on wells and rivers for irrigation purposes. Supplemental income will become increasingly important for households and is currently

not addressed effectively. Most households' are still relying on remittances, feeding schemes and food parcels, which is effective in addressing food security in the short term, but not addressing long-term food security. It is important that rural households have access to land, where they can produce for themselves and determine their own destination. Through land and access to other household assets, problems of food inaccessibility can be better addressed.

## **CHAPTER 3**

### **METHODOLOGY**

#### **3.1 Introduction**

The chapter deals with the description of the Limpopo Province, the Sekhukhune District and Mamone Village. It also deals with the research methodology (i.e data collection design, research instrument, sampling and problems encountered during field work). All the details on how data were analysed is presented in this chapter.

#### **3.2 Study area**

The study area is Mamone Village which is located in the Greater Sekhukhune District of Limpopo Province. Limpopo Province is South Africa's northernmost province, lying within the great curve of the Limpopo River (StatsSA, 2006). It is the gateway to the rest of Africa, with its shared borders making it favourably situated for economic cooperation with other parts of Southern Africa.

The greater Sekhukhune District (Figure 3.1) is one of five districts in Limpopo Province. It is a cross-boundary district between the Limpopo and Mpumalanga Provinces. The district has five local municipalities. These are Fetakgomo, Makhudu Thamaga, Greater Marble Hall, Greater Groblersdal and Greater Tubatse (StatsSA, 2006).

Mamone Village which is characterised by red sands and rocky outcrops lies in the Sekhukhune District. Its inhabitants are the descendants of the Great Sekwati, and Mamone is often indicated, together with villages like Mohlaletsi and Madibong, as one of the places where the real Pedi customs are still followed.

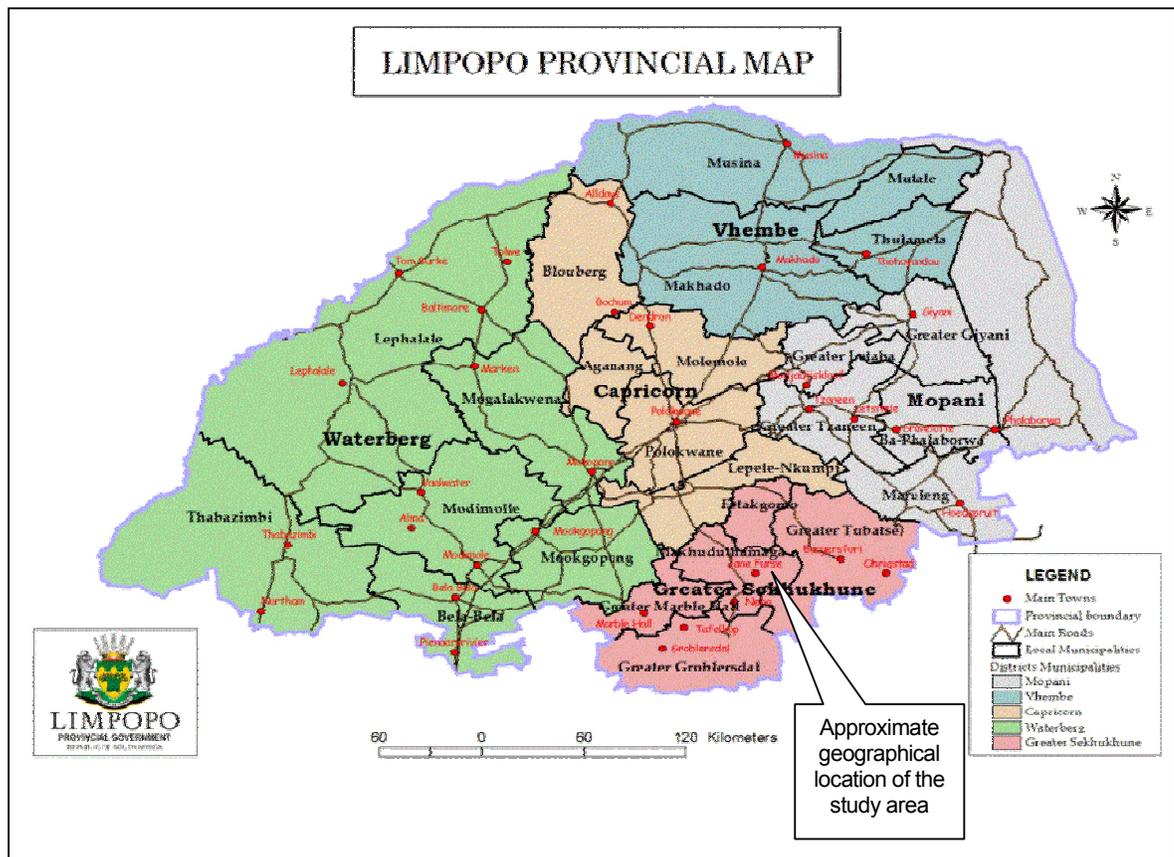


Figure 3.1 Geographic location of the greater Sekhukhune district (Limpopo Province (StatsSA, 2006))

### 3.3 Data collection design

This research used a quantitative design. During the first research visit after permission to conduct research in the village was granted by the chief, the questionnaires were explained to the local councillors. Two assistants were selected and trained in data collection. The importances of the study and data quality management were also explained. The assistants also played a role in giving directions in the village since the village is fairly large and has an unplanned geographical layout. The assistants relied on different landmarks to identify different wards. It was also important as part of ploughing back to the communities to empower local people with knowledge; here the assistants had an opportunity to learn more about data collection approaches.

### **3.4 Research instrument**

The instrument used in the study was a household questionnaire. The instrument was chosen because it was less expensive and required less skill to run. It was structured in such a way that it included matters relating to households assets and food accessibility. Two types of questions were used; *open-ended question* that gave the respondent chance to answer in their own words, and *closed-ended questions* which guided the respondent to choose answers from possible answers suggested by the researcher.

