Summary and conclusion

10.1 Introduction

The objective of this thesis was to measure and describe the sustainability of the Emfuleni economy in terms of its potential to generate income and employment opportunities (to reduce unemployment) that will result in the alleviation of poverty, taking into account the status of the economy before and after the recent (positive and negative) developments and proposals. Sustainability was defined for the purpose of this thesis as the ability of a local economy to provide employment and income generating opportunities for the local population to such a degree that the extent of poverty is reduced over a period of time.

The search of explanations for and solutions to poverty in different countries over the world has led poverty research away from a national focus to a more microperspective. From this micro-approach, it was clear that a single national poverty line cannot be applied in general as the cost of living varies widely between different areas, for example rural and urban areas. The cost of living in Emfuleni, for example, differs widely from the cost of living in the city of Tswane. The underlying causes of poverty also vary widely between different areas within a single country and thus the micro-perspective becomes increasingly more important as the focus sharpens.

The future challenge of poverty research therefore lies in studying poverty at local or micro-level. The ability of local economies needs to be studied to determine the extent to which they are able to sustain their own populations. This micro-perspective should then be tied into a macro-perspective. Local or micro-policies can then be aligned with national or macro-strategies and *vice versa*. National poverty studies are therefore not less important, but they should take into account the needs of the poor at micro-level because this is where the real poverty is.

Attempts to alleviate poverty in South Africa should therefore follow the recent, less conspicuous international trend of focusing on solutions at the micro- (local) level. It was for this very reason that poverty in Emfuleni was studied at a micro-level because it was imperative to build a reliable model to measure sustainability for the purposes of this thesis. This model and the methodology lend itself ideally to measure both the extent and depth of poverty.

The second model, an input-output model of the Vaal economy, was used to measure the effect of endogenous and exogenous changes in the Emfuleni economy on the level of household income and employment. The input-output model depicts economic linkages that exist within and between different components of an economy. This approach also identifies monetary flows (expenditures and receipts) between various units and focuses on the interdependence of different sectors of economic activities within the Vaal area.

A third model was developed to measure the impact of a change in household income on the extent and depth of poverty. The degree to which proposed local economic development projects decrease the extent of poverty determines the degree of sustainability of the economy.

10.2 Status quo and trends in Emfuleni

The *status quo* and trends of Emfuleni's population (numbers and growth), the workforce (employment and unemployment), poverty and the structure of the economy were analysed, in order to make meaningful projections.

The population of Emfuleni was determined at 658,422 for 2001. 23.3% of the population resides in the former white towns and 76.7% in the former black townships. From 1990 to 1996, Emfuleni experienced a relatively high population growth rate of 2.85% per annum. This relatively high rate was attributed to the influx of people from the rural areas after the scrapping of the Group Areas Act and other apartheid-based legislation. However, the rate decreased to 1.95% per annum in the period 1996 – 2001 because people moved to other areas with better economic and employment prospects than Emfuleni, where the economy declined in the period 1996 - 2001. The 2001 population growth rate of Emfuleni is slightly lower than the national average growth rate of 2.0% per annum.

The dependency ratio, an indicator of the number of persons who depend on the income of one earner, was determined to be 3.29 in 2001 for Emfuleni. The dependency ratio in 1994 for Emfuleni was determined at 2.77. This is a clear indication that in 2001, more persons were on average economically dependent on one earner. This trend also gives an indication of the increase in unemployment in Emfuleni.

The unemployment rate in Emfuleni was determined to be 51.0% in 2001 and 54.1% in 2003. This rate is higher than that of all other municipalities in Gauteng, as well as those in the Northern Free State. Since 1991, the Emfuleni economy has registered only a marginal growth in employment in certain sectors of the economy, and a negative growth in other sectors. The net effect has been a loss of employment opportunities. This effect, combined with an above-average population growth in the 1991-1996 period, has resulted in an increase in the unemployment rate. In the FBTs, where about 90% of the unemployed reside, the unemployment rate has increased by 73.4% from 35.0% in 1991 to 61.7% in 2003, because of a decline in the economy combined with a high influx of unemployed people into Emfuleni in this period.

The employment profile in Emfuleni is largely influenced by the economic structure of the area, which in itself is characterised by a specialisation in manufacturing. Basic metal and metal products are responsible for almost 64% of all manufacturing employment in the area. Of major importance are the trade and services sectors, which are responsible for about 16.7% and 18.9% respectively of the employment total. The manufacturing sector employed 22.2% of all the employed in the Emfuleni area.

