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The Significance of Physical Infrastructure in Economic Growth: Maputo Development Corridor

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BSc Honours in Urban and Regional Planning

2014

The Significance of Physical Infrastructure in Economic Growth: Maputo Development Corridor

By

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Submitted in partial fulfilment for the degree of Bachelor of Science with Honours in Urban and Regional Planning in the School of Architecture and Planning, Faculty of Engineering and the Built Environment at the University of the Witwatersrand, Johannesburg.

DECLARATION

I declare that unless otherwise indicated in the text, this research report is my own unaided work, and has not been submitted before for any degree or examination to any other university.

……..

Lesego Letsile

22 October 2014

To my family and friends

ACKNOWLEDGEMENTS

I would first like to thank God almighty for giving me the strength and perseverance to complete this document. I would also like to thank my mother, Rose Kgomotso Letsile, for her constant support and being a blessing in my life. I would also like to thank my family and friends for their support.

I also wish to thank my supervisor, Professor Alison Todes, for her guidance and patience throughout the year. Professor Todes has encouraged me during the most difficult times and her insightful comments have contributed to my ability to enhance the quality of my research.

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List of acronyms and abbreviations

BIP	Beluluane Industrial Park
BOT	Built Operate Transfer
CPI	The Investment Promotion Centre
ECA	The United Nations Economic Commission for Africa
FDI	Foreign Direct Investment
FIFA	Fédération Internationale de Football Association
GDP	Gross Domestic Product
GPI	Gross Performance Index
GVA	Gross Value Added
HDI	Human Development Index
IDC	Industrial Development Corporation
LED	Local Economic Development
LFR	Less Favourable Regions
MDC	Maputo Development Corridor
MDHC	Merseyside Docks and Harbour
NGO	Non-Government Organisation
PPP	Public-Private Partnership
SADC	Southern African Development Community
SDI	Spatial Development Initiative
SMME	Small Medium and Micro Enterprise
Statssa	Statistics South Africa

Chapter 1: Introduction

1.1. Introduction

The relationship between infrastructure and economic growth has been complex to define in space, especially in South Africa due to the country's troubled past (Perkins, 2006). Infrastructure development has been recognised as a tool for increasing national economic growth and ensuring that the country is able to compete with international growth trends. South Africa's growth trend has been heavily affected by the country's history, especially in the distribution of infrastructure and the selection of areas that required investment (Perkins, 2006). Apartheid has influenced the manner in which development has occurred in the country, most former settlements are still poverty-stricken and have limited infrastructure to act as growth attraction sites(Perkins, 2006).. The South African government had introduced infrastructure projects which would assist in rebuilding South Africa and increasing growth in more remote areas, especially after the end of apartheid.

The Maputo Development Corridor (MDC) was one of the projects initiated by the government to increase activity on the N4 from Gauteng to Maputo port (De Beer et al, 2001). The project was part of the Spatial Development initiative (SDIs) programme which was aimed at developing areas that had been previously ignored by the state (De Beer et al, 2001). The MDC is one of the successful projects that was implemented through the SDI programme and was involved in the rehabilitation and provision of transport infrastructure (Jourdan, 1998). This research investigates the existence of the relationship between infrastructure and economic growth along the MDC. Economic growth through transport infrastructure has been ambiguous and the relationship is not often clear, but there has been evidence from various literatures that indicates that the two are connected (Lakshmanan, 2010). The MDC has indicated a positive relationship between infrastructure and economic growth, the research aims to investigate the extent of the impact of growth in selected municipalities along the corridor (Perkins, 2006 and De Beer et al, 2001).

There has been an interest by government to invest in infrastructure in order to develop the country further and it assumes that this will increase economic growth. The Gauteng Department of Infrastructure and Development has aimed to increase infrastructure through the province in order to ensure that the foundations for growth are set. During the 2014 budget speech, the former Minister of Treasury announced that the government would be spending R143.8 billion on municipal infrastructure alone (Gauteng infrastructure, 2013). It

is clear that the state recognises infrastructure as an important element of growth and through its investment national economic growth can be easily achieved. The research focuses on exploring the relationship between infrastructure and economic growth along the Maputo Development Corridor, it aims to look at the growth trends from 1996 to 2011 in order to understand the relationship in this context (Gauteng infrastructure, 2013). Through this investigation, the results will show the growth of local municipal economies compared to that of national trends in order to see the difference in growth (Gauteng infrastructure, 2013). The research will first analyse the literature on the relationship between infrastructure and economic growth, it will secondly investigate the MDC and finally analyse the statistical data that indicates growth within the chosen context.

1.2. Context

The MDC travels from the metropolitan cities of Johannesburg and Pretoria in South Africa to the Maputo port in Mozambique. Figure 1.1 indicates the cities and towns that the route travels through. The research focuses on four specific municipalities. These are Mbombela local municipality, Emalahleni local municipality, Steve Tshwete local municipality and Emakhazeni local municipality[1].

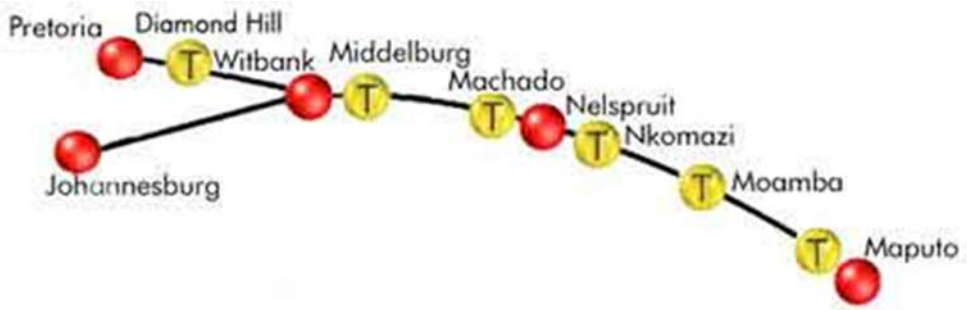


Figure 1.2.1.: The cities along Maputo Development Corridor

The research aims to investigate the impact of infrastructure on regional and national growth. It also aims to understand the social impact that the Maputo Development Corridor has had in terms of employment and standard of living in the chosen municipalities. The corridor has been known for being one of government's largest infrastructure projects, its impact on the economy is important to explore in order to determine whether the relationship between

[1] There are three district municipalities in Mpumalanga province namely, Nkangala, Ehlanzeni and Gert Sibande district municipalities. Emakhazeni, Emalahleni and Steve Tshwete local municipalities fall under Nkangala district municipality and Mbombela falls under Ehlanzeni local municipality.

infrastructure and economic growth is positive (De Beer et al, 2001). The Gauteng Department of Infrastructure Development's main vision is "to facilitate service delivery through the development, construction, and management of public infrastructure to optimize the creation of decent jobs and improve the quality of life for all" (Gauteng infrastructure, 2013). This vision assumes that the provision of infrastructure will provide jobs thereafter grow the economy. There has been a national infrastructure plan that has been influenced by the National Development Plan that has been intended to transform the economic landscape of South Africa through infrastructure investment (Government South Africa, 2014). The conception of these different policies and visions indicate that there is an assumption of a positive relationship, my research aims to understand how regional economic growth is affected.

1.3. The effects of infrastructure in economic growth

Infrastructure has direct and indirect impacts on the economy and on the society. It is indirect due to the increase of the marginal productivity of capital (Perkins, 2006). This means the capital's productivity level increases in a particular timeframe. The effects of infrastructure are not easily measured due to the long run effect of instant output (Perkins, 2006). Firms and household are dependent on infrastructure both in the long and short term. Urban environments in this day and age have learned to rely on infrastructure in order to carry out activities and ensure that profit margins for both public and private enterprises are maximised (Ennis 2003). The quality of infrastructure provided also plays a fundamental role in establishing the pace and output of production. This means the less constraints firms and households have to face the better for the economy. The more the country develops the more the needs of these two entities evolve, hence the constant need for infrastructure maintenance (Perkins, 2003). Urban areas are highly dependent on the preservation of infrastructure due to the constant use of infrastructure services. It influences the type of investments that firms often decide on, it is crucial for infrastructure to be accessible within all parts of the living environments in order for firms and household to capitalize on its use (Ennis, 2003 and Snieska and Simkunaite, 2009)

Government has acknowledged the importance of infrastructure in development. With good infrastructure, the state does not only improve economic growth, it also encourages a more robust and competitive economy which introduces the potential to trade at a larger scale (Ennis, 2003). The improvements of economic variables such as those that are included in infrastructure development promote investment which ultimately increases productivity. In

South Africa, the current government (1994- present) has grappled with the uneven distribution of infrastructure which was imprinted by the apartheid regime Snieska and Simkunaite, 2009). Governments throughout the world aim to strengthen their economies through various infrastructure programmes, they often do so to ensure the market economy absorbs and supports households and firms (Ennis, 2003). The impacts of infrastructure investment often take time to manifest, but their impact in society has positive effects when they are utilised properly (Perkins, 2006). The government has however optimised on its options by privatizing some elements of infrastructure such as road and transport in order to increase economic activity. Improvement in infrastructure acts as a basic need for economic growth due to their robust nature which is often the basis for development (Perkins, 2003 and Ennis 2003).