As part of testing validity and reliability, the questionnaire was first explained to the chief of the village and his councillors on the first visit and on the day of actual data collection. The questionnaire measured the same content on both days using the same people. Their answers were all the same on both days and they were all satisfied with the contents of the questionnaire because it produced information that was objective, unbiased and consistent. The information also showed good accuracy given the conditions of the village.

### **3.5 Sample and sampling methods**

The wards were selected using cluster random sampling. The community was divided into clusters along geographic boundaries. Ten households from each five wards were randomly selected and measured within sampled clusters. The total households included in the study were fifty. The following wards in Mamone Village were used in the sample namely, Ga Manyaka, Manyelethi, Matsoke, Magolwaneng and Maroteng.

### **3.6 Problems encountered during field work**

Many households were suspicious of the consequences of answering the questions. The tendency to associate the researcher with an informer who could get one arrested for being above the law was common. For instance, some households refused to disclose ownership of televisions for personal reasons.

It was also difficult for the researcher to convince some households to give their identification information, especially the age and income information as they took such

information confidential. It became apparent that the respondents misunderstood the nature of the questions at first. However, once respondents understood the pure academic nature of the research, they provided the information that was needed.

### **3.7 Food accessibility profile categories and analysis**

The data analysis was based on the research questions designed at the beginning of the research. Food accessibility categories and percentages were used to analyse data. Responses in the questionnaires were tabulated, coded and processed by the use of Statistical Package for Social Sciences (SPSS) version 15 programme.

In order to develop household food accessibility profile categories, information on human, social, financial, natural and physical assets was analysed using criteria shown in Table 3.1. Households were categorised as being food insecure (FI), vulnerable (VU), marginally food secure (MFS) and food secure (FS) (CFSVA, 2005).

Comprehensive food security and vulnerability analyses were used to categorise different food accessibility groups to meet the study objectives as shown in Table 3.1. According to comprehensive food security and vulnerability research published in 2005 (CFSVA, 2005), households with no education are most likely to be considered food insecure as shown in Table 3.1. Households with no access to basic sanitation could also be classified as those most likely to be vulnerable to food access. Households with no water source could be classified as those with marginal access to food. This method of classification also put households with full employment on the farm in the food secure category (CFSVA, 2005). It should be noted that the method used here for classification is a rough approximation of what will happen in real situations. Again the context in which these classifications were done appeared to be more or less the same in both studies.

From the classification of food accessibility using the above method presented in Table 3.1, a total of 50 households were classified as follows: Food insecure ( $n_1=30$ ), Vulnerable ( $n_2=8$ ), Marginal ( $n_3=7$ ), and Food secure ( $n_4=5$ ). The analysis could have sampling errors due to the small sub-samples and that the research could be repeated making use of a larger sample of each of the sub-samples, however, the analysis was sufficient in addressing the objectives of this research.

**Table 3.1: Definition of household food accessibility categories used in the study**

<b>Category</b>	<b>Definition</b>	<b>Measurement</b>
1. Food insecure:	Households with no education	No education (edu) = 1; 0 = otherwise
2. Vulnerable:	Households with no access to sanitation	No access to sanitation (san) = 5; 0 = otherwise
3. Marginal:	Households with no access to improved water sources	No water source (h2o) = 1; 0 = otherwise
4. Food secure:	Households with access to income generating activities	Fulltime employment on farm (act) = 2; 0 = otherwise

Source: CFSVA, 2005

### 3.8 Approximation of households according to human assets

The descriptions of variables employed in the analytical model are presented in Table 3.2. The variables included all human assets, namely gender (gen), employment (emp) and education (edu).

**Table 3.2 Variables used to describe households human assets characteristics**

<b>Assets</b>	<b>Description</b>
<b>Human Assets</b>	
Gender (gen)	0 = female; 1 = male
Employment (emp)	1 = working full-time; 2 = working part time; 3 = casual jobs; 4 = unemployed; 5 = pre – school; 6 = student; 7 = pensioner; 8 = housewife.
Education (edu)	1 = no education; 2 = some primary; 3 = primary completed; 4 = some secondary; 5 = secondary; 6 = post secondary; 7 = certificates; 8 = degree; 10 = post graduate

### 3.9 Approximation of households according to natural and social assets

The descriptions of variables used to explain natural and social assets employed are presented in Table 3.3. The variables included all natural and social assets, namely water source (h2o), water cleanness (cle) and membership to a local social organisation or society (org).

**Table 3.3: Variables used to describe households natural and social assets characteristics**

Assets	Description
<b>Natural Assets</b>	
Water source (h2o)	1 = tap in house; 2 = tap in yard; 3 = communal tap; 4 = spring/well; 5 = river; 6 = truck; 7 = handcart/ hawker; 8 = borehole; 9 = other; 10 = no regular source
Water cleanness (cle)	1 = always; 2 = most of the time; 3 = some of the time; 4 = never
<b>Social Assets</b>	
Local membership (org)	1 = burial society; 2 = agricultural associations; 3 = local stockvels; 4 = football association

### 3.10 Approximation of households according to financial assets

The descriptions of variables employed in the analytical model are presented in Table 3.4. The variables include all financial assets, namely income source (act), expenditure (ren), pay for food (paf), health care (pah) and transport (pat).

**Table 3.4: Variables used to describe households financial assets characteristics**

Assets	Description
<b>Financial Assets</b>	
Income source (act)	1 = informal employment; 2 = fulltime employment; 3 = seasonal employment; 4 = grants; 5 = remittances; 6 = pensions; 7 = selling snacks
Expenditure (ren)	1 = none; 2 = R1– R199 3 = R200 –R399; 4 = R400 –R599; 5 = R600 –R799; 6 = R800 –R999; 7 = R1000 –R1499; 8 = R1500– R2999 =R3000 –R6999; 10 = R7000– R8999 11 =R9000 –R13999; 12 = +R14000
Pay for food (paf)	1 =very difficult; 2 = difficult; 3 = don't know; 4 = easy; 5 = very easy
Pay for health care (pah)	1 =very difficult; 2 = difficult; 3 = don't know; 4 = easy; 5 = very easy
Pay for transport (pat)	1 =very difficult; 2 = difficult; 3 = don't know; 4 = easy; 5 = very easy

### 3.11 Approximation of households according to physical assets

The descriptions of variables employed in the analytical model are presented in Table 3.5. The variables include all physical assets, namely type of dwelling (dwe), access to grains (gra), access to fruits (fru), access to livestock (liv), storage facilities (sto) and cooking source (coo).