The largest percentage of remuneration is paid by the manufacturing sector in Emfuleni; the second largest percentage is paid by the services & other sector and the third largest by the trade sector. This corresponds with the numbers and percentages of the total labour force employed in these sectors.

The average monthly household income in Emfuleni for 2003 was determined at R3,400, compared to R3,083 in 1999. The average monthly wage per formal sector worker in 1999 was determined at R4,115. Salaries and wages on average contributed 72.2% to household income in Emfuleni in 2003. This percentage decreased slightly from 75.4% in 1999, indicating a greater

dependence of the average household on other sources of income. In 2003, 32.1% of household income on average was spent on food, cleaning materials and other groceries. In 1994, the expenditures were 26.1% on similar items for households in the townships. The increased expenditure on food in 2003 clearly indicates an increase in poverty in Emfuleni.

Both the methodologies for measuring the headcount index and the poverty gap were applied to data obtained from a household survey conducted in July 2003 in Emfuleni. The analysis revealed that 51.6% of the households in Emfuleni are poor. The percentage of the total population in Emfuleni that is poor is 53.6%. A further analysis of the poor households indicates that poor households on average are slightly larger than the average household. The average size of a poor household is 3.62 persons, compared to 3.52 for an average (poor and non-poor) household.

In Emfuleni, the poor households have relatively fewer fathers, and single parent households are more common amongst the poor. Almost 50% of the poor female-headed households are headed by a person close to or of retirement age, indicating that there is less likelihood for them to find employment. The poor have less schooling and qualifications than the non-poor, and are in most cases employed in the construction, trade and other sectors, implying that most of them are construction workers, shop attendants and domestic workers.

In the formal sector, the poor earn much less than the non-poor on average. The average household income for the poor is R658 per household per month compared to R4,764 for the non-poor households. The poor spend 86.4% of their income on survival items like food, water and electricity, housing, clothing, transport and save only 2.0% on average, compared to 10.6% of the income saved by the non-poor on average.

Only 12.4% of the total poor population is employed compared to 21.0% of the total population in Emfuleni. Of the poor population, 31.8% are unemployed compared to 24.8% of the non-poor. The unemployment rate amongst the poor is 71.8% compared to 54.1% for the total population in Emfuleni. The dependent population (economically non-active plus children younger than 15) amongst the poor comprises 55.8% of the population compared to 54.2% amongst the non-poor. The dependency ratio (number of people dependent on one income

earner) for the poor is also much higher than that of the non-poor: for the poor it is 7.1 compared to 3.7 for the non-poor.

Almost 52% of the total population of Emfuleni were born outside the Vaal area, whereas only 32.6% of the unemployed poor population in Emfuleni were born outside the Vaal. It appears that a greater percentage of those stemming from outside the region are employed compared to those born in the region. The reason may be that those from outside are prepared to work for lower wages. The minimum wages that the unemployed poor are prepared to accept for employment appears to be rather high. Only 33.7% of the unemployed poor are prepared to take up employment for a wage of R1,000 per month. If all unemployed could and would be prepared to take up employment at R1,000 per month, then the poverty rate would decrease from 51% to 10.5%.

There seems to be a mismatch between skills and desired small businesses and jobs. For instance, direct selling (tuck shops, catering, selling of fruit and vegetables) forms 54% of the desired businesses, while only 9% have any skills in selling or trade.

Many of the unemployed poor have skills in the agriculture field. In spite of this, it appears that there is not much interest in agriculture, but rather for the occupations in the services sector and trade. 28.5% of the unemployed poor were formerly employed in the agricultural sector (including gardening), yet only 11.7% of the unemployed poor actually desire to be employed in this sector.

The most important sector of the Emfuleni economy is manufacturing with a 41.3% contribution to the local GGP. Although it declined from 50.0% in 1990, it still remains the most important economic sector. In the manufacturing sector, the metal and metal products industries (mainly iron/steel) are responsible for 80.6% of all manufacturing production.

The Emfuleni economy plays an important role within the Gauteng Province, especially in its contribution to Gauteng's manufacturing sector. However, in spite of this, Emfuleni has the highest unemployment rate in the province. The headcount ratio of Emfuleni is also the highest compared to the other industrialised centres in Gauteng. Local stakeholders believe that the area has strong development potential, particularly in terms of the entertainment and

tourism sector, and it is hoped that some kind of project of this nature could be kick-started by being included in the Gauteng provincial government's *Blue IQ* Programme.

