THE ROLE OF THE AGRICULTURAL AND AGRO-PROCESSING SECTORS IN REDUCING UNEMPLOYMENT AND POVERTY IN THE TOWNSHIPS OF LESEDI

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CHAPTER ONE: INTRODUCTION

1.1 BACKGROUND

The problem of poverty is a typical human phenomenon that has been prevailing for thousands of years. Governments have always been, and continue to be, concerned about this problem (Wilson & Ramphele, 1991:ix). In South Africa, a research study on poverty in the country was commissioned by the government in 1998. This research resulted in the PIR (Poverty and Inequality Report), published on 13 May 1998.

A number of governmental and non-governmental institutions in South Africa, and in most other countries, are concerned about poverty and are constantly monitoring and trying to alleviate poverty. Over the years, poverty has continuously commanded government attention and resulted in the introduction of public welfare policies aimed at reducing poverty (May, 1998). Unemployment is a serious problem in South Africa, affecting some 40 percent of the economically active population who are without employment in the formal economy. This is further compounded by the fact that the formal economy absorbs only about five percent of new entrants annually, and has been losing jobs over the last four years (Ashley *et al.* 1994:11).

The Sedibeng District Municipality is a part of the Vaal Triangle and consists of the Emfuleni, Midvaal and Lesedi Municipalities, comprising a total population of 794,608 in 2001 (Statistics South Africa, 2001). The population of Sedibeng comprises nine percent of the population in the Gauteng Province. The annual growth rate of the Sedibeng population for the years 1996 to 2001 is two percent compared to the growth rate of 3.75 percent for the Gauteng population. The national average growth rate is also two percent per annum (Statistics South Africa, 2001).

Table 1.1 below offers a profile of the Sedibeng population.

Table 1.1Population of Sedibeng (2001)

Municipalities	Population	Households	Average household size	Area
Emfuleni	658,422	187,044	3.52	1,276 km^2
Midvaal	64,644	20,778	3.11	3,312 km^2
Lesedi	71,542	18,853	3.79	1,430 km^2
Total	**794,608**	**226,675**	**3.47**	**6,018 km^2**

Source: Statistics South Africa, 2001 (Census figures).

The Lesedi Municipality forms part of the Sedibeng District and has a total population of 71,542. The number of households in Lesedi is estimated at 18,853 and the average household size is estimated at 3.79 persons per household (calculations based on Census figures from Statistics South Africa, 2001).

The agricultural sector is currently a very small sector in the Vaal Triangle. Because of the low capital requirements for job creation, informal small-scale agriculture, rural and urban agriculture may provide opportunities for the low-skilled poor unemployed. Employment in the rural and urban agricultural sector should be encouraged for those who have lost their jobs and those who are unskilled and find it difficult to be absorbed employed by the formal sector. It is likely that the stimulation of the agricultural sector could lead to the establishment of agricultural-based industries like agro-processing industries (Slabbert, 2001:339).

1.2 PROBLEM STATEMENT

The Sedibeng economy experienced a real GGP growth of –4.1 percent per annum from 1996 to 1999. Between 1991 and 1996 there was a huge decrease in employment opportunities amounting to 54,000. From 1996 to 2001 there was an additional decrease in employment opportunities totalling 4,955 in Sedibeng (calculations based on Statistics South Africa 2001 Census data).

As a result, there is a severe poverty problem in the previously disadvantaged townships and in the rural areas. The factors of poverty in these areas may be

summarised as follows (IDP, 2004: 37-40):

- the low levels of payment for services and poor service provision;
- the municipality does not provide any infrastructural services to the farms, nor is it within its capacity to do so in the future;
- formal unemployment is very high. Although variations occur throughout the study area, indications are that in some of the areas unemployment is as high as 70 percent;
- many people have resorted to the informal sector in an attempt to earn a living; however, incomes earned from these activities are on average very low;
- poverty-in-employment is another dominant feature in the poor areas. Indications are that as much as 80 percent of those in formal employment earn less than R800 per month. The working community comprises a mix of farm labourers, domestic workers, unskilled workers and factory workers;
- the population in the poor areas is very youthful and not capable of making a significant contribution to households' income. The majority of the relatively younger population is unemployed and dependent, thus contributing to an increase in poverty;
- single and unemployed females head a large proportion of households;
- formal education and literacy levels are low. Because many households have single or no breadwinners, many scholars are prematurely forced to leave school to seek employment. For instance, in Ratanda township it is recorded that 32 percent of the population have no formal education, while only 0.8 percent have received a post-matric education; and
- another problem is that there exists a mismatch between skills required by industry and skills possessed by the jobseekers. This leads to structural unemployment and is difficult to redress.

Against this background, the future possibilities for formal employment in Ratanda and Impumelelo townships appear to be bleak. The chance for school leavers to

find formal employment seems to be extremely unlikely. It is expected that most of them will end up being poor because the low level of their educational qualifications lessen their chance of being employed. Due to the lack of work opportunities within the Lesedi area, the community struggles to make ends meet. It is believed that projects such as these listed below could assist community members in generating an income:

- small farming (e.g. chickens and vegetable gardens);
- skills training to ensure that members of the community are in the position to help themselves through retail trade, baking and cooking, milling and processing (IDP 2004:42); and
- access to agricultural co-operatives to serve new and emerging commercial farmers (small and large) from previously disadvantaged groups as well as to assist poor smallholders to produce more efficiently (Van Rooyen *et al.* 1998:5).

Agriculture is generally an important economic activity and life is highly dependent on the performance of this sector. In the light of the poverty and unemployment scenario in Ratanda and Impumelelo, effective agricultural co-operatives need to incorporate sustainable technologies to help the poor (Mohiuddin & Poonam, 1991:209). Agriculture has several characteristics that make it particularly attractive for increasing employment levels. Strategies within this sector can be used to assist people out of poverty because it is a labour intensive sector and the low-skilled and unskilled can be employed by this sector with relative ease. The agricultural opportunities would permit a significant increase in agricultural productivity and employment creation (Sterling, 1978:7). Agriculture should be considered as an essential part of the food sector. Agricultural production could generate significant income and employment, and could positively contribute towards reducing poverty levels and improving the economic position and food security status of the majority of people in the townships of Ratanda and Impumelelo (Van Rooyen *et al.* 1998:1).

Co-operatives are considered as important instruments for agricultural development. In South Africa, co-operatives are predominantly used in the

agricultural supply and distribution industries, operating through upstream and downstream activities to support commercial farmers. Co-operatives offer the effective promotion of modernisation in South African agriculture, and they are also the important instruments of national agriculture policy in commercial agriculture. Agricultural co-operatives have generally been very successful, while some have existed only through government support. For the townships of Ratanda and Impumelelo, co-operatives must also be considered as important instruments for agricultural development and, as a result, for reducing unemployment and poverty (Van Rooyen *et al.* 1998:236). According to Van Rooyen *et al.* (1998:57), co-operative arrangements provide for collective actions in farming. Various models can be considered ranging from the collective ownership and control of resources to collective buying and marketing.

According to Minnie (1994:170), the agricultural sector's great potential to enable the desperately poor to survive, alleviate poverty, create employment, and contribute to economic growth, should not be ignored. However, appropriate policy intervention is needed to enhance its potential. Ratanda and Impumelelo townships should focus on strategies within the agricultural sector for alleviating poverty (Van Rooyen *et al.* 1998:83).

The agricultural sector is an engine for growth and development. This is because of the forward and backward linkages that exist between agriculture, the secondary and tertiary sectors, with agriculture supplying these sectors with raw materials and, in turn, providing a market for the goods and services generated. Therefore, linkages between agriculture and agro-processing sectors can be strong. However, it should be kept in mind that one sector is directly and/or indirectly affected by developments in any other sector (Van Rooyen *et al.* 1998:236).

1.3 AIM OF THE RESEARCH

The aim of this research is to reflect the actual economic position of the inhabitants of the township areas of Lesedi Municipality, namely, Ratanda and Impumelelo. The research will seek to identify the possibilities of agricultural and agro-processing projects in efforts to reduce poverty resulting from unemployment in Ratanda and Impumelelo. Furthermore, the intention is to

determine what effect these initiatives are likely to have on the local economy in terms of job creation and poverty alleviation.

1.4 OBJECTIVES OF THE RESEARCH

The objectives of this research effort include the following:

1. the identification of informal agricultural employment opportunities in and around township areas, where the majority of the unemployed resides;

2. the initiation of the processing of agricultural products that are consumed on a large scale in the townships areas using labour intensive methods;

3. a search for other labour intensive agro-processing manufacturing possibilities such as entrepreneurial agriculture to enhance employment creation;

4. assessment of the need for the training and acquiring of skills of people in modern production methods and technology which is essential in contributing towards the success of Ratanda and Impumelelo; and

5. an investigation of the skills possessed by the unemployed and the activities they wish to engage in to sustain themselves.

1.5 HYPOTHESIS

Ratanda and Impumelelo townships, as part of Lesedi Municipality, have experienced a decrease in employment opportunities resulting in poverty. Both Ratanda and Impumelelo are in need of agricultural projects that will reduce unemployment and poverty. The initiation of agricultural and agro-processing projects can have a positive impact in reducing unemployment and alleviating poverty. These projects can be deemed successful when they achieve the following:

- reduced poverty levels;

- reduction of unemployment rates and creation of new jobs; and

- establishment of new business (formal and informal).

1.6 METHODOLOGY

1.6.1 Literature study

Both primary and secondary sources will be used, including journals, books, articles, and primary interviews. All sources upon which the research will be based will be clearly specified.

1.6.2 Empirical research

In order to obtain the data required to calculate unemployment and poverty rates for the townships of Ratanda and Impumelelo, a survey was conducted on a sample basis. The methods for determining the unemployment rate, for measuring of poverty and for the impact assessment are explained below.

1.6.2.1 Methods for the measurement of unemployment

Statistics South Africa uses the definition of unemployment as indicated below as its official definition.

> *The unemployed are those people within the economically active population who:*
>
> *a) did not work during the seven days prior to the interview;*
>
> *b) want to work and are available to start within a week of the interview; and*
>
> *c) have taken active steps to look for work or to start some form of self-employment in the four weeks prior to the interview.*

These general criteria are translated into statistically meaningful criteria, namely:

- the population of potential working age (i.e. 15 years and older); and
- the economically non-active population (i.e. those who prefer not to or who cannot work).

The unemployment rate (Ur), then, is calculated by the standard equation:

$$\frac{number\ of\ unemployed}{Economically\ active\ population\ (EAP)} x \frac{100}{1} = Ur$$

The criteria for measuring unemployment are straight and definite, i.e. a person is out of work, and is actively looking for a job (Barker, 1999:171).

Statistics South Africa's definition for employment, which defines the 'employed' as those who performed work for pay, profit or family gain in the seven days prior to the household survey interview, or who were absent from work during these seven days, but had some form of paid work to which they can return (Statistics South Africa, 2000), was simplified. The question was simply asked: 'Do you work for a business, for yourself, or for your family?' Working for a business is regarded as formal employment. Self-employment and family employment is categorised as working in the informal sector.

In the survey only one criterion was taken as an indication of seeking work, namely, if a person 'has the desire to work and to take up employment or self-employment'. The question asked was simply: 'Do you want to work?'

1.6.2.2 Methods for measuring poverty

The methodology used by Slabbert (1997) to measure poverty at the household level is explained below. Following the guidelines of the World Bank (1990:1), a poor household is defined by Slabbert (1997:47) as a household for which the combined income of all its members is less than the Household Subsistence Level (HSL) as determined for the specific household. According to Potgieter (1980:4), the poverty line shows the income level needed to provide a minimum subsistence level. The most widely used poverty line in South Africa today is the Household Subsistence Level (HSL). The Household Subsistence Level is defined as an estimate of the theoretical income needed by an individual household to maintain a defined minimum level of health and decency in the short term.

If the combined income of a household is described by $\mathbf{y_i}$ and the poverty line (HSL) of the same household is described by $\mathbf{z_i}$, the extent of poverty, $\mathbf{P_i}$, of this household is described by $\mathbf{P_i\ (y_i,z_i)}$. The headcount index **(H)** is defined as the

fraction of the population below the poverty line. The headcount index is adapted by Slabbert (1997:47) to indicate the fraction of households that fall below their individual poverty lines, and is described by means of the equation:

$$H(y;z) = M/N$$

where: **H** = the fraction of households below the poverty line;

y = household income;

z = the poverty line of the household;

M = the number of households with incomes less than z; and

N = the total number of the households.

The poverty gap **(G)** measures the average shortfall of the incomes of the poor from the poverty line while the poverty gap index measures the extent of the shortfall of incomes below the poverty line. Slabbert (1997:47) adapted the poverty gap index **(R)** to be a measure of a specific household, as described by the equation:

$$R_i(y;z) = (z_i - y_i)/z_i$$

where: R_i = the income shortfall of a household expressed as a proportion of the household's poverty line;

y_i = the income of a specified household; and

z_i = the poverty line of a specific household.

According to Slabbert (1997:47), the poverty gap of an individual household (in monetary terms) can therefore be expressed by the equation:

$$G_i(y;z) = z_i - y_i$$

where: **G** = the income shortfall of a household;

y_i = the income of a specific household; and

z_i = the poverty line of a specific household.

From the three equations above it is clear that increasing household income can only reduce the poverty gap (Slabbert, 1997:47).

1.6.2.3 Methodology for assessing the impact of agricultural co-operatives in Ratanda and Impumelelo townships

According to Slabbert (1997:47), employment creation may supplement the existing income of households to such an extent that the headcount index for the population is decreased significantly. If the number of unemployed persons in a household is described by $\mathbf{u_i}$, and employment opportunities for the unemployed can be created at an average wage level of **W**, the poverty gap, $\mathbf{G_i}$, of a single household can be reduced by:

$$\mathbf{G_i - (u_i W)}$$

or

$$\mathbf{z_i - (y_i + u_i W)}$$

where: $\mathbf{u_i}$ = the number of unemployed members in a household;

W = the average wage earned by unemployed members of households as a result of an employment creation scheme.

Employment creation through agriculture and agro-processing projects aimed at the poor unemployed would have an immediate effect on the extent of poverty because it reduces the poverty gap. However, to have a significant effect, it should also reduce the headcount index. The extent to which the headcount index is reduced will indicate the success of an employment creation programme. The condition for reducing the headcount index is that the poverty gap of a household or households becomes zero or negative. This condition is described by the following equation:

$$\mathbf{G_i - (u_i W) \leq 0}$$

where: $\mathbf{G_i}$ =the poverty gap of a single household;

u_l = the number of unemployed members in a household; and

W = the average wage earned by unemployed members of households as a result of an employment creation scheme.

The larger the number of households satisfying this condition, the smaller the headcount index becomes (Slabbert, 1997:47).

The data identified in the household survey conducted in 2004 will be used for determining the impact of job creation on poverty. The data provides all the information needed to test these models, for example, the age and gender of household members required to determine the individual poverty line (**z**) for each individual household; the combined income of each individual household (**y**), and the number of unemployed members in a household (**u**). The household survey also covers information on desired self-sustaining activities and the skills possessed by the poor.

1.6.2.4 Sample survey

Maps of the Lesedi township/squatter areas (Ratanda and Impumelelo townships) were obtained, and sample stratification was designed on account of the geographical distribution of households and concentration of people in the areas. A sample of 160 households was interviewed by means of a questionnaire designed for obtaining the desired and necessary data for analysis. The area was divided into different parts and the questionnaires were apportioned evenly among the inhabited sites.

Plots or sites at which fieldworkers were to complete questionnaires were individually identified from the map before the fieldwork was undertaken. However, in the instance that individuals could not be secured for an interview, or where it was impossible to trace the house, the next pre-selected household was approached for an interview. Information was obtained from the breadwinner or the spouse.

For the region as a whole, it is important to investigate the difference in wage levels and employment opportunities as well as the technical skills required for

those job opportunities so that the movement of labour can be predicted (Minnie 1994:172). From the investigations conducted, the research contains the necessary information relevant to Ratanda and Impumelelo townships/squatter areas with regard to:

- the number of unemployed members in a household (**u**);
- the combined income of each individual household (**y**);
- demographic information;
- consumption patterns (to determine possible agro-processing projects);
- skills possessed by the unemployed, for example, technical skills and entrepreneurial skills; and
- preferred fields in which respondents or inhabitants would like to engage in self-sustaining activities.

1.7 OUTLINE OF THE STUDY

Chapter One consists of the background, problem statement, aim of the research, objectives of the research, hypothesis, methodology and an outline of the study.

The second chapter examines unemployment, theoretically, as the main determinant of poverty. It also defines poverty in absolute and relative terms. The calculation of headcount index and the distribution of households below the poverty line, as well as the poverty gap index, are calculated and interpreted.

In the third chapter the poor and the unemployed are portrayed. This chapter also gives a profile of the Ratanda and Impumelelo population in terms of size, household size, employment, and sectors of employment. It further investigates the skills possessed by the unemployed and the activities they wish to engage in to sustain themselves. Poverty is described in terms of the headcount index. The depth of poverty in Ratanda and Impumelelo is also discussed.

The aim of the fourth chapter is to recommend particular agricultural and agro-processing projects that can be used to alleviate poverty in the area, and to create

jobs and self-employment. It identifies possible agricultural projects which are aimed at alleviating poverty in Ratanda and Impumelelo. It also assesses the possible linkages of the agricultural sector to downstream manufacturing.

The final chapter presents a summary of the findings of the study and evaluates the hypothesis against the findings. Conclusions are drawn from these outcomes. The chapter contains recommendations including appropriate approaches and particular projects with regard to the reduction of unemployment and poverty, especially in Ratanda and Impumelelo townships. Existing agricultural projects and the Integrated Development Plan (IDP) processes also form part of the recommendations in this chapter.

CHAPTER TWO: DEFINITIONS AND THE MEASUREMENT OF UNEMPLOYMENT AND POVERTY

2.1 INTRODUCTION

This chapter looks at the definition of unemployment and poverty and other related concepts. Various methods of measuring unemployment and poverty are also discussed. The extent of unemployment in Ratanda and Impumelelo townships is then measured according to these different methods followed by a discussion about how to deal with the unemployment problem. Finally, the theoretical relationship between unemployment, poverty, and agriculture is also discussed.

2.2 DEFINITIONS AND THE MEASUREMENT OF UNEMPLOYMENT

According to Amis (1995:150), labour is the predominant resource base available to the poor. This means that unemployment is one of the main determinants of poverty. In addition, employment, or a lack of it, is the single most important determinant of urban poverty. Assuming that unemployment has a direct relationship to poverty, and that it is an indicator of poverty especially in an urban context, the employment status of residents of Ratanda and Impumelelo townships is analysed in the following sections.

Statistics South Africa conducts an annual sample survey to provide certain insights into, and perspectives on, the most important elements of unemployment. These surveys, called October Household Surveys (OHS), possibly give the most accurate portrayal of unemployment in the country, although their data are subject to criticism (Barker, 1999:171).

Statistics South Africa uses the following definition of unemployment as its official definition:

> *The unemployed are those people within the economically active population who:*
>
> *a) did not work during the seven days prior to the interview;*

b) *want to work and are available to start within a week of the interview; and*

c) *have taken active steps to look for work or to start some form of self-employment in the four weeks prior to the interview.*

These general criteria are translated into statistically meaningful criteria, namely (Barker, 1999:171):

- the population of potential working age (i.e. 15 years and older);
- the economically non-active (i.e. those who prefer not to or who cannot work); and
- the economically active population (i.e. all those who are fit to work, wish to work, have no employment and are ready for and actively looking for work, plus the employed and self-employed).

The unemployment rate is the number of unemployed persons taken as a percentage of the total economically active population (EAP), which includes both the employed and the unemployed.

The unemployment rate (Ur) then, is calculated by the standard equation:

$$\frac{number\ of\ unemployed}{Economically\ active\ population\ (EAP)} x \frac{100}{1} = Ur$$

2.2.1 Measurement of unemployment

Although there are various ways of measuring unemployment, there are four broad approaches proposed by Barker (1999:165-172) that can be used, which are presented as follows.

1) Census method

With this method the economic status of the whole population is determined by asking individuals for information about their economic status.

2) Difference method

The difference between the economically active population and those in employment is taken to be the number of unemployed individuals.

3) Registration method

This method provides for the unemployed to register at placement offices – in South Africa the responsibility for this resides with the Department of Labour.

4) Sample survey method

A survey is undertaken, like in the case of Ratanda and Impumelelo townships, on a sample basis to obtain the data required to calculated unemployment rates for specific groups of people (Barker 1999:165-172).

2.2.2 Shortcomings of the definition of unemployment

According to Barker (1999:173), the shortcoming of the definition of unemployment is that it fails to reflect persons who are under-employed, i.e. when a person's employment entails less than the number of normal hours of work or than other jobs. There are two types of underemployment:

1) visible underemployment occurs when persons involuntarily work less than the number of normal hours and are seeking, or have the desire for, full time or additional work; and

2) invisible unemployment occurs when there is a misallocation of labour resources, for example, the underutilisation of skills or very low productivity (Barker, 1999:173).

Another problem that affects the accuracy of the unemployment rate is the multiplying effect. This is the effect of high levels of unemployment on involuntary unemployment. For instance, if a mother and a grown-up daughter from the same family are unemployed, both will express a desire to become employed. However, if one of them is successful in obtaining employment, the other will no longer be available for employment. It is not possible to correct or adjust the results for the impact of this multiplying effect (Slabbert, 2001:43).

Another obvious example is the exclusion of discouraged workers from the number of the unemployed. Discouraged workers are persons who desire to work, but have made no effort in the last four weeks to find work, either because of a perceived lack of jobs or a perceived inability to find a job due to personal factors such as age, race, or lack of skills. Since discouraged workers have made no overt job search efforts, they are counted as outside of the labour force and are thus accounted for in the unemployment rate (Kaufman, 1994:649).

2.2.3 Types of unemployment

In order to address the problem of unemployment successfully, a distinction should be drawn between different types of unemployment. This gives an indication of the possible reasons for unemployment in the townships of Ratanda and Impumelelo, and also some ideas on how the problem should be addressed. Economists usually distinguish between four different types of unemployment, namely, frictional unemployment, structural unemployment, cyclical unemployment, and seasonal unemployment.

2.2.3.1 Frictional unemployment

Frictional unemployment arises as a result of the constant flow of people between jobs, and into and out of the labour force. This is caused by imperfect information in the job market and the fact that it takes time for unemployed workers and employers with job vacancies to find each other. If information was perfect and mobility was costless, this process could be done instantaneously, and unemployment of this nature would not occur (Kaufman, 1994:652).

Frictional unemployment has several distinctive characteristics. Firstly, it affects a relatively large number of people across all demographic groups, industries, and areas of the country. A second important feature of frictional unemployment is that a certain amount of frictional unemployment is unavoidable. Because of the large flow of people into and out of the labour market it is impossible to reach a zero unemployment rate. Public policy could reduce the level of frictional unemployment by eliminating undesirable causes of turnover (Kaufman, 1994:652).

2.2.3.2 Structural unemployment

The second type of unemployment is structural unemployment. It arises from a basic mismatch between the types of jobs that are available and the types of people who are seeking jobs. This mismatch may be related to skill, education, experience, geographic area, or age. Hence the empirical survey undertaken in this study will highlight the demographic profile of the Ratanda and Impumelelo population. With structural unemployment, job vacancies and unemployed workers coexist in the market and, even in the long run, are not easily matched. By merely gathering the data about the age, educational qualification, and skills of the unemployed in the study area, the reasons for their unemployment will be reflected (Kaufman, 1994:70).

One solution to reduce this kind of unemployment could be the government's provision or subsidisation of training programmes. This could possibly be achieved by giving 'hard-to-employ' young people marketable skills and offering tax incentives to companies that offer training to workers from targeted groups. A second approach could be to make the government the employer of last resort by offering public service jobs to workers who suffer from persistent unemployment (Kaufman, 1994:70).

2.2.3.3 Cyclical unemployment

The third type of unemployment is cyclical unemployment (sometimes called demand deficient unemployment). The basic cause of this type of unemployment is insufficient aggregate demand in the economy to generate enough jobs for those who seek them. Cyclical unemployment occurs because there are not enough jobs to go around. This type of unemployment is closely linked to the movement of the economy up and down the business cycle. On the upswing of the cycle, the unemployment rate gradually declines as growth in spending and production in the economy induce the firms to increase employment, both by calling back laid-off workers and hiring new employees. With the onset of a recession, the pattern reverses itself – the decline in sales prompts firms to lay off a number of existing employees and cut back on new hires, leading to a shortfall of available jobs in the economy and a rise in unemployment. The most direct approach in addressing cyclical unemployment is to adopt fiscal and monetary policies that ensure stable and healthy rates of

economic growth. An alternative approach might be public works projects such as urban renewal at the onset of periods of recession (Kaufman, 1994:654).

2.2.3.4 Seasonal unemployment

The fourth type of unemployment is seasonal unemployment. It is due to normal and expected changes in economic activity during the course of a single year. It is found in many sectors, with agriculture probably being the best example. Persons working during peak periods and being unemployed in off-peak periods are described as seasonal workers or the seasonally unemployed. This type of unemployment occurs on a regular and predictable basis. In order to find out whether Ratanda and Impumelelo residents are seasonally unemployed or not, certain questions will be asked about the respondents' duration of unemployment (Barker, 1999:166).

2.3 EMPLOYMENT IN SOUTH AFRICA

Employment data are important for a number of reasons. Increases in the labour force can, for instance, be compared with increases in employment to determine the reasons for unemployment.

Sectoral employment:

In **Table 2.1** an analysis is provided of employment per economic sector in South Africa, for the period from 1950 to 1996.

Table 2.1 Employment per economic sector in South Africa.

	% share of total employment				
	1950	**1970**	**1980**	**1990**	**1996**
Agriculture	26,9	17,5	13,4	11,0	11,0
Mining	12,9	10,7	10,2	9,3	7,4
Manufacturing	13,5	17,6	19,3	19,4	19,3
Electricity	0,6	0,7	1,0	1,1	1,0
Construction	2,5	5,2	5,3	5,8	4,8
Trade	9,6	11,9	12,5	12,5	12,1
Transport and communication	6,6	5,9	6,6	5,4	4,4
Finance and insurance	1,5	3,1	3,9	5,5	6,4
Non-government services	2,0	3,0	3,5	3,9	4,1
Government	7,1	10,2	12,9	16,3	19,6
Domestic service	16,8	14,2	11,4	9,8	9,9
TOTAL	100,0	100,0	100,0	100,0	100,0

Source: Barker, 1999:87.

It is apparent that there has been a sharp decline in the percentage of employment in the primary sectors, i.e. agriculture and mining. Agriculture's share, in particular, has declined substantially. Whereas this sector was responsible for nearly 27 percent of employment opportunities in 1950, this had declined to 11 percent in 1996. The rate of employment in the secondary sector (manufacturing, electricity, gas and water, construction) showed an increase of 16.6 percent in 1950 to 25.1 percent in 1996. The sharpest increase, however, was in the tertiary or services sector (excluding domestic services), where the rate of employment in the tertiary sector has more than doubled over the past four decades (Barker, 1999:86).

The agricultural sector's contribution to employment creation and its ability to create employment within the farming sector decreased rapidly. Despite a decreasing trend in the number of people employed in this sector, it remains the most important labour-intensive sector in the economy. Agriculture is also the backbone of the rural economy (Van Schalkwyk & Meyer, 1994:i).

2.4 AN EMPLOYMENT STRATEGY FOR RATANDA AND IMPUMELELO

According to Finnemore (1996:42), internal economic factors, such as high unemployment, high population growth, and an unequal distribution of wealth, are urgent issues demanding government attention. In response to all these needs and pressures, government policy can play a major role in influencing economic growth, unemployment levels, poverty, and productivity.

There are two key components that Ratanda and Impumelelo townships can strategically apply. The first is to increase the demand for labour by raising both output and labour absorption capacity through:

- strengthening special employment programmes;
- fast-tracking movement into new labour absorbing production methods, and sectors producing goods for domestic markets; and
- promoting small, micro, and medium-sized enterprises (SMMEs).

The second component is to strengthen the employability of labour by:

- improving the availability of skills, for instance, through improved education and training, and
- improving social security services and the implementation of a social plan (Finnemore, 1996:42).

2.5 REASONS WHY JOB CREATION SHOULD BECOME THE HIGHEST PRIORITY IN RATANDA AND IMPUMELELO TOWNSHIPS

Unemployment has grave consequences for every country. Not only does it affect an individual's dignity and self-respect and erode his or her standard of living, but it also affects society as a whole because of high crime rates and frustration leading to unrest and lawlessness. Employment in the broader sense of the word is the main link between economic growth and higher living standards (NEDLAC, 1998:43).

Unemployment confines people to poverty, as in Ratanda and Impumelelo township areas. In a NEDLAC report (1998:19) the point is made that poverty

and employment status are closely linked, with half of all poor people of working age outside the labour market altogether. Barker (1999:164) adds that high unemployment levels are having serious effects on perceptions of the success or failure of the market economy. There is a fairly widespread perception among disadvantaged communities that the market is unable to address the problem, and is even possibly responsible for unemployment.

The other reason for the attention given to unemployment is that it imposes substantial costs on individual workers and their families. The first is the loss in income that goes with unemployment. The second potential cost is that unemployment also imposes significant psychological and emotional costs on workers and their families, as revealed by the positive association between increased unemployment and higher frequencies of mental illness, suicide, and divorce. Finally, society must bear substantial economic costs because of heightened crime, drug addiction, and other maladies (Kaufman, 1994:647). These are only some of the reasons why employment creation should become the highest policy priority in Ratanda and Impumelelo townships.

2.6 DEFINITIONS AND MEASUREMENT OF POVERTY

The whole exercise of deriving a definition of poverty is an attempt to find a way of identifying the poor population in Ratanda and Impumelelo townships. Who are the poor? What common characteristics can be used as general criteria for the identification of the poor? This section will survey literature on the definition and measurement of poverty and other related concepts. Literature on poverty invariably divides the foundations of the definitions of poverty into two approaches, namely, the absolute and the relative approach.

2.6.1 The absolute approach

The absolute approach to poverty looks at poverty from the viewpoint of deprivation or the lack of sufficient income to satisfy basic needs. Unsatisfied needs, especially of a physiological nature, are seen as absolute poverty. Holman (1978:2) refers to such poverty as subsistence poverty or poverty below the subsistence level. He refers to the poor as those who have regular, though minimal income. The very poor are people whose income, for whatever reason, falls far below the subsistence level. The operative word in this approach is

'income'. Income that consistently falls short of providing the basic necessities of life is viewed as causing poverty. Determining the monthly average income per household of Ratanda and Impumelelo townships will find the cause of poverty in this respect.

The World Bank (1980:v) refers to absolute poverty as the condition of life so characterised by malnutrition, illiteracy and diseases as to be beneath any reasonable definition of human decency. In this definition, income is not necessarily given as the cause of such poverty. In fact, the definition is open-ended regarding the cause. In their view, absolute poverty means more than having a low income (World Bank, 1980:1).

The absolute approach in studying the poverty of subsistence in the region can be followed. By following this approach, people living in severe poverty can be identified. The extent of absolute poverty is then defined as the number of people living below a specified minimum level of income (Todaro, 1994:145).

2.6.2 The relative approach

The 'absolute approach' definitions of poverty have been widely criticised as insufficient and lacking in clarity. They are based on the notion of subsistence. What comprises subsistence is questionable because it depends on the place and society that is evaluated (Alcock, 1993:60). Such problems led to the development of the relative concept of poverty.

The relative approach to poverty is based on the idea that people are poor in relation to the community or society in which they live. This means that their income is consistently below the level that would allow them to attain a specific average standard of living. This is judged against the standard of living of the society to which they belong (Wratten, 1995:12).

Alcock (1993:59) sees the relative approach as more subjective (normative) than the absolute approach. He further explains that the relative definition of poverty is based upon a comparison between the standard of living of the poor and the standard of living of other members of society who are not poor. This usually involves some measure of the average living standard of the whole society in which the level of poverty is being studied. Relative definitions of

poverty imply inequality in wealth and income distribution that leads to a lopsided social stratification and classes. This, in turn, leads to suggestions of redistribution of wealth as one of the policies to combat poverty.