**Table 3.5 Variables used to describe household's physical assets characteristics**

Assets	Description
<b>Physical Assets</b>	
Type of dwelling (dwe)	1 = brick under asbestos; 2 = brick under tiles; 3 = bricks under corrugated sheets; 4 = bricks under thatched roof; 5 = pole and mud under thatch; 6 = pole and mud under asbestos
Access to grains (gra)	1 = Yes; 2 = No
Access to fruits (fru)	1 = Yes; 2 = No
Access livestock (liv)	1 = yes; 2 = no; 3
Storage facilities (water) (sto)	1 = container; 2 = tanks; 3 = drums; 4 = buckets; 5 =clay pots
Cooking energy source (coo)	1 = firewood; 2 = electricity; 3 =gas; 4 = paraffin; 5 = power from generator; 6 = solar energy

### 3.12 Conclusion

From the experience gained during field work, it can be said that in rural areas, where literacy rate is low, personal interviews using questionnaires as an interview schedule delivers the highest return rate. This can avoid problems that may be encountered during field work. The other experience drawn from field work is the advantage of using qualitative and quantitative methods; these methods give the researcher a full understanding of households' ability to acquire adequate amounts of food through a combination of their assets. It is also important to use statistical analyses to describe household assets and their food access.

## CHAPTER 4

### RESULTS AND DISCUSSIONS

#### 4.1 Introduction

The main purpose of this chapter is to analyse questions addressed by the questionnaire through appropriate methodology as well as the interpretation of data collected from the respondent in Mamone Village.

#### 4.2 Results and Discussion

The results in Table 4.1 show that 84% of the total 50 households sampled were female headed and 16% were male headed. Among the food insecure group 83.3% of 30 households were female headed and 16.7% headed by males. In the vulnerable group 87.5% of 8 households were headed by females and 12.5% headed by males. In the marginal group 85.7% of 7 households were headed by females and 14.3% were headed by males. Again in the food secure group 60% of the 5 households in the sub-sample were headed by females and 40% headed by males. Although the results indicate that female headed households constitute a significant number of the economically active population in Mamone Village it also reflects that female headed households usually fall within the vulnerable and food insecure categories (FAO, 2006).

**Table 4.1: Food access in terms of household gender**

	Food insecure n <sub>1</sub> =30	Vulnerable Marginal n <sub>2</sub> = 8	Food secure n <sub>3</sub> = 7	Total n <sub>4</sub> = 5	N = 50
	(%)	(%)	(%)	(%)	(%)
Male	16.7	12.5	14.3	40	16
Female	83.3	87.5	85.7	60	84
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

Table 4.2 shows that 62% of the total 50 households were pensioners and 18% were house wives. Only 6% of 50 households were working fulltime. In the food insecurity group 83.3% of 30 households were pensioners and 6.7% were house wives. Among the vulnerable group 100% of 8 households were pensioners. In the marginal group 71.4% of

7 households were pensioners and 14.3% were house wives. In the food secure 100% were working fulltime.

This is an indication that government support services continue to play an important role as a source of income, but that being categorised as food secure appears to be dependant on having a form of permanent employment. It could be noted from Table 4.2 that in the food secure group 40 percent indicated that they are unemployed. Further analysis revealed that these households are actively farming and producing food for household use as discussed in Table 4.9.

**Table 4.2: Food access in terms of household employment**

	Food insecure n <sub>1</sub> =30	Vulnerable Marginal n <sub>2</sub> = 8	Food secure n <sub>3</sub> = 7	Total n <sub>4</sub> = 5	N = 50
	(%)	(%)	(%)	(%)	(%)
Fulltime employment	0	0	0	100	6
Unemployment	10	0	14.3	0	14
Pensioner (not working)	83.3	100	71.4	0	62
Housewife (not working)	6.7	0	14.3	0	18
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

The results presented in Table 4.3 show that 60% of the total 50 households had no education and 20% had some primary education. Among the food insecure group 100% of 30 households had no education. In the vulnerable group 87.5% of 8 households had no education and 12.5% had some primary education. In the marginal group 100% of 7 households had no education. Finally in the food secure group 40% of 5 households had secondary education and 20% had a tertiary education degree. This is a serious limitation for households to access food because according to FAO (2006), lack of education correlates strongly with hunger and food insecurity. These figures therefore correlate with the millennium development goal number two which aims at paying specific attention to improving education amongst the whole population in order to reduce poverty and address hunger and malnutrition.

**Table 4.3: Food access in terms of household education**

	Food insecure n <sub>1</sub> =30	Vulnerable n <sub>2</sub> = 8	Marginal n <sub>3</sub> = 7	Food secure n <sub>4</sub> = 5	Total N = 50
	(%)	(%)	(%)	(%)	(%)
No education	100	87.5	100	20	60
Some primary	0	12.5	0	20	20
Secondary	0	0	0	40	18
Degree	0	0	0	20	2
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

The results in Table 4.4 show that 90% of the total 50 households used a spring/well as a water source and 10% had a tap with piped water inside the houses. In the food insecure group 86.5% of 30 households used a spring/well and 13.3% had a tap with piped water in the houses. Among the vulnerable group 87.5% of 8 households used a spring/well and 12.5% had a tap with piped water in the houses. In the marginal group 100% of 7 households used a spring/well while in the food secure group 80% of the 5 households used a spring/well and 20% had a tap with piped water in the house.

From Table 4.4 there appears to be no significant pattern in terms of having access to food and a tap with piped water in the house. However, due to the small sub-sample sizes it is possible that a significant pattern does not show. It could be beneficial to repeat this study on a larger scale to determine if having piped water inside the house plays a significant role in having access to food in Mamone Village.