The number of initiatives that are aimed at regenerating Emfuleni's economy indicate that there is a significant degree of thought and effort being expended at the local level. Each of the initiatives contributes elements towards the attraction and support of business, as well as improving the general business climate. Considering the fact that the manufacturing sector remains the most dominant economic sector in the area, the industrial regeneration initiative is a critical component in influencing the health of the economy more generally.

The establishment of an Industrial Development Zone and the already established manufacturing advisory centre (Gaumac Vaal) could also add to the support and growth of the manufacturing sector. The initiatives aimed at encouraging the growth of the agricultural and tourism and entertainment sectors are important in terms of aiming at diversifying the economy. Furthermore, the upgrading of the Vereeniging Airport to international status, the marketing of Emfuleni, and general collaborative research efforts can make a considerable contribution in terms of developing the economy in a more general way.

An input-output analysis of the Vaal provided tools for the identification of the key economic sectors of the Emfuleni economy. The 1993 input-output table for the area was adapted and updated to be relevant for the year 2000. As the Emfuleni economy forms an integral part of the Vaal economy, it is neither possible nor desirable to construct an input-output table for Emfuleni alone. The input-output table was used as an instrument to measure the impact of changes within a sector of the economy on the economy as a whole. As all the different sectors of the economy are linked to one another, forward and backward linkages are formed. The stronger the linkages of a sector with other sectors, the stronger the impact of a change in economic activity. Sectors with strong linkages are therefore better suited for stimulating the economy on a whole than sectors with weak linkages. The effect of a change where weak linkages are present will be relatively weak on the rest of the economy.

The sectors with strong backward linkages in Emfuleni are the tourism and entertainment, as well as the services and the manufacturing sectors. However,

although the services sector has strong sectoral linkages, this sector is not considered as a key sector for stimulating the economy, as its growth is namely dependent on the growth of the local economy. If the Emfuleni economy grows as a result of an increase in demand for products produced in the region (money flowing into the region from outside), there will be an increase in the demand for services. But when there is not an increase in the demand for products, this sector will not easily expand, as there is not much export orientation. For this reason alone, it is not considered as a sector to be used to stimulate the local economy.

As a result of the linkages between all the sectors of the local economy, a change in the final demand for products from a specific sector will lead to a change in production, turnover, household income and employment -- not only in the sectors concerned, but also in the other sectors of the economy. This is called the multiplier effect. Mostly GGP income multipliers, household income multipliers and employment multipliers are used to estimate the impact of a change in final demand on the economy.

The sectors with the highest employment, remuneration and GGP income multipliers are the tourism and entertainment, the trade and the services sectors. Just as with the services sector, the trade sector is also dependent on the overall growth of the Emfuleni economy and has therefore little potential for attracting money from outside the region. Tourism and entertainment has a great potential for attracting people and therefore money from outside the region. This sector can therefore be regarded as a key sector to be stimulated for income generation and employment creation in Emfuleni.

The manufacturing sector has moderate multipliers. As the manufacturing sector is the largest economic sector in Emfuleni and because it has a large potential for attracting money from outside the region through an increase in exports, this sector can also be regarded as a key sector for income generation and employment creation.

It is evident that if the key sectors of the economy could be stimulated sufficiently, this would result in an increase in employment and consequently household income. This, in turn, would lead to a decrease in the extent and depth of poverty.

As the formal (commercial) agricultural sector does not have much in the way of expansion possibilities because of limited land available, it has not much scope for stimulating the whole economy in terms of GGP growth. However, informal and intensive agricultural activities have a high employment potential as well as the potential to alleviate poverty. Informal agriculture requires low cost inputs for creating employment opportunities which are much lower than, for example, in the manufacturing sector. With this in mind, it would appear that the agricultural sector can also be regarded as one of the key sectors to be stimulated in Emfuleni.

10.3 Impact of change on the future sustainability of Emfuleni

Making use of the input-output model for the Vaal economy, the impact of change on the level of employment, household income and GGP income was measured in Emfuleni. The poverty impact model was used to measure the impact of a change in household income on the level of poverty (headcount index) and the depth of poverty (poverty gap). Projections of the population growth, GGP growth, growth in employment and unemployment and poverty were made until 2015. Table 10.1 summarises the *status quo* and trends in poverty and unemployment/ employment without any positive (implementation of projects) or negative (negative investment) interventions into the economy.

The table shows an estimated increase in the unemployment rate from 51.3% in 2000 to 60.6% in 2015. The poverty rate was estimated at 46.1% in 2000, increasing to 60.6% in 2015. This clearly shows that the Emfuleni economy at present is not sustainable and does not have the ability in itself to provide employment and income generating opportunities for the local population to such a degree that the extent of poverty is reduced over a period of time.