Infrastructure is an important element for the urban environment because it promotes efficient and effective functioning of the areas that depend on the adequacy of infrastructure to further grow developments (Ghosh and De, 1998). Growth in an economy needs to be sustained and increased further to ensure that the society is well taken care of. Infrastructure does not only do that but " [it] also raises the productivity of other factors of production (labour and other capital) and profitability of the producing units thereby permitting higher levels of output, income and/or employment" (Ghosh and De, 1998: 3039). The positive effects of infrastructure attract investments which in turn increase employment, output and raise general income. It primarily exists to ensure that human actions are carried out efficiently (Ennis, 2003). Growth in countries influences the wealth of that country, with great investment in infrastructure there is great potential for the country's wealth to grow (Snieska and Simkunaite, 2009).

1.4. Problem statement

The government has invested a great deal of money in infrastructure in attempts to develop the country even further. Regional economic growth and social development have been key outcomes that the state has hoped for in this investment. The Maputo Development Corridor has been one of South Africa's highest projects with a total of US$250 million invested in the development.

1.5. Research question

Has infrastructure in the Maputo Development Corridor been associated with economic growth?

1.5.1. Research sub-questions

- How has economic growth and employment improved in the municipalities along the corridor since the commencement of the project?
- How have the municipalities performed relative to the national economy?
- How has the quality of life improved along the corridor?

1.6. Methodology

The research aims to understand the relationship between infrastructure and economic growth, it also aims to understand the social impact of this relationship and investigate whether a relationship exists and if so, research the extent of the relationship. The investigation will mainly utilize primary sources which will be attained from Quantec Easydata® and Statistics South Africa (Statssa). The research will be investigating four municipalities which are Mbombela local municipality, Emalahleni local municipality, and Steve Tshwete local municipality and Emakhazeni local municipality. The research has identified the significance of the MDC in Mpumalanga province, the four municipalities are along the four and there have the most diverse economies in the province.

1.6.1. Economic indicators

1.6.1.1. Employment

The employment rate indicates the percentage of people employed in the economically active members of the population (Meintjes, 2001). The research investigates employment within the four municipalities in comparison with national statistics.

1.6.1.2. Gross value added (GVA)

GVA is a measure of output in an economy. " ..a measure of the value of goods and services in an economy, produced in an area, industry or section in an economy" (Aelodau, 2007:1) In this research GVA measures the patterns of GVA in the selected municipalities, this will determine if the municipalities output has increased over the years. GVA is measured between 1996 and 2011 and its growth rate is monitored to study the change over time (Meintjes, 2001).

1.6.1.3. Growth performance index (GPI):

Growth performance index is a measure of growth in a certain sector or in a particular economy relative to the growth attained in the same sector in the aggregate economy (Meintjes, 2001). The research compares growth in specific municipalities to those of the

national figures. The comparison will assist in comparing the municipalities' trends to those of national figures (Meintjes, 2001).

1.6.1.4. Annual average growth rate

The average annual growth rate measures the difference in growth rate between years. In this research it will be looking at the growth rate in total formal and informal employment and total GVA (Meintjes, 2001). This assist the research as it allows me to track the growth rate of the chosen locations. The research focuses on statistics from 1996 to 2011, the annual growth rate will be measured within these years (Meintjes, 2001).

1.6.2 Social indicators

1.6.2.1. Human development index

This indicator is a measurement of how communities live and quantifies the growth and development of that specific area. HDI measures life expectancy, literacy and income which determine people's ability to live a long prosperous healthy life (UNDP,2013). The measurement also quantifies people's ability to participate in community life. The HDI can assume a maximum value of 1, indicating a high level of human development, and a minimum value of 0 indicating the opposite. The HDI however is limiting because it is developed for provincial and national data (UNDP,2013). The research also considers HDI for the district municipalities that are encompass the municipalities concerned.

1.6.2.2. Household income and Disposable income

Household and disposable income assists in determining the regions that have a higher expenditure. The households are viewed individually in a specific region (Quantec, 2014).

1.7. Chapter outline

1.7.1. Chapter 2

This chapter analysis the relationship between infrastructure and economic growth in the literature. It studies and analysis this literature in various country's (mainly China and India) to investigate the impact of the relationship and whether the literature supports the statement that there is a relationship between infrastructure and economic growth.

1.7.2. Chapter 3

This chapter studies the Maputo development Corridor (MDC), it studies its origin, projects, purpose and operation. The study of the MDC assists in determining whether the investment in infrastructure has increased growth in the chosen municipalities. The project has been one

of South Africa's most successful infrastructure projects, the aim is to establish whether the project has made a change in the communities surrounding it.

1.7.3. Chapter 4

This chapter profiles the chosen municipalities by considering the status quo of the economy and challenges that the municipalities have.

1.7.3. Chapter 5

The chapter investigate the economy of the chosen municipalities by considering the various indicators mentioned above. The chapter aims to answer the research question by comparing the economy of the chosen municipalities to each other and the national trends. The chapter gives an insight in the type of change that has occurred since 1996

1.7.4. Chapter 6

The chapter analysis the information attained from chapter 5 and attempt to give reasons for the different trends found in that chapter. The chapter aims to amalgamate the theory discovered from the earlier chapters with the results from the previous chapter. The analysis will assist in articulating the development trends of the municipalities and support or reject the assumption that infrastructure promotes economic growth.

1.7.5. Chapter 7

This chapter concludes the research and summarises the information within the research. Its main purpose is to identify whether the MDC has an effect in economic growth in the selected municipalities.

Chapter 2: The relationship between infrastructure and growth

2.1. Introduction

There have been many debates on the significance of infrastructure in regional and national economic growth. The impact of this relationship is fundamental to understand as many governments around the world utilise this assumption to invest in infrastructure in attempts to increase economic growth (Lall,1999). It has not been clear what the relationship is and how the economy benefits from the investment. This section looks at the significance of transport infrastructure in national growth and some in regional growth. The report will first identify the relationship between infrastructure and economic growth in both the regional and national realms. It will then look at the impact of this relationship in other countries specifically China and India, it will then discuss the impact of the relationship in South Africa and lastly outline the critiques offered by various theorists. The aim of this section is to explore the impact of the relationship in different contexts.

2.2. The role of infrastructure in economic growth

The role of infrastructure in national statistics is not easily defined, according to Banister and Berechman (2001) it is easier to measure infrastructure in regions than national because growth trends are easier to evaluate in a national scale. Some theorists believe that it is much easier to measure the effects of growth in regional economy than national (Evans and Rauch, 1999). There might be different views on which is difficult to analyse, but they agree that it is not easy to determine to measure economic growth. The government has to decide on the strategies they wish to apply in order for the economy to grow. National economic growth, primarily in infrastructure, has to take into account the accessibility and reliability of infrastructure and ensure that it can maintain various economic activities (Asiedu, 2002). In National economic growth the state has to form partnerships which will grow the country further, this often happens when the state partners with the private sector.