**Table 4.4: Food access in terms of household natural and social assets**

	Food insecure n <sub>1</sub> =30	Vulnerable n <sub>2</sub> = 8	Marginal n <sub>3</sub> = 7	Food secure n <sub>4</sub> = 5	Total N = 50
	(%)	(%)	(%)	(%)	(%)
<i>Water source:</i>					
Tap in house	13.3	12.5	100	20	10
Spring / well	86.7	87.5	0	80	90
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<i>Water cleanness:</i>					
Always	3.3	0	14.3	40	4
Never	96.7	100	85.7	60	96
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<i>Local membership:</i>					
Burial society	100	100	100	80	96
Agric association	0	0	0	20	4
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

It was not surprising that most households had no access to clean water. This was because of the water source they used. Table 4.4 shows that 96% of 50 households had no access to clean water as compared to 4% of households who had access to clean water. The same trend is shown in the other categories, whereby in the food insecure group 96.7% of 30 households had no access to clean water, leaving 3.3% with access to clean water. In the vulnerable group 100% of 8 households had no access to clean water. In the marginal group 85.7% of 7 households had no access to clean water and the resultant 14.3% had access to clean water. Sixty percent of 5 households in the food secure group had no access to clean water with the remaining 40% that had access to clean water.

This has a very serious implication for food accessibility, because without clean and hygienic water households will experience problems in accessing and cooking healthy food. Questionable cleanliness of water is also connected with diseases and unhealthy human and physical conditions.

As a means of determining the extent of supportive social assets, respondents were asked on whom their households relied in difficult times. The results indicate that 96% of the total 50 households relied on burial societies and 4% relied on agricultural association as shown in Table 4.4. The results in different food accessibility categories also show that burial societies were popular among households, with 100% of 30 households in food insecure group relying on burial societies. In the vulnerable group 100% of 8 households relied on burial societies. Again in the marginal group 100% of 7 households relied on burial societies. Finally in the food secure group 80% of 5 households relied on burial societies and 20% relied on agricultural association. The implication is that households should be involved in other local organisations like community food schemes, where they buy groceries and share among themselves. This could enable them to become more food secure in future as is revealed by Putnam (1993) in this regard.

Table 4.5 shows that pensions are the main source of income for households. In all 52% of the total 50 households surveyed received income from pensions and 16% from government grants. In the different food accessibility categories, pensions still served as a main source of income, 70% of 30 households in the food insecure group received income

from pensions. In the vulnerable group 75% of 8 households received income from pensions and about 42.9% of 7 households in the marginal group received income from pensions. In the food secure group 100% of 5 households received income from full time employment. This result indicates that the role of government support services does assist in having limited access to food but the important role that job creation could play in ensuring access to food should be recognised as a primary influencing factor to having food access, bearing in mind that the category of food security rests on having full-time employment.

**Table 4.5: Food access in terms of household income sources**

	Food insecure n <sub>1</sub> =30	Vulnerable Marginal n <sub>2</sub> = 8	Food secure n <sub>3</sub> = 7	Total n <sub>4</sub> = 5	N = 50
	(%)	(%)	(%)	(%)	( % )
Informal Employment	3.3	0	0	0	4
Full time Employment	3.3	0	4.3	100	10
Government grants	10	12.5	14.3	0	16
Remittances	10	12.5	14.3	0	14
Pensions	70	75	42.9	0	52
Selling snacks	3.3	0	14.3	0	4
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

Table 4.6 shows monthly expenditures of households. The results show that 40% of the total 50 households spend R600 – R 799 monthly. Thirty percent of total 50 households spend R 800 –R 999 monthly. In the food insecure group 40% of 30 households spend R800 – R999 monthly and 36.7% spend R600 – R799 monthly. In the vulnerable group 75% of 8 households spend R600 – R799 monthly and 12.5% spend R400 – R599 and R200 – R399 respectively in a month.

In the marginal group 42.9% of 7 households spend R800 – R999 monthly and 28.6% used R400 – R599 monthly. In the food secure group 40% of 5 households spend R1500 – R2999 monthly. These results are not surprising as 52% of households shown in Table 4.5 rely on pensions as their income source. This will have a very serious impact on how households pay for food and other necessities.

**Table 4.6: Food access in terms of household expenditure**

	Food insecure n <sub>1</sub> =30	Vulnerable n <sub>2</sub> = 8	Marginal n <sub>3</sub> = 7	Food secure n <sub>4</sub> = 5	Total N = 50
	(%)	(%)	(%)	(%)	(%)
R200 –R 399	6.7	12.5	14.3	0	8
R400 – R599	10	12.5	28.6	0	6
R600 –R 799	36.7	75	0	20	40
R800 –R 999	40	0	42.9	0	30
R1000 –R 1499	3.3	0	0	20	6
R1500 –R 2999	3.3	0	14.3	40	8
+R14000	0	0	0	20	2
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

Among all sampled households, 62% of the total 50 households found it difficult to pay for food, health care and transport and 36% found it very difficult to pay for food, health care and transport as shown in Table 4.7. In their food accessibility categories, 60% of 30 households found it difficult to pay for food and 40% found it *very* difficult. In the vulnerable group 75% of 8 households found it very difficult to pay for food and 25% found it difficult. In the marginal group 57.1% of 7 households found it difficult to pay for food and 42.9% found it *very* difficult. Finally 60% of 5 households found it difficult to pay for food, 20% found it *very* difficult and only 20% found it easy to pay for food

In the food insecurity group 60% of 30 households found it difficult to pay for health care and 40% found it *very* difficult. In the vulnerable group 75% of 8 households found it *very* difficult to pay for health care and 25% found it difficult. In the marginal group 57.1% of 7 households found it difficult to pay for health care and 42.9% found it *very* difficult. Finally 60% of 5 households found it difficult to pay for health care, 20% found it *very* difficult and only 20% found it easy to pay for health care.