Relative definitions also imply other issues, as pointed out by Holman (1978:14-20). According to him, such an approach includes four main elements, listed below:

1. comparisons with other persons - the lowest incomes are too far removed from those of the rest of the community;

2. the contemporary environment - this takes the dynamic nature of society into account and the prevailing standard of living is used as a measure;

3. inequality;

4. the value judgement that refers to the standard that society sees as 'acceptable' or the prototype standard that people pursue. People habitually judge themselves against a 'reference group'. The poor do the same, having a standard they would like to attain, failing which, they see themselves as poor. Researchers are also prone to give moral judgement to the concept of poverty and in the interpretation of statistics.

The preceding discussion shows that a clear-cut definition of poverty is not simple to construct. For the purpose of this study, poverty is defined as the inability to attain a minimal material standard of living. The World Bank defines poverty as the inability of people to attain a minimum standard of living. This definition gives rise to three questions: 1) how do we measure the standard of living?; 2) what is meant by a minimum standard of living?; and 3) how can we express the overall extent of poverty in a single measure?

The most obvious measure of living standards is an individual's or household's real income or expenditure (with an allowance made for output produced for own consumption). However, as this measure does not capture dimensions of wealth such as health, life expectancy, literacy and access to public goods, consumption-based poverty measures of living standards based on income,

therefore, may need to be supplemented by other measures that include non-income measures (Thirlwall, 1994:11).

In theory, a consumption-based poverty line can be thought of as comprising two elements. Firstly, an objective measure of expenditure is necessary to determine a minimum level of nutrition, and secondly, there is a subjective additional amount reflecting the cost of individuals participating in everyday life. What is regarded as an acceptable standard of living in the United Kingdom will be different from what is regarded as acceptable in South Africa. In practice, however, for the measurement of poverty the World Bank uses just two figures for per capita income: one to classify the total poor, the other to measure the extremely poor. A poverty line shows the income level needed to provide a minimum subsistence level. Once the poverty line has been calculated, the simplest way to measure poverty is by using the headcount index that simply adds up the number of people who fall below the poverty line (sometimes expressed as a proportion of the population) (Thirlwall, 1994:11).

1) Definition of household income

Most of the quantitative measurements of poverty are based on income levels as listed below (Slabbert, 2001:46):

1. salaries, wages, overtime and commissions prior to the deductions of pensions and taxes;
2. net profit from business, farming or professional practice;
3. estimates cash value of fringe benefits such as a company car and housing subsidy, food, clothing and accommodation provided by employers; and
4. any other regular income (pensions, interest, dividend, rent from boarders/lodgers, help from the family) (Slabbert, 2001:46).

2) Definition of a poverty line

The poverty line shows the income level needed to provide a minimum subsistence level. According to Slabbert (1997:44), the most widely used poverty line in South Africa today is the Household Subsistence Level (HSL).

Potgieter (1980:4) defines the Household Subsistence Level as an estimate of the theoretical income needed by an individual household to maintain a defined minimum level of health and decency in the short term.

The HSL is calculated as the lowest retail cost of a basket of necessities of adequate quality. This comprises the total food, clothing, fuel, lighting, washing and cleansing materials required for each person, together with fuel, lighting and cleansing materials needed by the household as a whole, and the cost of rent and transport. A comparable calculation can thus be made for any household of any given size and composition.

3) The headcount index and the poverty gap

Slabbert (1997:47) formulated the headcount index and poverty gap as follows: the headcount index is defined as the fraction of the population below the poverty line. The purpose of the headcount index is to quantify the number of those individuals or households that fall below the poverty line. If the distribution of incomes is represented by y and the poverty line by $\boldsymbol{z}$, a poverty measure may be expressed by the function $\mathbf{P = (y;z)}$.

Suppose that in a population of **N** households with incomes $\boldsymbol{y_i}$ $\boldsymbol{(i = 1...N)}$ ranked in ascending order by subscript, **M** units have incomes equal to or less than the poverty line $\boldsymbol{z}$, then the headcount ratio **(H)** may be defined as follows (Borooah & McGregor, 1991:359):

Headcount index:

$$\mathbf{H\ (y;z) = M/N}$$

The headcount index is concerned with the number of poor people or households whose incomes fall below a given poverty line as a ratio of the whole population.

Example: if there are 500 households in the survey and 250 of them have income below the poverty line z, then $H(y;z) = 250/500 = 0.5$. The poverty rate is then 50 percent, meaning that 50 percent of the households are below the poverty line.

However, one weakness of the headcount index is that it ignores the extent to which the poor fall below the poverty line. According to Slabbert (1997:48), in order to overcome this weakness the concept of the poverty gap may be used. The poverty gap measures the transfer of income required to bring the income of every poor person up to the poverty line (Thirlwall, 1994:12). The poverty gap index is concerned with the depth of poverty (its magnitude) and therefore measures the extent of the shortfall of incomes below the poverty line (Slabbert, 2000:49). Slabbert (1997:48) defines the poverty gap ratio **(R)** by the following equation (adapted from Borooah and McGregor, 1991:359):

$$R\,(y;z) = \sum_{i=1}^{M} (z-y_i)/z$$

where: **R** = the average income shortfall of the poor expressed as a proportion of the poverty line;

z = the poverty line;

y = the income of a household; and

M = the number of *households* with incomes below or equal to the poverty line (z).

Example: The poverty line (z) is determined at R800,

The household's income (y_i) is R500,

The poverty gap is then (z-y_i) = R300,

The individual poverty gap ratio of the household is then:

$(z-y_i)/z$ = R300/R800 = 0.375.

The average of all the poverty gap ratios of the sample of households will give R.

2.7 GROUPS AT RISK OF POVERTY

Kaufman (1994:700) points out that the problem of poverty weighs disproportionately on certain groups in the population, although no group is immune from poverty. Among those groups most at risk are the following:

1) **female-headed households** - families headed by women (with no husbands present) have a one-third chance of being poor. The burden of poverty is spread unevenly. Women in general are disadvantaged and in poor households they often shoulder more of the workload than men, are less educated, and have less access to remunerative activities;

2) **age** - children under the age of 15 years have the highest incidence of poverty of any age group. One reason for this is that children increase a family's needs, but contribute little, if any, income;

3) **education** - the poverty rate declines rapidly with additional years of schooling. Among families headed by high school dropouts, the poverty rate is higher than those families with a household head who had even one year of tertiary education; and

4) **work experience** - persons in families with a household head who worked at a year-round job (50-52 weeks) were much more likely to have incomes above the poverty line. Not unexpectedly, people who work only part-time or not at all have a significantly greater chance of being in poverty.

2.8 POVERTY IN RATANDA AND IMPUMELELO TOWNSHIPS

2.8.1 Urban Poverty

Urban poverty in Lesedi Municipality is primarily located in and around the Ratanda and Impumelelo areas. High levels of unemployment, as well as poverty-in-employment (wages below the breadline) characterise communities in these areas. Although important strides have been made in terms of the provision of basic services and facilities to these communities, large sections of them still have inadequate access to these services (IDP, 2004:60).

2.8.2 Rural Poverty

The most marginalised group in Ratanda and Impumelelo is the landless rural population (farm workers and tenants). In addition to very high levels of unemployment and poverty-in-employment, these communities generally do not have adequate access to even the most basic services and facilities. Further, they are threatened by job losses and evictions as commercial farming becomes more and more mechanised and less dependent on unskilled labour. Generally speaking, the landless rural population is the least skilled of all the population groupings in Ratanda and Impumelelo, although most community members do possess basic agricultural skills (IDP, 2004:60).

2.8.3 The determinants of poverty

The main causes of the poverty problem in the townships of Ratanda and Impumelelo which need to be considered in formulating a local poverty alleviation strategy include the following:

- the low current economic growth rate coupled with an ever-decreasing reliance by formal employers on unskilled and semi-skilled labour;
- the prevailing low levels of education and skills within the poor communities, restricting not only their access to formal jobs, but also their ability to enter the economy by means of their own initiative;
- the restricted financial and institutional capacity of government to effectively combat poverty and create jobs;
- the higher-than-average birth rates in poor communities and influx of homeless people, which exacerbate the poverty problem and effectively pass it on to future generations (IDP, 2004:38);
- limited labour market opportunities. The explanation for the existence of poverty is that certain segments of the population have limited job opportunities in the labour market. The local economy does not generally provide sufficient jobs for everyone who desires to work, and the types of jobs available at the bottom end of the labour market offer low wages, little employment security, and few training opportunities (Kaufman, 1994:702).

- undesirable life events. The reason why some people are poverty stricken is that they suffer due to unforeseen life events that substantially reduce either the economic resources available to them or their income earning ability. Examples of such life events include divorce, death of a spouse or parent, prolonged illness, loss of a job, or the infirmities that accompany old age. Various undesirable life events such as unwanted pregnancy and disability have been found to be an important cause of poverty (Kaufman, 1994:707); and

- an increase in the population of a region that does not have a commensurate increase in employment and employment opportunities leads to an increase in poverty (Mokoena, 1994:42).

2.9 THE ROLE OF AGRICULTURE AND AGRO-PROCESSING TO REDUCE UNEMPLOYMENT AND POVERTY

This section analyses the important role that the agriculture and agro-processing sectors can play in the structural transformation of the developing economy of Ratanda and Impumelelo. The location of Lesedi within a high potential agricultural area highlights the importance of this sector for the economy. The importance of this sector should be emphasised and it should be encouraged through the following actions and programmes:

- existing large-scale agricultural enterprises should be encouraged to add value to their products, thereby increasing the impact on the local economy;

- small farm programmes should be investigated and promoted, and funding for land reform projects should be made available by the Department of Land Affairs; and

- infrastructural investment should be financed in order to promote development, especially in the disadvantaged areas of Ratanda and Impumelelo townships (IDP, 2004:82,83).

Due to the fact that the Ratanda and Impumelelo areas are mainly rural in nature, with high potential agricultural land and a strong farming community, the focus in many projects should be on agriculture. Every effort should be made to

provide opportunities for people to enter the market. This can be achieved through access to the formal economy, land and training (IDP, 2004:84).

All economic strategies and projects, directly or indirectly, should work towards poverty alleviation. Provision of opportunities for skills training and public works programmes should be undertaken in order to reduce the high levels of poverty in the area of study since they are the catalysts for poverty alleviation (IDP, 2004:85).

2.9.1 Food supply

One of the primary roles of agriculture and the agro-processing industry is to ensure a secure food supply to consumers at reasonable prices. As a lower income group, the rural and urban populations in the area are inclined to spend a high percentage of their earnings on food. It is therefore crucial that Ratanda and Impumelelo townships maintain a competitive agricultural sector that is able to meet the demand for basic foodstuffs (Van Schalkwyk & Meyer, 1994:5).

2.9.2 Provision of employment

South Africa's agricultural sector contributes substantially to economic development and welfare. The agricultural sector generated 4.4 percent of gross domestic product (GDP) in 1995 and 14 percent of the economically active employed is found in agriculture. The sector's real contribution, however, is far more crucial as regards its role in poverty abatement (Van Rooyen *et al.* 1998:1).

The agricultural and agro-processing sectors can achieve the following:

- reduction of poverty levels;
- creation of new jobs;
- reduction of unemployment rates;
- establishment of new business (formal and informal);
- broadening the tax base of the local authority;
- support for SMMEs;

- attract increased government funding/investment;
- increase general buying power;
- growth in infrastructural investment by local authority;
- diversification of the economy; and
- skills training facilities (IDP, 2004:71).

2.10 CONCLUSION

This chapter has shown that:

- the definition of unemployment can vary from researcher to researcher. However, the October Household Surveys (OHS) possibly gives the most accurate picture of unemployment;
- a distinction drawn between different types of unemployment gives an indication of the possible reasons for unemployment in the townships of Ratanda and Impumelelo, and also some ideas on how these problems can be addressed;
- poverty and employment status are closely linked, with half of all poor people of working age outside the labour market altogether. Unemployment has grave consequences for every country. It not only affects an individual's dignity and self-respect and erodes his or her standard of living, but also affects society as a whole, because of high crime rates and frustration leading to unrest and lawlessness. Unemployment confines people to poverty, as in the case of the townships of Ratanda and Impumelelo;
- the measurement of poverty also depends on the definition applied. There are a number of measurements of poverty in existence. Most of these measurements depend on income and inequality in income. It is always better to use a number of methods in building up a poverty profile of a region. Policies and measures used to combat poverty will depend on both the definition and the measurement applied in assessing poverty;
- the poverty problem in the townships of Ratanda and Impumelelo is caused by,

among other factors, the low current economic growth rate coupled with an ever-decreasing reliance by formal employers on unskilled and semi-skilled labour. The prevailing low levels of education and skills within the poor communities restrict not only their access to formal jobs, but also their ability to enter the economy by means of their own initiative. The higher-than-average birth rates in poor communities and the influx of homeless people exacerbate the poverty problem; and

- due to the fact that the Ratanda and Impumelelo areas are mainly rural, with high potential agricultural land and a strong farming community, the focus in a number of projects should be on agriculture. The most essential role of agriculture and agro-processing is ensuring the creation of new jobs for the unemployed and a secure food supply to consumers at reasonable prices.

CHAPTER THREE: PROFILE OF THE POPULATION OF RATANDA AND IMPUMELELO

3.1 INTRODUCTION

This chapter provides an analysis of the Lesedi population in general and, more specifically, for Ratanda and Impumelelo. Ratanda and Impumelelo are located in the Lesedi municipal area. Lesedi Local Municipality is located on the south-eastern edge of Gauteng, and together with the local municipalities of Midvaal and Emfuleni falls under the jurisdiction of the Sedibeng District Council. Lesedi spans an area of ±1430km², which is largely rural, with two towns situated within it, namely Heidelberg/Ratanda in the western part, and Devon/Impumelelo on its eastern edge. This area can be described as mostly agricultural, with Heidelberg and Devon being the primary service centres for the surrounding agricultural areas.

As far as its regional context is concerned, Lesedi is situated relatively far away from the hub of economic activity in Gauteng, but is traversed by two national roads, namely the N17 and the N3, which create certain potential in terms of future economic development. Lesedi's contribution to the region lies primarily within the agricultural sphere; however, areas like Heidelberg; Jameson Park/Kaydale and Vischkuil/Endicott also fulfil a residential function for many people working in the East Rand/Far East Rand.

A sample of 160 households was selected for the purposes of interviews by means of a questionnaire and approached in June 2004 to determine the economic status of the population of Ratanda and Impumelelo in terms of:

- unemployment;
- poverty levels; and
- household income.

In the analysis some products were also identified that could possibly be used to initiate agro-processing projects in Ratanda and Impumelelo townships. The skills possessed by the unemployed and the activities they wish to engage to

sustain themselves are also highlighted. The following data were obtained for this analysis:

- consumption patterns (to determine possible agro-processing projects);
- skills of the unemployed;
- willingness to undergo skills training and preferred fields;
- willingness and ability to undergo training at tertiary level; and
- preferred fields in which respondents would like to start self-sustaining activities.

The unemployment and poverty data were used to construct a model for the purposes of an Economic Impact Assessment. This model measures the impact of projects on the Ratanda and Impumelelo communities in terms of income generation and poverty alleviation.

The opinions of the residents on the following environmental issues are also reflected:

- the cleanliness of the environment and responsibility to clean it;
- smoke and noise pollution and responsibility to reduce levels of the pollution;
- the value attached by residents to different kinds of pollution; and
- how households are affected by crime.

3.2 DEMOGRAPHIC PROFILE OF RATANDA AND IMPUMELELO

Table 3.1 below gives a profile of Lesedi's current population.

Table 3.1 Current population of Lesedi

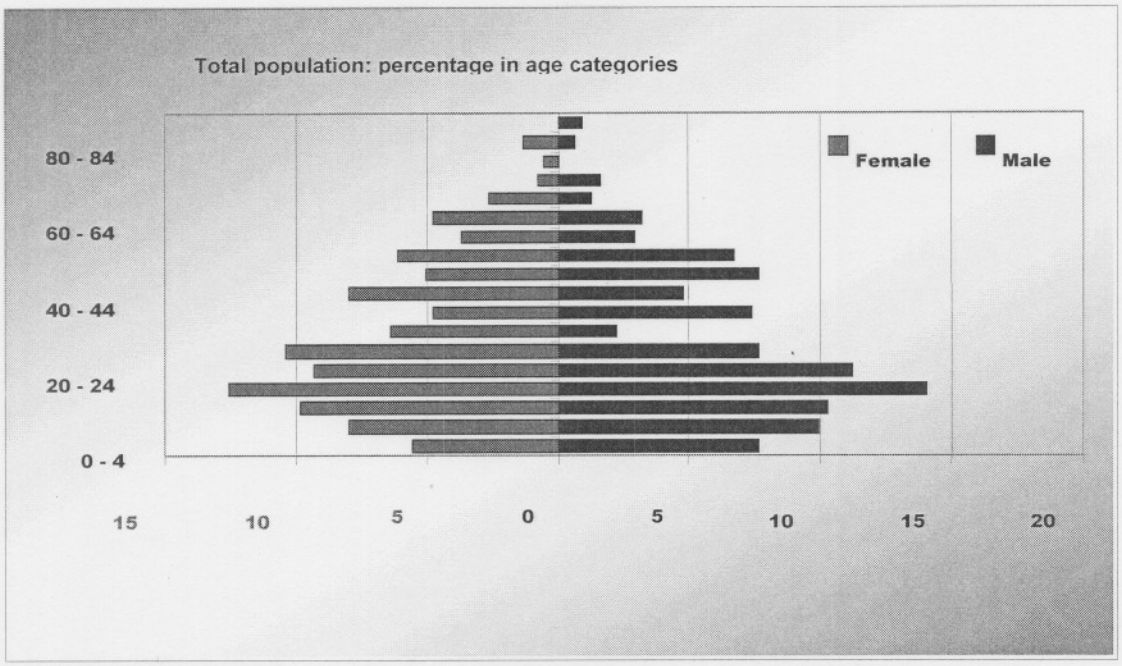
Area	Total Population	% of Total
Black African	± 57429	80.27 %
Coloured	± 594	0.83 %
Indian or Asian	± 620	0.87 %
White	± 12899	18.03 %
Total	± 71542	100%

Source: Statistics South Africa Census 2001 data.

The demographics of the Ratanda and Impumelelo communities are portrayed below in terms of the age categories of the population, gender distribution, qualifications of the post-school population, and the average length of stay in Ratanda and Impumelelo. Lesedi's population growth is lower than in the urban areas of Gauteng. The 2001 population figures available from Statistics South Africa for Lesedi were used to estimate the 2004 population figures. The population of Lesedi is estimated at 71,542 for 2001. The age structure of the population is relatively young, which holds serious implications in terms of the number of people that will enter the job market within the next decade.

The age categories of the total population of Ratanda and Impumelelo are portrayed in **Figure 3.1,** and the male and female distribution of the population in Ratanda and Impumelelo in **Figure 3.2**.

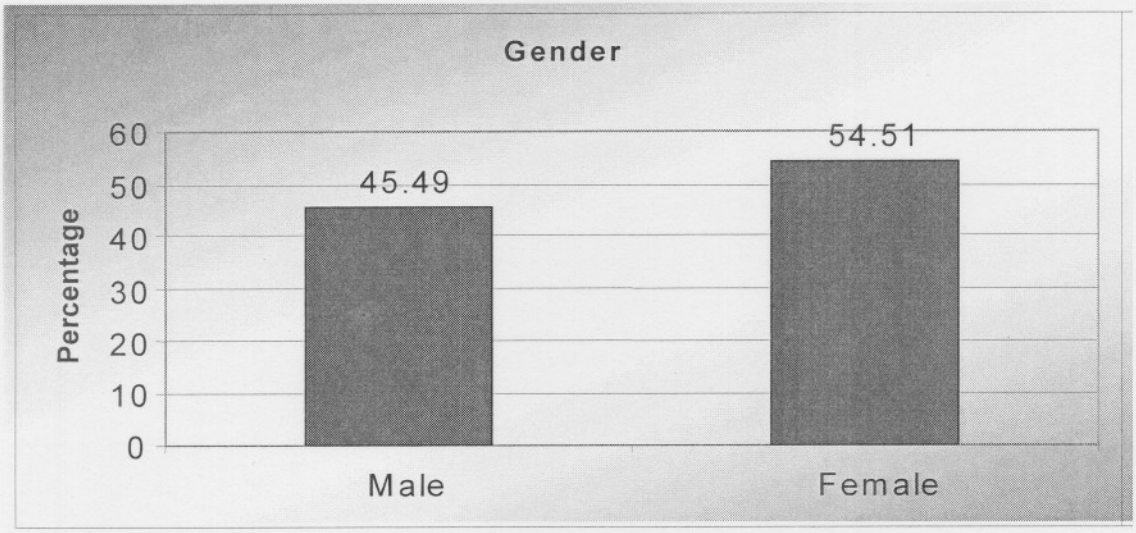
Figure 3.1 Total population of Ratanda and Impumelelo: % in age categories



Source: Survey data, 2004.

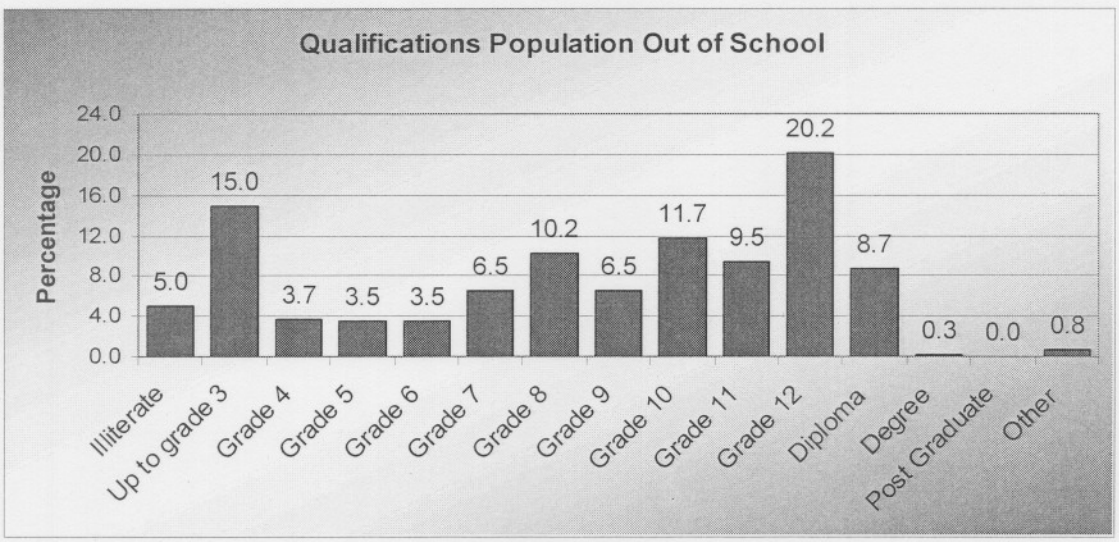
There seems to be a relatively high percentage of the population between 20 and 40 years of age, which is the age at which people in general are the most productive. The Ratanda and Impumelelo communities have more females (54.51 percent) than males (45.49 percent). According to Mokoena (2004:101), 33.3 percent of the Evaton West female population is between 20 and 40 years of age, while 36.6 percent is 19 years of age or younger. The comparative figures for males are 34.1 percent and 50 percent respectively. This means that half of the male population in Evaton West is younger than 20 years of age, and 84 percent is younger than 40 years of age. The male population is therefore relatively young (certainly in comparison to the female population). The Bophelong community also has more females than males. A total of 46.5 percent of the population is male and 53.5 percent is female (Slabbert, 2003:5).

Figure 3.2 Male and female distribution of the population



Source: Survey data, 2004.

Figure 3.3 Qualifications of population out of school



Source: Survey data, 2004.

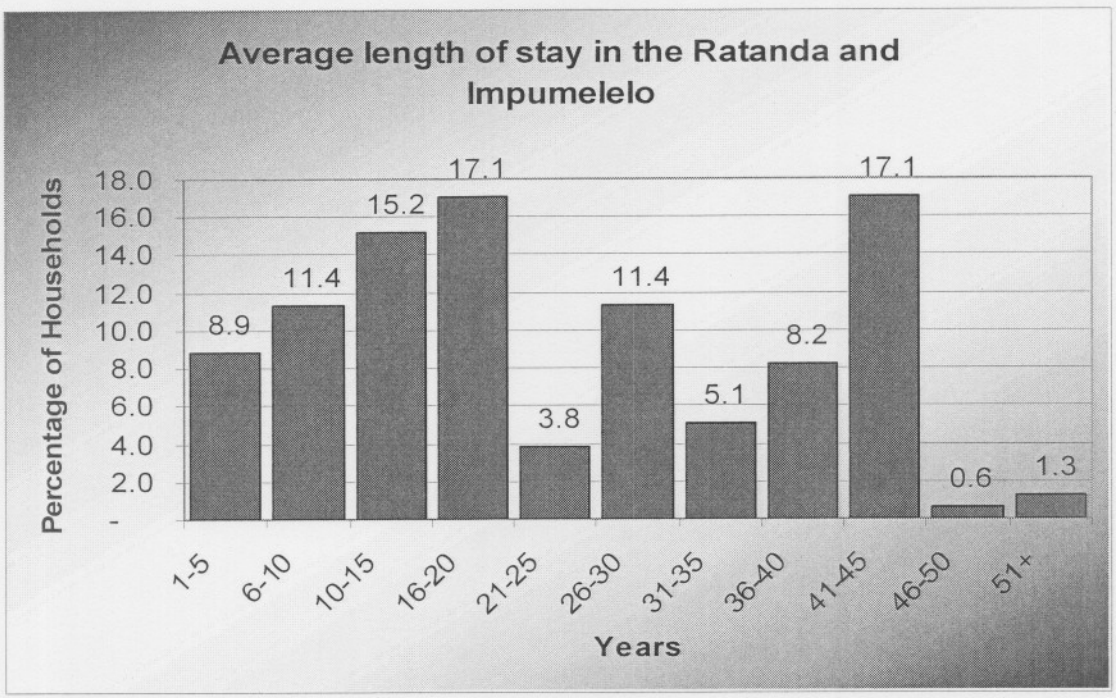
The qualifications of the population are portrayed in **Figure 3.3**. A total of 30 percent of the post-school population has a Grade 12 or higher qualification. Ratanda and Impumelelo have a large young population, many of whom are out of school and not productively employed. Educational and skills levels are generally low – this is a constraining factor in terms of sustainable economic development in the study area.

Slabbert (1997:101) gives a profile of the qualifications of the black population in the VTMA not at school any longer. It was found that of the poor post-school

population, 26.6 percent had no qualifications at all, compared with 11.3 percent of the non-poor. The majority, which is 71.5 percent of the poor post-school population, had a qualification of less than Standard 7 (Grade 9) compared with 49.3 percent for the non-poor. Only 28.5 percent of the poor post-school population had a qualification higher than Standard 6 (Grade 8), compared with 50.7 percent of the non-poor.

The population of Lesedi resides in the urban areas of Heidelberg/Ratanda and Devon/Impumelelo, and the rest of the population can be categorised as rural.

Figure 3.4 Average length of stay in Ratanda and Impumelelo



Source: Survey data, 2004.

Figure 3.4 portrays the average length of stay of respondents in Ratanda and Impumelelo townships. It shows that almost 70 percent of the respondents have been staying in the townships for over 30 years. Most of the respondents indicated that they were born in Ratanda and Impumelelo. Only 8.9 percent had moved into Ratanda and Impumelelo in the past 5 years, mostly from other areas within Gauteng. This explains the increase in the unemployment rate to a certain extent. Mokoena (2004:102) shows that, on average, people have been in Evaton West for around 30 years; this means that most people have been living there for their whole lives. In the case of Bophelong, the average length of

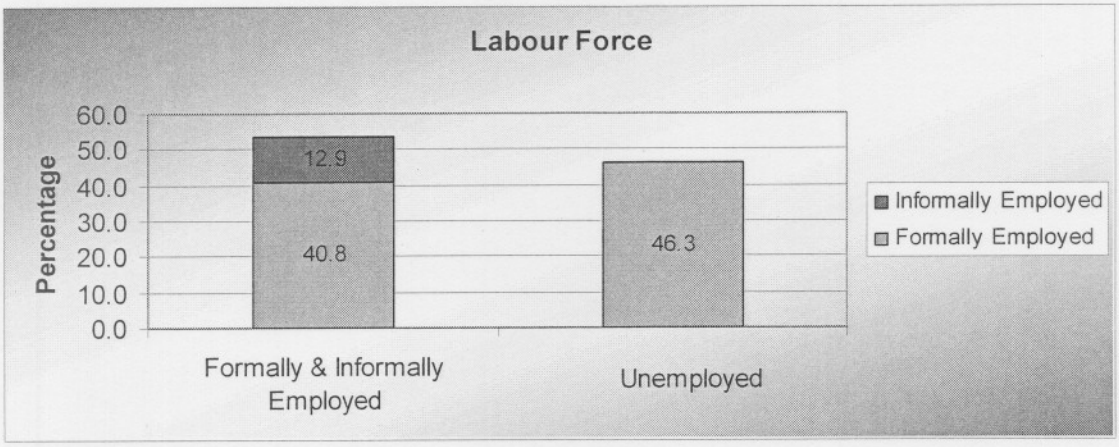
stay is mostly around 28 years. People residing in Evaton West came mostly from Evaton proper (the old Evaton).

3.3 LABOUR FORCE

The unemployment rate in Ratanda and Impumelelo is determined at 46.3 percent and there is, on average, one unemployed person per household. This indicates that unemployment is one of the main determinants of material poverty in Ratanda and Impumelelo. According to Slabbert (1997:104), the unemployment rate of the poor black population in the VTMA is estimated at 68.7 percent, compared with 33.4 percent for the non-poor population and 48.4 percent for the total population. The lack of employment opportunities, especially for the low-skilled and unskilled persons, has a major impact on poverty in the VTMA. According to Mokoena (2004:103), the unemployment rate in Evaton West was 61.37 percent in 2003. This rate is approximately equal to the total Emfuleni rate that was calculated at 61.7 percent in 2003, but much higher than the Bophelong figure that was determined at 55 percent (Slabbert, 2003:6).

Figure 3.5 divides the respondents according to employed and unemployed status. The purpose is to distinguish the unemployed from those who are employed in either the formal or the informal sector. **Figure 3.5** shows that almost 41 percent of the economically active population were employed in the formal sector while 12.9 percent were informally employed. A total of 46.3 percent were unemployed in 2004. According to Slabbert (1997:105), the percentage of poor people that are economically inactive (including children of 14 years and younger) is greater relative to the non-poor. Of the poor, 61.4 percent are economically inactive compared with 56.3 percent of the non-poor. The greater the economically inactive component, the greater is the extent of poverty in households. Mokoena (2004:104) indicates that of the total labour force in Evaton West, 27.4 percent are in formal employment while 11.23 percent are employed in the informal sector. The formal employment figure for Bophelong is higher (34.9 percent) and the informal employment figure lower (10 percent). The figures are similar to the Emfuleni figures (27.78 percent and 10.51 percent respectively).

Figure 3.5 The labour force



Source: Survey data, 2004.

3.3.1 Employment

The unemployment rate is the number of unemployed persons taken as a percentage of the total economically active population (EAP), which includes both the employed and the unemployed. The unemployment rates for Ratanda and Impumelelo are calculated from the data obtained in the 2004 survey.