Foreign direct investment (FDI) occurs in areas with the greatest potential. There are four factors that the countries have to consider when attempting to attract FDI. Firstly, the host country has to ensure that there is a higher return of capital. Investors prefer to invest in countries that offer the greatest returns, the larger the return of the capita, the greater the chance for more investment (Asiedu, 2002). Secondly, the level of infrastructure has to support various kinds of business associated with the type of FDI the host country is attempting to attract. Thirdly, the host country has to be transparent, policies and plans for future growth have to be available for interested parties, the level of transparency allows

companies to plan ahead. Lastly, political risk may determine the extent of investment in that particular country (Asiedu, 2002). There are two factors that determine investment in a politically insecure economy. The probability of change of the ruling government and political violence, the latter has varied results depending on the extent of the violence (Asiedu, 2002). The state has to consider the various factors and decide the extent of the effectiveness of these factors.

The growth of regional economies is supported by a number of businesses located in that particular region. The responsibility of Infrastructure in regions depends on many factors, which enable the regions to connect with the surrounding neighbourhoods. The role of infrastructure in regional development can be seen through firms and households, this is because they are the two most basic users of infrastructure. Infrastructure is significant in growth because it acts as a direct and indirect factor to production (Perkins, 2005). In regional economics, infrastructure provides local firms with the necessary equipment to maximise profits efficiently (Lall, 1999). Regional growth has had a dynamic nature over the years, through regional planning there has been an emphasis on strategic geographically focused investment, where there has been an emphasis on certain policies to ensure that industries are able to locate in specific areas without much constraints from the infrastructural side of business (Lall, 1999). This means governments have been making areas more attractive for investment. This has a direct impact on the cost of production, the more infrastructure available the easier and more affordable transport is to the user. The cost is not the only significant contribution infrastructure has on the economy. The efficient use of infrastructure can assist the state and the private sector to increase its production rate by offering convenient alternatives to production (Lall, 1999).

There are various debates on the validity of the relationship between infrastructure and economic growth. According to Banister and Berechman (2001) there has been extensive research on the relationship between the two variables. Some authors, politicians, lobbyists, and promoters believe that the increase in infrastructure leads to immense growth in the long run, while others believe that the effects are not as significant and that the assumption is propaganda spread to lure investors (EFN, 2000). There are three conditions that Banister and Barechman (2001) set out in order for the relationship to be successful. These are economic externalities, investment factors and political factors. The first condition looks at positive externalities that support the function and strength of economic infrastructure. The externalities encourage a high quality labour force and encourage new businesses to develop

in that particular investment (Ennis, 2003). The second condition focuses on the financial capabilities that investors possess. The amount they are willing to invest determines the extent of their investment and its location as well as the network effects. The third condition considers political, policy and institutional organisations. The political realm has to ensure that decisions taken are beneficial for the growth of the economy (Banister and Berechman, 2001).

The three conditions set out enable the success of the relationship and creates investment attraction factors. When one or two of these conditions are not present the relationship often struggles to progress. The conditions set out influence the amount of time it takes for goods and people to move from one place to another (Banister and Berechman, 2001).. The reduction of time through the efficient provision of infrastructure also has a direct effect on the cost of transportation, the reduction of time lowers the cost and influences more actors into economic activity. The more efficient the infrastructure the lower the cost of overall transport (Banister and Berechman, 2001). This is not the only positive effect on the relationship, infrastructure investment also increases favourable results by raising the image of an area, and this further attracts investment and increases the potential for increasing growth and employment (Lall, 1999). Through investment an area is able to define its own characteristics and attract the kind of economy it had considered. Increase in productivity, technological substitution and regional production can lessen the cost of transportation. The lesser the cost of transportation the higher the rate of distribution and the greater the potential for growth in that particular area. The less time it takes for products to move from one area to another influences the rate of production due to increased distribution, while increasing growth through employment and influencing competition between the connected areas(Ennis, 2003). The literature argues that infrastructure might results in uneven development where one area benefits more from the infrastructure development depending on the type on investment (Banister and Berechman, 2001). This means that the area with more sophisticated investment has a higher opportunity of growing than its competitor. The three conditions mentioned at the beginning will also influence the development of that region depending on the effectiveness of the conditions (Banister and Berechman, 2001).

Infrastructure development influences the conception and expansion of new localities, this is seen through the establishment of new settlements, the expansion of various economic activities within different regions and mass production and consumption (Lakshmanan, 2011). The investment and growth of an area influences a region to be more specialised in

certain activities where economies of scale are prominent (Banister and Berechman, 2001). When the relationship is prominent there might be a rise in capital markets and financial capabilities. The location of the relationship is important for the benefits to transpire (Lakshmanan, 2011). Growth is influenced by the extent of accessibility an area allows to its surrounding locations. When a location is accessible and has functioning infrastructure it allows potential agglomeration economies and becomes more attractive for externatl investments from surrounding areas. The increase in growth in that area influences mass production and consumption which can lead to an increase in the sales of the products sold (Lakshmanan, 2011). Competition and the rise of new technologies become prominent in that area as well. The relationship between the two entities allows all these benefits to transpire in theoretical basis. Transport infrastructure can act as a basis point for all the benefits mentioned and impact regional as well as national growth at a larger scale (Munnell, 1992).

Transport infrastructure allows a region to increase its activities with its surroundings. To ensure that there is sustainable growth, stake holders in infrastructure projects have to ensure that there are solid conditions that allow them to continue and grow the area chosen for development. To ensure that the long-term effects are present, there has to be policies in place that stakeholder adhere to in order to increase the life of the implemented projects (Banister and Berechman, 2001).The different stakeholders have to acknowledge their different roles in the success of infrastructure and ensure that I is sustainable. For economic growth to transpire there has to be different key players that are willing to ensure that the maintenance of transport infrastructure occurs and that it functions properly. It is never straight forward which activities different stakeholders need to uphold in order for the project to succeed, but the use of policy provides direction for these activities (Banister and Berechman, 2001). There has to a level of transparency which will allow the state or concerned parties to hold each other accountable for the different requirements in the development of infrastructure projects. Investment in infrastructure has to be more than monetary value, but time has to be invested as well in order to ensure that the envisioned projects are seen through effectively (Munnell, 1992).

Infrastructure investment differs in many regions of the world. Developed and developing countries differ in the type of infrastructure placed in an area. Developing countries often use infrastructure to increase development and economic growth simultaneously. National, regional and local development differs evidently in their scale and objectives. In national terms the state invests to increase competition with other countries and take part in global

markets. In regional investment, competition lies inter-regionally (Banister and Berechman, 2001). Transport infrastructure offers links and networks making it easier for new developments along those ways to transpire. Transport infrastructure has the ability to influence the formation of new nodes while increasing economic activities along routes. Transport infrastructure provides an opportunity for regions to grow their economies by providing services which would assist in achieving that goal. Trade barriers have to be reduced through efficient regulation of transportation, such as road maintenance, in order to increase movement. Control systems also have to be considered in order to create efficient ways of movement and allow the flow of information without difficulty (Banister and Berechman, 2001). Road technology such as surveillance and traffic lights give investors some form of certainty because they can be able to track their goods. It is often difficult to implement these services in remote areas because areas where infrastructure has to be implemented are often compromised (Ennis, 2003). For example, surveillance cannot be placed in an open area or fences because there do not have enough energy to support them or they can be vulnerable to theft.

Infrastructure programs are easier to measure regionally because they are more specified and concentrated, making it easier to measure. New activities are able to transpire when there is much more access in regions (Munnell, 1992). Investors are reluctant to invest in areas that have poor services and regions where the government is not accountable for state economic infrastructure. Local businesses have to dominate in order to increase local economies and allow actors to suggest more growth in lagging local areas (Stead, 2001). Accessible areas allow investment opportunities at a higher level that will support the growth. Access allows regions to attract both national and international investment that will further encourage growth while increasing local economic development.

It is important to consider infrastructure development at a local scale as it offers precise indication of the level of contribution the investment has on an area. Local analysis offers information on which projects increase Gross Domestic Products (GDP) and which produce lower effects (Banister and Berechman, 2001). Transport infrastructure at local scale can offer interested parties the general rate of returns which have greater impact on the increase in economic growth. For economic growth to emerge effectively, there has to be a consideration of networks which will allow increased accessibility for other businesses to locate (Banister and Berechman, 2001). Single projects do not necessarily grow the economy directly, there has to be a solid network relationship between surrounding areas. A clear set of

objectives have to be given out in order to increase and strengthen development. Transport infrastructure offers a locality various opportunities to grow, in order for this to flourish there have to be conditions and objectives that are set out to increase the impact of the investment. Localities however have to be careful of the kind of firms that locate in order to protect their regions (Ennis, 2003). Firms that release toxins for example degrade the area while attracting more businesses of its kind. This decreases the state of the environment of that area and increases the chances for disease and unhealthy conditions for its workers. In the long run the locale loses benefits and this has effects on economic growth (Banister and Berechman, 2001). Localities have to outline their strengths and invest their time in ensuring that the positive attributes found will able to increase economic activity for a longer period.