In the food insecurity group 60% of 30 households found it difficult to pay for transport and 40% found it *very* difficult. In the vulnerable group 75% of 8 households found it *very* difficult to pay for transport and 25% found it difficult. In the marginal group 57.1% of 7 households found it difficult to pay for transport and only 42.9% found it *very* difficult.

Finally 60% of 5 households found it difficult to pay for transport, 20% found it *very* difficult and only 20% found it easy to pay for transport.

This is due to the income source that the households used and hence 40 % of households used R600 – R799 as their monthly expenditure, which makes it very difficult for them to pay for food, health care and transport. It is also not good for households because according to Ipinge and Kinabo (2000) inability to pay for food, health and transport deprives households of certain essentials, since the households may even sell some of their productive assets to pay for food, health care and transport. When households commence to sell productive assets it places them in a predicament that often result in them moving from a food secure to a marginally food secure category, or a marginally food secure category to a vulnerable category and finally from a vulnerable category to a food insecure category (Start, 2001).

**Table 4.7: Household’s ability to pay for food, health care and transport**

	Food insecure n <sub>1</sub> =30 (%)	Vulnerable n <sub>2</sub> = 8 (%)	Marginal n <sub>3</sub> = 7 (%)	Food secure n <sub>4</sub> = 5 (%)	Total n <sub>4</sub> = 5 (%)	N = 50 (%)
Very difficult	40	75	42.9	20	20	36
Difficult	60	25	57.1	60	60	62
Easy	0	0	0	0	20	2
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
Very difficult	40	75	42.9	20	20	36
Difficult	60	25	57.1	60	60	62
Easy	0	0	0	0	20	2
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
Very difficult	40	75	42.9	20	20	36
Difficult	60	25	57.1	60	60	62
Easy	0	0	0	0	20	2
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

According to Makhura (2004) the characteristics of the dwellings in which households live provide an important indication of the well-being of households’ members. About 62% of 50 households do not satisfy the characteristics of a good dwelling. Only 10% of 50 households have their dwellings built with bricks under tiles.

Table 4.8 further shows that in food insecurity group 70% of 30 households used bricks under corrugated iron and 20% used poles and mud under thatch. In the vulnerable group 62.5% of 8 households used poles and mud under thatch and 25% used bricks under corrugated iron. In the marginal group 42.9% of 7 households used bricks under corrugated iron and 28.6% used bricks under tiles. Similarly, in the food secure group 40% of 5 households used bricks under corrugated iron and 40% used bricks under tiles. Although this indicates a limited socio-economic development in the village there is potential to practice rainwater harvesting from dwellings that make use of corrugated iron, tiles or asbestos sheets. The effective practice of rainwater harvesting could have a potentially positive impact on the availability of water for households, and the household would further be enabled to monitor and manage cleanliness of the water and regulate their household use and what is available for household food production.

**Table 4.8: Food access in terms of household dwelling**

	Food insecure n <sub>1</sub> =30	Vulnerable n <sub>2</sub> = 8	Marginal n <sub>3</sub> = 7	Food secure n <sub>4</sub> = 5	Total n <sub>4</sub> = 5	N = 50
	(%)	(%)	(%)	(%)	(%)	(%)
Bricks under tiles	6.7	0	28.6	40	40	10
Brick under asbestos	0	0	0	20	20	2
Brick under corrugated iron	70	25	42.9	40	40	62
Pole and mud under thatch	20	62.5	14.3	0	0	24
Pole and mud under asbestos	0	0	20	0	0	2
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

Table 4.9 shows that 60% of the total 50 households had access to a grain garden as compared to 40% without access to a grain garden. The results further show that in the food insecurity group 60% of 30 households had access to grain garden leaving 40% with no access to grain gardens. About 87.5% of 8 households in the vulnerable group had access to grain gardens as compared to 12.5% with no access. In the marginal group 28.6% of 7 households had access to grain gardens and the resultant 71.4% had no access. Finally 60% of 5 households had access to grain gardens with the remaining 40% that had

no access. These results suggest that the benefits of grain gardens are not yet realised by the households.

About 72% of the total 50 households surveyed had access to fruit trees and 28% had no access. But it seems the benefits of having access to fruit trees is not yet realised. This is confirmed by the percentages of households in different food accessibility categories. In the food insecure group 66.7% of 30 households had access to fruit trees and 33.3% had no access. In the vulnerable group 62.5% of 8 households had access to fruit tree leaving 37.5% with no access. About 57.1% of 7 households had access to fruit trees and 42.9% had no access. Finally 80% of 5 households had access to fruit trees as compared to 20% with no access. The challenge here is to encourage households to use the benefits of fruit trees to realise food accessibility. Planting fruit trees also has the added benefit of diversifying the food of the household that further improves the food access status of the household. The potential of processed to be used during winter months when produced food becomes scarce is another additional benefit of having fruit trees.

Livestock ownership constitutes an asset that is widely owned by rural households in developing countries and performs a crucial role as a contributor of income generation and food accessibility (FAO, 2006). From the study (Table 4.9) it seems as though the situation in Mamone differs from what would be expected according to the literature. About 52% of 50 households have access to livestock as compared to 48% without access to livestock. It is also shown in Table 4.9 that 60% of 30 households in the food insecure group had access to livestock and 40% had no access.

In the vulnerable group 62.5% of 8 households had access to livestock and 37.5% had no access. In the marginal group 42.9% of 7 households had access to livestock while 57.1% had no access. About 40% of 5 households had access to livestock as compared to 60% with no access. This indicates that the benefits of owning livestock is not yet realised by most households hence food accessibility will not be achieved by some households. It would be necessary to conduct further research on the reasons why livestock ownership does not place household in a more secure position in terms of food access by investigating further the type of livestock that is owned against the uses and products utilised from the livestock.