The unemployment rate (Ur) then, is calculated by the standard equation:

$$\frac{number\ of\ unemployed}{Economically\ active\ population\ (EAP)} x \frac{100}{1} = Ur$$

$$Ur = \frac{143}{309} x \frac{100}{1} = 46.27$$

Therefore, the employment rate for Ratanda and Impumelelo townships can be calculated as:

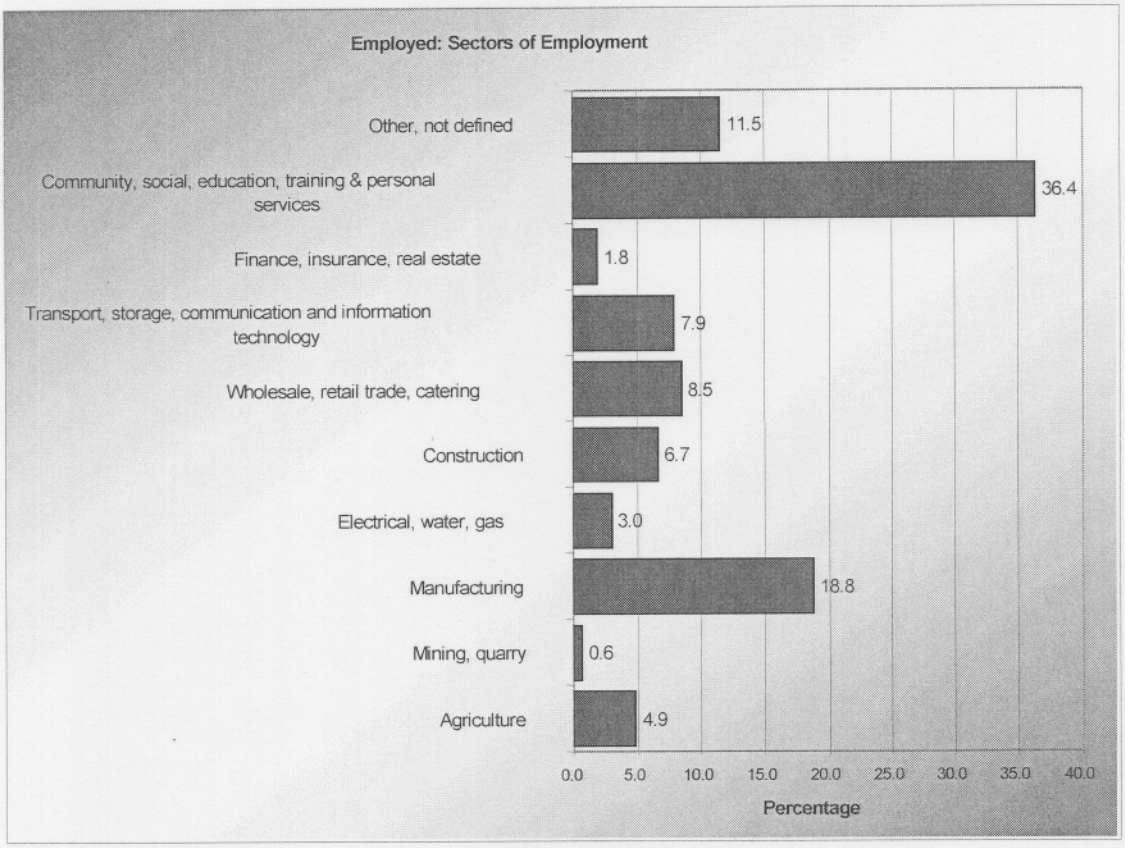
$$\frac{number\ of\ employed}{Economically\ active\ population\ (EAP)} x \frac{100}{1} = Er = \frac{166}{309} x \frac{100}{1} = 53.72$$

3.3.1.1 Profile of the employed

The potential labour force, or economically active population (persons between 15 and 64 years of age, minus the economically inactive population which includes housewives, the disabled and those who prefer not to work) of the Ratanda and Impumelelo townships is 53.7 percent. **Figure 3.6** portrays the

percentage contribution of the different sectors of the Ratanda and Impumelelo economy to total employment.

Figure 3.6 The sectors of employment of Ratanda and Impumelelo communities



Source: Survey data, 2004.

Perhaps not surprisingly, the employment profile in Ratanda and Impumelelo is largely influenced by the economic structure of the area.

- The major sector of employment is community, social, education, training and personal services, at 36.4 percent. The other major sector of employment is manufacturing (18.8 percent).
- The trade and services sector also plays an important role. The wholesale, retail trade, catering and other activities are responsible for 20 percent.
- Ratanda and Impumelelo areas has very limited mining activity, and is therefore fortunate, compared to the rest of Lesedi in terms of environmental degradation caused by mining.

3.3.2 Unemployment

The unemployment rate is the number of unemployed persons taken as a percentage of the total economically active population (EAP), which includes both the employed and the unemployed. The unemployment rates for Ratanda and Impumelelo are calculated from the data obtained in the 2004 survey.

The unemployment rate (Ur), then, is calculated by the standard equation:

$$\frac{number\ of\ unemployed}{Economically\ active\ population\ (EAP)} x \frac{100}{1} = Ur$$

$$Ur = \frac{143}{309} x \frac{100}{1} = 46.27$$

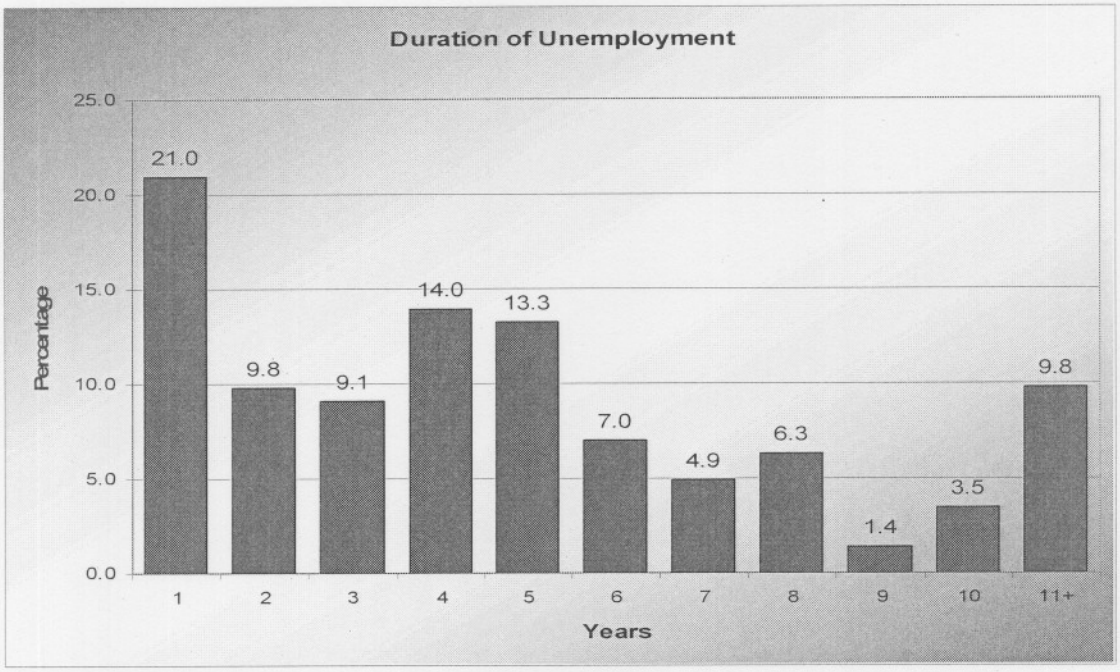
The unemployment rate for Ratanda and Impumelelo townships is 46.27 percent.

3.3.2.1 Profile of the unemployed

Job creation should be at the forefront when projects are evaluated against sustainability criteria. There should also be clear definitions and analysis as to who the beneficiaries are concerning projects. Agricultural projects are of key importance due to the signficant availability of land, expertise and infrastructure in Ratanda and Impumelelo.

Figure 3.7 portrays the duration of unemployment. A total of 21 percent of the unemployed were unemployed for one year. It is likely that these are school leavers who have entered the labour market as job seekers, which serves to emphasise the problem of formal employment creation. Employment opportunities are not being created at a sufficient rate to absorb people entering the labour market.

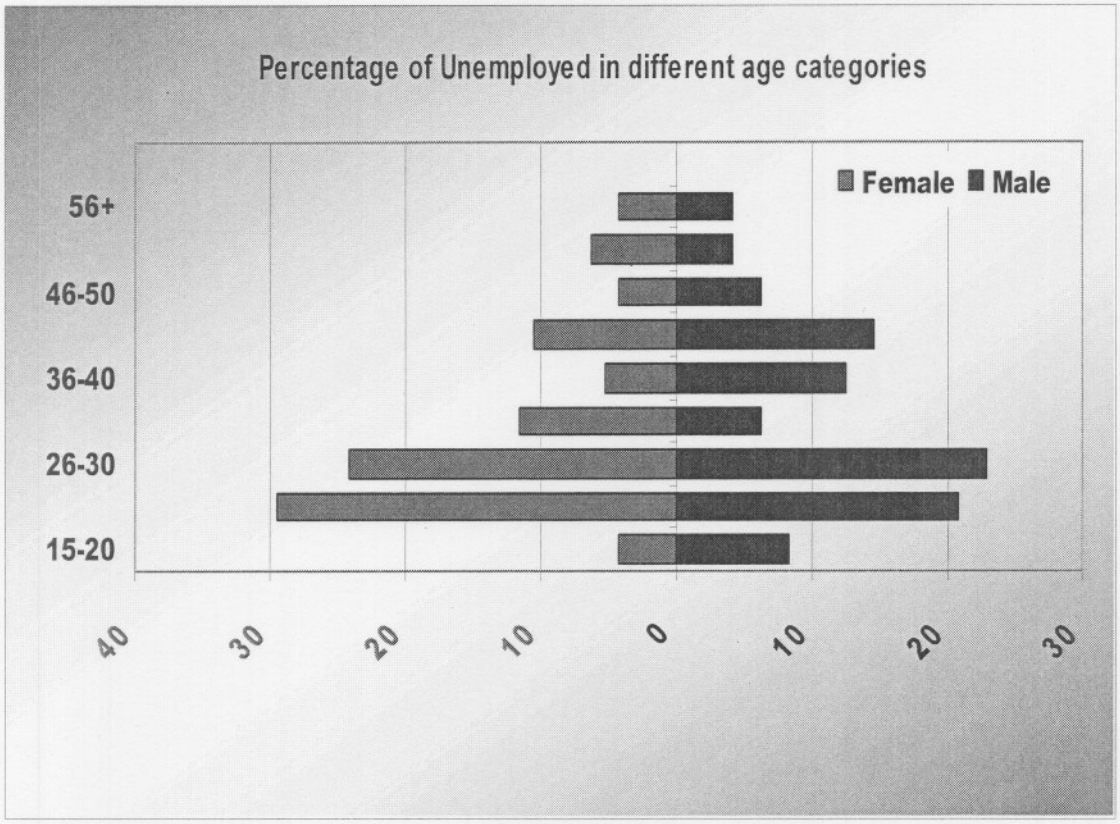
Figure 3.7 Duration of unemployment



Source: Survey data, 2004.

As shown in **Figure 3.8**, the majority of the unemployed are in their youth: half of the males and 65.3 percent of the females are between 20 and 35 years of age. According to Slabbert (1997:112), the percentage of poor that are unemployed comprises 60.2 percent of the total unemployed population in the VTMA. The non-poor comprise only 39.8 percent of the unemployed population. The unemployed are, therefore, to a great extent a part of the poor population in the VTMA, and one may conclude that unemployment is a major determinant of poverty. Of the unemployed that are poor, 48.4 percent are male and 51.6 percent are female. In Evaton West, the main concentration is around the ages 20 to 35 for females and 20 to 40 for males. This is strikingly similar to the Bophelong figures. The unemployed are therefore still relatively young in both areas (Mokoena, 2004:108).

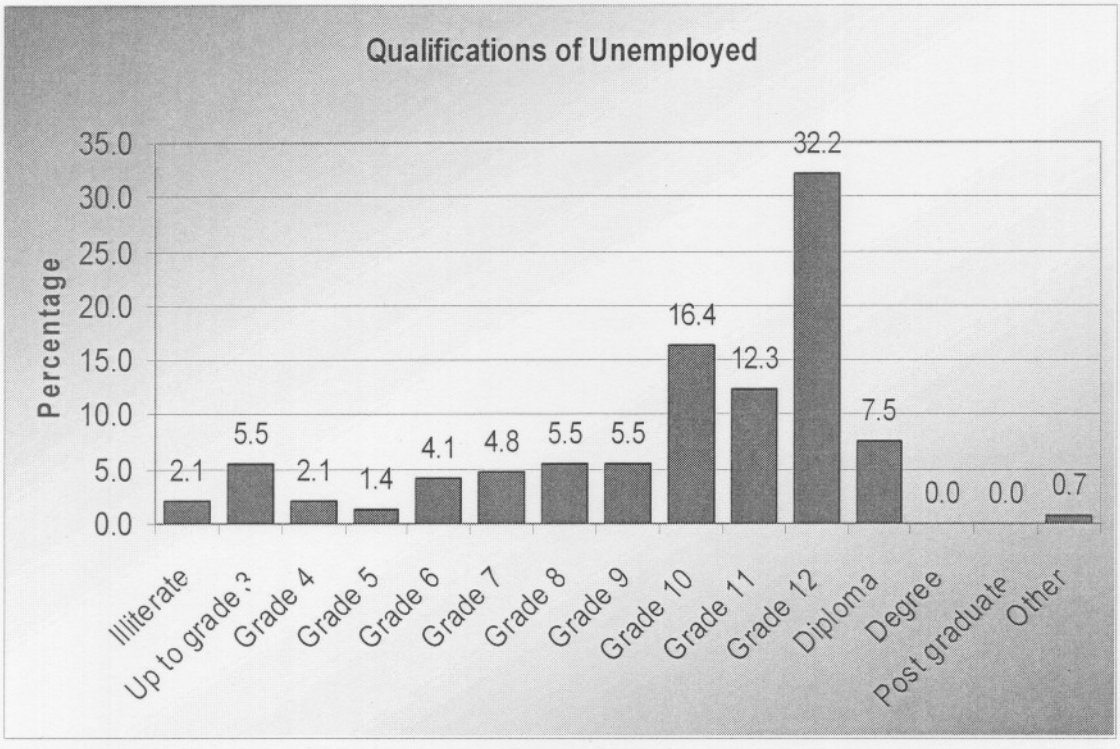
Figure 3.8 Percentage of unemployed in different age categories



Source: Survey data, 2004.

Figure 3.9 portrays the qualifications of the unemployed. A total of 40.4 percent of the unemployed have qualifications of Grade 12 and higher, compared to 30 percent of the total post-school population. The reason for the lower percentage could be that pensioners are included in the total post-school population who have on the whole lower qualifications. However, the percentage of the total post-school population with a diploma or degree is 9 percent, compared to 7.5 percent for the unemployed, which could indicate that those with a diploma or degree have a better chance to find employment than those with only Grade 12 or lower.

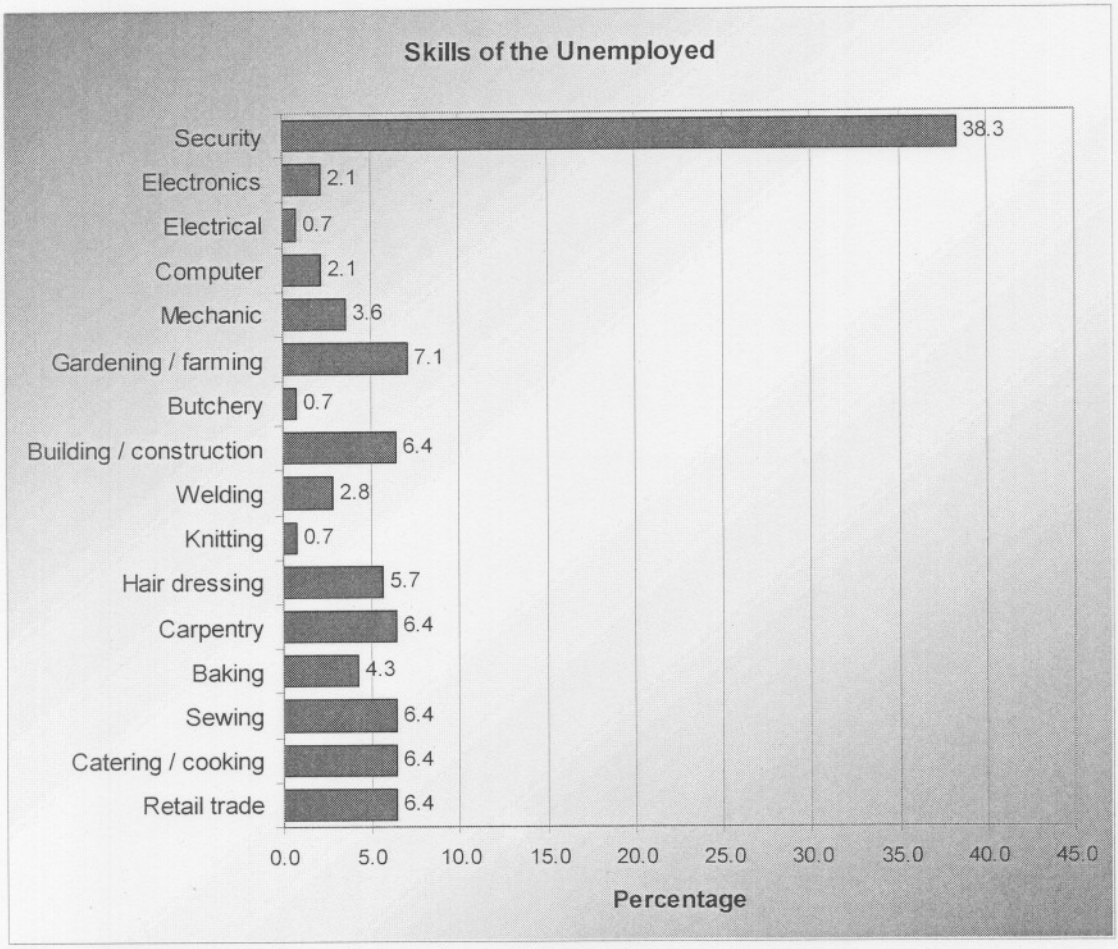
Figure 3.9 Qualifications of unemployed



Source: Survey data, 2004.

The landless rural population in Ratanda and Impumelelo is faced with insecurity of tenure, compounded by various other problems, such as poverty and unemployment, unaffordable rentals, exploitation, evictions, and limited access to basic services. Most of these people have basic agricultural skills and seek access to agricultural land as a means to improve their current living conditions. Farmers and landowners, on the other hand, are not willing to implement land reform without adequate compensation from government. Currently there is a great deal of distrust between rural landowners and tenants (IDP, 2004:46).

Figure 3.10 Skills of the unemployed



Source: Survey data, 2004.

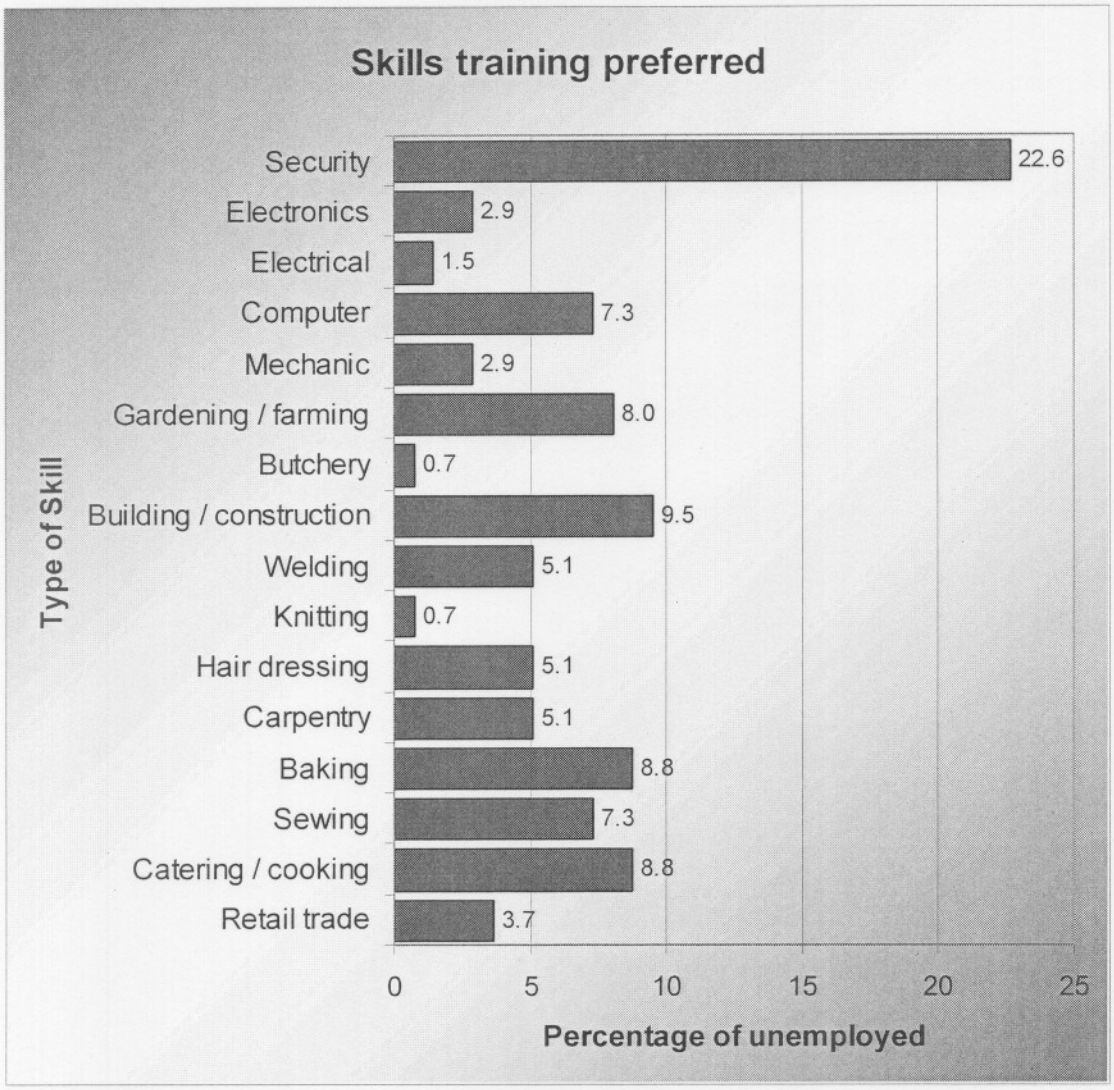
Figure 3.10 shows the skills possessed by the unemployed. The highest percentage of the unemployed have skills in security at 38.3 percent, and gardening/farming at 7.1 percent. It is assumed that these are likely to represent the male unemployed. This is followed by 6.4 percent of the unemployed who have building/construction skills, 6.4 percent with retail trade skills, and 3.6 percent with mechanic skills. The predominantly 'female' skills possessed by the unemployed are catering/cooking, sewing, baking and knitting (17.8 percent), while the predominantly 'male' skills are security, gardening/farming, building/construction, welding and carpentry (61.8 percent).

According to Slabbert (2003:9), the highest percentage of the unemployed in Bophelong has skills in catering/cooking, sewing and baking. It is assumed that these are likely to represent the female unemployed. A total of 7.7 percent of the unemployed have building/construction skills, 6.9 percent have trading skills, and six percent have gardening or farming skills. The predominantly

'female' skills possessed by the unemployed are catering/cooking, sewing, baking and knitting (45.4 percent), while the predominantly 'male' skills are gardening/farming, building/construction, welding and carpentry (21.9 percent).

However, there are unemployed people who feel that if they could be trained, they could get a better job. **Figure 3.11** shows the kind of skills in which the unemployed wish to be trained.

Figure 3.11 Skills training preferred.



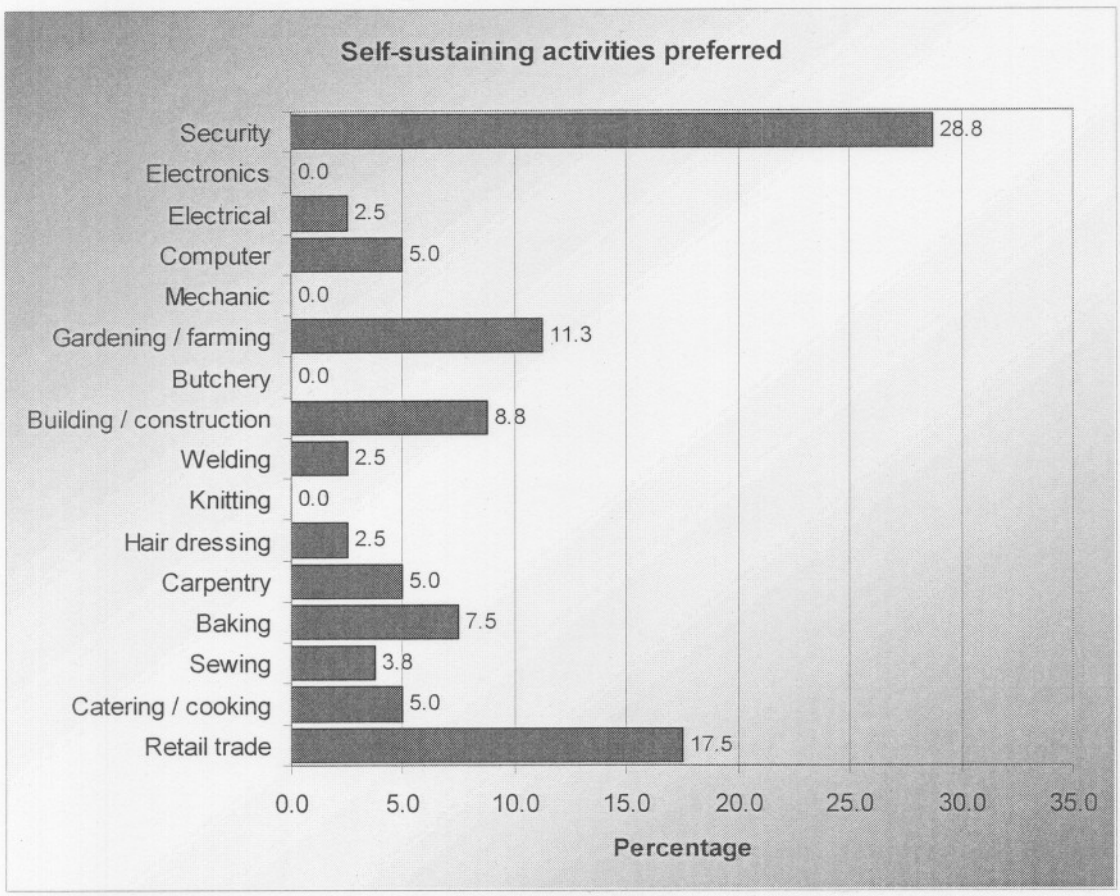
Source: Survey data, 2004.

From the survey results it is clear that many respondents want further skills training in the security, and that is the field in which they already have experience. There is a correlation between the information in **Figure 3.10** and **Figure 3.11**.

In **Figure 3.11**, 1.5 percent of the unemployed indicated that they would like to be trained in electrical skills, and 7.3 percent in computer skills. Concerning gardening/farming, a larger percentage of eight percent of the unemployed are interested in being trained in this sector. However, in retail trade the interest in being trained was determined at 3.7 percent.

The main underlying problems which need to be addressed in the previously disadvantaged communities are the lack of employment opportunities and the low level of skills possession. These communities are not self-sustaining, and, in addition to the provision of basic services and facilities, the focus here should be on education, skills training and various local economic development (LED) initiatives aimed at ultimately creating self-sustaining communities. The key towards uplifting the rural poor is to facilitate access to productive land for these communities, via the various land reform programmes and funding available from central government institutions (IDP, 2004:60).

Figure 3.12 Self-sustaining activities preferred



Source: Survey data, 2004.

Figure 3.12 shows the self-sustaining activities in which the unemployed prefer to be engaged. If compared with **Figure 3.10**, it is clear that the percentage of those unemployed possessing typically 'female' skills - 6.4 percent in catering/cooking, 6.4 percent in sewing, 4.3 percent in baking and 0.7 percent in knitting (total of 17.8 percent of the unemployed) - match quite closely with a total of 16.3 percent of the unemployed who prefer these activities. Concerning the predominantly 'male' activities, the highest percentage of the unemployed has skills in security at 38.3 percent and gardening/farming at 7.1 percent. This is followed by 6.4 percent of the unemployed who have building/construction skills, 6.4 percent have retail trade skills, and 3.6 percent have mechanic skills (totalling 61.8 percent), and a total of 15.6 percent who prefer these activities. Within these 'male' activities, security and gardening/farming seem to be more attractive and welding less attractive.

Those who have trading skills comprise 6.4 percent of the unemployed, while those who would like to be involved in trading comprise 3.7 percent of the unemployed. Almost all the unemployed indicated that they are willing to undergo skills training in order to start self-sustaining activities, or further tertiary training.

3.4 POVERTY

3.4.1 The headcount index

The simplest method of measuring poverty is to express the number of poor as a proportion of the population. This is called the *headcount index* (World Bank, 1990:27). Slabbert (1997:47) formulated the headcount index as follows: the headcount index is defined as the fraction of the population below the poverty line. The purpose of the headcount index is to quantify the number of those individuals or households that fall below the poverty line. If the distribution of incomes is represented by y and the poverty line by z, a poverty measure may be expressed by the function $P = (y;z)$.

Suppose that in a population of **N** households with incomes y_i $(i = 1...N)$ ranked in ascending order by subscript, **M** units have incomes equal to or less than the poverty line z, then the headcount ratio (**H**) may be defined as follows (Borooah & McGregor, 1991:359).

Headcount index:

$$\mathbf{H}\ (y;z) = \mathbf{M/N}$$

The headcount index is concerned with the number of poor people or households whose incomes fall below a given poverty line as a ratio of the whole population.

Example: if there are 500 households in the survey and 250 of them have income below the poverty line *z*, then H(*y;z*) = 250/500 = 0.5. The poverty rate is then 50 percent, meaning that 50 percent of the households are below the poverty line.

The headcount index for Ratanda and Impumelelo townships for the year 2004 is 48.8 percent. This implies that 48.8 percent of the households' income was below their respective poverty lines. By calculating each household's poverty line (called the household's HSL) and comparing that with its own income, the distribution of households below (and above) their poverty lines can be determined. The Household Subsistence Level (HSL) only covers basic items like food, clothing, rent and transport.

Table 3.2 shows a more detailed analysis of households whose incomes were less than their specific HSL (poverty line).

Table 3.2 Percentage of households below their poverty lines in different income categories expressed as % of their HSL: Ratanda and Impumelelo (2004)

Percentage of households below their poverty lines in different income categories expressed as % of their HSL: Ratanda and Impumelelo (2004)			
Household income as percentage of the HSL		**Percentage households**	Cumulative percentage
1	0 – 10	10.3	**10.3**
2	11 – 20	9.0	**19.3**
3	21 – 30	2.6	**21.9**
4	31 – 40	14.1	**36.0**
5	41 – 50	15.4	**51.4**
6	51 – 60	14.1	**65.5**
7	61 – 70	9.0	**74.5**
8	71 – 80	9.0	**83.5**
9	81 – 90	9.0	**92.5**
10	91 – 100	7.7	**100.2**
TOTAL		100.2	

Source: Calculations of survey data, 2004.

The analysis shows that 48.8 percent of the households in Ratanda and Impumelelo townships receive incomes less than their HSL. Furthermore, it reveals that most of these households live in severe poverty. As much as 10.3 percent of the poor households receive incomes between 0 and 10 percent of their poverty lines. A total of 51.4 percent of the poor households receive incomes that are less than 50 percent of their poverty lines, as illustrated by Slabbert (2001:35) in Emfuleni:

- the percentage of households receiving an income less than their respective HSLs is 46.1 percent;
- the percentage of households receiving an income above their respective HSLs, but less than the Household Effective Level (HEL), is 10.4 percent; and

- the percentage of households receiving an income above the HEL level is 43.5 percent.