The efficient use of transport infrastructure creates demand, which influences economic growth (Banister and Berechman, 2001). Travel time is reduced in three ways, through volume distance and efficiency. These three methods assist with the future of infrastructure development. The efficient use of infrastructure allows the business sector to increase its volume because there is an opportunity for more goods, services and humans to be transported, which assists with the long-term transportation of these entities at a wider scale. The primary benefits to transport infrastructure reduction of travel time and the reduction of costs associated with dreadful infrastructure (Munnell, 1992). The efficient implementation of transport infrastructure increases the rate of production and moving goods, this has positive effects on the economy by increasing employment while increasing consumption (Perkins, 2006 and Banister and Berechman, 2001). Transport infrastructure also influences the spatial distribution of goods and services, this enables society to gain opportunities for new innovative technologies to raise economic growth. Communities are able to experience and invest in transport network economies which enable the firms to encompass various options in their pursuit of profit maximisation (Munnell, 1992).

Transport infrastructure has the ability to influence the economic success or failure of a region. As mentioned above, through transport infrastructure the amount of time saved from getting from one place to another can affect the rate of production of that particular region and influence its competitiveness in local and world markets (Mathe, 2009). “Infrastructure supports growth primarily by lowering the cost of production and transactions, thus enabling those who participate in the economy to produce, trade, invest, do business or simply reside where affordable infrastructure is available in the right mix” (DBSA, 1998:34). The change in infrastructure connects different regions together in order to increase the amount of output

in an area. The increase in the different types of production enables an increase in accessibility allowing an opportunity for neighbouring settlements to expand their markets as well (Lackshmanan, 2011). Different localities are able to expand in this regard because various economies in different locations can amalgamation and increase economic growth. This encourages the diversification of economies enabling the national economy to be robust against global financial meltdowns (Lackshmanan, 2011).

Theorists have attempted to find a direct link between infrastructure investment and economic growth. The literature however has proven that the investment in infrastructure can be seen in the long run. Investment is shown through the different increases of economic factors and cannot be recognised immediately. Various states around the world have recognised the importance of infrastructure development and have raised their public expenditure through the notion of infrastructure related growth (Devarajan, 1996). Countries have also recognised that the growth in infrastructure improves labour supply, which refurnishes skills and improves the quality of products produced in the long run. The development of infrastructure assists with growth in both national and regional dimensions, the increase of regional growth has a direct effect on the growth of the national economy. Regions often concentrate their resources by placing their main resources on display, by doing so they increase the potential for investment because they display their strongest resource. Regions have an opportunity to specialize and define their economies through their products and the increase in efficient transport use motivates economic growth even further. The restructuring of the economy offers the opportunity for innovative measures which can lower the cost of production and increasing output (Lackshmanan, 2011). Innovative measure, especially in transportation, allows regions and countries to increase their revenue while transporting goods and services efficiently.

The government is the largest infrastructure supplier in society, firms and households take part in the final consumption and are the core factors responsible for identifying growth in infrastructure. The process of implementing infrastructure also has a positive effect on the economy (Munnell, 1992).. The construction phase also provides a significant stimulus to the growth of the economy especially in the construction sector (Snieska and Simkunaite, 2009). The implementation offers beneficial factors to the areas invested in. The focus and growth of regions also allows resource rich regions to compete by increasing the potential for imports, They also give a region an opportunity to specialize in a specific resource. Countries all over the world have found one resource to grow their economies for example Johannesburg grew

from its trade from gold, some countries have found more than one resource or skill that has grown their brands while others rely on their comparative advantage to grow their economies (Perkins, 2001). Transport in this instance has played a significant part in the growth of regions, the ability to move products from one place to another efficiently encourages the development of new businesses. Efficient use of infrastructure creates trust from interested parties (Devarajan et al, 1996).

Regions do not develop in the same rate, they often develop at different paces while others do not develop at all. There are three titles which can define the economic status of an area, an area can be lagging (economically insecure), intermediate (on the middle ground) or leading (economically prosperous) (Lall, 1999).Lagging regions are a priority for the state and they often have higher dependency rates which is a negative effect on the state, because the dependencies of these regions decrease economic performance in the country. Infrastructure development offers these dependants an opportunity to grow their economies and sustain the growth without government support (Ennis, 2003). This means that a region (primarily business) can implement its own projects more rapidly because it has the resources to do so without state intervention. A regions success increases the extent of demand from outside regions, which increases production further and grows the economy simultaneously (Munnell, 1992). The ability of transport to increase accessibility converges time, this means that there is more time to increase economic activity thus influencing activity, which has the potential to increase economic growth in the long run (Banister and Berechman, 2001). The effects of economic growth are seen in the Gross Domestic Product (GDP)[2].

Countries around the world realise the importance of transport infrastructure in daily production. There have been various approaches concerning economic growth with interest in the development of new and effective infrastructure methods to reduce costs. Studies around the world have not discussed the power of transportation in economic growth effectively; the use of infrastructure has provided alternative approaches to transport goods and has led to an increase in development opportunities (Bougheas et al, 2000). There is a strong belief in development related policies that identify that the introduction of infrastructure influences the location of businesses, thus the strong interest by various regions. This later result in the attraction of investment capital which regions often benefit from and local businesses can strengthen their revenue through the introduction of new firms (Lall, 2001 and Stead, 2000).

[2] Economists often measure in order to track growth in a country (Bougheas et al, 2000).

There is a rise in competition which decreases costs and enables the conception of new firms. The long term effects of competition allow private and public enterprise to further grow by making long term contributions to the development of the region. The more the region develops, the higher the increase of income in that area, which further attracts investors and increases the standard of living in that particular area (Bougheas et al, 2000).

2.3. The impact of infrastructure in economic growth in India, China and South Africa

Different countries have realised the importance of infrastructure investment, there have been various approaches by different states in the attempt to increase regional competitiveness, and one of the prominent countries has been India (Bougheas et al, 2000). Development plans in India have been specialised and targeted to improve the lives of the country's poor. The country has prioritised the development of regions and placed it as a national priority. India is not Stagnant with regards to development trends throughout the country. The country differs in demography, geography and economic attributes (Lall, 1999). Third world countries often have uneven development patterns where one city supports most of the economic activity while the others experience dire poverty. These patterns lead to overpopulation which can degrade the city if the state does not intervene. In South Africa for instance the most populated province is Gauteng due to its production rate (Statssa, 2013). The introduction of adequate transport systems can decrease the effects of overpopulation in leading regions. The Indian government has vowed to decrease regional disparities by investing in infrastructure especially in less favoured regions (LFRs). The Indian government has realised the importance of social infrastructure before the implementation of economic infrastructure. The lagging areas were given both economic and social infrastructure to increase competition. Lagging areas cannot flourish economically if they do not have the proper social infrastructure because it is able to generate skills e.g. through schools and keep people healthy to work though hospitals and local clinics (Lall, 1999). Leading areas are able to increase economic activity through the investment of economic infrastructure alone. In India they have established that the success of economic growth lies in the relationship between different types of infrastructure. For example, when people have good health and are educated they can be able to maintain the positive effects of economic infrastructure (Lall, 1999). India has diverse geographic economic and developmental characteristics due to the

magnitude of the country. The image below is a depiction of the various states and their powers as shown by Lall (1999).