**Table 4.9: Households access to grain garden, fruit tree and livestock ownership**

	Food insecure n <sub>1</sub> =30	Vulnerable n <sub>2</sub> = 8	Marginal n <sub>3</sub> = 7	Food secure n <sub>4</sub> = 5	Total N = 50
<i>Access to grain (%) garden</i>					
Yes	60	87.5	28.6	60	60
No	40	12.5	71.4	40	40
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<i>Access to fruit tree</i>					
Yes	66.7	62.5	57.1	80	72
No	33.3	37.5	42.9	20	28
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<i>Livestock ownership</i>					
Yes	60	62.5	42.9	40	52
No	40	37.5	57.1	60	48
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

Food access is an essential feature of a household's means of survival. It depends on self production and an ability to store water especially in areas where there is limited access to water (Kumar, 2002). About 70% of 50 households used plastic containers and 24% used tanks as storage facilities as shown in Table 4.10. In the food insecure group 66.7% of 30 households used plastic containers and 26.7% used tanks. In the vulnerable group 62.5% of 8 households used plastic containers and 25% used buckets. About 57.1% of 7 households used plastic containers as compared to 42.9% who used tanks. Finally in the food secure group 40% of 5 households used plastic containers and 60% used tanks.

Through observation of each household the plastic containers always contain dirty and unhygienic water from springs and this makes it difficult for households to access healthy foods. The use of tanks enables households to be in a good position to access clean water for cooking food. In terms of water storage facilities it is obvious that traditional mechanisms of storing water in clay pots has been abandoned in favour of plastic containers.

**Table 4.10: Food access in terms of household water storage facilities**

	Food insecure n <sub>1</sub> =30	Vulnerable n <sub>2</sub> = 8	Marginal n <sub>3</sub> = 7	Food secure n <sub>4</sub> = 5	Total N = 50
	(%)	(%)	(%)	(%)	(%)
Plastic containers	66.7	62.5	57.1	40	70
Tanks	26.7	12.5	42.9	60	24
Buckets	3.3	25	0	0	4
Drums	3.3	0	0	0	2
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

Table 4.11 shows that 94% of the total 50 households relied on firewood to prepare food as compared to 6% who relied on electricity. In the food insecure group 93.3% of 30 households relied on firewood for cooking and 6.7% relied on electricity. In the vulnerable group 100% of 8 households relied on firewood for cooking. About 85.7% of 7 households relied on firewood for cooking and 14.3% relied on electricity. Finally in the food secure group 60% of 5 households relied on firewood for cooking and 40% relied on electricity.

The use of firewood in Mamone Village is done in an unsustainable manner. Nearly 94 % of 50 households raised their concern about how lack of electricity is affecting their livelihood because of time involved in collecting firewood and high prices they experienced from local sellers of firewood. The households would therefore benefit from planting woodlots for firewood and having community resource management structures that can manage the sustainable use of firewood as a resource.

**Table 4.11: Food access in terms of households cooking energy source**

	Food insecure n <sub>1</sub> =30	Vulnerable n <sub>2</sub> = 8	Marginal n <sub>3</sub> = 7	Food secure n <sub>4</sub> = 5	Total N = 50
	(%)	(%)	(%)	(%)	(%)
Firewood	93.3	100	85.7	60	94
Electricity	6.7		14.3	40	6
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

### **4.3 Conclusion**

Results from the descriptive statistics employed in this study show that the highest numbers of respondents were female headed households. The results also show that 62% of the total 50 households depend on pensions as their source of employment while 60% of total 50 households had no formal education.

On the question of water, 90% of total 50 households used springs/wells as their water source while 96% of the total 50 households did not receive clean water. The results also show that 96% of the total 50 households relied on burial societies as their social asset. A fairly high percentage of (62%) of the total 50 households did not cope in paying for food, health care and transport. From 50 households, 52% of the total 50 households relied on pensions as an income source while 40% of the total 50 households spend R600 – R799 monthly on expenditure.

With regard to physical assets, 62% of the total 50 households used bricks under corrugated iron as their dwelling type while 70% of the total 50 households used plastic containers as their storage facility. The result shows that 94% of the total 50 households used firewood as a source of cooking energy. Sixty percent of the total 50 households had access to grain gardens; 72% of the total 50 households had access to fruit garden and 52% of the total 50 households owned livestock.

## CHAPTER 5

### CONCLUSION AND RECOMMENDATIONS

#### 5.1 Introduction

This study was based on assets portfolios and food accessibility in a village in Limpopo Province. The two analytical tools used were descriptive analysis and comprehensive food security and vulnerability analysis. By using these types of analyses, the aim was to achieve the three objectives of the study, namely:

- Differentiate categories for households' food access in terms of household assets. This was achieved through the use of comprehensive food security and vulnerability analysis. The following categories were identified: food insecurity, vulnerability, marginal and food secure categories.
- Compare different food access categories in terms of households' assets. This was achieved by calculating percentages of households in different categories in terms of their assets. It was also found that food insecure households are characterised by very weak access to food. Vulnerable households were characterised by weak access to food. Marginal households were characterised by medium access to food while food secure households were characterised by good access to food in terms of their assets.
- Identify gaps that exist in determining households' food access in terms of households' assets. The following gaps were identified: lack of education, lack of a reliable water source, lack of infrastructure, lack of employment opportunities, lack of water storage facilities and lack of income generating activities.

It was well established that lack of food accessibility was largely driven by poor households' lack of productive assets essential for food production, the meagre contribution of subsistence agriculture to households food needs, a relatively high dependence on government support services and limited access to good water sources.

The study indicates that households in Mamone Village generally have a small economic base meaning few people are involved in providing services and products to their local economy, implying that a large proportion of the population reside in areas with few employment opportunities and therefore creating high unemployment rate as discussed in chapter 4. This further implies that households would look towards other sources of income such as remittances, government grants and pensions in order to secure food accessibility in an environment where food production is minimal as shown in Table 4.5 of chapter 4.

Furthermore, with the settlement patterns in rural areas being largely scattered over a wide area, the provision of infrastructure and services for the majority of the population is difficult and costly to achieve. According to Table 4.8 of chapter 4, Mamone Village have a low infrastructure base, due largely to the fact that parts of all five wards were on rocky outcrops and had a backlog in infrastructure provision as well as reliable water source as reflected in Table 4.4 of chapter 4.