TABLE 10.1 PROJECTIONS OF UNEMPLOYMENT AND POVERTY IN EMFULENI

Year	Population	Unemploy- ment rate %	Poverty rate %	Number of unemployed	Number of employed
2000	645,583	51.3	46.1	155,988	148,082
2005	711,301	57.1	55.0	189,267	142,199
2010	783,410	59.1	59.1	215,756	149,313
2015	862,831	60.6	60.6	243,660	158,419

Source: Calculated from data in Tables 8.3 & 8.5.

The impact of the two proposed projects by the ELM (Inland Waterfront in Emfuleni and a 5% increase in Manufacturing activities), combined with the negative impact of the failure of Krion Financial Services and Equilibium/Futura International investment schemes were also calculated and projected until the year 2015 (Table 10.2). The impact of the proposed International Cargo Airport and Industrial Development Zone is only estimated for the year 2015. It is, however, not likely that these last two projects will materialise, as they do not have the support of the provincial government. The estimated impact of these projects is included in Table 10.2 (last row), merely to show the effect that projects of that size will have on the unemployment and poverty situation in Emfuleni.

TABLE 10.2 ESTIMATED IMPACT OF TWO PROPOSED PROJECTS AND THE FAILURE OF THE FINANCIAL SCHEMES ON EMPLOYMENT AND UNEMPLOYMENT IN EMFULENI (2000 – 2015)

Year	Population	Unemploy- ment rate %	Poverty rate %	Number of unemployed	Number of poor households
2000	645,583	51.3%	46.1%	155,988	84,549
2005	711,301	56.3%		186,615	
2010	783,410	53.3%		194,582	
2015	862,831	53.1%	46.6%	213,504	114,227
4 projects 2015	862,831	42.0%	37.1%	166,622	90,940

Source: Tables 8.15 & 8.16.

In the years 2002 and 2003, the years in which the greatest impact of the failed financial schemes were felt, none of the proposed projects were implemented. By the year 2015, assuming that the proposed development projects reach their full potential by that year, it is estimated that the two failed financial schemes will

have no more additional impacts. The cumulative effect of the two failed financial schemes will be a 1.05 percentage points increase in the unemployment rate, while the impact of the two projects will see a decrease in the unemployment rate of 8.6 percentage points from 60.6% to 52.0% in 2015. Adding the negative impact of the two failed financial schemes, the unemployment rate will be 53.1% in the year 2015. If the two additional projects (the IDZ and the upgrading of the Vereeniging Airport to an international cargo airport) would materialise, the combined impact would be a decrease in the unemployment rate down to 42.0%.

The total effect of the failure of the two financial schemes on the poverty rate (percentage of households below their poverty lines) in Emfuleni will be a 1.6 percentage points increase, while the impact of the two proposed projects on the poverty rate will be a decrease from 60.0% to 45.0% in 2015, and to as low as 35.5% in the case of the four projects. Adding the negative impact of the failure of the two financial schemes, the estimated poverty rate will be 46.6% in the case of the two projects and 37.1% in the case of the four projects in 2015.

From Table 10.2, it is evident that, should the ELM implement the two proposed projects, the unemployment rate will be kept at a relatively constant level, increasing only from 51.3% in 2000 to 53.1% in 2015. However, the numbers of unemployed will increase from 155,988 in 2000 to 213,504 in 2015. The poverty rate which is estimated at 46.1% in 2000 will increase to 46.6% in 2015, and the number of poor households will increase from 84,549 to 114,227. The table shows that, with the implementation of the two projects, *the Emfuleni economy will still not be sustainable*, especially in terms of the numbers of unemployed and poor households.

Even if all four projects should materialise, the *number* of unemployed persons in 2015 will still be more than the number of unemployed persons in 2000, implying that even if the unemployment rate may drop, the number of unemployed will be increasing as the population increases. The same applies to the number of poor households. Even if all four projects should materialise, the number of poor households in 2015 would still be more than in 2000.

Conversely, even if the economy could receive an injection with the size of the four mentioned projects, Emfuleni's ability to *provide employment and income*

generating opportunities for the local population to such a degree that the extent of poverty is reduced in terms of numbers over a period of time will still fall short.