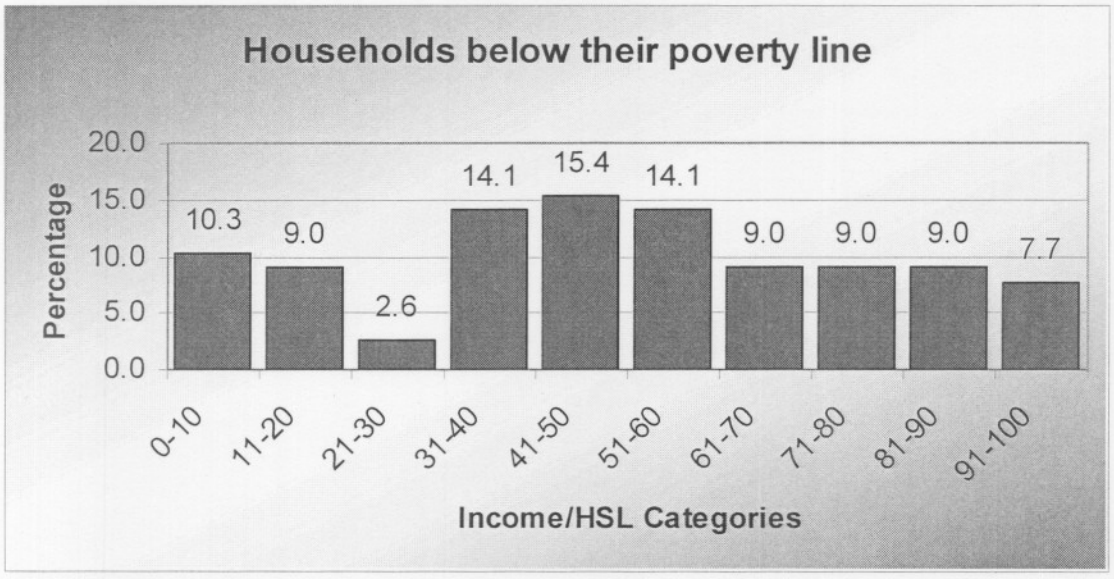
Slabbert (2003:13) points out that "if most households earn 90-100 percent of their own HSL, this would indicate that the poverty is not severe". In line with this assertion, Mokoena (2004:111) shows that there are severe levels of poverty in Evaton West. A total of 65.5 percent of households fall below 50 percent of their HSL compared to 45.8 percent for Bophelong.

As with most predominantly rural municipal areas, such as Ratanda and Impumelelo townships, the area is characterised by poor communities with high levels of unemployment and poverty. High levels of 'poverty-in-employment' also exist in the area. The local community of Ratanda and Impumelelo, including the local business community and local authorities, must strive to establish an economic growth rate in an economically stable environment; this growth rate must be at least equal to the national growth rate. This can be achieved by creating job opportunities and uplifting the disadvantaged communities, resulting in the improvement of the quality of life of residents in Ratanda and Impumelelo.

Making use of the methodology as explained in **Section 2.6.2** and **Annexure B**, the headcount index in Ratanda and Impumelelo was determined at 48.8 percent. It was also determined that Ratanda and Impumelelo have a lower unemployment rate of 46.3 percent compared to the unemployment rate in Bophelong determined at 55 percent (for the method see **Annexure A**) and there is, on average, one unemployed person per household (Slabbert, 2003:6). The lower unemployment rate in Ratanda and Impumelelo townships can be explained by the fact that more residents of these townships, because of their proximity to Heidelberg and Devon, have access to low-paid household jobs including positions as gardeners and domestic servants - or that a greater percentage is engaged in informal activities, which are usually low-paid. The prevailing poverty is manifested in a cycle of low levels of payment for services and poor service provision. Although this allows for a lower unemployment rate, it does not reduce the level of poverty at all. Households in Ratanda and Impumelelo are therefore just as poor as the average township household in Lesedi (IDP, 2004:37).

Figure 3.13 portrays the distribution of poor households. If most households earn 90-100 percent of their own HSL (Household Subsistence Level – which is used as the poverty line – see **Annexure B**), this would indicate that the poverty is not particularly severe. **Figure 3.13**, however, shows that 51.4 percent of all households in Ratanda and Impumelelo townships have an income of less than 50 percent of their HSL, which indicates a high degree of poverty.

Figure 3.13 Households below their poverty line.



Source: Calculations from survey data, 2004.

The poverty gap measures the transfer of income required to bring the income of every poor person up to the poverty line (Thirlwall, 1994:12). The poverty gap index is concerned with the depth of poverty (its magnitude), and therefore measures the extent of the shortfall of incomes below the poverty line (Slabbert, 2000:49). Slabbert (1997:48) defines the poverty gap ratio **(R)** by the following equation (adapted from Borooah & McGregor, 1991:359):

$$R\,(y;z) = \sum_{i=1}^{M} (z - y_i)/z$$

where: **R** = the average income shortfall of the poor expressed as a proportion of the poverty line;

z = the poverty line;

y = the income of a household; and

M = the number of households with incomes below or equal to the poverty line (z).

Example: If the poverty line (*z*) is determined at R800;

the household's income (y_i) is R500;

the poverty gap is then (z-y_i) = R300; then

the individual poverty gap ratio of the household is:

(z-y_i)/z = R300/R800 = 0.375.

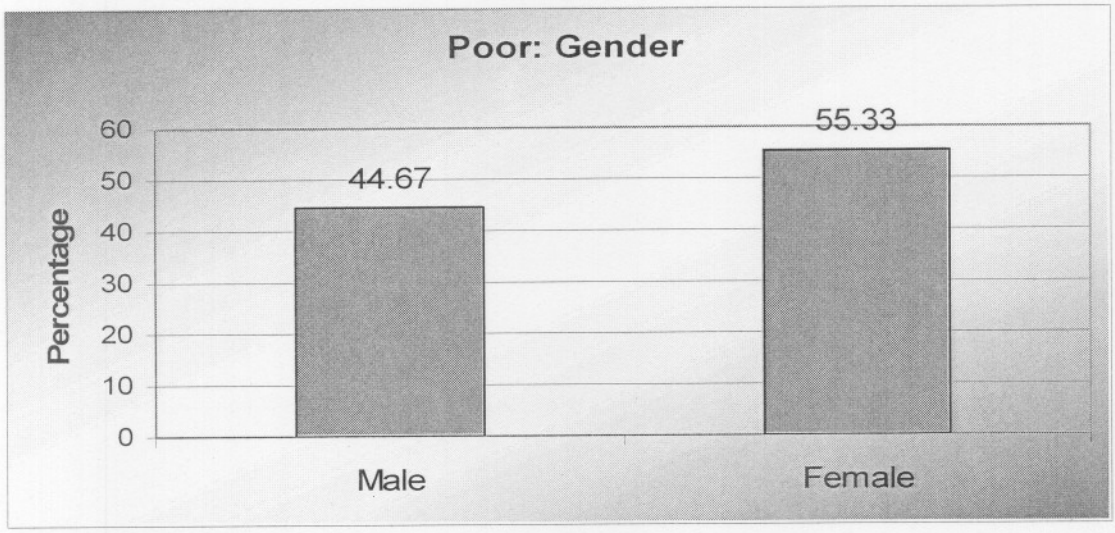
The average of all the poverty gap ratios of the sample of households will give R. The poverty gap ratio in Ratanda and Impumelelo is 0.5, indicating that, on average, poor households lack 50 percent of the income to attain a level equal to their poverty line.

3.4.2 Profile of the poor

Ratanda and Impumelelo's poverty problem is one that involves being primarily situated in the previously disadvantaged areas: the townships and the rural areas. A large percentage of the population in the poor areas is young; in fact, the youth comprises a significant element of the total population. The youth are particularly affected by unemployment and poverty. Almost 60 percent of the unemployed poor are in the age category 21-35 years. Females in this category are more affected than males - there are 59.4 percent of unemployed females in this category compared to 47.4 percent males. Comparatively, the figure for Bophelong for the population in this category is 58 percent. The figure for females is 61.5 percent and 52.2 percent for males (Slabbert, 2003:17). The figures for Bophelong are therefore higher than those for Ratanda and Impumelelo.

Figure 3.14 depicts the gender distribution of the poor population of Ratanda and Impumelelo.

Figure 3.14 Gender distribution of the poor population of Ratanda and Impumelelo



Source: Survey data, 2004.

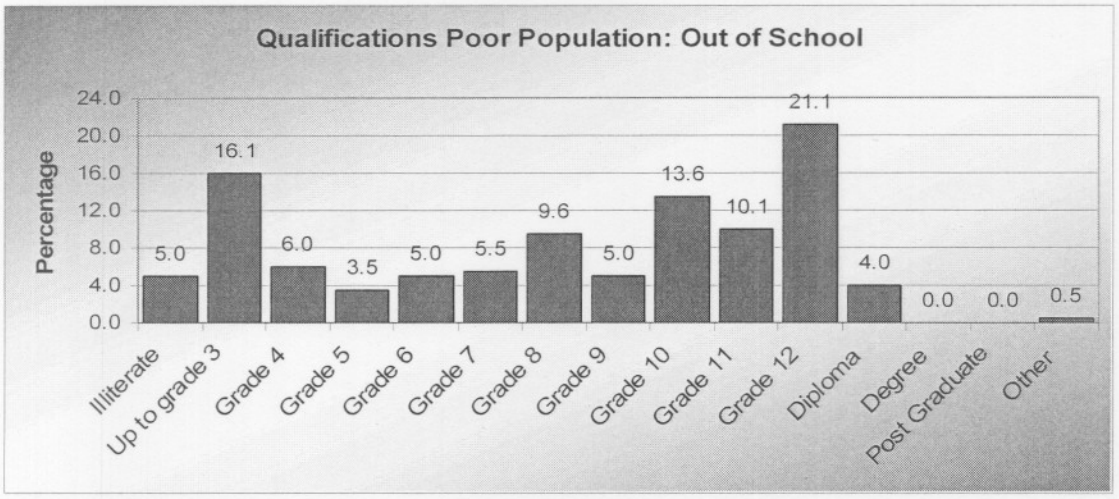
Figure 3.14 shows the spread of the population between male and female for poor households. It is noteworthy that the number of females exceeds the number of males. As shown in the figure, 55.33 percent of the poor population is female and 44.67 percent male, compared to 54.51 percent and 45.49 percent for the whole population of Ratanda and Impumelelo townships. In contrast to this, Mokoena (2004:114) points out that in Evaton West there was a slightly lower percentage of females living in poverty than men, i.e. 49.9 percent females compared to 50.1 percent male. It can therefore be concluded that females in Ratanda and Impumelelo experience poverty more than their male counterparts. Poverty does, therefore, have a gender and an age bias.

Because of the stagnating local economy in Ratanda and Impumelelo, the poverty problem has not improved in recent years, but has in fact been exacerbated by various factors such as the natural population increase, and a decreasing reliance (of farms, business, industry and domestic households) on unskilled and semi-skilled labour. Efforts by local government to provide skills training and create jobs have had a negligible impact on the problem.

Ratanda and Impumelelo townships have a large percentage of young people, many of whom are out of school and not productively employed. Youth development programmes and facilities are in short supply, especially in the

township and rural areas. Any youth development strategy should be linked to the provision of tertiary, skills and entrepreneurial training.

Figure 3.15 Qualifications of poor population: out of school



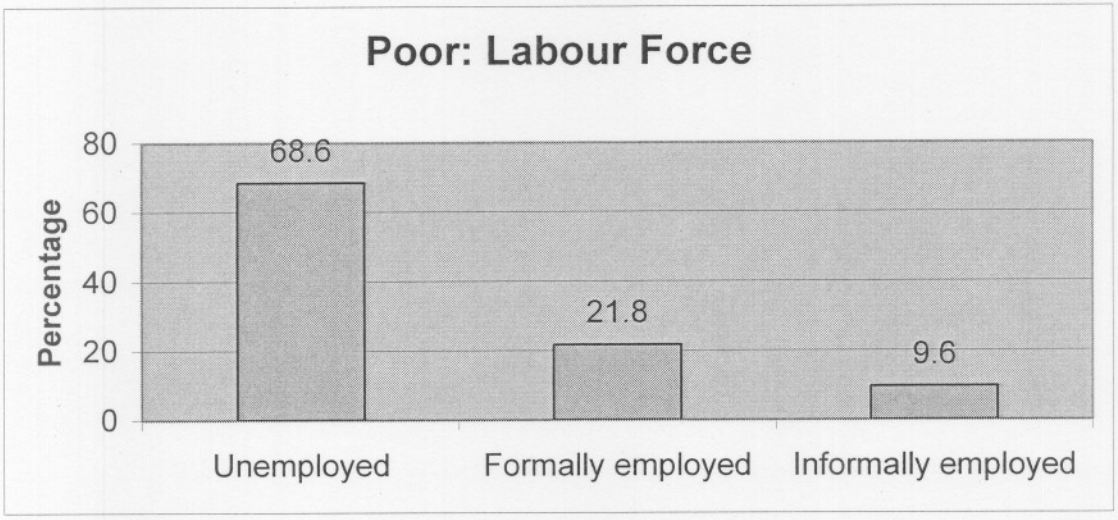
Source: Survey data, 2004.

Figure 3.15 shows the literacy levels of Ratanda's and Impumelelo's poor population by looking at the qualification of the post-school poor population. A total of 25.6 percent of the poor post-school population has a qualification of Grade 12 or higher, compared to 30 percent for the population as a whole. Individuals possessing a diploma or degree living in poor households is only four percent of the poor population, compared to nine percent of the population as a whole. This shows an inverse correlation between especially higher qualification and poverty.

3.4.3 Profile of the poor employed

Figure 3.16 portrays the status of the labour force that is also classified as the poor population. A total of 31.4 percent of the poor labour force is classified as employed (in either the formal or informal sector). The unemployment rate of the poor is therefore 68.6 percent compared to 46.3 percent in general in Ratanda and Impumelelo.

Figure 3.16 Labour force of the poor population

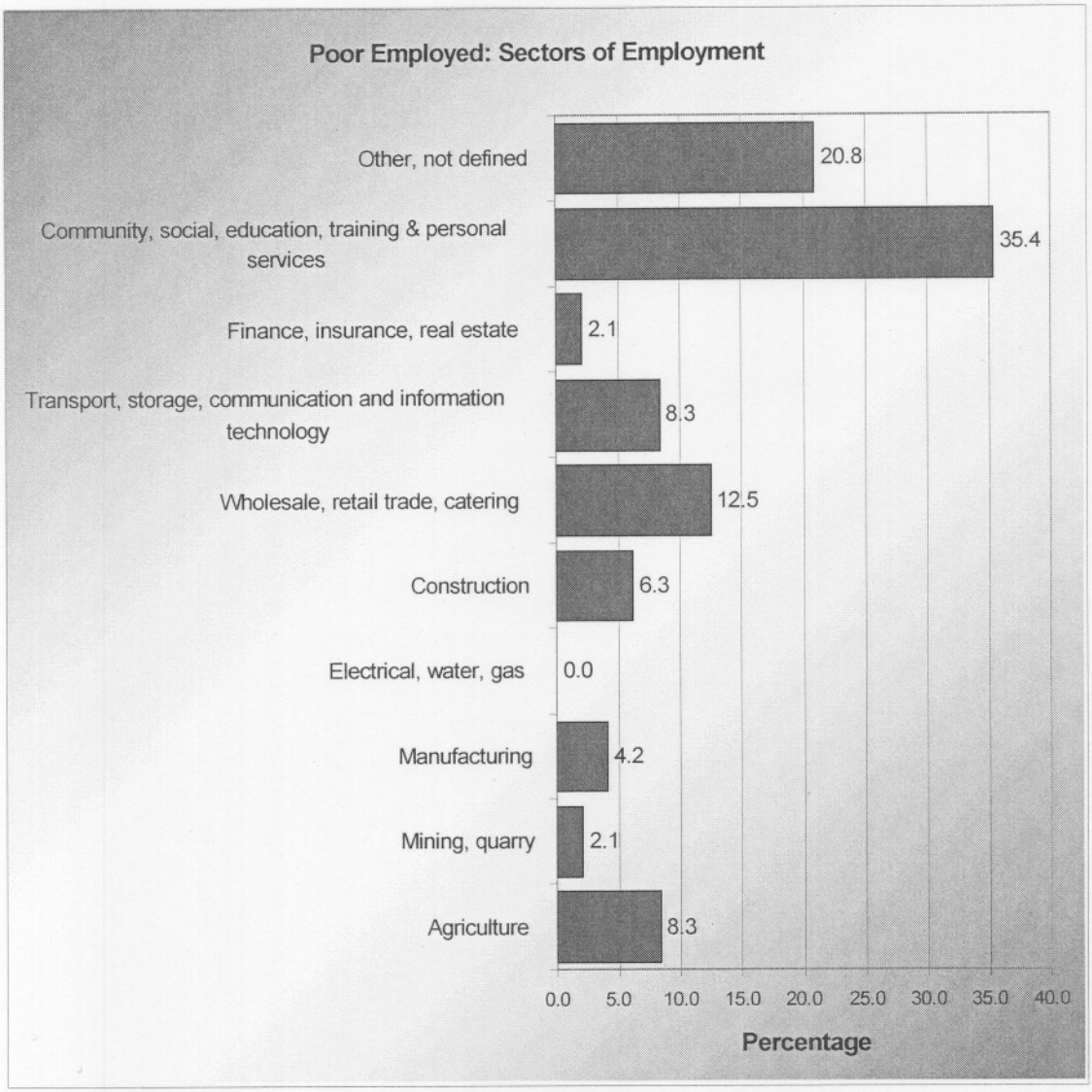


Source: Survey data, 2004.

Concerning the poor employed, 21.8 percent are formally employed and 9.6 percent informally employed, compared to 40.8 percent and 12.9 percent respectively for the total population within Ratanda and Impumelelo townships.

Figure 3.17 indicates the sectors of the economy within which the poor employed work. A comparison with **Figure 3.6** (sectors of employment for the employed of the total Ratanda and Impumelelo population) shows that the most common sector within which the working poor work is in the community, social, education, training and personal services sector (35.4 percent compared to 36.4 percent for the total population). A slightly greater percentage of the poor work in the wholesale, retail trade, and catering sector (12.5 percent compared to 8.5 percent), but in the manufacturing sector (where the average salaries are usually relatively high) there is a much lower percentage of the poor employed (4.2 percent compared to 18.8 percent).

Figure 3.17 Poor employed: sectors of employment

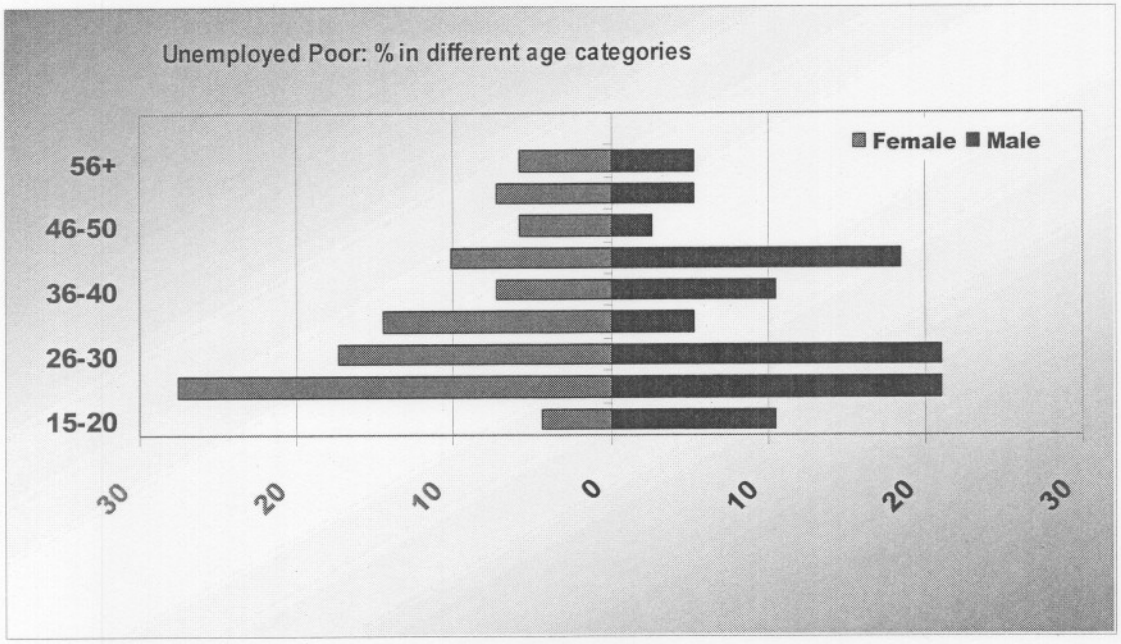


Source: Survey data, 2004.

3.4.4 Profile of the poor unemployed

Figure 3.18 gives an age profile of the poor unemployed in Ratanda and Impumelelo. The majority of them are in their youth, as supported by the following: 59 percent of the total unemployed poor are between 20 and 35 years of age. In the case of females it is higher (59.4 percent) than in the case of males (47.4 percent). The percentage of the poor unemployed that are between 20 and 35 years of age is slightly lower than for the total unemployed (poor and non-poor combined): 65.3 percent of females and 50 percent of males.

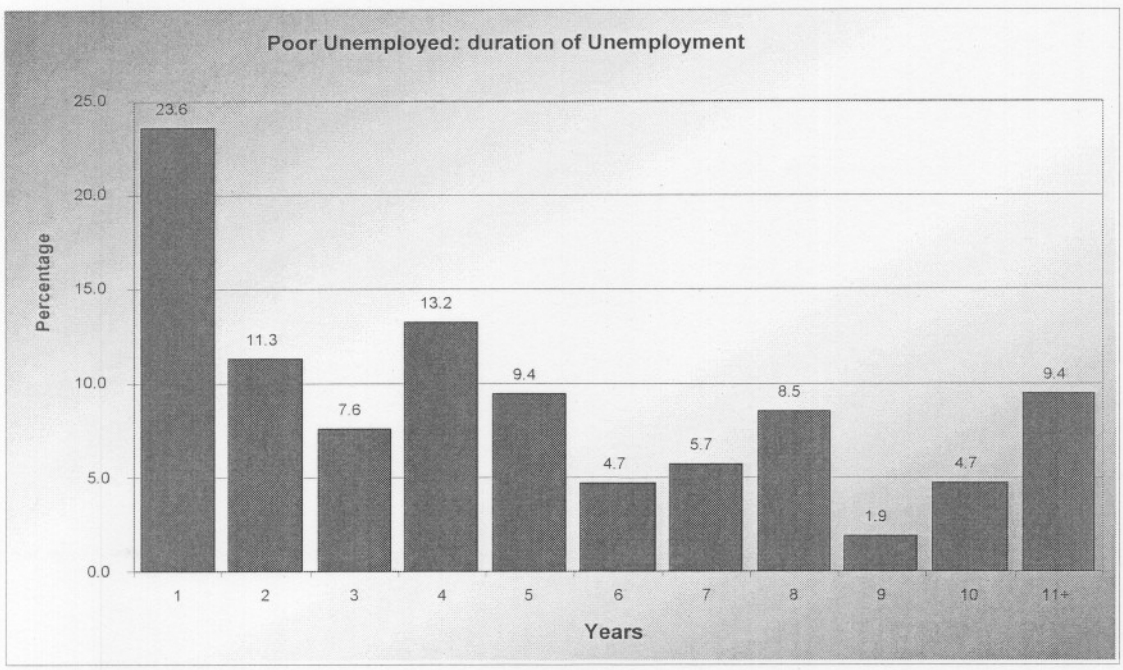
Figure 3.18 Poor unemployed: % in different age categories



Source: Survey data, 2004.

Figure 3.19 shows the duration of unemployment of the poor population. This is about the same as for the Ratanda and Impumelelo population as a whole.

Figure 3.19 Poor unemployed: duration of unemployment

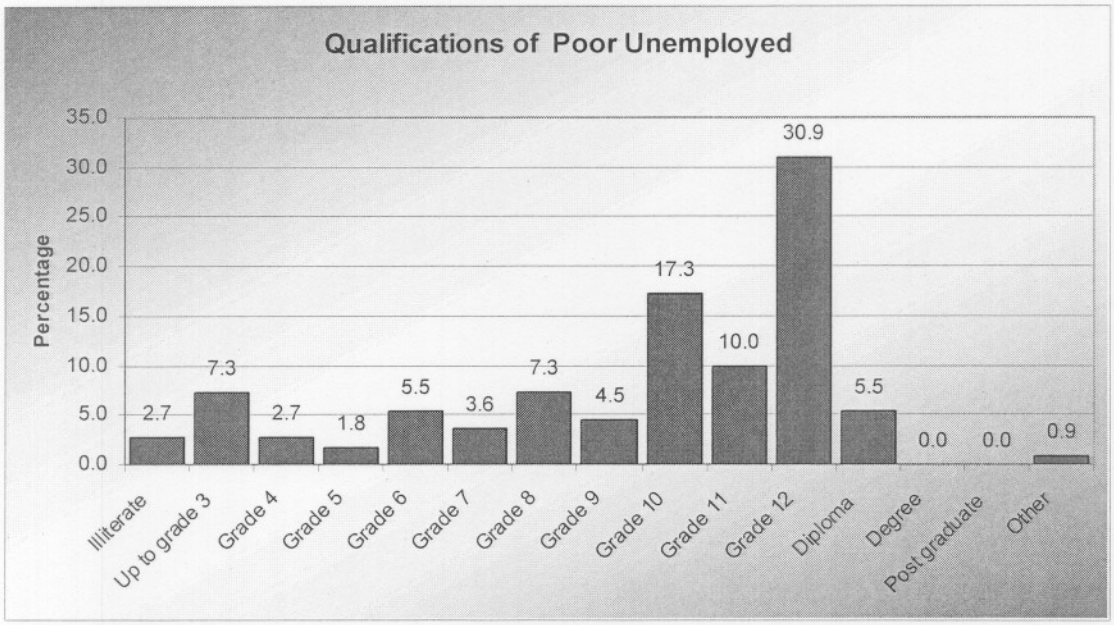


Source: Survey data, 2004.

Figure 3.20 shows the qualifications of the poor unemployed. The percentage of the poor unemployed with a Grade 12 or higher qualification is 36.4 percent

compared to 40.4 percent for the poor and non-poor unemployed. A total of 5.5 percent of the poor unemployed have a diploma or degree, compared to 7.5 percent for the total unemployed population. It appears that, on average, the poor unemployed have a marginally lower level of qualifications than the unemployed in general.

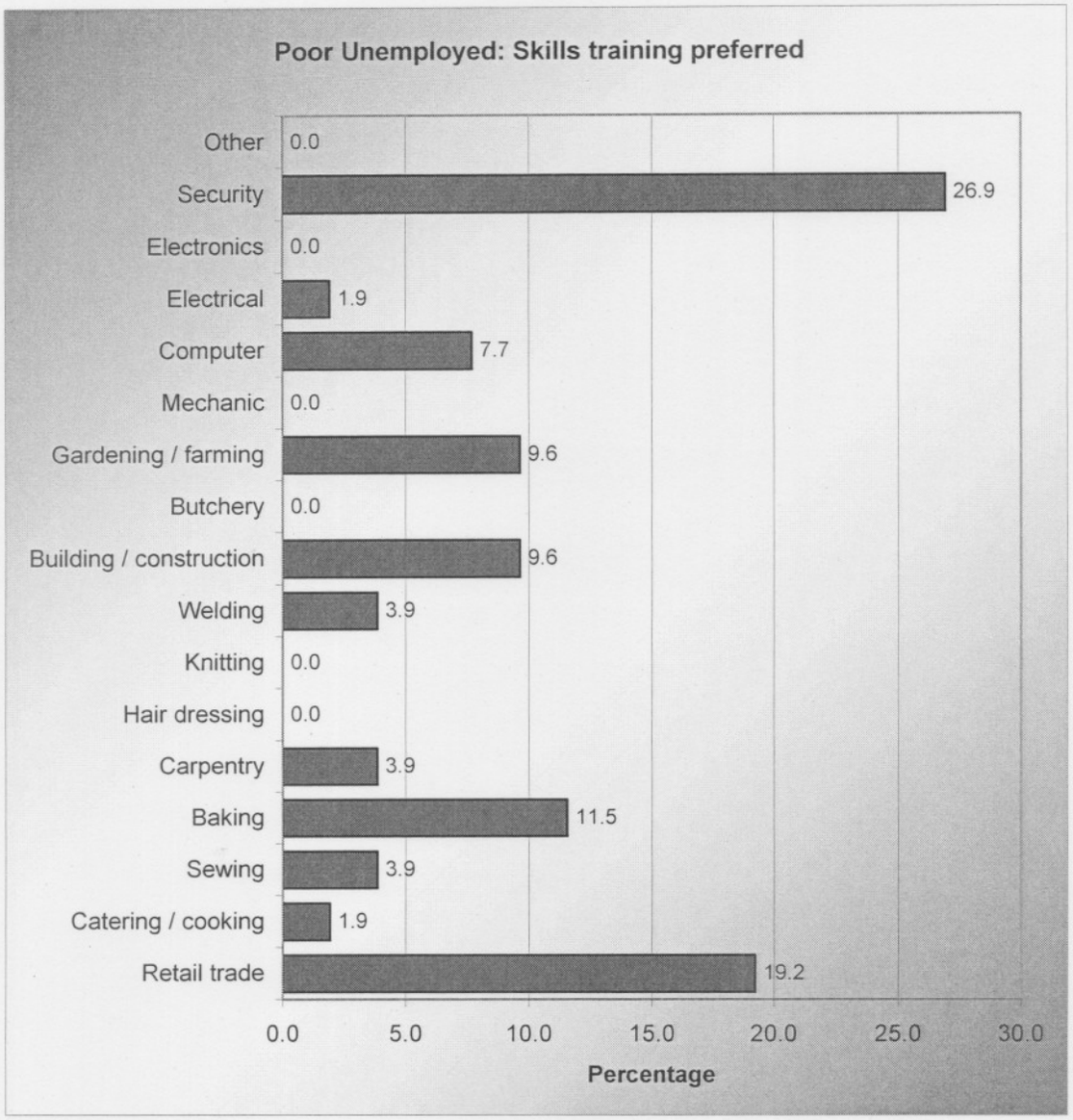
Figure 3.20 Qualifications of poor unemployed



Source: Survey data, 2004.

The 2004 household survey sought to determine the types of skills as well as the employment and business aspirations of the poor unemployed in Ratanda and Impumelelo townships. **Figure 3.21** gives an indication of the most frequently stated skills training in which the poor unemployed would prefer to be trained. The majority of the unemployed would like to be trained in the security field. According to these findings a strategy for poverty alleviation should focus on creating jobs in this field as well as in the retail trade and baking for females, gardening/farming and building/construction fields.

Figure 3.21 Poor unemployed: skills training preferred



Source: Survey data, 2004.