## **5.2 Key challenges**

The following key food accessibility challenges facing households were identified:

### *5.2.1 Household food production*

The majority of households in Mamone are not involved in food production, some have access to grain gardens and fruit trees but many of these households are still food insecure and vulnerable. Where there is interest and available support structures, the challenge is to strengthen household food production, storage and distribution in order to facilitate access to other markets. Water is a key challenge with regard to food production particularly since 90 % of the 50 households were relying on a spring / well as their water source. This means if rainfall is low, food production will be compromised. Yet, it was indicated that there is potential for rainwater harvesting techniques to be investigated and implemented in the village.

### *5.2.2 Purchasing power*

There is generally a limited scope of income opportunities in Mamone. Fifty two percent (52 %) of the total 50 households rely on pensions and this makes their monthly income and resultant expenditure very low. The challenge is to foster participation in the mainstream economy through pro poor employment creation and to create sustainable opportunities through government assistance such as public works programme.

### *5.2.3 Safety nets*

The government role is to ensure that there are adequate safety nets and food emergency management systems as a last resort to assist households that are unable to meet their food needs from their own efforts. This must be encouraged especially in Mamone Village where some households still spend R200 – R399 as monthly expenditure.

In conclusion it is evident from the results that lack of assets is both an effect and a cause of lack of food access. Households without assets tend to be consumption poor because they have nothing to sell in difficult times and they are economically dependent. This study shows the reality of food accessibility in Mamone Village and will hopefully provoke discussion about the resources and systems underlying food accessibility activities in Mamone Village.

## **5.3 Recommendations**

It is recommended that special attention be given to measures that will provide the necessary factors that negatively affect household food security and vulnerability. The government should also give special attention to policy measures that guide towards the provision of household assets.

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ANNEXURE A

**INSTRUCTIONS TO INTERVIEWERS**

***INTRODUCTION AND DEFINITION OF A HOUSEHOLD:***

**My name is Phokele Maponya** Your household has been chosen to participate in this study and your contribution is very important. By answering our questions, you can help in planning future rural development strategies for the country. The answers that you personally give will be kept strictly confidential. They will be put together with everyone else's to give an overall picture. No-one will be able to know what you said as an individual, or what other members of your household said. So please feel free to tell us what you think.

I would first like to speak to the person who is head of the household [**Interviewer: ask “who is the head of this household”, if the person is absent and not likely to return in the next 3 days (e.g. a migrant worker) than ask “who is the person that makes important financial decisions about this household other than the person who is not here”. Once you have identified the head of the household then carry on**]

By household we mean all people who live, sleep and eat here permanently for at least 4 days a week and who generally sleep in this dwelling. People/children who are in an institution or at a boarding school but who are financially dependent on the household are seen as household members, however migrant laborers are excluded.

**Date of interview: ...2007 August 20.....**

**Number: .....**

**Household Asset Portfolio and Food Accessibility Questions**

[Interviewer: head of household for Section One. Let’s talk about who lives in this household.

Name	Birth date	Gender (please specify )		Relationship to Head of Household	Employment status (codes at end of table)	Education Level (codes below)
Respondent 1. (head of household)		M	F	XXXXXXXXXXXX		
2.		M	F			
3.		M	F			

Name	Birth date	Gender (please specify )		Relationship to Head of Household	Employment status (codes at end of table)	Education Level (codes below)
4.		M	F			
5.		M	F			
6.		M	F			
7.		M	F			
8.		M	F			
9.		M	F			
10.		M	F			
11.		M	F			
12.		M	F			
13.		M	F			
14.		M	F			
15.		M	F			

Codes for employment status:		Codes for education:		Codes for Relationship to Head of Household	
Working full-time	1	No formal schooling	1	Father	1
Working part-time	2	Some primary education	2	Mother	2
Casual/piece jobs	3	Primary education completed	3	Brother	3
Unemployed	4	Some secondary school education	4	Sister	4
Pre-school	5	Secondary school education completed	5	Uncle	5
Student (at school or further education)	6	Post secondary college education	6	Other ( specify)	6
Pensioner	7	Certificates / Short courses	7		
Housewife taking care of home full-time	8	Some university education	8		
		University degree	9		
		Post graduate degree	10		
		Refused	98		
		Don't know	99		

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1. **This household is located in:**

District	Sekhukhune
Wards	Manyelethi. Maroteng, Ga Manyaka, Magolwaneng, Matsoke.
Village	Mamone

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2. **TYPE OF DWELLING:**

Brick under asbestos	-1
Brick under tiles	-2
Brick under corrugated sheets	-3
Brick under thatched roof	-4

Pole and mud under thatch	-5
Pole and mud under asbestos or iron sheets	-6
Other (please specify)	-7

---

3. Do you have access to arable land?

Yes  
-1

GO TO Q5

No  
-2

GO TO Q8

---

4. How much land do you have access to and how much of the land available for field crops did you actually cultivate during this past year? Indicate **in hectare for field crops and in square metres for home gardens**. One hectare = 100m x 100 metres. Enumerator to probe for size and calculate approximate size)

4.1

*How much land do you have available for:*

Field  
crops.....  
.....  
Hectares

4.2

Home  
garden.....  
.....  
Square metres

How much of the land available for field crops did you actually cultivate during this past year?