10.4 Conclusion

In the above sections 10.2 and 10.3, the state of affairs and impact of some negative and positive factors on the Emfuleni economy in terms of unemployment and poverty were summarised. Based on the assumption that at least the Inland Waterfront Project and the stimulation of the manufacturing sector would be a high implementation priority for the ELM, projections and estimates on unemployment and poverty were made. Although the implementation of these two projects will not make the Emfuleni economy sustainable in terms of the *numbers* of unemployed and poor households, it will at least keep the *unemployment rate* and *poverty rate* of 2000 at roughly the same levels by the year 2015. The implementation of these projects are therefore of crucial importance to retain and maintain this level of sustainability in Emfuleni.

These efforts should be enhanced by an Inward Industrialisation Process (IIP), aimed at the townships areas especially. An analysis of the skills of the unemployed poor in the townships shows vast pools of labour with certain skills. In addition, there are products that are consumed by the local townships communities which can be produced locally. An analysis of the products consumed in the townships (where the majority of the unemployed and poor reside) showed that about the same number of jobs (at a monthly wage of R600) could be created in producing these products as the number of jobs that could be created throughout the economy with the Inland Waterfront. Establishing cooperatives to produce these products will also be far less capital- intensive. Taking into account Emfuleni's financial constraints, this is an appropriate route to take towards sustainability for the Emfuleni economy, additional to the formal projects mentioned earlier.

Although the introduction of an IIP and the stimulation of employment using the unemployed poor as gardeners, domestic workers and the like, would not have a great effect on the GGP of Emfuleni, it could have a great impact on poverty. If jobs for all the unemployed poor (estimated in this thesis at 132,622 in 2005 and 195,556 in 2015 without implementation of the regeneration projects) could be

created at a minimum wage of R600 per month, it would decrease the headcount index of households from 0.51 to 0.23 and the poverty gap index from 0.46 to 0.26. With an average monthly income of R1,000, the poverty rate would decrease to about 10.5%. It is evident that relatively low wages on average are required to alleviate poverty.

An Inward Industrialisation Process, therefore, could have a major impact on employment creation and poverty alleviation in Emfuleni, especially when it is aimed at providing employment for the unemployed poor. This process should be initiated, without neglecting the development and implementation of the formal mentioned projects. All possible ways and means should be explored to put Emfuleni firmly on the track of economic sustainability.

The fact that a strategic review and analysis of the ELM's approach towards Local Economic Development (LED) showed a distinct lack of enthusiasm on the side of the ELM may be because Local Economic Development is apparently not properly understood and therefore not taken seriously. This lack of enthusiasm has resulted in a delay in the planning, development and implementation of the proposed projects on Emfuleni's side, putting the sustainability of the Emfuleni economy at greater risk with every day that passes without action.

Emfuleni has recently put out tenders for the formulation of a marketing strategy. Specific strategies for place marketing, industrial recruitment, SMME promotion and support, community economic development, export promotion and business retention, expansion and attraction should be properly incorporated into this marketing strategy. Taking into account Emfuleni's financial constraints, it is in the interest of the local community that Emfuleni explore Public Private Partnerships to seek solutions for the lack of sustainability of the economy.

10.5 Recommendations

The following recommendations are made to put the Emfuleni economy on a firm road towards sustainability:

With the support of the Sedibeng District Municipality, Emfuleni Local Municipality, together with the local business sector, should establish a vibrant local development agency to foster LED in the area. This

agency should seek support from provincial and national government as well as the private sector to bring the Inland Waterfront project and the stimulation of the manufacturing sector towards an implementation phase.

- Emfuleni Local Municipality should formulate a proper marketing strategy. This strategy should focus on the tourism and entertainment sector (with the highest employment multipliers) as well as the manufacturing sector (with a well developed infrastructure and ample idle capacity).
- A skills audit should be conducted among the unemployed to determine the level of skills and further training needs.
- An in-depth investigation should be conducted into the production of downstream steel products, making use of the unemployed pool of labour with steel-related skills. The formation and establishment of steel manufacturing co-operatives that will absorb the unemployed poor with steel-related skills should form part of the investigation.
- An in-depth investigation should be conducted into the formation of cooperatives related to the skills of the unemployed poor, for example agricultural co-operatives, clothing manufacturing co-operatives and catering co-operatives. The aim should be to absorb the unemployed into production activities related to their skills. With reference to agriculture, the possibility to develop labour intensive agricultural units in the vicinity of the townships needs to be investigated.
- An in-depth investigation should be conducted into an Inward Industrialisation Process (IIP), where a range of products which are consumed in local communities can be produced locally with labour intensive methods. The formation of co-operatives that will absorb part of the unemployed poor should form part of this investigation.