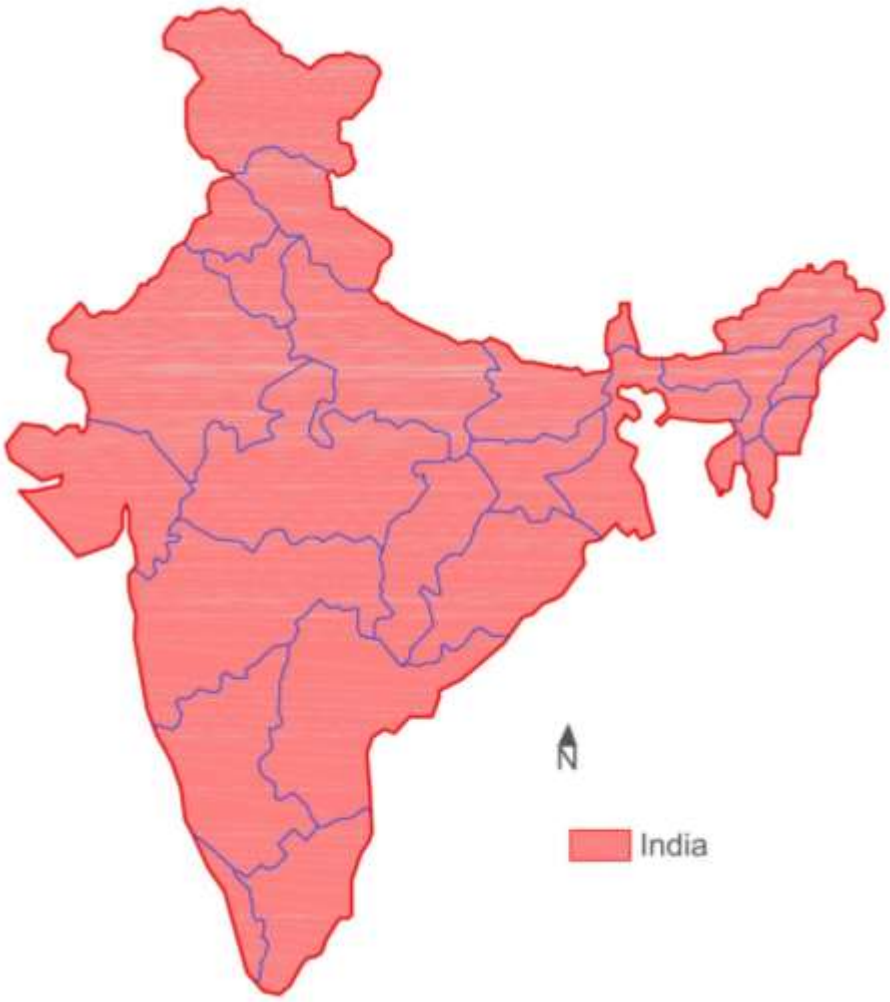


Figure 2.3.1. Map of India

Development in lagging and leading areas differs in the sense that conditions for economic growth differ because of disparities. As mentioned above, lagging states require a mixture of both economic and social infrastructure in order to have economic growth (Mathe, 2009). This leads to the conclusion that transport infrastructure cannot function alone to bring forth economic growth, there has to be supporting factors to ensure that the infrastructure provided sustains itself. The South African economy has had limitations concerning economic growth due to the country's apartheid history (Perkins, 2005). The different capabilities amongst regions have pressured the government to produce new notions of development. Evidence from the South African economy has proved that there is a significant relationship between

infrastructure and economic growth (Mathe, 2009). The marginal product of capital has risen due to the investment in infrastructure through the years, this has been due to the increased intensity by the state to even development in different areas in the country (Perkins, 2005). Output has also increased since other regions have been able to grow through the new government policies. South Africa is similar to India in terms of geographic disparities in economic growth. The two countries have struggled with alleviating poverty and maintaining economic growth in various lagging areas in the country. Through transport investment the two countries have been able to open access to the peripheries thus allowing the flow of goods and services (Perkins, 2006).

China is one of the countries that have flourished from the rapid investment in infrastructure investment. The Chinese government has prioritised transport infrastructure which includes roads, railways, airports, waterways and ports. The entire infrastructure is regulated, owned and financed by the state (Yu et al, 2012). There has been uneven development in Chinese regions due to bias development policies set by the central government (Yu et al, 2012). China is divided into three regions namely, the Eastern region, the Central region and the Western region. The map below depicts the three Chinese regions:

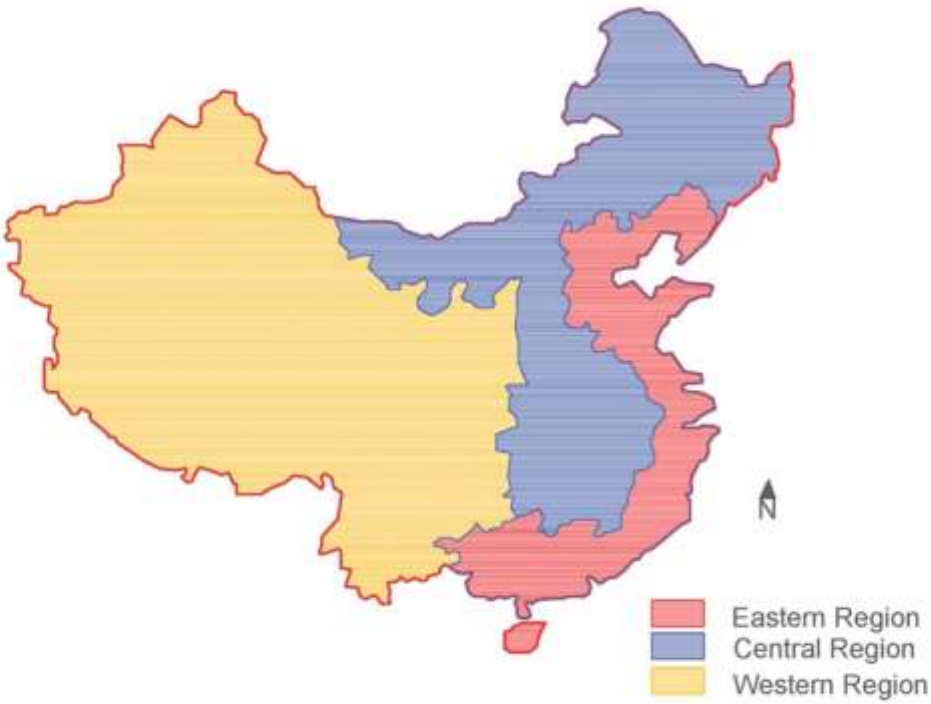


Figure 2.3.2: Regions in China

These regions all have nine provinces and are part of the central government's authority; they vary in geography, society and the economy (Yu et al, 2012). The Eastern region has the most prominent economy due to the clustering of economic activities, this is also due to the accessibility offered by transport infrastructure. The Eastern region has an advantage concerning its location, the region is located near the coastal region which allows for international trade (Demurger, 2000). The society is well educated and is technologically advanced. Because there have been biased development policies enforced by the central government, the predominant number of resources and capital have flowed in this region (Yu et al, 2012). Development occurs more effectively because there are a higher percentage of skilled workers (Yu et al, 2012). The Western region is the exact opposite of the Eastern region, there are intolerant climate conditions e.g. drought and mountainous areas which hinder development. The people who occupy that area are minorities such as the Tibetans and the Xingjiang, which often rebel against the central authority. The economy in this region is in the worst condition in the country, there has been low flow of income and capital which has led to the underdevelopment of some areas within the region (Demurger, 2000). The Central region is slightly pleasanter than the Western region, it's located between the two

regions and reaps some of the rewards of the Eastern region (Yu et al, 2012). The region is populated and houses a predominant number of those working in the Eastern region and carries moderate levels of the population. Economic growth in the area has been slow and has not supplied the demand.

The Chinese government had decided to improve their transport infrastructure in order to attract Foreign Direct Investment (FDI) and increase economic activity (Demurger, 2000). The investment was one of the driving forces for various potential investors and that caused China to increase their stake in freight density and passenger density. Over RMB 11 billion was invested in the development of transport infrastructure, primarily in the Eastern region (Yu et al, 2012). China's transport infrastructure performed very well due to the high investment and has increased its interest in investing throughout the country. The investment however has not solved some of China's problems. The Eastern region is still congested and the infrastructure cannot respond to the day-to-day demand of passengers and operations (Yu et al, 2012). Transport infrastructure cannot maintain the growing demand from the rapidly growing economy, this results in more congested areas that negatively affect to the distribution rate. The Eastern region does not have enough space to implement new transport structures to decrease congestion. The Central government has decided to shift investment to the Central and Western region in order reduce concentration in the city and grow the areas economically (Demurger, 2000).