*Size of land actually cultivated in the case of field crops*

Practically all of it  
01

At least half or more  
02

Less than half  
03

---

5. What is your major source of energy for cultivating the soil?

- Manual labour 01
- Draft animals 02
- Petrol and diesel 03

---

6. What crops do you plant? Indicate by making a tick whether the crops are planted for:

		Own consumption	Mostly own, but small surplus is sold	Most of the harvest is sold
Grains				
	01			
	02			
	03			
Vegetables				
	04			
	05			
	06			
Fruit				
	07			
	08			
	09			
Other (specify)				
	10			

---

7. Do you or any members of this household **own any livestock**.

Yes	-1	<b>GO TO Q8</b>
No	-2	<b>GO TO Q11</b>
Don't know	-3	<b>GO TO Q11</b>

8. If yes to question 7:

List which members of the household own livestock	No. of horses	No. of cattle	No. of Goats	No. of Sheep	No. of chickens	No. of donkeys	Other (please specify)

9. If you own cattle or goats or sheep, where do these animals graze? More than one response is possible.

Communal land	-1
Land privately owned by a member of this household	-2
Land leased	-3
Other ( specify)	-9

10. Does your household have surplus of the following to sell?

		None	Sometimes but not often	Regularly
Cattle	-1			
Sheep	-2			
Goats	-3			
Chickens	-9			
Other ( specify)	-10			

11. How do you rate the quality of the following agricultural support functions that you have access to?

	Very good	Good	Average	Poor
Information				
Seed				
Medicines				
Pesticides				
Herbicides				
Markets for crop products :				
Local Market				
Outside Market				

Markets for livestock and livestock products:				
Local Market				
Outside Market				

---

12. Which of the following sanitation does your household mainly use?

Flush toilet inside dwelling	-1	GO TO Q14
Flush toilet outside dwelling	-2	<b>GO TO Q13</b>
Traditional pit latrine	-3	
Ventilated improved pit (VIP) latrine	-4	
No access to toilet - bush/field	-5	GO TO Q13

---

13. Approximately how many *other* households in addition to your household have to use this toilet as well?

.....

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14. **[ASK ALL]**  
Is your rubbish removed by your local authority?

Yes	-1	<b>GO TO Q16</b>
No	-2	<b>GO TO Q15</b>
Don't know	-9	<b>GO TO Q15</b>

15. How do you get rid of your rubbish? Do you:

Dump it in bins in the yard	-1
Dump it in a communal rubbish dump	-2
Burn your rubbish	-3
Dump the rubbish in the open	-4
Other ( specify)	-5

16. What main source of energy does your household use for lighting and cooking?

	<i>Lighting</i>	<b>Cooking</b>
Candles	01	Xxxxxxxx
Charcoal/wood	02	01
Electricity	03	02
Gas	04	03
Paraffin/Primus stove	05	04
Power from a generator or battery	06	05
Solar energy	07	06
Other ( specify)	08	07

17. Where do you **mainly** get water for household use?

Tap in house	-01	GO TO Q21
Tap in yard	-02	
Communal tap	-03	GO TO Q18
Spring/Well	-04	
River/Dam	-05	
Truck	-06	
Handcart/hawker	-07	
Borehole	-08	GO TO Q21
Other	-09	
No regular source	-10	

18. Which one person mainly/**usually** fetches the water?

Respondent	-01
Spouse/partner	-02
Son	-03
Daughter	-04

Other male	-05
Other female	-06

19. How long does it take to get water – in other words, from your house to the water and back to your house?

About 15 minutes or less	-1
More than 15 minutes less than 30 minutes	-2
More than 30 minutes less than 60 minutes	-3
More than 60 minutes	-4
Don't know	-5

---

20. Approximately how many times a day is water fetched for the household?

.....

---

21. Would you say that the water you get is clean:

Always	-1
Most of the time	-2
Some of the time	-3

Never	-4

---

22. How do you store water?

Plastic Container	-1
Tanks	-2
Drum	-3

Buckets	-4
Clay pots	-5
Other ( specify)	-6

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23. Indicate to which of the following items you have access:

radio	-01
bicycle	-02
Television	-03
Electric fan	-04
Motorbike	-05
Refrigerator	-06
Land phone	-07
Mobile phone	-08
Car	-09
Truck	-10

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24. Where do you and your household usually go for medical care?

		Travel time	Queuing time
Private doctor	-01		
Private hospital / nursing home	-02		
Public clinic	-03		
Mobile clinic	-04		
Public hospital	-05		
Traditional healer	-06		

Drug vendor/shop/pharmacy	-07		
Other (specify)	-08		

About 15 minutes or less	-1
More than 15 minutes less than 30 minutes	-2
More than 30 minutes less than 60 minutes	-3
More than 60 minutes	-4
Don't know	-9

25. What activities bring in any money into this household?

	<i>Yes</i>	<i>Rank them in order of contribution, where (1) is the biggest contribution and (7) is the smallest contribution</i>
Informal employment e.g. selling things/ small business	-1	
Formal full-time employment	-1	
Temporary or seasonal employment	-1	
Government grant, e.g. child maintenance	-1	
Money sent from other relatives	-1	
Pensions	-1	
Other: (Specify)	-1	

26. Please tell me approximately how much money this household has to spend monthly on rent, food, bills and school fees.

None		R 1500 – 2999	-08
R1 - 199	-02	R 3000 – R6999	-09
R200 - 399	-03	R 7000 – 8999	-10
R400 - 599	-04	R 9000 – 13999	-11
R 600 - 799	-05	R 14000 and above	-12
R 800 - 999	-06	Refused to answer	-98
R 1000 - 1499	-07	Don't know	-97

27. How difficult or easy do you find it in this household to:

	<b>Very difficult</b>	<b>Difficult</b>	<b>Don't know</b>	<b>Easy</b>	<b>Very Easy</b>
Pay for clothing	1	2	3	4	5
Pay for food	1	2	3	4	5
Pay for health care	1	2	3	4	5
Pay for transport to the nearest town	1	2	3	4	5
Pay for school books	1	2	3	4	5
Pay for agricultural inputs (e.g. fertilizer, seed, implements)					
Save money	1	2	3	4	5

28. Are you a member of any local organization?

Burial society	-01
Agricultural associations	-02
Local stokvels	-03
Football association	-04
Other, specify	-05

29. If this household had extra money, what would you spend that money on? Besides food.

Order of importance	Things I would spend money on (apart from food)
1. Most Important	
2. 2 <sup>nd</sup> most important	
3. 3 <sup>rd</sup> most important	

**THANK YOU VERY MUCH FOR YOUR TIME.**