3.5 INCOME AND EXPENDITURE

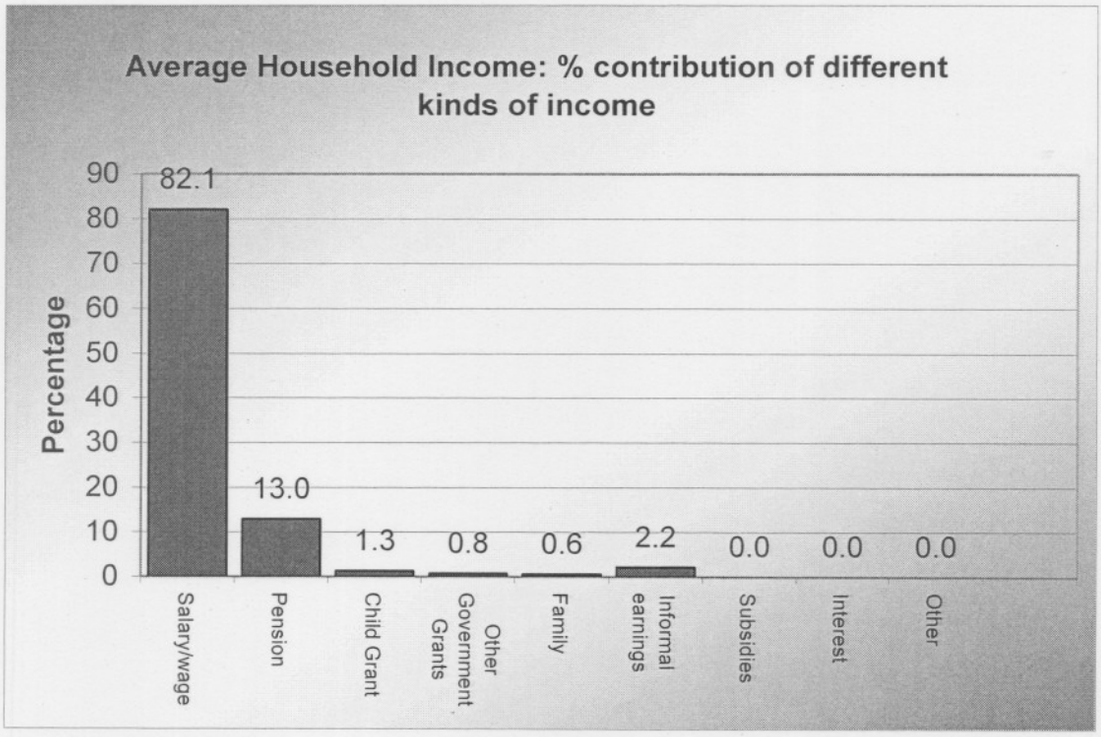
Table 3.3 and **Figure 3.22** show the different sources of household income and their contribution to the total income of Ratanda and Impumelelo townships. The average household income in Ratanda and Impumelelo is determined at R1953 per month.

Table 3.3 Sources of household income in Ratanda and Impumelelo (2004)

Source of household income	**Percentage**
Salary/wage	82.1
Pension	13.0
Informal earnings	2.2
Child Grant	1.3
Other Government Grants	0.8
Family	0.6
TOTAL	100.0%

Source: Calculations based on survey data, 2004.

Figure 3.22 Average household income: % contribution of different kinds of income



Source: Survey data, 2004.

The average income per household in Ratanda and Impumelelo is approximately R1953 per month. This has been calculated at R1288 for Evaton West (Mokoena, 2004:121) and R1497 for Bophelong (Slabbert, 2003:19). This indicates higher incomes per household in Ratanda and Impumelelo than in both Bophelong and Evaton West. In Ratanda and Impumelelo, 82.1 percent

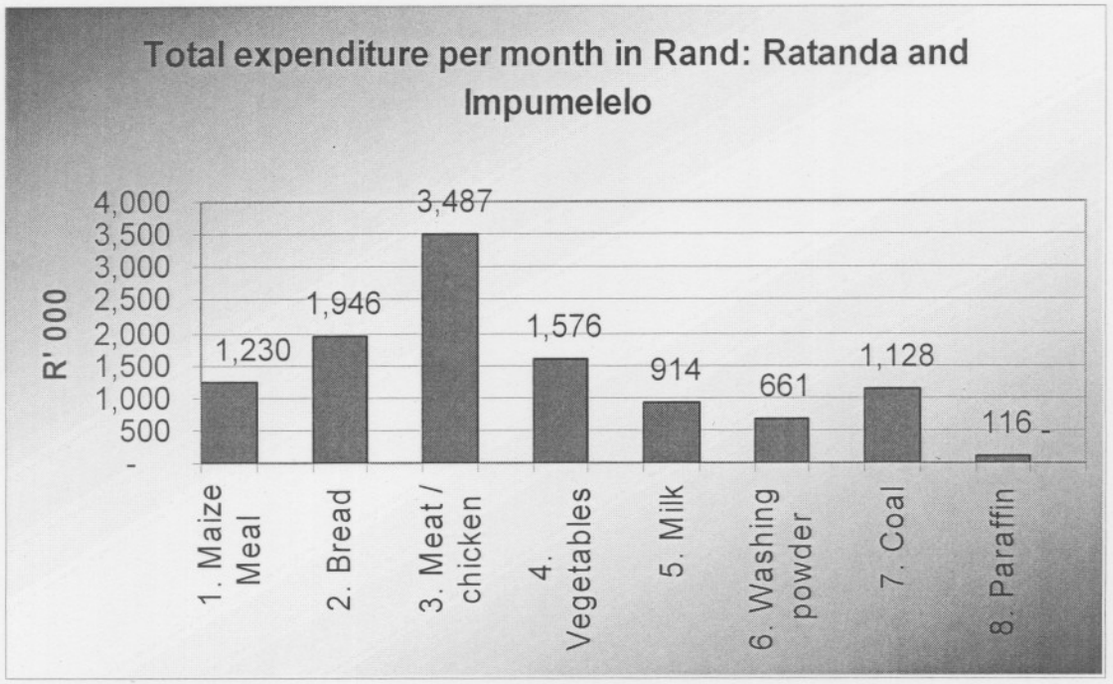
(64.1 percent for Bophelong and 37 percent for Emfuleni townships) of average household income comes from salaries and wages. This is by far the primary source of household income, followed by pensions at 13 percent (12 percent for Bophelong and 29 percent for Emfuleni townships) (Mokoena, 2004:122). Informal earnings account for 2.2 percent, whilst other grants, gifts from families, etc. contribute 2.7 percent in Ratanda and Impumelelo townships.

The expenditure profile for households living in Ratanda and Impumelelo is shown in **Figure 3.23**. Residents consume 469 628 kilograms of mealie meal per month, amounting to an expenditure of R1.2 million (or R14.7 million per year). A total of R3.4 million is spent monthly on meat (R41.8 million per year), R1.9 million on bread (R23.3 million per year), R1.5 million on vegetables (R18.9 million per year) and R913 993 on milk (R10.9 million per year).

The total expenditure on these five items amounts to R109.8 million per year, which provides opportunities for agro-processing, whereby local residents for the Ratanda and Impumelelo township communities could produce some of these products.

This would mean that money is retained in the area and that a multiplier effect in terms of income and employment would play a role in Ratanda and Impumelelo.

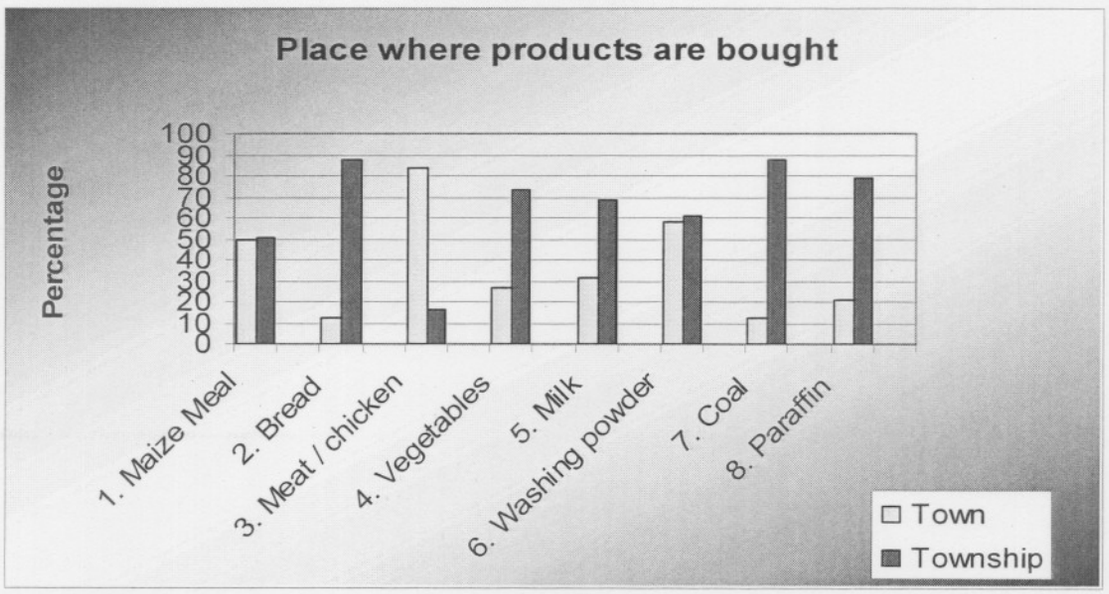
Figure 3.23 Total expenditure per month in Rand



Source: Survey data, 2004.

Figure 3.24 indicates the places where the products mentioned in **Figure 3.23** are bought. The majority of these products are bought in township, except meat. Although these products are bought within townships, none of them are manufactured or produced in or around the area.

Figure 3.24 The place where products are bought



Source: Survey data, 2004.

Table 3.4 and **Figure 3.25** depict the average expenditure of households in Ratanda and Impumelelo. An estimated 21.73 percent of household's expenditure is, on average, allocated for food – thus this is the most important expenditure item. Other significant expenditure items are housing (9.32 percent), transport (11.15 percent), clothing (7.66 percent) and furniture (6.94 percent). According to Mokoena (2004:124), in both Evaton West and Bophelong areas expenditure on food is also by far the highest. It amounts to 29.6 percent of total expenditure in Evaton West, compared to a higher 36 percent in Bophelong. Expenditure on transport in Evaton West is 11 percent and in Ratanda and Impumelelo it is 11.15 percent, meaning that both areas are almost equal in terms of transport expenditure. This emphasises the fact that Evaton West, Ratanda and Impumelelo are further from sources of employment, schools and towns than Bophelong, where residents can walk to the nearest town. Expenditure on clothing, school, furniture and electricity is also relatively high for both areas.

According to Slabbert (1997:121), it appears, contrary to conventional wisdom, that poor households in the VTMA spend their income on less essential or more luxury items, while at the same time relatively small amounts are spent on more basic items such as food and clothing. This implies that part of the poverty problem in the VTMA can be related to misspending, and not only to a lack of income.

Table 3.4 Expenditure profile of households in Ratanda and Impumelelo

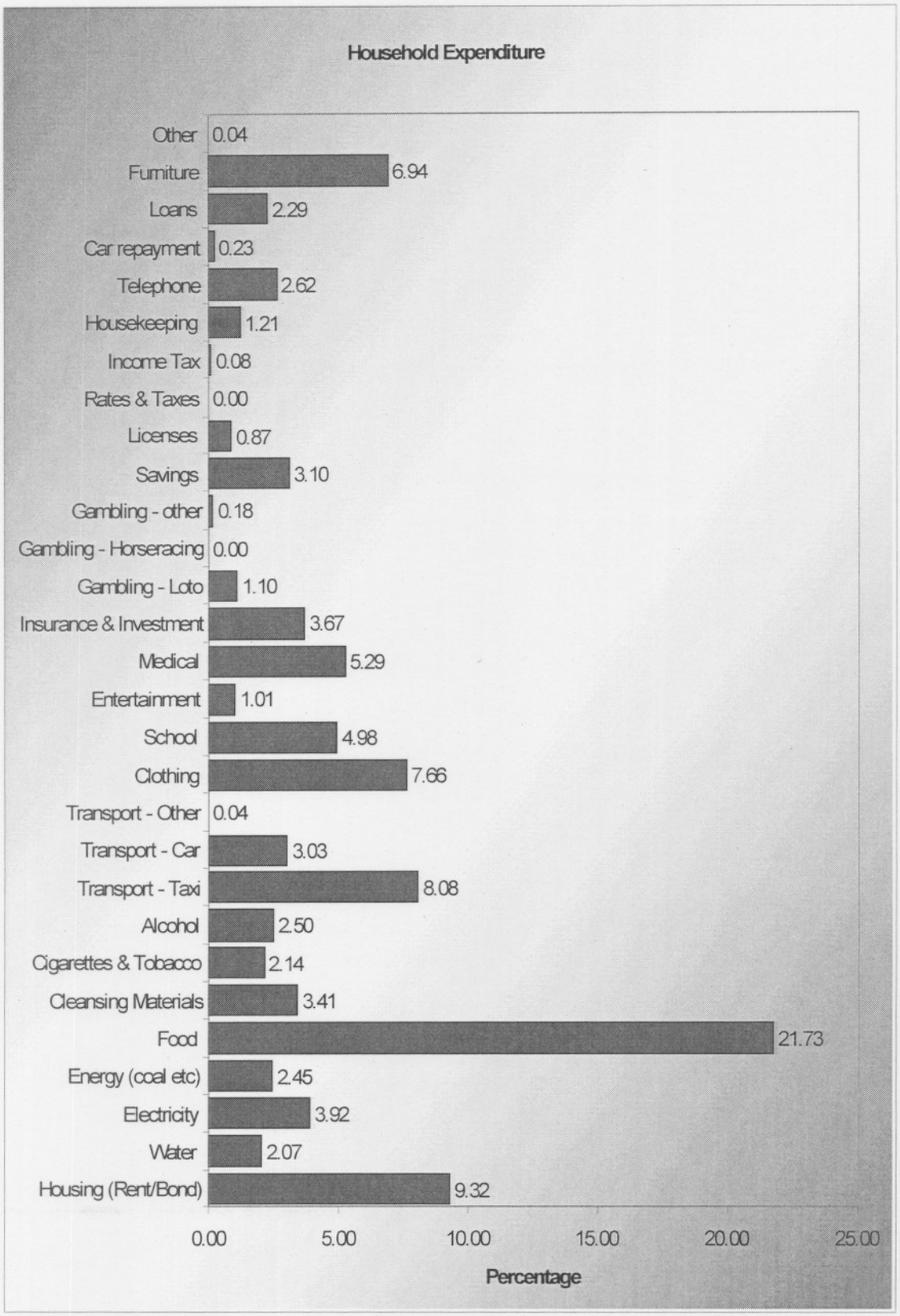
Expenditure item	% of total household expenditure
Food	21.73
Transport	11.15
Housing (Rent/Bond)	9.32
Clothing	7.66
Furniture	6.94
Medical Expenses	5.29
School	4.98
Electricity	3.92
Insurance	3.67
Cleansing Materials	3.41
Savings	3.1
Cell phone	2.62
Other energy (coal etc)	2.45
Loans	2.29
Cigarettes & Tobacco	2.14
Water	2.07
Beer, wine & spirits	2.5
Gambling	1.28
Telephone	1.21
Entertainment	1.01
Licenses (e.g. TV, Vehicle)	0.87
Car repayment	0.23
Housekeeping Services (e.g. garden service)	0.08
Other	0.04
TOTAL	100,0

Source: Calculations based on data survey, 2004.

Although an estimated 21.73 percent of household's expenditure is on average allocated for food, 92.95 percent of food bought is from the towns and only 6.41 percent of food is bought within the townships. During the survey it was established that the agricultural products bought and sold in the township markets were neither produced in Ratanda nor in Impumelelo townships. Fresh produce markets, fruit and vegetable wholesalers, and farms, are supplying vegetables and fruit to informal traders. Depending on their location, informal traders get their supply of vegetables from various sources. In the case of Ratanda, markets in Nigel are the most important suppliers of vegetables and

fruit. In Impumelelo, the majority of buyers indicated that they get their vegetables and fruit from Springs shopping centre. Since food is the basic item, this necessitates food production in Ratanda and Impumelelo in order to make this item affordable to households with low incomes.

Figure 3.25 The household expenditure



Source: Survey data, 2004.

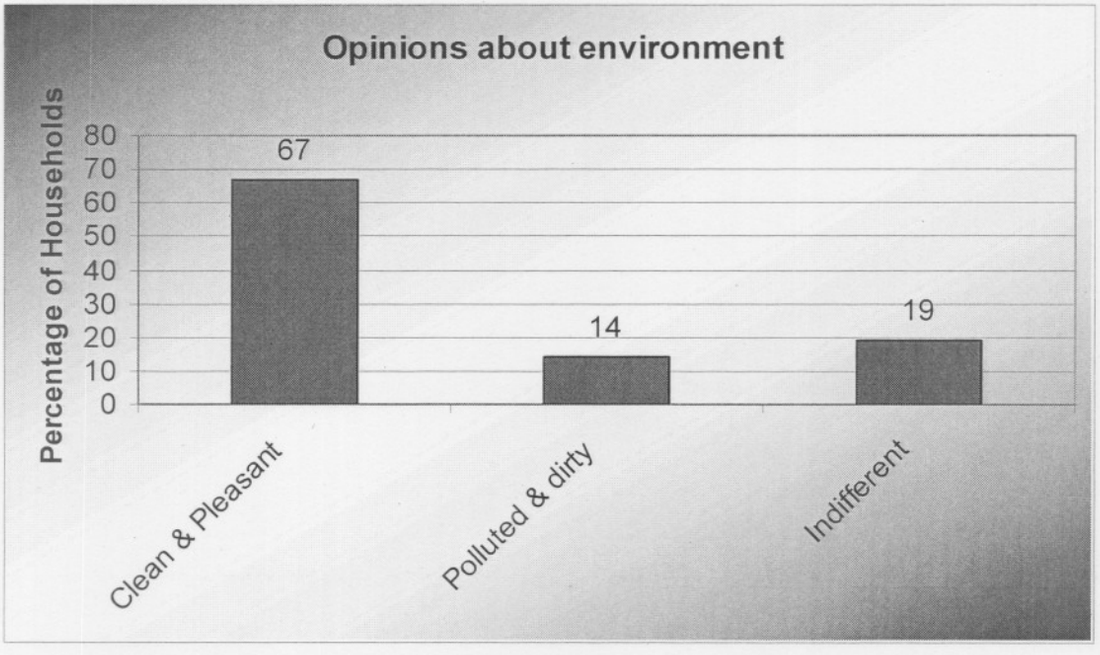
3.6 ENVIRONMENTAL ISSUES

The environment plays an important role in the Lesedi Municipal Area, more so than in most other areas of the Gauteng Province. This is due to the existence of large nature reserve areas, the natural beauty of the area, the high potential agricultural land, the number of dams and rivers throughout the area, natural ridges and the abundance of fauna and flora. Three areas of environmental issues are analysed: the extent to which households are affected by or view littering, air pollution, and noise pollution.

3.6.1 Littering

Figure 3.26 shows the opinion of the residents of Ratanda and Impumelelo about the state of the environment in terms of littering. Fourteen percent of Ratanda and Impumelelo residents sampled and 69.7 percent in Emfuleni townships regard the environment as polluted and dirty. To a large extent, this probably explains indiscriminate littering in non-designated areas (Mokoena, 2004:125).

Figure 3.26 Residents' opinions about the environment

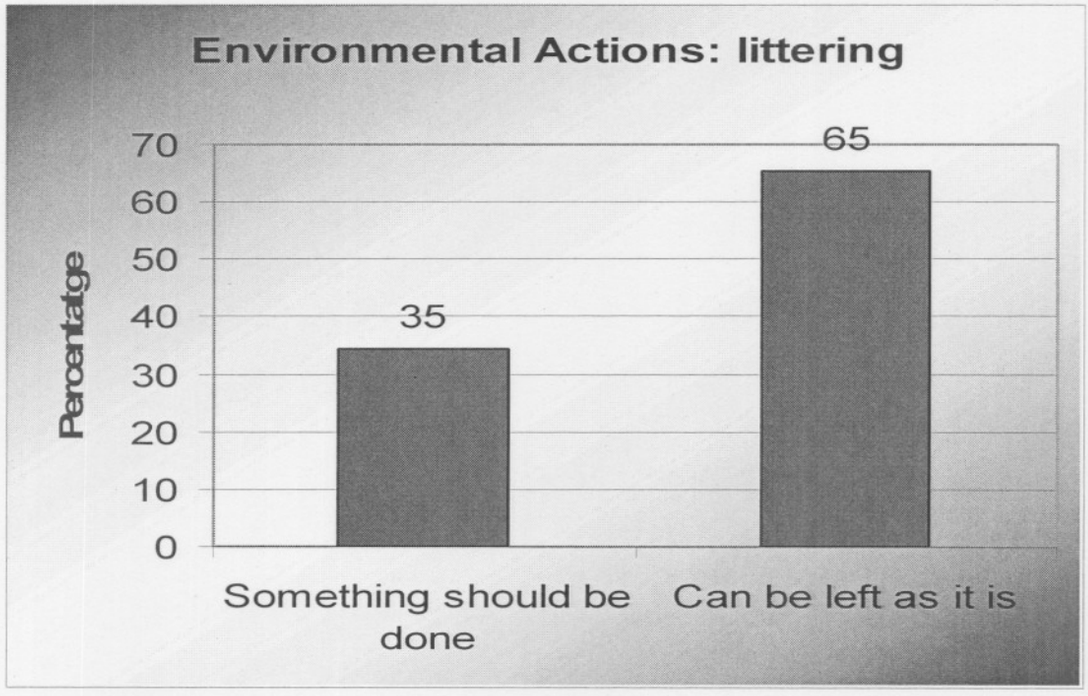


Source: Survey data, 2004.

The 35 percent of residents in Ratanda and Impumelelo (88 percent in Emfuleni townships) feel that something should be done about cleaning the environment,

while 65 percent feel that it can be left as it is (**Figure 3.27**). Within the Emfuleni townships, 41.7 percent felt that the municipality should take responsibility for cleaning the environment (Mokoena, 2004:126). Ratanda and Impumelelo residents feel strongly that every person should also take responsibility for cleaning the environment. **Figure 3.27** shows residents' opinions about environmental actions.

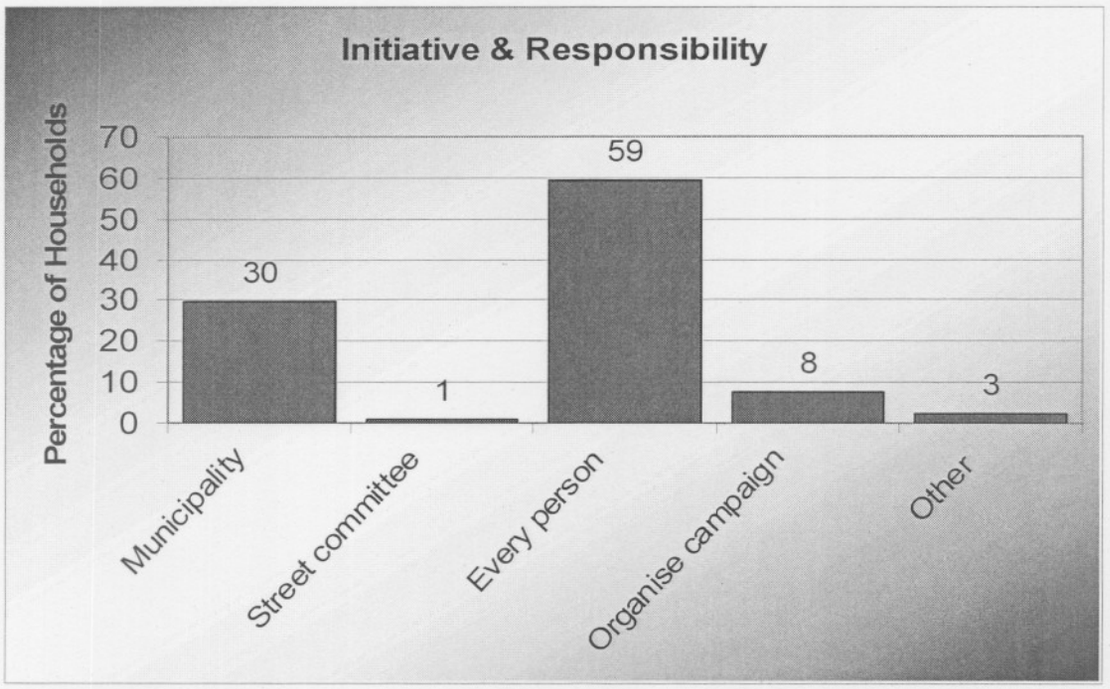
Figure 3.27 Environmental actions: Littering



Source: Survey data, 2004.

As regards the question about who should be responsible and take the initiative in cleaning the polluted environment, 59 percent regard every person as responsible and 30 percent are of the opinion that the municipality should be responsible. Opinions regarding who should take responsibility for dealing with the unclean environment are shown in **Figure 3.28**.

Figure 3.28 Initiative and responsibility to clean environment



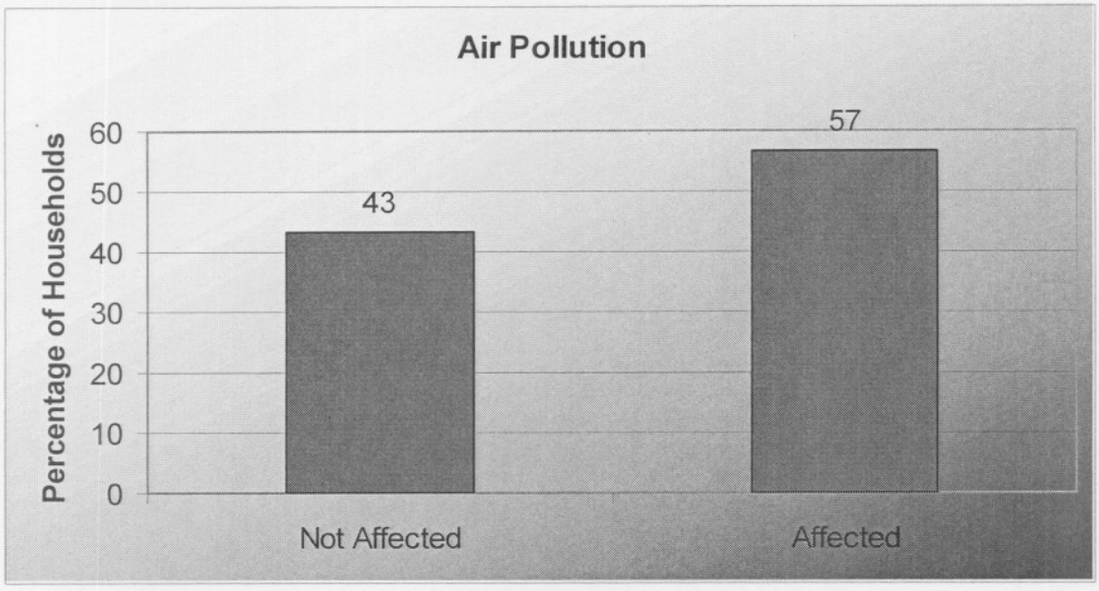
Source: Survey data, 2004.

The average monthly Rand value that an average household attaches to a clean environment is R15.91.

3.6.2 Air and dust pollution

Figure 3.29 shows that 57 percent of the respondents are affected by air pollution.

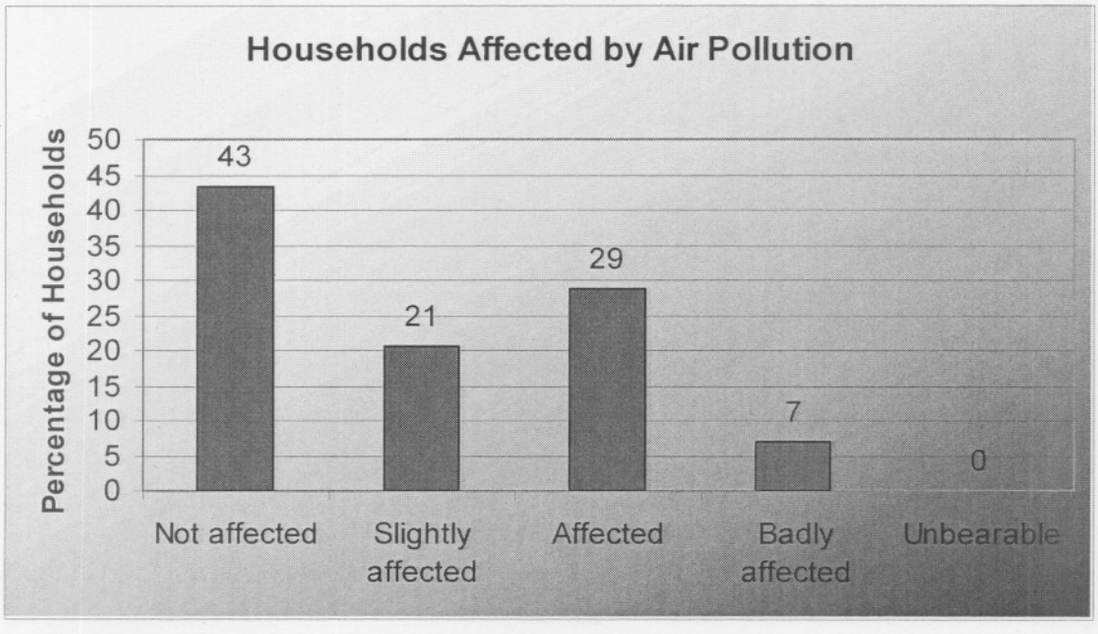
Figure 3.29 Air pollution



Source: Survey data, 2004.

Figure 3.30 gives an indication of how seriously respondents feel affected by air pollution. Of those affected, seven percent indicated they are badly affected.

Figure 3.30 Households affected by air pollution

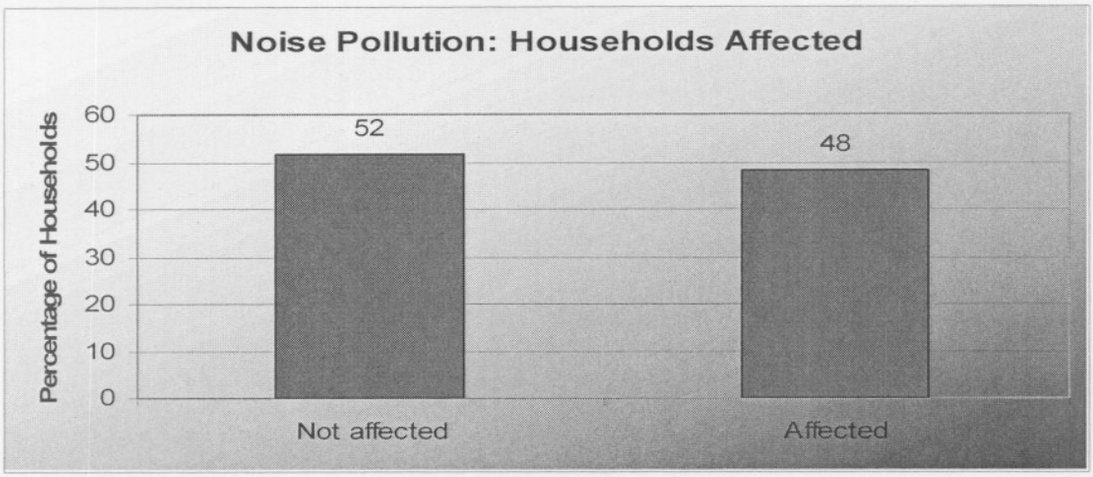


Source: Survey data, 2004.

3.6.3 Noise pollution

According to **Figure 3.31**, 48 percent of the respondents indicated that they are affected by noise in Ratanda and Impumelelo townships.

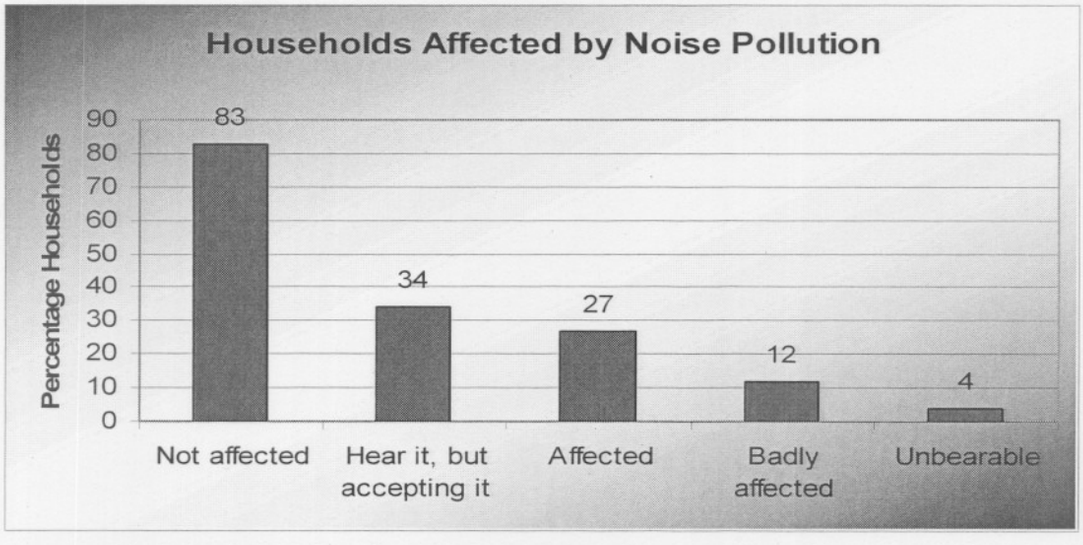
Figure 3.31 Noise pollution



Source: Survey data, 2004.