Transport infrastructure has played a significant role in the economic growth of China. The Chinese have witnessed an increase in the economy since the reform of the 1960s which capitalised on land and resources. The central government has been responsible for developmental policies and has advocated for the growth through socialist policies (Yu et al, 2012). The growth of the Eastern region has attracted higher populations which reside there resulting in better skills quality. The Western region has recently embarked on a programme called the 'Western Development strategy' which aims to increase economic activity in the region. The strategy was introduced in 1998, and has been producing promising results (Yu et al, 2012). The low development areas in the Western region have performed poorly in producing output and have become a burden to the Chinese state. The central government decided to embark on a transport development chain which would assist the Western region to increase economic activity (Demurger, 2000). In order to increase investment attraction the Chinese government explored the possibilities of heavy infrastructure development which

would promote economic development in the long run (Yu et al, 2012). Transport investment has not proven to be a success yet due to the lower densities of the Western region.

The success of the Eastern region has the highest transport investment in China, it accounts for 50% of the total investment in the country and accounts for 57.7 % of the total infrastructure investment in 2009 (Yu et al, 2012). The infrastructure development in the Eastern region did not influence the growth of the other two regions, there had been a slow output especially in the Western region due to political reasons until the conception of the new Western region development strategy. The strategy has not yielded significant output as the Chinese government had hoped. According to Yu et al (2012) the Western region's growth rate was 11.42 % which was almost half the annual GDP growth the government had expected. The Western region has experienced lower quality of transport infrastructure which also contributed to the low rate of output in the region (Demurger, 2000). The central government attempted to reduce these effects by investing in higher quality infrastructure, but the outcome was not as effective because there has been low investment in education and technology which have led to lower utilisation of transport infrastructure. Regional disparity in China has not assisted the growth of the economy, but the infrastructure investment policies have assisted in the constantly growing economy of the country (Yu et al, 2012).

Other countries can learn from the Chinese government effective use of transport infrastructure to drive economic growth (Demurger, 2000). The country has experienced similar problems as those in South Africa, this is with regards to regional disparity (Perkins, 2001). Regional disparity has been a problem for China since reform. It has concentrated growth in one area and neglected most of the Western region, but this was caused by bias policies. Although the Western region has not grown as significantly as the central government has hoped, the infrastructure development has raised economic growth in the region (De Coning, 1999). The Eastern region has benefited from the infrastructure investment, but if China builds more it will experience marginal decrease in infrastructure. There have been predictions that the success of the Eastern region will spill over to the Central region and increase the economic activity there. Since the Central region is an intermediate between the Eastern and the Western region, the Central government hopes to increase investment for the economy to spill over to the Central region then finally to the Western region (De Coning, 1999).

South Africa has also suffered through unequal growth because of past policies that led to for unequal growth in the country. Like China, the apartheid government of South Africa exacerbated regional disparity in the name of oppression. Infrastructure development assists with the growth of Gross Value Added in regions that were serving the white population, the South African government had decreased its investment on infrastructure especially towards the 80s when the country experienced international sanctions, which lowered the growth of the economy by promoting this type of growth (Kularatne, 2006). The relationship between productive capital and productive infrastructure set the conditions for increased growth in the country. The South African Government had witnessed the effects of growth in small amounts before 1994, but had not allowed equal development which led to some regions growing faster than others (Kularatne, 2006). Separate development plans decreased the potential rate of development for South Africa as a whole and has placed the new government on a complex quest to increase economic growth. Growth in the country has been difficult to achieve because the investment in Gross Fixed Capital Formation[3] (GFCF) between 1970 and 2002 had been low (Perkins, 2005). Several areas experienced marginal rate of returns because of an increase in unnecessary infrastructure. The uneven development of areas caused regions to have slow growth, which were not able to respond to the employment demand (Perkins, 2005). This resulted in an increase in state dependency, which did not allow conditions for global market competition and investment attraction.

The slow growth of the GDP between 1980 and 1990 did not encourage new investors in the country, which led the government to introduce new strategic plans that would attract investors. These plans were in the form of Spatial Development Initiatives and Reconstruction Development Programmes (Jourden, 1998). The regional disparity has been a threat to the growth of the economy, the spatial inequality has forced uneven growth even further by not offering alternatives for new development initiatives. The core, e.g. Johannesburg, Pretoria etc. have been the main investment attracters, which have led to growth in their favour. Peripheries have struggled in attracting growth because of the lack of investment (De Coning, 1999). The new government has attempted to re-direct infrastructure development in these less favourable conditions by laying out transport infrastructure and offering incentives to potential investors, the implementation process however has been slow and infrastructure development has occurred in some places while excluding others (De

[3] Gross Fixed Capital Formation is Gross fixed capital formation (net investment) is the net amount of fixed capital accumulation. It measures the increase in the capital stock less the disposal of fixed assets. It excludes land purchase and it excludes depreciation (Economics today, 2014)

Coning, 1999). Rail networks have been the primary concern for the apartheid region resulting in an increase of rail development (Perkins, 2006). The previous government needed to ensure that they would be able to respond to the ever-increasing population demands for employment. South Africa's infrastructure development came in phases because of a stagnant economy. This was because most of the population was low skilled and the projected growth did not address the high percentage of educated individuals. The government had to ensure that infrastructure roll out was gradual to allow the growth of skills (in both educational and menial skills) (Kularatne, 2006).

South Africa's second concern lay in the development of infrastructure investment in inter-city roads in the 1940s, the focus further shifted to national and provincial roads to attempt to increase economic activity in the periphery (Kularatne, 2006). The investment in peripheral roads was somewhat low compared to the urban investment. Transport infrastructure became fundamental in the inner city due to the increase in traffic and congestion. The improvements of roads were prioritised in the 1940s as much investment flooded the city, which led to the increase of freight and transport (Perkins, 2005). Ports in the country have been fundamental in trade and have been one of South Africa's oldest infrastructure investment, during this time the state decided to increase its trade capacity by adding two more ports along the coasts. The government lastly improved on electricity and telecommunication within urban areas (Perkins, 2005). The wave of infrastructure development assisted in the production and transportation of goods inter-regionally, nationally and internationally. The evidence of the relationship between infrastructure and economic growth in South Africa lies in the long run relationship between economic infrastructure and real GDP[4]. Infrastructure fixed capital stock increases the rate of GDP, there has been a positive relationship between GDP and transport, and GDP and goods stock all due to the investment in infrastructure (Perkins, 2005).

2.4. Critiques

There are different forms of literature that argue against the mentioned effects of growth. Banister and Berechman (2001) remark that growth is not a definite there are many layers to its manifestation. The regional growth of an area depends on many un-noticeable factors. Investment in infrastructure sets the conditions for growth but it does not necessarily guarantee development in the invested areas. Investors are reluctant to invest in non-favourable locations and some might wait for other firms to locate before they invest

[4] The relationship between infrastructure is calculated with real GDP in Perkins (2005)

(Banister and Berechman, 2001). There have been discrepancies in the literature especially in the methodology. One of the main critiques has been that of different methodologies to find the necessary relationship between infrastructure and economic growth. Because infrastructure takes a long time to show impacts, there is no clear indication of the amount of output infrastructure produces (Perkins, 2005). The relationship between infrastructure and economic growth has been seen as a plot by politicians and lobbyist to offer non-existent benefits to private investors in order for them to invest in the regions (Banister and Berechman, 2000). The effects of transport infrastructure or economic infrastructure do not provide a guarantee for the growth of a region. There effects have been identified, but some theorists believe they have been greatly exaggerated while others believe that they offer a solid foundation for growth.

Critics argue that transport infrastructure can only act as a compliment to other more important element of economic growth than the foundation for the growth altogether (Banister and Berechman, 2000). "…transport investment is not a necessary condition but acts in a supporting role when other factors are at work." (Banister and Berechman, 2000:318). The critiques do not recognise infrastructure as the foundation for growth but rather one of the elements used to encourage economic growth. There have been more critiques of the cost of infrastructure and its results. Some theorists have mentioned that the cost of infrastructure costs 50 per cent more than the output it produces (Banister and Berechman, 2000). The effects of employment can be debated, in some cases infrastructure does not produce as many permanent jobs as expected.