According to **Figure 3.32**, of those who stated that they are affected by noise pollution, 16 percent are severely affected.

Figure 3.32 Households affected by noise pollution

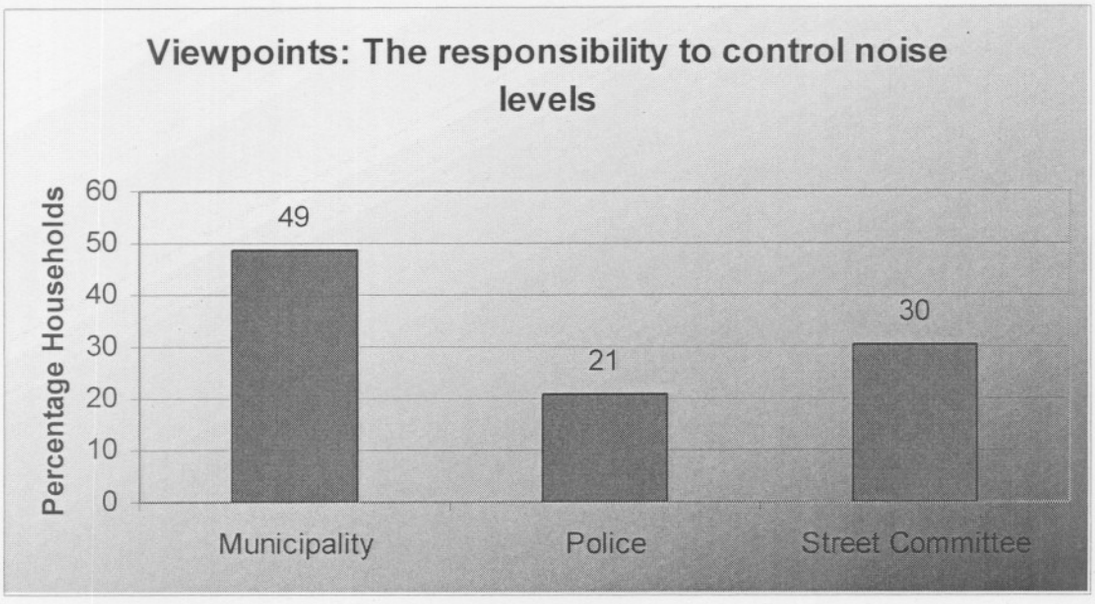


Source: Survey data, 2004.

In Ratanda and Impumelelo, as shown in **Figure 3.33**, of those who indicated that they are affected by noise pollution, 49 percent feel that the municipality

should control the noise levels, while 30 percent (31 percent for Bophelong) are of the opinion that this is the responsibility of a street committee.

Figure 3.33 Viewpoints: the responsibility to control noise levels



Source: Survey data, 2004.

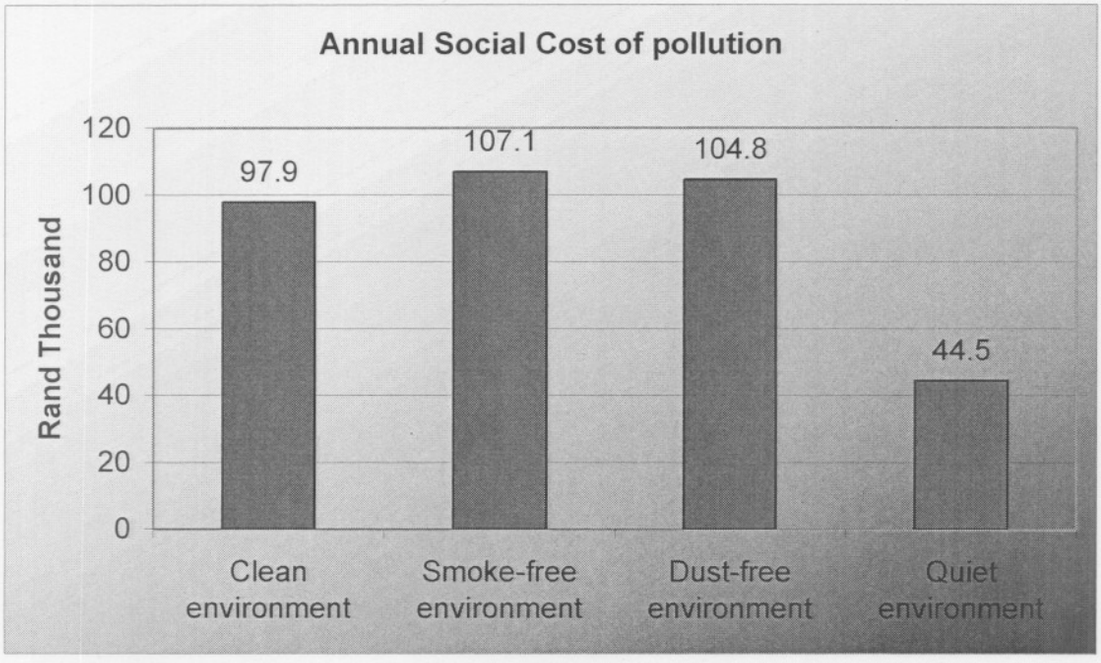
A total of 21 percent felt that police should deal with the situation. On average, the Rand value attached to a pollution-free environment in Ratanda and Impemelelo is as follows: smoke environment – R17.39 per household per month (R56 per household per month in Bophelong); and noise pollution – R7.23 per household per month (R31 per household per month in Bophelong). For all types of pollution, therefore, there is a higher Rand value attached to dealing with pollution in Bophelong than in Ratanda and Impumelelo. These figures were calculated according to the average responses from residents as to how much they would be willing to spend to live in a pollution-free environment.

3.6.4 Social cost of pollution

Ratanda and Impumelelo townships are rural areas, as well as relatively poor areas. It is therefore of vital importance to find a balance between environmental conservation and use of natural resources for employment purposes. It should be noted that the existing high levels of poverty impact negatively on the environment, but through agricultural projects, the standard of living could increase, having a reduced impact on the environment.

Informal housing settlements exist in the areas surrounding Ratanda and Impumelelo. These settlements have serious impacts on the environment in terms of pollution and degradation of the areas. It is an accepted principle that economic development has a positive impact on the environment and upliftment is vital in these areas. Where possible, informal settlements should be formalised and services should be provided. These settlements have huge potential for environmental disasters, thus they should be located a reasonable distance away from sensitive areas and the use of high potential agricultural land should be a last resort.

Figure 3.34 Annual social cost of pollution



Source: Survey data, 2004.

As shown in **Figure 3.34**, smoke-free and dust-free environments are seen as being of a much higher priority than a quiet environment. However, taking into account the percentage of households that are affected and the average amount they are willing to pay to live in a smoke-free, clean, quiet and dust-free environment, the monetary value (annual social cost) of pollution can be calculated, thus the annual social cost of pollution is estimated at:

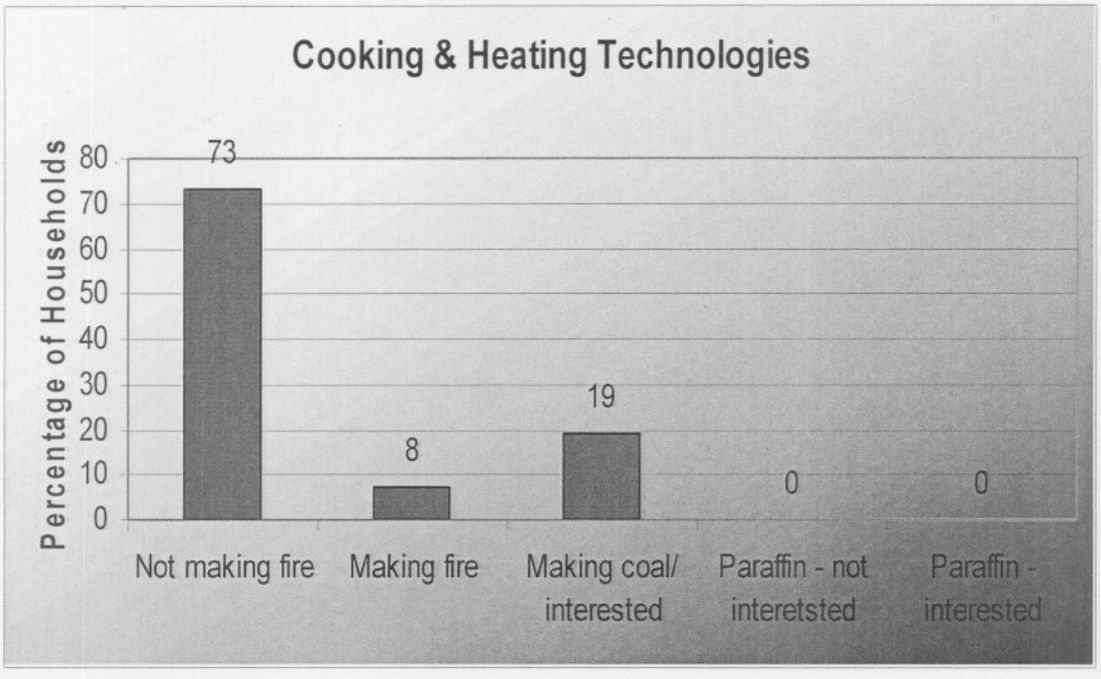
- R107,100 for non-polluted air;
- R104,800 for a dust-free environment;

- R97,900 for a neat and clean environment; and
- R44,500 for a quiet environment.

3.6.5 Heating and cooking technologies

In Ratanda and Impumelelo, 73 percent of residents use electricity, while 63 percent use electricity in Bophelong. Alternative technologies are therefore used more in Bophelong than in Ratanda and Impumelelo (for instance, 37 percent make use of a fire for cooking and heating). It is therefore predictable that more people in Bophelong would be interested in alternative technologies than in Ratanda and Impumelelo. **Figure 3.35** shows the sources of energy respondents in Ratanda and Impumelelo townships use for cooking and heating.

Figure 3.35 Cooking and heating technologies



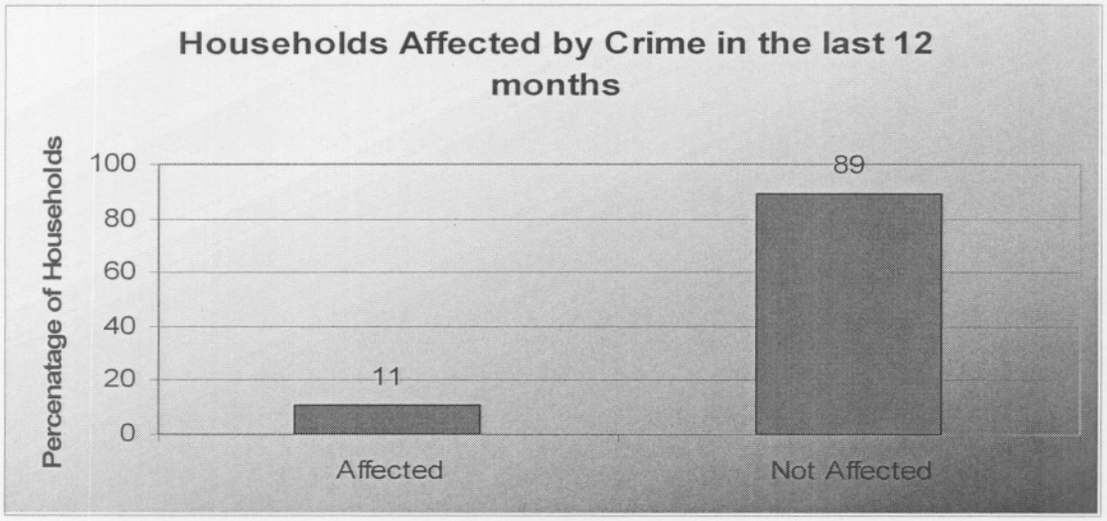
Source: Survey data, 2004.

3.7 CRIME

According to Mokoena (2004:132), crime in South Africa has been publicised as one of the serious challenges facing post-apartheid democracy. The country's crime rates are amongst the highest in the world and no South African is insulated from its effects. There is a particularly high incidence of crime in the Gauteng Province, including serious crimes (such as murder, rape and robbery

with aggravating circumstances). Crime has a negative effect on the economic development of an area. It negatively affects the quality of life, the investment decisions made by industry, and increases personal and law enforcement costs. The percentage of households in Ratanda and Impumelelo affected by crime in the past 12 months is shown in **Figure 3.36**. In Ratanda and Impumelelo 11 percent of the households (23 percent in Bophelong and 27.1 percent in Emfuleni townships) were affected by crime in the last 12 months (Slabbert, 2003:30).

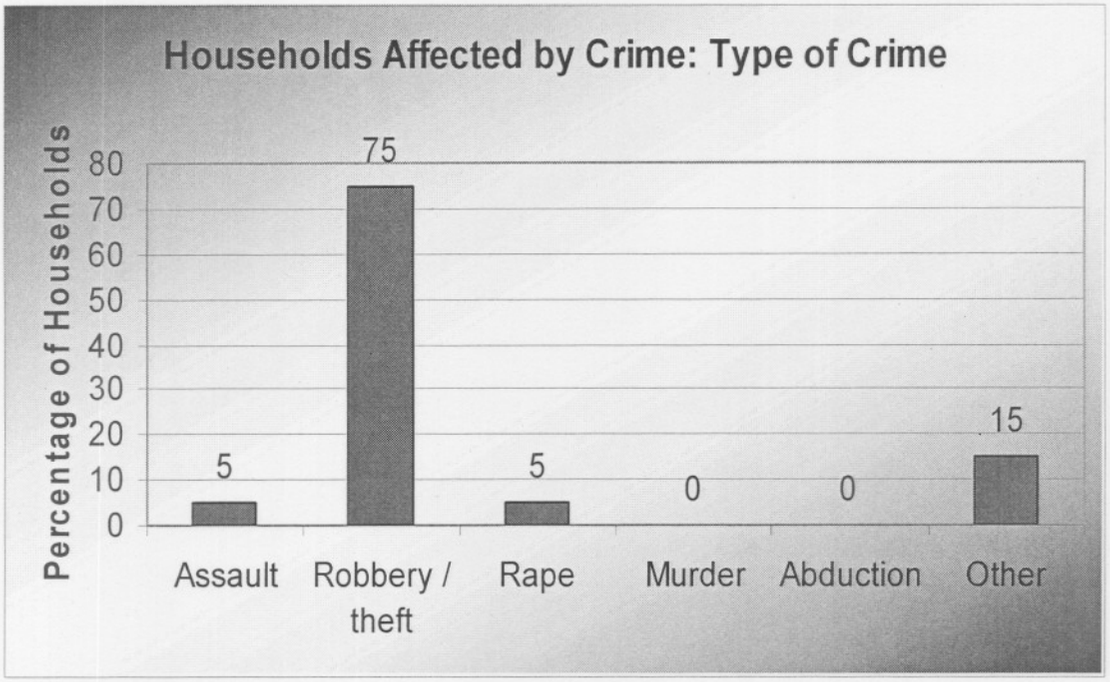
Figure 3.36 Households affected by crime in the last 12 months



Source: Survey data, 2004.

Figure 3.37 further indicates that of those affected by crime, the highest percentage was affected by robbery and theft (73.6 percent in Evaton West, 64.8 percent in Emfuleni townships, and 60 percent in Bophelong). Assault was measured at five percent in Ratanda and Impumelelo townships (9.4 percent in Evaton West, 19.8 percent in Emfuleni townships, and 26 percent in Bophelong). Of those affected, five percent in Ratanda and Impumelelo experienced crime in the form of rape. **Figure 3.37** indicates households affected by type of crime in 2004.

Figure 3.37 Households affected by type of crime - 2004



Source: Survey data, 2004.

3.8 JOB CREATION

In **Section 3.3** the unemployment rate was determined at 46.3 percent. The unemployment rate amongst the poor is 68.3 percent. Job creation would thus have a major impact on the level of poverty. Most of the individuals who have some kind of skill, would, if they would get the opportunity, prefer to receive further training in the same field and would also like to start self-sustaining activities in the same field. Ample opportunities exist for the manufacture of products that are consumed by the community, and it would be beneficial if those interested could receive skills training, practical advice and financial support to initiate and start such activities.

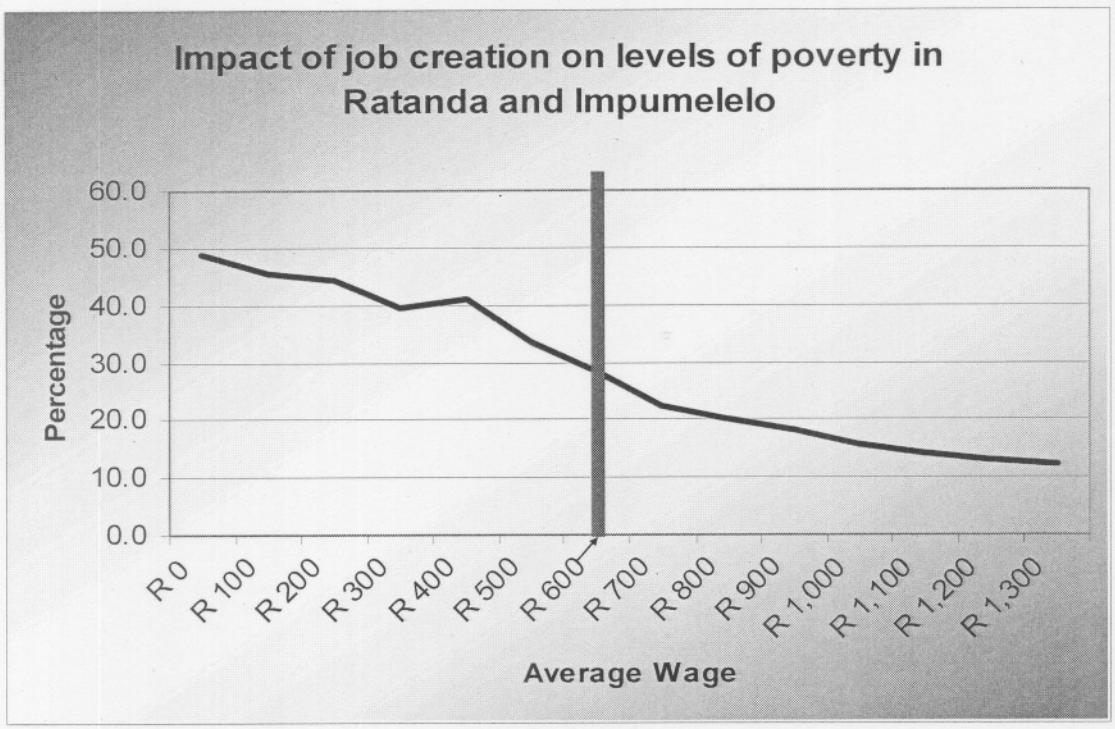
Commercial farms take up the greater part of the Ratanda and Impumelelo township areas. The land has, in most cases, high agricultural potential and is an important area for food production in Lesedi Municipality. The agricultural land should logically be protected for these purposes as far as possible.

Assuming that some unemployed poor residents could be assisted to form co-operatives or enterprises to produce the mealie meal, bread, meat/chicken, vegetables and milk consumed by the Ratanda and Impumelelo township

communities (at an average income of R600 per month) the headcount index could be reduced from 48.8 percent to 26.3 percent.

The impact of job creation at different income levels on the level of poverty in Ratanda and Impumelelo townships is illustrated in **Figure 3.38**. At a level of R600 per unemployed person, the percentage of households below their poverty line is reduced to 26 percent. If all the poor-unemployed received incomes of R1000 per month, the poverty rate would decrease to a further 20 percent.

Figure 3.38 Impact of job creation on levels of poverty in Ratanda and Impumelelo



Source: Survey data, 2004.

3.9 CONCLUSION

- The results of the survey analysis are presented in a format that gives a profile of the Ratanda and Impumelelo townships in general. Where necessary, a profile is included of the poor population (members of households below their respective poverty lines). Presenting it in this format gives guidance as to where to concentrate efforts to alleviate poverty and for focussing on projects to uplift the community.

- It appears that there are ample opportunities for agro-processing, especially with regards to the production of mealie meal, bread, meat/chicken and vegetables, and even milk. It is recommended that the production of these products on a small scale with labour intensive techniques be investigated, as well as the skill requirements to operate such enterprises.

- It also appears from the analysis that a cleaning up of the area would have a major impact on the community. A large percentage of the respondents regard the municipality as responsible to clean up Ratanda and Impumelelo townships. This proposal needs to be investigated. It is important that the municipality should work in such a manner that once the area is cleaned the organisations, systems and people will be in place to maintain the cleanliness.

- Attention should also be given to dust, air and noise pollution. It appears that households are prepared to be exposed to new technologies to reduce the level of air pollution. With regard to noise pollution, most respondents (48 percent) that are affected believe that the municipality should control the levels of noise emanating from houses and shebeens (who are playing loud music and using amplifiers to attract customers). Taking into account that 11 percent of the households were affected by crime in the last 12 months, the problem of crime should be addressed by the local police.

CHAPTER FOUR: AN IDENTIFICATION OF POSSIBLE AGRICULTURAL AND AGRO-PROCESSING PROJECTS FOR RATANDA AND IMPUMELELO AIMED AT THE POOR

4.1 INTRODUCTION

The analysis of poverty among the households of Ratanda and Impumelelo in the preceding chapter signifies that the creation of employment opportunities in these townships holds the key to poverty alleviation. The analysis in **Chapter 3** shows that the Lesedi economy will not be able to reduce the poverty rate without the implementation of employment-creating strategies specifically aimed at the unemployed of the poor households in Ratanda and Impumelelo townships. The purpose of this chapter is to introduce possible strategies for employment creation aimed at poverty alleviation. The strategies investigated are aimed at strengthening the ability of the Ratanda and Impumelelo economy in order to provide employment opportunities. They also aim to seek places where employment opportunities can be secured and created by other methods, specifically for the low skilled and unemployed in poor households. The extent to which poverty can be reduced will also be estimated.

The strategies discussed in this chapter may serve as guidelines for local communities in search for solutions to the high rate of unemployment and poverty in Ratanda and Impumelelo townships.

4.2 POVERTY IN RATANDA AND IMPUMELELO TOWNSHIPS

The previous chapter has shown that poverty exists in Ratanda and Impumelelo townships and that the levels of poverty are unacceptably high at the rate of 48.8 percent. The prevailing poverty is manifested by a high unemployment rate and many people have resorted to the informal sector in an attempt to earn incomes in order to exist. However, incomes earned from these activities are, on average, very low.

According to Kaufman (1994:700), female-headed households (with no husbands present) have a one-third chance of being poor. The burden of

poverty is spread unevenly. Women in general are disadvantaged, and in poor households they often shoulder more of the workload than men, are less educated, and have less access to remunerative activities. This is also the case with regard to Ratanda and Impumelelo townships. Single and unemployed females head a large proportion of households. In **Chapter Three** under **Section 3.5.2**, **Figure 3.14** revealed the spread of the population between male and female for poor households. It is noteworthy that the number of females exceeds the number of males. In Ratanda and Impumelelo townships 55.33 percent of the poor population is female and 44.67 percent male. It can therefore be safely concluded that females in Ratanda and Impumelelo experience poverty more than their male counterparts. Poverty does therefore have a gender bias.

Formal education and literacy levels are low in Ratanda and Impumelelo townships. For instance, in Ratanda township it is recorded that 32 percent of the population have no formal education, while only 0.8 percent have received a post-matric education. Many households have single or no breadwinners - that is one of the reasons why many scholars are prematurely forced to leave school in order to seek employment (IDP, 2004:37). According to Slabbert (1997:104), when taking into account the relatively low qualifications of the poor, it is clear that the poor have less access to formal employment than the non-poor does. It can be argued that better qualifications would put them in a better position to compete for employment opportunities.

It is very unlikely that the formal economy will grow sufficiently to provide enough formal employment opportunities for all the poor unemployed people. For this reason, much attention should be given to alternative ways of earning an income. Since Ratanda and Impumelelo townships are located within a high potential agricultural area, it is possible that the agricultural sector can play a key role in terms of the creation of employment for poverty alleviation in this area. This chapter is therefore aimed at discussing agricultural projects and support measures that can be used to fight poverty in the area and to create jobs and self-employment.

4.3 PROJECTS AND SUPPORT MEASURES AIMED AT EMPLOYMENT CREATION AND POVERTY ALLEVIATION FOR THE POOR

The following sections discuss the projects and support measures that should be encouraged in Ratanda and Impumelelo townships in order to assist in alleviating poverty. Projects in the form of individuals or co-operatives that will use largely human resources are discussed. These include projects and support measures such as:

- agricultural projects;
- urban agriculture;
- the use of urban open spaces;
- urban waste recycling projects;
- agricultural co-operatives; and
- employment creation projects.

4.3.1 Agricultural projects for Ratanda and Impumelelo townships

The 2004 survey conducted in Ratanda and Impumelelo townships has indicated high levels of poverty and unemployment in these areas. The survey has also shown that most of those that are part of poor households have been staying in Ratanda and Impumelelo townships for over 30 years. Some of the key findings of the survey can be summarised as follows:

- there is a direct relationship between poverty and unemployment in Ratanda and Impumelelo townships. The poor are mostly also the unemployed;
- many poor people are or have been employed in low wage industries;
- although some have an agricultural background, most do not see it as a viable source of livelihood;
- given the chance (in terms of capital), most would prefer to go into small businesses engaged in direct selling; and

- Skills levels of the poor and unemployed are very low.

As discussed in this chapter, agriculture is one way of alleviating poverty due to a number of factors, including:

- easy of entry into the sector;
- low skill level required for initiating such projects;
- low start-up costs linked to such projects; and
- the relatively small-scale of operation required initially.

4.3.2 The urban vegetable production

It is envisaged that a number of poverty alleviation projects will be initiated by this project. A number of household level food security (hlfs) is encouraged across Ratanda and Impumelelo townships. During the survey, it was established that about eight percent of the unemployed population have basic agricultural skills and 50.6 percent of the residents seek access to agricultural land as a means to improve their current living conditions through food gardens. A further 64.4 percent of the residents reported that they could be involved in community food garden projects. These figures indicate that the Ratanda and Impumelelo population is positive towards food garden projects. However, there is a need for land ownership. Lack of legal ownership of land in Ratanda and Impumelelo townships weakens the motivation of people to make the most of the available open urban spaces. This condition has to be changed in order to invite capital investment of any nature and self-investment in terms of labour. With these components the developments of vegetable gardens have a good chance of success (Webb, 1994:5).

The Urban Vegetable Production (UVP) is also seen as a means of increasing welfare and it could do so on three levels. The first is that of income generation through the sales of vegetables. The vegetable sales could be undertaken by producing from the home gardens and from the plots of the projects. The second level of increasing welfare would be through the consumption of the home production. This could conceivably achieve considerable savings for the households. Income generation and the value of home consumption to the

household were considered as the two means by which the UVP could benefit the household. The third is by bartering and the use of vegetables to secure certain favours or to consolidate positions in personal networks (Webb, 1994:5).

4.3.3 Urban agriculture

Urban agriculture (UA) is one of the possible solutions in reducing poverty and unemployment in the townships of Ratanda and Impumelelo. Mougeot (1994:10) defines urban agriculture (UA) as follows: it is an industry located within (intra-urban) or on the fringe (peri-urban) of a town, a city or a metropolis, which grows or raises, processes and distributes a diversity of food and non-food products, using largely human and material resources, products and services found in and around that urban area, and in turn supplying human and material resources, products and services largely to that urban area. The emphasis is placed on the idea of food gardening and urban agriculture for the following reasons:

- most agricultural projects do not require capital intensive production methods and can be operated from a backyard. A typical food garden comprises a very small piece of land;

- the local government in Lesedi Municipality has embarked on what is termed the Integrated Development Plan (IDP) which is meant to kick-start sustainable development in the area in a co-ordinated and integrated manner.

4.3.4 The use of urban open spaces

It is important to ensure that open spaces do not become redundant or waste spaces used solely for dumping. These areas must be seen by the local community as a valuable resource. A wide variety of urban open spaces can be well used for food gardens – parks, unused ground at hospitals, clinics, churches, schools, land unsuitable for building, and land belonging to local authorities. The community of Zamdela has a food garden at Zamdela Clinic whereby old people provide food for their families and sell the surplus to earn much needed money. Severely reduced family incomes resulting from the high level of unemployment mean that the aged must use their inadequate pensions

to provide food for their families whilst their food gardens are left unused (Webb, 1994:6). According to Burnham (1994:2), in order to promote urban agriculture the vacant land should be turned for intensive and productive use. To bring farming into the urban area as an everyday part of everyone's experience could ensure that trading local produce becomes commonplace.

4.3.5 Urban waste recycling projects

Re-cycling projects have been implemented with success in the Ekurhuleni area and lessons could be learnt and similar projects could be introduced in Ratanda and Impumelelo townships. Projects by organisations like 'Collect-a-Can' assist in waste management in the townships. Organic waste such as paper and vegetable matter can be turned into compost at specific sites. There are more opportunities for waste recycling projects targeted at compost and manure production as well as those targeted at animal consumption. Nothing should leave the township unless it is valuable enough to be sold (Slabbert, 2001:150).

Slabbert (2001:151) lists the following benefits deriving out of urban waste recycling:

- the earned income could be used to purchase seeds, tools, and other basic inputs;
- the sales of compost brings in revenues, which helps reduce waste disposal charges;
- the urban farmers benefit from improved soil fertility and yield thanks to the valuable compost; and
- separate collection and composting creates and secures incomes both for the township refuse collectors and urban farmers.

4.3.6 Agricultural co-operatives

Agricultural co-operatives are a widespread phenomenon in both developed and developing countries. Different forms of co-operatives have evolved in different regions. Special forms of co-operation have emerged in many developing countries. Some of these co-operatives have been very successful while some exist only through government support. Co-operatives are

considered as important instruments of rural and agricultural development (Van Rooyen *et al.* 1998:236).

In South Africa, co-operatives have been used predominantly in the agricultural supply and distribution industries, operating upstream and downstream activities to support commercial farmers. The co-operative idea, mainly an urban phenomenon in Western Europe, spread to South Africa before the Anglo-Boer War. However, most of these early co-operatives failed because of management problems, under-capitalisation or non-economic ventures. The few apparent successes were mainly in areas where small groups of farmers saved capital by jointly investing in equipment or where, by bulking up produce they could, without investing much capital, sort it and offer it to buyers in more convenient and uniform lots than any of the members could have presented separately (Van Rooyen *et al.* 1998:237).

Co-operatives fulfil the following functions:

- operate as agents of their members in purchasing and selling requisites and products and become involved in processing activities;
- provide an instrument for agricultural control boards to administer advance and deferred payments in the marketing system;
- provide services such as grading, storage, processing, financial support, and insurance to members;
- reduce risk to members by introducing pool pricing schemes;
- enable members to gain access to improved technologies and communication systems through technical and economic extension services;
- succeed in providing a strong and consolidated lobby for commercial farming interests within organised agriculture; and
- support various forms of rural life and became important role-players in (commercial) rural society (Van Rooyen *et al.* 1998:237).

Modern co-operative theory views the co-operative association as a form of collective action; as a coalition of member interests; and as a contract between

individual members and their managers to achieve an agreed-upon set of objectives. Member interests can vary from collective social needs such as domestic vegetable production, to individualistic business needs such as the purchase of inputs for production purposes and marketing (Csaki & Kislev, 1993).

The ability of a co-operative to deliver economically viable and sustainable business benefits members and remains a critical factor in its survival. This, however, requires particular management within the co-operative structure. Community development is people-centred development and it is basically about what ordinary people in local situations can do to improve their lives. The emphasis is not on what people do for others or for themselves, but on the impact this has on lives of the involved people. Through people-centred development, the people should be empowered to develop all aspects of their community life. They should be directly involved in the development process and the addressing of their perceived needs. The people should be mobilised to devise their own solutions and use their local knowledge to alleviate poverty and improve their lives (Reyneke, 1994:5).

4.3.7 Co-operatives and family farming

When the efficiency of the household or family farm is compared in relative terms to the co-operative farm, it is found that households will, in general, put in a greater effort on a family farm than on a co-operative farm, and that the total output of the family farm is greater than that of a co-operative farm. The main reason hinges around greater commitment and ownership (and often thus higher direct returns) achieved by the family farm in comparison with co-operative farms. High-quality management can, however, increase efficiency on all farms (Van Rooyen *et al.* 1998:241).

4.3.8 Employment creation projects

Formal and informal business activities in Ratanda and Impumelelo townships must be encouraged. The creation of additional jobs in the local economy will lead to general economic growth resulting in an enlarged income base and improved quality of life, especially as regards the disadvantaged sector of the community. Increased buying power will lead to improved business potential for

local entrepreneurs. Although every effort should be made to create formal job opportunities by the attraction and expansion of formal business, an opportunity exists for the promotion of informal opportunities as well. Small business development activities must be promoted by creating a positive environment for retail activities. A positive environment could include formal facilities as well as training facilities to provide retail skills to aspiring small business people and entrepreneurs (IDP, 2004:80).

According to IDP (2004:81), formal business opportunities should be promoted in Ratanda and Impumelelo as this sector of the economy is essential for economic growth and a stable environment. Business opportunities should be marketed and the "Zone of Opportunity" should be utilised to attract new business and industry to Ratanda and Impumelelo townships. It is proposed that a hierarchy of business opportunities be established in order to promote job creation. The following levels should be implemented and strengthened:

- setting up informal opportunities linked to existing formal business activities as well as small job creation centres in residential areas; and
- provision of job and training opportunities for the homeless, unskilled and unemployed and poor people.

4.4 METHODS TO SUPPORT AGRICULTURAL PROJECTS IN RATANDA AND IMPUMELELO TOWNSHIPS

4.4.1 Education, training and acquiring of agricultural skills

Projects in Ratanda and Impumelelo townships have to be funded in order to develop skills appropriate to their communities. Empowering popular participation in these schemes and using every possible strategy will raise the status of skills and natural sciences in this area. The point of focus is the concentration of people who have gathered on the outskirts of urban areas.

4.4.1.1 Primary school education in agriculture

It was mainly the Department of Education that was responsible for the education of black children that offered a course in 'Agriculture' at a primary level. The subject curriculum for Agriculture at primary school level is known as

'Gardening'. The curriculum content of Gardening is very practically orientated and focussed on the establishment of flowerbeds, lawns and the production of vegetables. However, Gardening as a subject is offered by schools and often 'chosen' by pupils because of other reasons related to the composition of the school curriculum allowed for primary schools (Van Rooyen *et al.* 1998:219).

4.4.1.2 Secondary school education in agriculture

As in the case of Gardening, it was mainly the Department of Education for black children that offered the subject 'Agricultural Science' at secondary school level. This subject is to a large extent theoretically orientated and does not have a compulsory practical component. However, Agricultural Science is often not chosen by pupils due to an interest in or an affinity towards agriculture. The overwhelming reason why schools offer this subject and why children choose this subject is that Agricultural Science is regarded as a 'soft option'. This means that pupils generally believe that Agricultural Science is an easy school subject and will help them to obtain a matriculation certificate (Van Rooyen *et al.* 1998:219).

It should be emphasised to learners at the early stages of their education on how to become 'Agricultural Graduates' and they should be taught the significance of agriculture. Ratanda and Impumelelo townships have a large young population, many of whom are out of school and not productively employed. Youth development programmes and skills training facilities are in short supply, especially in the townships and rural areas. Youth development strategies should be linked to the provision of tertiary skills and entrepreneurial training. The Ratanda and Impumelelo Municipalities should enter into strategic partnerships with other role players such as educational institutions, the private sector, and other service providers in order to render training services on agriculture in available facilities. The multi-use of existing community facilities should be investigated. In the past, the Lesedi Municipality approached several tertiary institutions to explore the opening of satellite facilities within the area but they were unsuccessful. They should, however, again organise visits to these institutions and arrange for some of their councillors to accompany them to ensure that the institutions become aware that they do have a need for such facilities (IDP, 2004:43).

Improved knowledge is a prerequisite for improved agricultural marketing in Ratanda and Impumelelo townships. This means that education and training are vital and training of traders and farmers in terms of marketing deserves a high priority. This would be a good investment of public funds and the type of subsidisation with the most significant of advantages (Van Rooyen *et al.* 1998:211). According to Niland (1994:3), the food gardeners should learn about important aspects such as crop rotation, companion and succession planting, and non-poisonous insect control. Some significant benefits for people of food gardening are that:

1. it may provide to improve the quality of life;
2. it is easy to learn and implement;
3. available resources can be used;
4. it can be a self-help and community project;
5. because of its simplicity and the fact that only the most meagre resources are required, food gardening is often the first step to improved health and quality of life for poor and despairing people; and
6. the food gardeners become more ecologically aware and begin to clean up and beautify unsightly areas. Accumulated rubbish and junk is cleared away to make room for food gardens. A sense of pride and achievement results in further efforts to upgrade and improve surroundings.

4.4.1.3 Food garden management training in a community development programme

The management of a food garden is, and will always be, the key to the success of any food garden in a community development programme. Anyone who wishes to start with a food garden in his backyard must understand how the system of food garden management works and what management means. The main goal of the training in food garden development is to get as many people as possible interested in food gardens by indicating how it can improve their quality of life (Niland, 1994:4).

According to Niland (1994:3), it was found that the most effective way to initiate and develop food gardens in urban areas is by training trainers first. Government and non-governmental organisations (NGOs), community development officers, community leaders, schoolteachers, clinic sisters, and people in charge of the projects, should attend training courses. Food gardening involves a technique and a philosophy which can be adapted to a wide spectrum of community and individual needs, and each group can decide on its own plan of action. The only cost involved in starting a food garden is for seeds. Where necessary, seeds can be donated. There are always a few spades and rakes available in the community and after a time the sales of vegetables provides funds for further tools and seeds.

The main approach of the training team is to increase the quantity as well as the quality of the vegetables, using the same area as is currently used as well as the same amount of water. To find this multi-disciplinary team who can train the people is of utmost importance. The DACEL-DAG Programme is a provincial initiative that could be adopted by the Ratanda and Impumelelo townships, and the Mangaung Programme is an example of a successful programme applied in the vicinity of Bloemfontein and which could also be applied in Ratanda and Impumelelo townships.

4.4.1.4 DACEL-DAG

According to Slabbert (2001:169), the Department of Agriculture, Conservation, Environment and Land Affairs' Directorate: Agriculture in Gauteng (DACEL-DAG) suggest practical solutions in establishing food security projects and in assisting emerging farmers. The DACEL-DAG offers assistance to poor communities in three areas, namely:

- household food security and poverty alleviation;
- farmer settlement support and established agriculture; and
- specialised support services.

This section contains an abstract from the Gauteng Household Level Food Production and Entrepreneurial Development Programme used by the DACEL-DAG. It outlines the Programme adopted by the Department to initiate and

sustain food security programs at regional level. This Department assists small-scale farming and household level food security projects in various ways including soil testing, land surveying, arranging for water and electricity, supplying tools and storage for containers, offering technical training, and on-going support for three years. The Ratanda and Impumelelo townships are targeted due to the high poverty and unemployment levels in the areas.

Farmer settlement support programmes and specialised support services involve mainly advisory and educational services offered by the DACEL-DAG. There are proposals being developed regarding the farmer settlement programmes targeted at assisting emerging farmers with a variety of services. 'Emerging farmers' are seen as a level following from household level food security (hlfs). Some of the people involved in hlfs programmes, it is hoped, will grow and become emerging farmers engaging in relatively larger scale farming.

Slabbert (2001:170) summarised the objectives of the farmer settlement support and established agriculture by DACEL-DAG as:

- to provide the necessary support to enable farmers to be settled and to establish economically viable, environmentally friendly and sustainable units; and

- to promote the agricultural development of established smallholdings and commercial framers through organisational structures in order to enhance National Food Security, securing jobs and creating a sound labour environment in order to contribute to the economy.

The specialised support services section has the following objectives:

- to render advice on Agricultural Production Technology services through specialised knowledge and expertise on all plant and agro-processing;

- to render advice on Agricultural Resource Conservation and Development through services that include ecology, soil conservation, alien vegetation eradication, land use planning, irrigation and farming structures and land care;

- to render advice on agriculture economics and marketing services through the compilation of business plans, evaluating of market tendencies and the development of enterprise budgets; and

- to collect and disseminate all agricultural-related information to all role players in and outside the Department and the management thereof.

4.4.1.5 The Mangaung – University of the Orange Free State Community Partnership Program

According to Slabbert (2001:171), the Mangaung – University of the Orange Free State Community Partnership Programme (MUCPP) - is a comprehensive health care project, established in April 1991 in the Free State Province. It is largely funded by the Kellogg Foundation, USA. The partnership is a triumvirate consisting of the Community of Mangaung, the University of the Orange Free State (UOFS) and the Department of Health of the Free State Province. The Food Garden Management Programme is a very important programme in MUCPP. In 1996 the MUCPP Food Garden was awarded 'PEACE GARDEN OF THE YEAR' in the corporate class in a national competition.

The project was initially established to combat malnutrition. The unemployed poor are helped to grow vegetables on their own plots. This is a type of subsistence farming on about 100–150 square meter plots at the back of a resident's house, which is used for the production of vegetables, chickens and rabbits, mainly for consumption. The University provides research support, training and advice, and helps to market excess produce.

4.4.1.6 Local authorities

As the result of these, it could be proposed that several projects be adopted and implemented across the townships of Ratanda and Impumelelo. The projects will target the unemployed, the poor, and youth. The local authorities can also take part in these projects. The Ratanda and Impumelelo Councils should assist in making land available to these projects. This could be done in conjunction with companies willing to offer unused land for such purposes.

4.5 THE IMPACT OF AGRICULTURAL AND AGRO-PROCESSING SECTORS IN RATANDA AND IMPUMELELO TOWNSHIPS

4.5.1 Poverty reduction

From **Chapter 3**, it has been calculated that, on average, the poor population of Ratanda and Impumelelo townships spends R199 per month on different agricultural products, i.e. maize meal, bread, meat and chicken, vegetables, and milk. However, if poor unemployed persons could be assisted to produce these products through food gardens and agro-processing projects at an average income of R600 per month, the headcount index would be reduced from .49 to .26 meaning that poverty is reduced by 46 percent in general by establishing food production in the hands of the unemployed poor. The surplus produce could be sold and the income earned could be used to pay for basic inputs of production.

4.5.2 Food provision: self-sufficiency and food security

Total production and consumption of selected agricultural commodities for the period 1980 to 1989 shows that, on aggregate, total production has outstripped total consumption. To achieve food security and poverty relief and to increase income and employment in the economy, the agricultural sector must perform efficiently. The agricultural sector has proved to be flexible and responsive to policy changes (Van Rooyen *et al.* 1998:104).

According to Van Rooyen *et al.* (1998:272), challenges in high potential areas entail measures to increase farm incomes and food production. Food imports from other regions may be too expensive for the poor population. It will therefore be important to create the environment to exploit the diversity and comparative advantages in food production in Ratanda and Impumelelo townships more effectively. There is great potential to increase the domestic production of agricultural products such as maize, vegetables, milk, etc. Similarly, there is great potential to increase the production of livestock products (beef, mutton, and milk) to improve farm incomes.

Urban farming can provide an income base for a large proportion of Ratanda and Impumelelo townships. The agro-processing sector can produce bulk foods

like maize, a very wide range of vegetables and fruit, and meat can be produced on a domestic scale. Doing this is both financially and socially rewarding (Burnham, 1994:2).

4.5.3 Marketing surplus produce to increase quality of life

The labour absorption rate into formal employment shows that industry cannot cope with the increase in unemployment. Another problem is that there exists a mismatch between the skills required by industry and the skills possessed by the jobseekers. This leads to structural unemployment and is difficult to redress. In **Chapter Three**, **Figure 3.10** shows the skills of the unemployed. The highest percentages of the unemployed have skills in gardening/farming. It is likely that these will be the male unemployed. It therefore means that if they possess skills and use them efficiently, it could lead to the development of an agricultural market which could absorb those who are idling with their skills. However, there are unemployed people who feel that if they could be trained, they could get a better job. In broad policy terms, the growing local interest in urban agriculture must be located as one new element for managing poverty in Ratanda and Impumelelo townships.

4.5.4 New emerging retail markets

The rapidly expanding urban population provides a massive market to be served by the informal sector. Small farming in and around urban growth areas will be well placed to serve these markets. Urban agriculture is clearly tightly bound to the supply of fresh produce to urban consumers, whether directly through formal fresh produce markets, or indirectly via informal sector street hawkers or through the formal marketing channels. As such, understanding the nature of urban food supply systems, particularly those systems which are used by poor households, is critical if urban agriculture is to be promoted as a viable option for both producers and consumers (May, 1994:7).

A two-fold strategy around marketing and distribution could then benefit both producers and consumers. Firstly, this would consist of changing the 'food retail environment' through measures such as the restoration of produce markets, influencing consumer preferences, and redirecting institutional purchasing patterns. Thus, for example, restoring farmers markets may be beneficial by

reducing the substantial handling costs associated with produce distribution, and may also be a viable means of mitigating against higher food costs. If located in lower income areas, this could be a potential aid to the poor. Other marketing possibilities include the promotion of small scale canning and preserving production in order to mop up seasonal surpluses (May, 1994:7).

4.5.5 The economics of food gardens in a community

A food garden can also have economic value for the persons involved in the sense that it is not necessary to buy extra vegetables, with the result that extra money is available for other necessities. One very important aspect of food gardens in a community is that they must be kept within the manageable size for the gardener. Labour costs are too high in the communities to pay a wage and make profit. According to Slabbert (2001:207), the area available for vegetable gardening within the communities is normally too small to make a living from vegetables. It is therefore important that the community knows which of their vegetables gives the highest yield as well as the best pest resistance. Spinach is an excellent example of such vegetables that (a) is the most popular vegetable in the townships; (b) has a high enough profit margin to also pay a wage; (c) has relatively high nutritional value; (d) can be produced twelve months of the year; (e) has a low waste factor; and (f) is fairly disease resistant. With such products the economic welfare of the family as well as that of the community can be increased. In some cases it will even be possible to sell some of the produce to neighbours who do not have their own vegetable gardens.

4.6 CONCLUSION

This chapter suggests agricultural projects as a way of alleviating poverty. This is due to a number of factors including the easy of entry into the sector, low skill level required for initiating such projects, and low start-up costs linked to such projects. Projects and support measures for employment creation to alleviate poverty are explored. The analysis of the different projects that can be implemented in Ratanda and Impumelelo townships indicates that a large number of employment opportunities aimed at the unemployed and poor households can be created.

Urban open spaces may, for example, improve the current living conditions if provided to 50.6 percent of the residents who seek access to agricultural land for food gardening. The lives of 64.4 percent of the residents may be improved if the community food garden projects are implemented in Ratanda and Impumelelo townships. Urban vegetable production is also seen as a means of increasing welfare. This can be achieved through the consumption of the home production and the sales of excess vegetables that will generate incomes for the households.

Households can also form co-operatives since they are considered important instruments for agricultural development. Co-operatives have been used predominantly for agricultural supply to support commercial farmers. The successes of co-operatives are mainly in areas where small groups of households saved capital by jointly investing in equipment and bulking up produce, selling it to buyers in more convenient and uniform lots than any of the members could have presented separately. Co-operatives are important in that they operate as agents of their members in purchasing and selling requisites and products, and become involved in processing activities, enabling members to gain access to improved technologies and communication systems through technical and economic extension services.

In order to alleviate poverty in Ratanda and Impumelelo townships the creation of employment is encouraged in the local economy because it is certain to lead to general economic growth resulting in an enlarged income base and improved quality of life, especially for the poor and unemployed households.

Adding to this, the result of primary and secondary school education in agriculture, food garden management training and acquiring of agricultural skills, may effect employment creation and the reduction of poverty. This may be adequate to alleviate poverty in Ratanda and Impumelelo townships.

The reduction of poverty in Ratanda and Impumelelo townships, however, depends substantially on the attitude of the local authorities and communities towards employment creation and poverty alleviation. There are available resources such as the Department of Agriculture, Conservation, Environment and Land Affairs' Directorate: Agriculture in Gauteng (DACEL-DAG) Programme that could be adopted by the Ratanda and Impumelelo townships. The DACEL-DAG offers assistance to poor communities in household food

security and poverty alleviation and established agriculture. This Department assists small-scale farming and household level food security projects in various ways, for example, soil testing, land surveying, arranging for water and electricity, supplying of tools and storage for containers, offering technical training and on-going support.

The poor population in Ratanda and Impumelelo townships spend, on average, R199 per month on maize meal, bread, meat and chicken, vegetables, and milk. It is estimated that poverty can be reduced through the production of these different agricultural products through food gardens and agro-processing projects aimed at the poor and unemployed households. A total of 7.1 percent of the unemployed have skills in gardening/farming, which means that if the skills possessed can be utilised efficiently, this could lead to the development of an agricultural market to absorb those who are idling with their skills.

Food gardens have economic value for the persons involved in the sense that it is not necessary for them to buy extra vegetables. According to Slabbert (2001:207), the area available for vegetable gardening within the communities is normally small. It is therefore important that the community knows which of their vegetables gives the highest yield with the highest price as well as possesses the best pest resistance.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 INTRODUCTION

In the preceding chapters of this dissertation a profile of the Ratanda and Impumelelo townships (which is the part of Sedibeng District of Gauteng Province) was given. This study set out to evaluate the position of the Ratanda and Impumelelo townships with regard to poverty. This chapter provides a summary of the main points of the dissertation and draws pertinent conclusions from the findings in the other chapters. Some recommendations are made, and are drawn out from the conclusions.

The chapter gives a brief evaluation of the various findings. These findings assisted in evaluating the hypothesis set at the beginning of the dissertation. This chapter concludes with some recommendations based on the results of the survey done in Ratanda and Impumelelo townships.

5.2 SUMMARY OF THE DISSERTATION

Chapter 1 of this dissertation dealt with the background, problem statement, aim of the research, objectives of the research, hypothesis, methodology and an outline of the chapters. This provided a solid basis for the rest of the dissertation.

Chapter 2 examined unemployment as the main determinant of poverty. Poverty is also defined according to the absolute and relative approaches. The definition of unemployment varies from researcher to researcher. However, the October Household Surveys (OHS) possibly give the most accurate picture of unemployment. The distinction drawn between different types of unemployment gives an indication of the possible reasons for its occurence in the townships of Ratanda and Impumelelo, and also provides an idea of how these problems could be addressed. Unemployment has grave consequences for every country and it confines people to poverty as in the case of the townships of Ratanda and Impumelelo.

The exercise of deriving a definition of poverty was an attempt to find a tool that could identify the poor population in Ratanda and Impumelelo townships. The measurement of poverty also depends on the definition applied. There are several measurements of poverty most of which depend on income and inequalities in income. A number of methods are used in building up a poverty profile of Ratanda and Impumelelo townships. Policies and measures used to combat poverty will depend on both the definition and the measurement applied in assessing poverty. Literature on poverty invariably divides the foundations for the definitions of poverty into two approaches, namely the absolute and the relative approach. Absolute poverty is the condition of life so characterised by malnutrition, illiteracy and diseases as to be beneath any reasonable definition of human decency. The relative approach to poverty is based on the idea that people are poor in relation to the community or society in which they live.

The poverty line shows the income level needed to provide a minimum subsistence level. One of the most widely used poverty lines in South Africa is the Household Subsistence Level (HSL), defined as an estimate of the theoretical income needed by an individual household to maintain a defined minimum level of health and decency in the short term. The other concept that has been discussed is the headcount index. It is defined as the fraction of the population below the poverty line. The purpose of the headcount index is to quantify the number of those individuals or households that fall below the poverty line. The headcount index, the distribution of households below the poverty line, and the poverty gap index, were calculated and interpreted.

Poverty in Ratanda and Impumelelo townships is primarily located in and around these areas. High levels of unemployment, as well as poverty-in-employment characterise communities in these areas. The prevailing low levels of education and skills within the poor communities restrict not only their access to formal jobs, but also their ability to enter the economy by means of their own initiative. This chapter concludes by analysing the important role that agriculture and agro-processing sectors could play in the structural transformation of a developing economy in Ratanda and Impumelelo townships.

Chapter 3 provides an empirical analysis of the Ratanda and Impumelelo townships' population. A sample of 160 households were interviewed by means of questionnaire interviews to determine their status in terms of unemployment, poverty, household income, consumption patterns (to determine possible agro-processing projects), as well as the preferred fields in which respondents would like to start self-sustaining activities.

As far as employment is concerned, 12.9 percent of the employed is informally employed and 40.8 percent of the employed is formally employed. The unemployment rate is calculated at 46.3 percent for the workforce. A total of 7.1 percent of the unemployed have skills in gardening/farming as well as 6.4 percent in building/construction.

The skills possessed by the unemployed and the activities they wish to engage to sustain themselves were also highlighted. The unemployment and poverty data were used to construct a model for an Economic Impact Assessment. This model measures the impact of projects on the Ratanda and Impumelelo townships in terms of income generation and poverty alleviation.

The percentage of households below their poverty line was 48.75 percent in 2004. The poverty gap index is 0.5 while the unemployment rate of the poor is 68.6 percent. Ratanda and Impumelelo townships have a large number of young people, many of whom are out of school and not productively employed. Education and skills levels are generally low, which are constraining factors in terms of sustainable economic development in the study area.

Job creation should be at the forefront when projects are evaluated as sustainable. Agricultural projects are of key importance due to the huge availability of land, expertise and infrastructure in the area. If job opportunities could be focussed on poor unemployed persons at a minimum monthly income of R600 per person, the poverty rate could be reduced from 48 percent to 26 percent in the Ratanda and Impumelelo communities. At a minimum monthly income of R1000 per person, the poverty rate would be reduced from 48 percent to a further 20 percent.

The expenditure profile for households living in Ratanda and Impumelelo townships is also analysed. The average household income in Ratanda and Impumelelo is determined at R1953 per month. Residents of Ratanda and Impumelelo consume 469 628 kilograms of mealie meal per month, amounting to an expenditure of R1.2 million per month (or R14.7 million per year). A total of R3.4 million is spent monthly on meat (R41.8 million per year), R1.9 million on bread (R23.3 million per year), R1.5 million on vegetables (R18.9 million per year) and R913 993 on milk (R10.9 million per year). The total expenditure on these five items amounts to R109.8 million per year, which possibly provides an opportunity for an agro-processing, whereby local residents for the Ratanda and Impumelelo communities may produce some of these products. It is suggested that the demand for these products may be used to kick-start agro-processing projects in Ratanda and Impumelelo. There is ample opportunity in these five areas for agro-processing, using small producers with labour intensive operations. An agro-processing industry focussed on a few products consumed in Ratanda and Impumelelo may provide incomes to the community.

Summary of results

Demographics of Ratanda and Impumelelo townships in 2004

- Total population: 71,542 (2001).
- Number of households: 18 853.
- Males: 45.49 percent and females: 54.51 percent.
- A total of 30 percent of the post-school population has a Grade 12 or higher qualification.
- A total of 20.3 percent of the residents moved to Ratanda and Impumelelo townships in the last 10 years.

Employment

- A total of 12.9 percent of the employed is informally employed.
- A total of 40.8 percent of the employed is formally employed.

Unemployment

- Unemployment rate: 46.3 percent.
- Majority of the unemployed is young: 51 percent of the males and 56 percent of the females are in the 20-35 years age category.
- A total of 40.4 percent of the unemployed have qualifications of Grade 12 or higher.
- A total of 7.1 percent of the unemployed have skills in gardening/farming; 6.4 percent in building/construction, 6.4 percent in retail trade; 5.7 percent in hairdressing; 4.3 percent in baking; 3.6 percent in mechanic work; 2.1 percent in computers; and 0.7 percent in butchery-type of work.

Poverty

- Percentage of households below their poverty line is 48.75 percent.
- Poverty gap index is 0.5.
- Unemployment rate of the poor is 68.6 percent.
- A total of 25.67 percent of the poor unemployed have a Grade 12 or higher qualification.

Expenditure

- Total expenditure on food and other items is R134.8 million per year.
- Residents spend in total R14.7 million on mealie meal; R41.8 million on meat; R23.3 million on bread, R18.9 million on vegetables and R10.9 million on milk per year.
- There is ample opportunity in these five areas for agro-processing, using small producers with labour intensive operations.
- A total of 21.73 percent of household expenditure is on food, 11.15 percent on transport; and 7.7 percent on clothing.

Environmental issues

- Non-polluted air is considered the most important environmental issue, a dirty and untidy environment (littering) is second most important, while dust-free is rated third, and noise pollution fourth.

- The fact that households attach monetary values to these environmental issues shows they are important to them.

- The total estimated annual social cost (value that affected households attach to these issues) is estimated at:

    - R97, 900 for a neat and clean environment;

    - R104, 800 for a dust-free environment;

    - R107, 100 for non-polluted air; and

    - R44, 500 for a quiet environment.

Crime

- A total of 11 percent of the households were affected by crime in the last 12 months. Of those affected, 75 percent was in connection with robbery or theft and five percent in connection with assault and rape.

Job creation

- An agro-processing project focussed on the provision of a few products consumed in Ratanda and Impumelelo townships may provide incomes to the communities.

- If the job opportunities could be focussed on poor unemployed persons at a minimum monthly income of R600 per person, the poverty rate could be reduced from 48 percent to 26 percent in the Ratanda and Impumelelo township communities. At a minimum income of R1000 per person, the poverty rate would be reduced to a further 20 percent.

Chapter 4 discussed agricultural projects as a way of alleviating poverty. In this chapter, strategies for employment creation to alleviate poverty are explored.

The analysis of the different strategies that may be implemented in Ratanda and Impumelelo townships indicates that a large number of employment opportunities aimed at the unemployed and poor households can be created.

The urban open spaces, for example, may improve the current living conditions if provided to 50.6 percent of the residents who seek access to agricultural land for food gardening. The lives of 64.4 percent of the residents may be improved if the community food garden projects are implemented in Ratanda and Impumelelo townships.

The households can also form co-operatives since they are considered as important instruments of agricultural development. The successes of co-operatives are mainly in areas where small groups of households saved capital by jointly investing in equipment and bulking up produce, selling it to buyers in more convenient and uniform lots than any of the members could have presented separately. Co-operatives are important in that they operate as agents of their members in purchasing and selling requisites and products, and become involved in processing activities enabling members to gain access to improved technologies and communication systems through technical and economic extension services.

In order to alleviate poverty in Ratanda and Impumelelo townships, the creation of employment is encouraged in the local economy because it will lead to general economic growth resulting from an enlarged income base and improved quality of life, especially in the poor and unemployed households.

Adding to these estimates the impact of primary and secondary school education in agriculture, particularly food garden management training and acquiring of agricultural skills, the effect on employment creation and the reduction of poverty may be adequate to alleviate poverty in Ratanda and Impumelelo townships. There are available resources such as the Department of Agriculture, Conservation, Environment and Land Affairs' Directorate: Agriculture in Gauteng DACEL-DAG Programme that could be adopted by the Ratanda and Impumelelo townships. The DACEL-DAG offers assistance to poor communities in household food security, poverty alleviation and established agriculture. The Ratanda and Impumelelo townships should be assisted due to the high poverty and unemployment levels in the areas.

The poor population in Ratanda and Impumelelo townships spends an average amount of R199 per month on maize meal, bread, meat and chicken, vegetables, and milk. It is therefore established that the estimated percentage of poverty can be reduced through the production of these different agricultural products for themselves through food gardens and agro-processing projects aimed at the poor and unemployed households.

5.3 CONCLUSION

This research reflected the economic status of the inhabitants of the township areas of Lesedi Municipality, namely, Ratanda and Impumelelo. The role that agriculture and agro-processing could play was considered in this study, through the use of different sources of information, namely a review of the literature and an empirical study. The research identified the possibilities for agricultural and agro-processing projects to play a role in reducing poverty in Ratanda and Impumelelo. The research also determined what effect these initiatives are likely to have on the local economy in terms of job creation and poverty alleviation. Employment creation could supplement the existing income of households to such an extent that the headcount index for the population is decreased significantly. To have a significant effect, it should reduce the headcount index substantially. The extent to which the headcount index is reduced indicates the success of an employment creation programme.

In **Chapter 3**, it was calculated that, on average, the poor population of Ratanda and Impumelelo townships spends R199 per month on different agricultural products, i.e. maize meal, bread, meat and chicken, vegetables, and milk. However, if poor unemployed persons could be assisted to produce these items for themselves through food gardens and agro-processing projects, and at an average income of R600 per month, the headcount index would be reduced from .49 to .26, meaning that poverty is reduced by 46 percent in general by establishing food production in the hands of the unemployed poor. An employment creation scheme aimed at the poor unemployed would have an immediate effect on the extent of poverty, because it could reduces the poverty gap from 0.5 to 0.3 The surplus produce could be sold and the income earned could be used to pay for basic inputs of production. This would lead to the development of new emerging retail markets.

This research fulfilled its objectives through the identification of informal agricultural employment opportunities and the identification of processing opportunities of agricultural products that are consumed on a large scale in the townships. Areas using labour intensive methods would enhance employment creation. The research also assesses the need for the training and acquiring of skills in modern production methods and technology which is essential for job creation in Ratanda and Impumelelo. Skills possessed by the unemployed and the activities they wish to engage in to sustain themselves are also investigated.

The level of poverty is high in Ratanda and Impumelelo, even if there are initiatives aimed at alleviating it. The initiation of agricultural and agro-processing projects could have a positive impact in terms of reducing unemployment and alleviating poverty. These projects are deemed successful in reducing poverty levels, reducing unemployment rates and creating new jobs, and establishing new businesses (both formal and informal).

The study conducted for the purposes of this dissertation shows that, on the whole, Ratanda and Impumelelo townships, like other townships in the Vaal Triangle, have a high level of poverty partly due to unemployment. From the above information and figures, it may be concluded that the hypothesis is proved to be true, i.e. stimulating job creation in the agricultural sector will alleviate poverty and reduce unemployment in Ratanda and Impumelelo townships. For this reason, it would be worthwhile to implement projects such as those identified in this dissertation. This is explained in more detail in the recommendations below.

5.4 RECOMMENDATIONS

The research conducted identified the potential of the agricultural sector to create jobs. More research should to be undertaken in order to apply these initiatives and to evaluate the effects of such programmes. The recommendations outlined hereafter are equally important and deserve the attention of policy makers and the Ratanda and Impumelelo communities.

Recommendation 1: Training and education

The skills and capacities of the whole community, but especially the disadvantaged population, should be improved in order to improve productivity as well as contribute towards the upliftment of the community in general. Formal training centres should be established to provide training, thereby giving people the opportunity to start their own small business. This can be achieved by upgrading the Impumelelo Resource Centre in terms of facilities and trainers, and the development of the priority area for job creation and training of SMMEs in Extension 23 (Ratanda).

Recommendation 2: Skills development

Most of the residents are unskilled and they have to compete with unskilled workers from other areas for very few jobs in a volatile employment situation. Being skilled in areas most in demand for the local economy will make people more employable. This could be achieved through the government's Expanded Public Works Programmes (EPWP) or the Department of Labour's Learnership Programmes.