2.5. Conclusion

Economic growth requires infrastructure investment in order to progress, different literature have identified that the relationship often requires more than one entity to succeed. This means economic infrastructure requires social infrastructure to have a much larger impact. In the case of South Africa, the development of social infrastructure is necessary to ensure that people are able to sustain themselves (De Coning, 1999). Infrastructure has both direct and indirect effects on the economy. The direct effects often affect the growth of temporary employment especially in the construction sector. Transport infrastructure ensures there is market accessibility which influences the establishment of new businesses. India and China have shown also invested in infrastructure to increase growth. India showed that economic infrastructure alone could not respond to the needs of their people, but investment in both social and economic infrastructure was fundamental to grow the economy. The lessons

learned from infrastructure investment in China respond to the regional disparities of the country (Yu et al, 2012). The investment aims to promote a link between the Eastern and the Western region in order for the effects of the Eastern region spill to the west. The central region aims to increase economic activity in the western region through the transport link it aims to develop (Yu et al, 2012). The construction of the transport infrastructure influences the growth of the economy through short-term construction networks. Transport infrastructure in China is meant to respond to the regional disparities while increasing output and growing the GDP. The investment has proven to be a necessary and can be a learning experience for countries that wish to increase economic growth while addressing regional disparities (Yu et al, 2012).

The literature has identified that the relationship between infrastructure and economic growth has been easily identified by different theorists. In transport infrastructure time is very fundamental to the increase of economic growth. The lessons learned from different countries shows that infrastructure development cannot be carried alone, there have to be different factors that allow conditions, which will increase economic growth in the end. The critiques offer an insight on the negative sides of infrastructure in pursuit of economic growth. Though the methods might differ it does not mean that infrastructure does not influence economic growth. Banister and Berechman, (2000) assume that the methodologies are exaggerated, even though they might be, there is investment attraction when there is accessible infrastructure development. The relationship has proven to be relevant in the attempts for economic development in new regions and plays an important role in increasing production rate and accessibility of a region or country.

Chapter 3: The Maputo Development Corridor

3.1. Introduction

The Maputo Development Corridor (MDC) is an important socio-economic project which was initiated by the government of South Africa in collaboration with the Mozambican government a year after the end of apartheid, to influence growth between Gauteng and Maputo (De Beer and Arkwright, 2003). This was done by rehabilitating the existing route that was in place between the two areas and by improving the port. The corridor was underperforming and economic growth and development was stagnant. The government intervened in order to improve the situation and create jobs whilst improving the conditions of the corridor for economic purposes (De Beer et al, 2001). The state was aware of the different employment demands that the society had endured around that time and Maputo was not doing well either after the effects of the prolonged war settled in (Jourdan, 1998). Investment was the initial key characteristic of the corridor and the MDC was part of the Spatial Development Initiative (SDI) which was meant to address the economic constraints in different locations in order to develop and grow the country's economic output (Jourdan, 1998). This chapter will focus on the development of the MDC and at projects that were part of the corridor development. The first section will focus on the development the MDC through the Spatial Development Initiatives (SDI) and the processes that determined the program. The second part will outline the key projects that were rehabilitated and introduced In the MDC.

3.2. Overview of the MDC

The research is based on one of the most successful corridors in Southern Africa, It has shown significant economic growth and has invested much of its developments on infrastructure projects. The MDC was one of the first Spatial Development Initiatives (SDIs) to be implemented in 1995, a year after apartheid ended in South Africa[1] (De Beer and Arkwright, 2003). My research is investigating its growth patterns and the impact on the surrounding communities in terms of income improvement. The MDC travels from Gauteng to South Africa's closest port in Maputo city (COMESA, 2001). It is a transport route which focuses on infrastructure rehabilitation and broad economic development for the countries involved. South Africa and Mozambique had decided to establish a relationship which would provide an economic path between the two countries. There were four key objectives that the MDC based its development on. These were:

[1]There is a debate on the specific year the MDC was implemented, some argue that it was in 1996 while other are adamant on 1995

i. To rehabilitate the core infrastructure along the MDC with minimum impact on the fiscus.
ii. To maximise investment in both the inherent potential of the MDC area and the added opportunities which infrastructure rehabilitation creates.
iii. To ensure that the development impact to this investment is maximised particularly with regards to disadvantaged communities.
iv. To ensure sustainability by developing policy, strategies and frameworks that encompasses a holistic, participatory and integrated approach to development.

(De Beer and Arkwright, 2003)

These objectives guided each part of the process and established the type of infrastructure chosen from the project (Jourden, 1998). The project required heavy investment from every sector which was willing to invest, both in private and public to ensure that the corridor was successful. (De Beer et al, 2001). The infrastructure provided from the development included road facilities, an upgrade of the rail road, the upgrading of the port, dredging the harbour and improving the telecommunication network between Mozambique and South Africa (Jourden, 1998). This was done through a wide range of infrastructure investment between the public and private sectors, it was particularly focused on the functioning of the road, and this has been termed public-private partnerships (PPPs). The government establishes a relationship with the private sector in order to divide the costs, this will be discussed further below.

Spatial Development Initiatives and regional development

Growth is difficult to achieve especially in a financially unstable economy. The government that was sworn in in 1994 had to deal with weak economic context and the effects of sanctions. They needed plans and new projects to increase growth and support development (De Beer et al, 2001). The Spatial Development initiative (SDI) was one of the strategies which were aimed at increasing growth in areas that showed potential by raising the growth of the economy. The MDC was the first of the many initiatives from the SDI programme. There were six projects that were formed from the SDI programme these were the Maputo

development Corridor (MDC), The fish river SDI, which focused on industrial development zones, the Lubombo SDI, which was focused on tourism and agriculture, the west coast investment initiative (WCII)a wide initiative focused on the improvement of many sectors in the west coast in the Western Cape, The Richards bay SDI, which was focused on improving and attracting the industrial zone in the area, and SADC SDIs, which were aimed at improving regional growth through the development and investment of infrastructure[5] .The state had to find a way to deal with different social issues while increasing growth in the country and had decided to invest in corridor development (De Beer et al, 2001). There were several key issues that the government had to address, these were policy issues that "…ranged from broader issues of regional economic integration, trans-boundary collaborations, the promotion of growth of selected sub-national regions, through to project specific policy issues as engaging the private sector in major cross boarder infrastructure development…" (De Beer et al, 2001:8). There was immense pressure on the side of government for the project to succeed as the world was watching.

The initiative was a great strategy to ensure the growth of the economy especially in areas that had great potential. The South African government wanted to ensure that the project would sustain itself through investment attraction. The previous government believed in an unequal spatial development initiative which favoured the development of some regions than others (De Beer et al, 2001). The problem with this however was that there were fewer areas producing enough capital and growth. Much of the wealth was still invested in one area. The new government had to confront this regional disparity by finding ways to ensure that the regions which were not considered before were looked upon (De Beer et al, 2001). South Africa's objective through this project was to attract investment from international groups, it also wanted to show credible international organisations that the country was on a successful path to growth and that these organisations could play an important part by supporting south Africa's economic growth ventures (De Beer et al, 2001).

SDIs are policy focused initiatives which are driven by specific principles. They consider different strategies that influence the growth of regions. The principles are centred on political champions, ensuring efficient and effective ways of design and implementation, innovative institutional structure and inter-relationships between different spheres of governments (Söderbaum, 2003). When firms locate they consider different incentives that

[5] See Jourdan, P. (1998). Spatial development initiatives: the official view. Vol. 15 No. 5

influence their decisions, unfortunately some areas are less favoured than others. These places often include poor located regions which don't have access to beneficial resources. Through the SDIs and its principles the government had selected localities that had underused potential in order to attract investment while improving the standard of living in the communities surrounding the projects (Jourdan, 1995). The projects were focused on attracting investment while communities around them benefitted from the growth (De Beer et al, 2001). State encouragement of offering incentives, like six year tax holidays, was meant to ensure that the projects sustain themselves after the construction phase meaning less dependence on government intervention (De Beer et al, 2001). Local businesses are of grave importance when it comes to increasing regional economic growth. The state depends on their growth to ensure that poverty is reduced in those localities and the opportunity of more jobs is created in the future (De Beer et al, 2001).