Recommendation 3: Communication and information

It is recommended that an information and communication technology (ICT) centre or a telecentre within a Multi-Purpose Community Centre (MPCC) be created for Ratanda and Impumelelo. Such a centre may benefit the community and:

- offer support to local enterprises so that they are more likely to succeed;
- improve civic life;
- provide open access to information and resources; and
- offer training in information technology and other technologies.

Recommendation 4: Environment: greening of open spaces through vegetables planting and trees

Greening projects need to be introduced on an ongoing basis, combined with environmental education. A major opportunity exists for public works projects where large numbers of low qualified workers could be involved in the cleaning and clearing of waterways and the removal of intruder plants in the area. This will lead to the beautification of the area and improving the aesthetic appearance of Ratanda and Impumelelo. An effective waste management system should also be developed in the area and the provision of refuse bins should be considered.

Re-cycling projects have been implemented with success in the Ekurhuleni area. Lessons could be learnt and similar projects could be introduced in the Ratanda and Impumelelo areas. The community could be assisted to handle waste themselves. This should include money-generating recycling initiatives for the community through, for example, 'Collect-a-Can' and other initiatives.

The development of a dumping site at a convenient point for all residents - and linked to the recycling initiatives - should be considered. There is currently no central dumping site. This result in residents dumping refuses at any open space. Such refuse leads to health hazards. However, the dumping site could also be used for compost and manure making to be used in growing vegetables and fruit.

A culture of small-scale urban agriculture should be encouraged amongst residents. This will ensure that many backyards in the area are used for vegetable growing. This will assist residents with food harvested from their own backyards.

Recommendation 5: Agriculture

Agriculture is one of the priority catalysts that could be used to reduce poverty. Due to the fact that the Lesedi Municipal Area is mainly a rural area with high potential agricultural land and a farming community, the focus in a number of projects should be on agriculture. Every effort

should be made to provide opportunities for people to enter the market through ensuring access to land, encouraging linkages to the formal economy and training. The Inqayizivele Small Scale Farming Project is an example of an agricultural project. Co-operation should also be established between the local authorities, DACEL, and the private sector to ensure successful implementation of economic projects.

Recommendation 6: Urban agriculture

Urban agriculture should be encouraged as one of the possible solutions in reducing poverty and unemployment in the townships of Ratanda and Impumelelo. It is an industry located within the urban area that involves the growing, processing and distribution of a diversity of food products, using largely human and material resources. The emphasis is placed on the idea of urban agriculture due to the fact that most agricultural projects do not require capital intensive production methods and can be operated from a backyard. To promote urban agriculture the open spaces should be made available for intensive and productive use.

Recommendation 7: The use of urban open spaces

Open spaces are used for agricultural purposes. It is important to ensure that open spaces do not become redundant or 'waste spaces' used solely for dumping. These areas must be seen by the local community to be a valuable resource. A wide variety of urban open spaces can be well used for food gardens. In this way, people can provide food for their families and sell the surplus to earn much needed money.

Recommendation 8: Food gardens

The development of food gardens will contribute towards poverty alleviation and income generation. In the process of creating jobs for the community, the food garden becomes evident. There are certain vegetables that the people of Ratanda and Impumelelo plant in order of priority. If vegetables are produced for own consumption, the sub-system is relatively easy. The people within the townships who produce for the market also have an advantage in the sense that they can supply fresh

vegetables directly to the consumer and the consumer does not have to buy large quantities. In fact, they can buy every day for the next day's meals.

Recommendation 9: Job creation

Job creation should be the priority in alleviating poverty and ensuring the quality of life. Both formal and informal business activities in Ratanda and Impumelelo must be encouraged. The creation of additional jobs in the local economy will lead to general economic growth resulting from an enlarged income base and improved quality of life. Formal business opportunities should be promoted, as this sector of the economy will be essential for economic growth and a stable environment. Business opportunities should be marketed and the "Zone of Opportunity" should be utilised to attract new business and industry to Ratanda and Impumelelo.

Recommendation 10: Small business development

The development of sustainable new ventures in Ratanda and Impumelelo should receive urgent attention as a way of developing the economy of the area, and to encourage the circulation of money in the area. Small business development activities must be promoted by creating a positive environment for such activities. A positive environment could include formal facilities as well as training facilities to provide skills training to aspiring small business people and entrepreneurs.

During the survey it was revealed that there is a relatively high dependence on businesses in towns, as this is where residents spend most of their income. There appears to be a need to create and assist local small businesses in the area, both as an employment creation mechanism and as a way of bringing markets to the residents.

Recommendation 11: Co-operative approach to SMME development

The creation of co-operatives or similar structures should be actively pursued with a view to implementation.

The Ratanda and Impumelelo communities and local authorities can help in identifying specific gaps that the Ratanda and Impumelelo economy can fill. They need to promote a diversified range of specialised industry clusters, drawing on local advantages to serve local, national and international markets. Such co-operatives would take the burden off the shoulders of the small businesses in the following ways, for example:

- jointly investing in equipment or where, by bulking up produce they could sort it and sell it to buyers in more convenient and uniform lots than any of the members could have presented separately;
- operate as agents of their members in purchasing and selling requisites and products and become involved in processing activities;
- provide services such as grading, storage, processing, financial support and insurance to members; and
- enable members to gain access to improved technologies and communication systems through technical and economic extension services.

Since many residents spend the highest percentage of their income on food items in the area, there is strong case to support agro-processing and such businesses. This means that the production of food items that are bought in Ratanda and Impumelelo can also take place locally, and many jobs can be created and supported by the local economy in this way.

It is also recommended that marketing should become one of the key components of Lesedi's local economic development (LED) strategy. It should be a basic principle that agricultural industries should provide raw products and agro-processing industries should add value by making these into final products. The LED strategy should also focus on consumption. Components of consumption include retail development, tourism, conferences and summits, sports events, cultural events, museums, as well as festivals.

Recommendation 12: Crime prevention

Undoubtedly, crime has a negative impact on development. The community must be involvement in crime prevention. Various programmes and initiatives in conjunction with the police (SAPS) will achieve this, for example, community awareness programmes ('Don't Do Crime Campaign'), community and municipal participation in the various Community Policing Forums, community inputs and participation in the relevant Section 79 Committee of Council, and local business support and involvement such as in the case of the proposed closed-circuit television monitoring system.

It is believed that these recommendations, if implemented, will enhance poverty alleviation in Ratanda and Impumelelo to a large extent.

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ANNEXURE A: Methodology for the measuring of unemployment

Various methods are used to measure unemployment. The following three are more or less standard methods that can be used according to Slabbert and Levin (1997).

a) The census method

This method is used for measuring the economic status of the entire population. However, censuses take place only periodically and even then only a limited number of questions pertaining to employment can be included.

b) Registration method

This method provides for the unemployed to register at placement offices - in South Africa these are offices of the Department of Labour. Registration is compulsory to qualify for unemployment benefits. In South Africa some categories of civil servants, domestic workers, farm workers, casual and seasonal workers, those earning more than the ceiling income, and those whose period of benefit (six months) has run out, are excluded from the fund. Many persons, therefore, have no reason to register. Registered unemployment figures published by the Department of Labour in South Africa consequently do not show the level of unemployment accurately.

c) Sample surveys

A survey is undertaken on a sample basis to obtain the data required to calculate unemployment rates for specific groups of people. In earlier years the Central Statistical Services conducted surveys on a monthly basis for Blacks, Coloureds and Asians. It was called the Current Population Survey (CPS). However, since the figures obtained for Blacks were found to be inaccurate, their results have not been published since April 1990 (Baker, 1992: 83). In 1994, the CPS was terminated and the October Household Survey (OHS) was introduced. Statistics South Africa has conducted October Household Surveys since 1996. The OHS is an annual survey, based on a probability sample of a large number of households. It covers a range of development and poverty indicators, including unemployment (official and expanded), according to the definitions of the International Labour Organisation

(ILO).

Because of the lack of reliable sources of information on a regional basis, surveys were conducted in the Vaal Triangle by Slabbert *et al* (1987; 1988; 1991; 1994 and 1999) to determine the unemployment and poverty rate. The method used to determine the unemployment rate in Ratanda and Impumelelo townships is explained below.

Definition of unemployment

Statistics South Africa uses the following definition of unemployment as its official definition:

> *The unemployed are those people within the economically active population who:*
>
> *a) did not work during the seven days prior to the interview;*
>
> *b) want to work and are available to start within a week of the interview; and*
>
> *c) have taken active steps to look for work or to start some form of self-employment in the four weeks prior to the interview.*

These general criteria are translated into statistically meaningful criteria, namely:

- the population of potential working age (i.e. 15 years and older);
- the economically non-active (i.e. those who prefer not to or who cannot work – for instance housewives, persons 65 years and older, the disabled, etc); and
- the economically active population (all those who are fit to work, wish to work, have no employment and are ready for and actively looking for work, plus the employed and self-employed).

The unemployment rate (Ur), then, is calculated according to the standard equation:

$$\frac{number\ of\ unemployed}{Economically\ active\ population\ (EAP)} x \frac{100}{1} = Ur$$

In developed countries this definition is relatively simple to apply. The criteria for measuring unemployment are straight and definite, i.e. a person is out of work, and is actively looking for a job by means of listing at a placement or other government office. However, in developing countries circumstances are very different, and it is not always clear whether a person is seeking employment. In South Africa some unemployed persons become discouraged and therefore refrain from taking active steps to seek employment.

In the survey for this section only one criterion was taken as an indication of seeking work, namely, if a person 'has the desire to work and to take up employment or self-employment'. The question asked was simply: 'Do you want to work?' When the standard Statistics South Africa definition is used, but its strict criteria are relaxed - as was done in this survey - it is referred to as an expanded definition of unemployment. This expanded definition includes (a) and (b) but not (c) (Statistics South Africa, 2000: xv).

Statistics South Africa's definition for employment which defines the 'employed' as those who performed work for pay, profit or family gain in the seven days prior to the household survey interview, or who were absent from work during these seven days, but had some form of paid work to which they can return (Statistics South Africa, 2000), was also simplified. The question was simply asked: 'Do you work for a business, for yourself or for your family?' Working for a business was regarded as formal employment. Self-employment and family employment were taken as working in the informal sector.

Source: Slabbert & Slabbert, 2002: 17.

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ANNEXURE B: Methodology for the measuring of poverty

Following the guidelines of the World Bank, a poor household is defined as a household for which the combined income of all its members is less than the Household Subsistence Level (HSL) as determined for the specific household. If the combined income of a household is described by y_i and the poverty line (HSL) of the same household is described by z_i, the extent of poverty, P_i, of this household is described by $P_i (y_i; z_i)$.

The headcount index is defined as the fraction of the population below the poverty line. In this report, the headcount index is adapted to indicate the fraction of households that fall below their individual poverty lines, and is described by means of the equation:

$$H(y;z) = M/N$$

where: H = the fraction of households below the poverty line;

y = household income;

z = the poverty line of households;

M = the number of households with incomes less than z; and

N = the total number of households.

The poverty gap usually measures the average shortfall of the incomes of the poor from the poverty line, while the poverty gap index measures the extent of the shortfall of incomes below the poverty line. In this report, the poverty gap index is adapted to be a measure of a specific household, described by the equation:

$$R_i(y;z) = (z_i - y_i)/z_i$$

where: R_i = the income shortfall of a household expressed as a proportion of the household's poverty line;

y_i = the income of a specific household; and

z_i = the poverty line of a specific household.

The poverty gap of an individual household (in monetary terms) can therefore be expressed by the equation:

$$G_i(y;z) = z_i - y_i$$

where: G_i = the income shortfall of a household;

y_i = the income of a specific household; and

z_i = the poverty line of a specific household.

From the three equations above it is clear that the poverty gap can only be reduced by increasing household income.

Source: Slabbert, 1997: 47.

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ANNEXURE C: Methodology for impact assessment

Employment creation may supplement the existing income of households to such an extent that the headcount index for the population is decreased significantly. If the number of unemployed persons in a household is described by u_i, and employment opportunities can be created at an average wage level of **W**, the poverty gap G_i of a single household can be reduced by:

$$G_i - (u_i W)$$

or

$$z_i - (y_i + u_i W)$$

where: u_i = the number of unemployed members in a household; and

W = the average wage earned by unemployed members of households as a result of an employment creation scheme.

An employment creation scheme aimed at the poor unemployed will have an immediate effect on the extent of poverty, because it reduces the poverty gap. However, to have a significant effect, it should reduce the headcount index. The extent to which the headcount index is reduced will indicate the success of an employment creation programme. The condition for reducing the headcount index is that the poverty gap of a household or households becomes zero or negative. This condition is described by the following equation:

$$G_i - (u_i W) \leq 0$$

where: G_i = the poverty gap of a single household;

u_i = the number of unemployed members in a household; and

W = the average wage earned by unemployed members of households as a result of an employment creation

scheme.

The larger the number of households satisfying this condition, the smaller the headcount index becomes.

The 2004 household survey data will be used for determining the impact of job creation on poverty in the Ratanda and Impumelelo townships. The data renders all the information needed to test these models, for example, the age and gender of household members required to determine the individual poverty line (***z***) for each individual household; the combined income of each individual household (***y***); and the number of unemployed members in a household (***u***).

Source: Slabbert, 1997: 171.

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ANNEXURE D: The household survey

Sampling

Maps were obtained from Lesedi Municipality for Ratanda and Impumelelo townships, and sample stratification was designed on account of the geographical distribution and concentration of people in the areas. A questionnaire was designed for obtaining the desired information. The area was stratified and the questionnaires were apportioned evenly among the inhabited sites to ensure total population and geographic coverage. Two fieldworkers were used to interview a total of 160 households in the survey. They were initially trained in a group. Checks were made in an effort to judge the degree of accuracy with which the questionnaires were completed. Only a few errors were found in the questionnaires that were assessed.

Plots or sites at which fieldworkers were requested to complete questionnaires were identified individually from the map before the field workers went out. However, where interviews could not be secured, or where it was impossible to trace the house, the next pre-selected household was approached for the purposes of an interview. Information was obtained from the breadwinner or the spouse. Questionnaires were completed during the day and over the weekends when members of households were anticipated to be at home. Experience in previous surveys conducted by the Employment Research Unit (ERU), Vaal Research Group (VRG) and other institutions (e.g. Bureau of Market Research) has shown that samples of this size with a low refusal rate supply statistically reliable data within reasonable limits.

Empirical data

The data was obtained from households by means of questionnaires (see **Annexure E**). The basic unit for which questionnaires were completed was the household. Preference was given to the household (and not to the family unit), because households include family and non-family members living together. The following definition of a 'household' was used: **one or more persons who pool their income to buy food, live (eat and sleep) together in one or more houses/huts/living units on the same plot/site and depend financially on**

one another. Each questionnaire was completed on the site. Details with regards to the site were listed but no names were recorded with regard to the head of the household or other persons living at the site. This was done to ensure anonymity, thereby encouraging honest and reliable information. Almost all the households approached were willing to partake in the survey and 160 questionnaires were completed in July 2004.

The first question in the questionnaire (a question concerning the number of households, number of people and separate occupied houses/huts/living units on the plot) was completed by interviewing the main tenant or the owner of the site. The other questions were completed for each separate household on that site. It was therefore possible to complete more than one questionnaire at a single site. This was done deliberately in order to obtain information about backyard tenants and also to establish their incomes and expenditures.

Reliability of the results

It must, as a general principle, be kept in mind that a properly conducted sample survey might yield useful estimates. Although every precaution was taken to minimise errors and to make sure that questions were well understood in order to obtain quality answers, they still might not give exact unquestionable values. It is possible that the following could have affected the reliability of the results of this survey: sampling errors, because only a fraction of the population was interviewed; and survey errors, stemming from memory errors and misunderstanding of questions.

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ANNEXURE E Household questionnaire: June 2004

N.B.: The information in this questionnaire will be treated in strict confidence. *(June2004)*

Township:	Section: Old / RDP / shack	Date:	Questionnaire no:
Street:	House number:	Interviewer:	

A: BACKGROUND INFORMATION

1. What is the position of the respondent in the Household? Cross *

Head of household	Spouse or child	Extended family member	Boarder

2. How many housing units are on the site? ☐

3. How many people stay permanently on the site? ☐

4. How long have you (respondent) stayed in the Vaal Triangle (years)? ☐

B: ENVIRONMENTAL

5. How do you feel about the environment in which you stay? (Mark 2 options) *

1. It is clean and pleasant	2. It is littered, untidy and dirty	3. Indifferent – No opinion	4. Something should be done to clean it	5. It can be left as it is

6. If you feel it should be cleaned up, who should take the initiative and responsibility? (* More)

1. The municipality	2. A street committee	3. Every person should be made responsible	4. A campaign should be organised	5. Other: (explain)

7. If you would have the money, what would you be prepared to pay monthly to have your environment cleaned up? ☐

8. How do you experience, especially in winter, the smoke levels (air pollution) in your area? *

1. Not affected	2. Slightly affected	3. Affected	4. Badly affected	5. Unbearable (Severely Affected)

9. If you are making fire for cooking & heating purposes, would you like to be introduced to technologies that will reduce the smoke levels at your house? *

1. Not making fire: using electricity for cooking & heating	2. Making coal / wood fire: but not interested	3. Making coal / wood fire: And Interested	4. Using paraffin: Not interested	5. Using paraffin: Interested

10. What would you be prepared to pay monthly to have your environment smoke-free? ☐

a) What % of the smoke pollution do you think comes from industry? ☐ and coal fires? ☐

b) Number of persons in your household whose health is affected by air pollution? ☐

c) What are most of them suffering from?_____

11. How do you experience, especially in winter, the dust levels in your area? *

1. Not affected	2. Slightly affected	3. Affected	4. Badly affected	5. Unbearable (Severely Affected)

12. What would you be prepared to pay monthly to have your environment dust free? ☐

13. Especially in the spring & summer some people are using amplifiers to make loud music. How are you affected by this in your area? *

1. Not affected (quiet in the area)	2. I hear it but I don't care (accepting it)	3. I hear it and it is affecting me (don't like it)	4. I hear it and I am badly affected	5. I hear it and it is unbearable (severely affected)

14. If you feel that something should be done in your area to reduce the noise levels, who should be responsible and what should be done? (Mark * more than one option)

1. The municipality should control & restrict people to play loud music	2. The police should control & restrict people to play loud music	3. A street committee should control & restrict people to play loud music	4. People who disturb the neighbourhood with noise should be fined / punished	5. The instruments of those who disturb the neighbourhood should be confiscated

15. If you would have the money, what would you be prepared to pay monthly to have your environment quiet? ☐

16. Has any person in your household been a victim of crime in the last 12 months?

Yes	No

17. What kind of crime? (Can mark * more than one option)

1. Assault	2. Robbery	3. Rape	4. Murder	5. Abduction	6. Other

C: CONSUMPTION

How much of the following items does your household buy per week/per month & about how much does your household spend on these items per week/per month?

Product	Kilograms / litres per week	Kilograms / litres per month	Rand per week	Rand per month	Town ✓	Town-ship ✓
1. Maize Meal						
2. Bread						
3. Meat / chicken						
4. Vegetables						
5. Milk						
6. Washing powder						
7. Coal						
8. Paraffin						

How does your household spend their income monthly?

Item	Rand per month	Name of shop	Town	T/ship	
Housing (Rent/Bond)					1
Water					2
Electricity					3
Other energy (coal, paraffin etc)					4
Food					5
Cleaning materials					6
Cigarettes & Tobacco					7
Beer, wine & spirits					8
Transport: Taxi..... Car..... Other.....		Total:			9
Clothing					10
School					11
Entertainment					12
Medical Expenses					13
Insurance					14
Gambling: Lotto.....					15
Horseracing.....					16
Other (casino etc)....					17
Savings					18
Licenses (e.g. TV, Vehicle)					19
Rates and taxes					20
Housekeeping Services (e.g. Garden)					21
Telephone.....					22
Cell Phone.....					23
Car Repayment					24
Loan repayments					25
Furniture					26
Other: Specify:					27

D: EMPLOYMENT & EDUCATION STATUS

18. Complete in respect of all members of the household (Refer to Code List)

1. Number of people in the household	1	2	3	4	5	6	7	8
2. Composition of members (Code list 2)								
3. Age of each member in years								
4. Sex (Male = 1; female = 2)								
5. Marital Status (code list 5)								
6. Qualifications (still at school) (Code list 6)								
7. Qualifications (not at school) (Code list 7)								
8. Employment Status (Code list 8)								
9. Sector of employment (Code list 9)								
10. Has your salary increased as a result of minimum wages? (10)								
11. Can employer afford increases because of minimum wages?								
12. Working hours been reduced because of minimum wages?								
13. **(10 – 17 for <u>unemployed</u> only)** Skills of the unemployed								
14. Duration of unemployment in years								
15. Dismissed because employer could not afford minimum wage								
16. Willingness & type of Skills Training required (code list 13)								
17. What is the Unemployed doing presently								
18. Do you have matric exemption?								
19. If persons would like to study further: preferences								
20. Preferences to start self-sustaining activities								
21. Minimum wage required to take a job								
22. **Income:** Wages/salaries per month (Take home pay)								
23. Pension/Remittance								
24. Child Grant from Government								
25. Other Grants from Government								
26. Help (family/relatives/etc) Also help in kind								
27. Informal activities (e.g. SMME)								
28. Subsidies (e.g. Housing)								
29. Interest/dividends								
30. Other (Specify)								

19. **Does someone in your household have a vegetable garden?.....**

Yes	No

20. **Would someone in your household be interested in receiving .....**

assistance to start a food garden in your yard?

Yes	No

21. **Would someone in your household like to be involved in a community food garden project?**

Yes	No

22. **Would someone in your household be interested in farming?**

Yes	No

23. **Do you know small farmers in the area?.....**

Yes	No

If so, give the address:

_____

24. **Does someone in your household own a sewing machine?.....**

Yes	No

25. **Do you know a clothing manufacturing business in your township?.....**

Yes	No

If so, give the address:

_____

26. **Do you know any small scale welding / metal work firm in the township?.....**

Yes	No

If so, give the address:

_____

27. **Has any member of your household operated a SMME / still operating one? ...**

If so, what kind of SMME?

Yes	No

_____

28. **Taking into account your skills (or that of your household members), would you or someone in your household (unemployed persons) be interested in starting your own business or rather work together with others in a cooperative?**

Own business	Cooperative

29. **What kind of business would you like to start?**_____

30. **If you would like to start your own business, what kind of support do you think you will need?**

31. **Do you know somebody with a catering business in your township?.....**

Yes	No

If so, give the address:

_____

32. **Do you think you will get a job if you are better trained?.....**

Yes	No

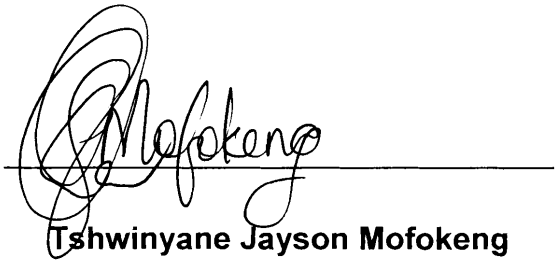
THANK YOU FOR YOUR COOPERATION!

DECLARATION

I declare that

THE ROLE OF THE AGRICULTURAL AND AGRO-PROCESSING SECTORS IN REDUCING UNEMPLOYMENT AND POVERTY IN THE TOWNSHIPS OF LESEDI

is my own work, that all the sources used or quoted have been duly acknowledged by means of complete references, and that I have not previously undertaken or rather submitted the dissertation for a degree at another university.



Tshwinyane Jayson Mofokeng

Date: 2005/07/15

ABSTRACT

This dissertation analyses the role of agricultural co-operatives and agro-processing in job creation and poverty alleviation in Ratanda and Impumelelo. The approach in the dissertation is to define poverty, measure it, and determine the profile of the poor. The study focuses on three areas, namely: 1) the theories of unemployment, poverty and agriculture; 2) the state of unemployment and poverty in Ratanda and Impumelelo; and 3) agricultural co-operatives as one of the contributors to the solution to unemployment and poverty.

Unemployment is identified, amongst other factors, as a major determinant of poverty. For this reason, the chief component of any policy aimed at alleviating poverty should focus primarily on employment creation. The agricultural industry, as the most labour-intensive industry in South Africa with low capital entry requirements, creates opportunities for entrepreneurially driven employment creation in Ratanda and Impumelelo.

The approach in the dissertation is to define and measure unemployment and poverty and determine the profile of the poor population in Ratanda and Impumelelo. This is done by using household level indicators. For measuring poverty at the household level, the following tools are used: the Household Subsistence Level (HSL) as poverty line, the headcount index, and the poverty gap. Unemployment is also used to determine poverty levels. At the household level, the dissertation uses tools such as assessing the skills of the unemployed, duration of unemployment, and the qualifications of the unemployed. The dissertation shows that Ratanda and Impumelelo experience lower unemployment rates as compared to the VTMA, Evaton West, Emfuleni township, and Bophelong.

The analysis shows that a lower percentage of the households in Ratanda and Impumelelo receive incomes that are less than the household subsistence level as compared to Evaton West, but a higher percentage as compared to Bophelong. The agricultural sector has the potential to create job opportunities in Ratanda and Impumelelo if assistance could be offered to the poor and unemployed.

The expenditure of the entire population of Ratanda and Impumelelo on agricultural products (also considering nearby communities) shows a potential retail market for

agricultural co-operatives in the township. The poor population in Ratanda and Impumelelo townships spends an average amount of R199 per month on different agricultural products, i.e. maize meal, bread, meat and chicken, vegetables, and milk. However, if poor unemployed individuals could be assisted to produce these products through food gardens and agro-processing projects at an average income of R600 per month, the headcount index would be reduced from .49 to .26, meaning that poverty would be reduced by 46 percent in general by establishing food production in the hands of the unemployed poor. The surplus produce could be sold and the income earned could be used to pay for basic production inputs.

The dissertation concludes that agricultural co-operatives can indeed create job opportunities and alleviate poverty, but assistance from different structures would be required. The dissertation suggests that institutions like DACEL-DAG, local authorities and training institutions can play a key role in this process.

Finally, the dissertation presents recommendations. It is proposed that one of the major solutions in dealing with poverty is to consider the establishment of agricultural co-operatives and food gardens that facilitate the employment of less skilled residents. These projects are deemed successful if they act as catalysts in the reduction of poverty and the creation of new jobs. In particular, the development of urban agriculture and the formation of co-operatives are proposed.

Key terms

Ratanda and Impumelelo, poverty, unemployment, poverty measurements, headcount index, poverty gap, profile of the poor, co-operatives, agricultural projects, job creation, Bophelong, Emfuleni, Evaton West, poverty alleviation, job creation, unemployed, poor, unemployment rate, headcount index, non-poor, average income, poverty line, HSL, skills.

SAMEVATTING

In hierdie verhandeling word die rol van landbou koöperasies en die verwerking van landbou produkte in werkskepping en armoede verligting in Ratanda en Impumelelo ontleed. As uitgangspunt word armoede gedefinieer, gemeet en die profiel van die armes bepaal. Die studie fokus op drie terreine, naamlik: 1) die teorieë van werkloosheid, armoede en landbou, 2) die stand van armoede en werkloosheid in Ratanda en Impumelelo en 3) landbou koöperasies as een van die bydraers vir die oplossing van armoede en werkloosheid.

Werkloosheid word geïdentifiseer, onder andere , as een van die hoof oorsake van armoede. Die hoofkomponent van enige beleid wat armoede wil verlig behoort dus op werkverskaffing te fokus. Die landbou-industrie as die mees arbeidsintensiewe industrie in Suid-Afrika met lae kapitale aanvangsvereistes, skep die geleentheid vir entrepreneur-gedrewe werkskepping in Ratanda en Impumelelo.

Die uitgangspunt in die verhandeling was om armoede en werkloosheid te definieer en te meet en 'n profiel van die arm gemeenskap in Ratanda en Impumelelo te bepaal. Dit is gedoen deur middel van aanwysers op die vlak van die huishouding. Om die vlak van armoede in 'n huishouding te meet is die volgende instrumente gebruik: Die "Household Subsistence Level" (HSL) as armoedelyn, die koppetel indeks en die armoede gaping. Werkloosheid is ook gebruik om armoedevlakke te bepaal. Op huishoudingsvlak is instrumente soos die assessering van vaardighede van die werkloses, duur van die werkloosheid asook die kwalifikasies van die werkloses aangewend. Die studie toon dat Ratanda en Impumelelo laer werkloosheid koerse beleef in vergelyking met die "township" gebiede in die Vaal Driehoek, Evaton Wes, Emfuleni en Bophelong.

Die ontleding toon verder dat daar 'n laer persentasie van huishoudings in Ratanda en Impumelelo is wat 'n inkomste laer as hulle HSL ontvang in vergelyking met Evaton Wes, maar 'n hoër persentasie in vergelyking met Bophelong. Landbou het die potensiaal om werksgeleenthede in Ratanda en Impumelelo te skep as die arm en werkloses bystand kon ontvang.

Die uitgawes van die hele populasie in Ratanda en Impumelelo (asook nabygeleë gemeenskappe) op landbouprodukte toon 'n potensiële kleinhandelmark vir koöperasies in die dorpsgebied. Arm mense in Ratanda en Impumelelo spandeer 'n gemiddelde bedrag van R199 per maand op verskillende landbouprodukte soos mieliemeel, brood, vleis en hoender, groente en melk. Indien arm werkloses bygestaan kan word om hierdie produkte deur groentetuine en d.m.v. landbouverwerkingsprosesse te produseer teen 'n gemiddelde inkomste van R600 per maand, sal die koppetel indeks van 0.49 na 0.26 verminder word, wat beteken dat armoede met 46 persent verminder word. Die surplus produkte kan verkoop word en die inkomste wat daaruit verkry word, kan aangewend word om inset kostes te dek.

In die studie word genoem dat landbou koöperasies inderdaad werksgeleenthede kan skep en armoede kan verlig, maar dat bystand van verskeie strukture nodig is. Die studie kom tot die konklusie dat die volgende belangrike instansies soos die Departement van Landbou, Bewaring, Omgewing- en Grondsake en die Direktoraat: Landbou in Gauteng, plaaslike owerhede en opleidingsinstansies 'n sleutelrol in die proses kan speel.

Ten slotte word sekere aanbevelings gemaak. Daar word voorgestel dat een van die belangrikste oplossings vir armoedeverligting is om koöperasies en groentetuine te oorweeg wat werk kan verskaf aan inwoners wat oor min vaardighede beskik. Sulke projekte word as suksesvol beskou as die armoedevlak verlig word en nuwe werksgeleenthede geskep word. Daar word spesifiek na die ontwikkeling van stedelike landbou en die daarstelling van medewerkers verwys.

Sleutelbegrippe

Ratanda en Impumelelo. Armoede, werkloosheid, armoede bepalings, koppetel indeks, profiel van die armes, koöperasies, landbouprojekte, werkverskaffing, Bophelong, Emfuleni, Evaton Wes, armoedeverligting, werkskepping, werkloosheid, arm, werkloosheidsvlak, nie – armes, gemiddelde inkomste, armoedevlak, HSL, vaardighede.

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LIST OF ABBREVIATIONS

CPS	Current Population Survey
DACEL-DAG	Department of Agriculture, Conservation, Environment and Land Affairs' Directorate: Agriculture in Gauteng
EAP	Economically active population
EPWP	Expanded Public Works Programmes
ERU	Employment Research Unit
GDP	Gross Domestic Product
GGP	Gross Growth Product
HEL	Household Effective Level
HLFS	Household Level Food Security
HSL	Household Subsistence Level
ICT	Information and Communication Technology
IDP	Integrated Development Plan
ILO	International Labour Organisation
LED	Local Economic Development
MPCC	Multi-Purpose Community Centre
MUCPP	Mangaung – University of the Orange Free State Community Partnership Programme
NGO	Non-Governmental Organisations
OHS	October Household Surveys
PIR	Poverty and Inequality Report
SAPS	South African Police Service

SMME	Small, Medium and Micro Enterprises
UA	Urban Agriculture
Ur	Unemployment rate
UVP	Urban Vegetable Production
VRG	Vaal Research Group
VTMA	Vaal Triangle Metropolitan Area

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