Regional growth is not an easy task to achieve. There are various factors involved in its success which need several parties to participate. Infrastructure, as said before, cannot provide economic growth alone, the SDI ensures that regional businesses survive by providing a variety of services which are interdependent (De Beer et al, 2001). According to Amin (1998) in De Beer et al (2001) there is no one way to develop a region but each region has a strength which potential investors can exploit. The literature argues that SDIs are particular to the specific location, but there has to previous strategies utilized that are applicable from previous programmes, that can act as a guide to the development of new programmes in order minimize risks. Amin argues that certain factors have to be considered when developing a region, these have to coincide with the context of the region but most importantly they have to produce output (De Beer et al, 2000). Amin (1998) first suggests that solidifying networks of association is advised and focusing on the individual region can assist it to grow. The support arises from different businesses that locate in the same area which encourages competition resulting in the growth of that particular region. Secondly the state has to encourage participation, negotiations and rational systems of decision making. This process has to include all the stake holders from the development companies involved to the average citizen which will benefit their life in one way or another. Finally, he suggests that the stakeholders have to establish which problems are context specific. This means they have to separate the local issues from those that are from the initiative altogether in order to have a clear determination of strategies (De Beer et al, 2001).

Corridors have been of great significance in development initiatives in the SDI program. The MDC had aimed to address several key issues (mentioned in the introduction) which acted as guiding factors for strategies that would increase growth. The SDI and the development of the MDC operated under a few key principles which acted as a guide for future corridor development especially in regional development strategies. These were:

i. Co-operation, collaboration and integration in terms of economic policy and strategy

South Africa's history had limited the country's expansion into the world. The Southern Africa Development Community (SADC) initially sanctioned South Africa as the rest of the world did. Apartheid did not only cause social inefficiencies in the country but it also made sure that there were no integration initiatives that would assist the development of regions altogether (De Beer et al, 2001). The uneven spatial balance only made economic policies weak and insufficient. The end of apartheid signified a new era for the spatial economy, this meant that regional integration, collaboration between different regions was possible, and trade was more accessible to South Africa and other countries. Being a member of the SADC committee benefits regions to an extent, they enhance the scale of economies which enhances the level of competition across different regions (De Beer and Arkwright, 2003). Conflict is managed through a wider scale which is effective and reduces time constraints. Primary product exports are also reduced through the SADC relationship, this is because primary exports are divided through large regional projects (De Beer et al, 2001). SDIs open up links by creating new opportunities for these areas to further their trade and increase the benefits.

ii. Focus on existing transportation/development corridors

Transportation plays a vital role in any development or growth initiative. The literature has proved that the success of transportation has a considerable effect on economic growth (Khosa, 1995). The initial SDI program ensured that micro-regionalism through corridor development was successful in attracting investment and rehabilitating the state of economy in regions (Söderbaum and Taylor, 2003 and De Beer et al, 2001). SDIs realise the importance of economic infrastructure especially in investment concerned with transportation. The investment in infrastructure, especially with reference to corridors, is vital to the SADC programme because they have the potential to increase growth internationally and intra-regionally. According to De Beer et al (2001) corridors are the 'lifeline' of SADC continental economies, whether they are transportation or developmental they play a

vital role in the growth of the economy (De Beer et al, 2001). Quality transportation acts as a potential factor for inter-regional trade by offering firms and individual business opportunities to move their goods. The corridors offer the public sector financial, technical and political leverage since they increase income by offering alternatives and competition in the global context.

iii. The Promotion of development corridors rather than transportation routes

Transportation routes only offer transportation while corridors link resource rich areas with ports and nodes which eventually trade together and stimulate the growth new developments while improving the standard of life in communities they locate in (De Beer et al, 2001). SDIs were supportive of route development especially those associated with corridors. This was because there were opportunities for new developments along routes, this meant increased income for businesses located near corridors (De Beer et al, 2001). Infrastructure rehabilitation often assists regions to sustain development and increase the number of employed people in the future. The MDC was not initially envisioned to be a development corridor but rather an investment attraction programme which would create a generation of wealth in that region (Söderbaum, 2003). Transport infrastructure sustains the generation of wealth and decreases dependence on the government. The SDIs bottom up approach anticipates a trickle-down effect of wealth, in order to sustain this wealth corridors have to attract more investment in order to grow region further (De Beer et al, 2001).

iv. Greater regional competitiveness via regional integration and collaboration

Economies often succeed when there is diversity of businesses. The economy is able to absorb shocks when there are a variety of industries concerned, this is because they offer different services which require different systems of management and will not be broken down by one force (De Beer and Arkwright, 2003). Regions are dominant in one entity or another, the shared responsibilities and trade amongst them benefits all the parties involved when they collaborate. Collaboration between regions means greater strength and shared responsibilities, for example, sharing a region's capacity building and training reduces costs and shares rewards (De Beer et al, 2001). Regions that show greater unity have greater opportunities of attracting foreign direct investment (FDI) (De Beer et al, 2001).

v. A far greater emphasis on the role of the private sector

After the abolition of apartheid the new government realised that they did not have the capacity to initiate and regulate the SDI programme effectively without assistance. They had decided to embark on a new policy which would include the private sector. The public-private partnership (PPP) was conceived with this concern in mind. The private sector had more to offer with regards to experience and expertise of different infrastructure programs (Jourdan, 1998). This includes non-state actors such as non-government organisations (NGOs), private enterprise, informal market actors and community based organisations. The involvement of the private sector in the programme was understood as the 'crowding in' of the sector. Before it was not allowed to be part of the construction of public production, but the new government saw the importance of involving it in order to attract FDI. The inclusion of the private sector was seen as a shift by the new government to assure global interests that neo-liberal policies were in the fore-front of business (Ngwenya and Taylor, 2003). The private sector's role was to give alternatives and opportunities in the project that would offer investors assurance of their investments. The PPPs offered SDIs commercial viability through the use of existent infrastructure and development knowledge in both the region and the country entirely (Ngwenya and Taylor, 2003).

The private sectors first mandate is to maximise profit, the public sector's involvement ensured that communities involved are not exploited and their interests are considered in the process (De Beer el al, 2001). The development of African regions does not only depend on the marginal growth of production and consumption, but on the extent of their relationship and growth (Ngwenya and Taylor, 2003). The United Nations Economic Commission for Africa (ECA) has had a significant influence in the involvement of the private sector in public affairs. This organisation was instigated by the United Nations in order to facilitate and participate in the growth of African countries as well as to increase economic activity and raise the standard of living for African societies. ECA views concrete partnerships between the state and the private sector as an essential tool for the growth of the economy because they offer a solid foundation for accelerated continental development (Ngwenya, and Taylor, 2003).

As mentioned before MDC is one of the SDIs most prominent initiatives in Southern Africa due to its ability to meet a predominant number of its objectives. Through the SDI the corridor has been able to produce some significant impact on the country's economic growth

(Jourdan, 1998). The anchor projects initiated by the program are an investment magnet which aims to magnify the growth of the local economy. Regional development through the initiative has risen and has placed the MDC as the most successful of its project especially in the new millennium , weak management however threaten the growth of and success of the corridor (Ngwenya and Taylor, 2003). The different organisations involved in the SDI (specifically the MDC) have acted as an example for other upcoming regional development initiatives in Africa, especially in the SADC region (Ngwenya and Taylor, 2003). Through the MDC communities were put in the fore-front to encourage a new regionalist approach to development. Though the SDI expected the MDC to be more of an investment attraction corridor, it displayed characteristics of a developmental corridor which benefited regional development and gave communities opportunities to be part of the process (De Beer et al, 2003).

The approach associated with SDIs differs depending on the context of the region. Some SDIs in South Africa have used the growth pole approach where infrastructure and industry were the prime dogmas of development while others used the new regionalist approach (Söderbaum and Taylor, 2003 and De Beer et al, 2001). SDIs were initially situated in rural areas, but through time they become spread out on the basis of development potential. The government's aim to increase wealth and increase employment opportunities through the SDI had been successful, in both long and short term employment specifically on the MDC project. The programme was viewed as effective that it was applied throughout the SADC region. However the success was short lived as different SDIs did not gain momentum due to various regional constraints (Söderbaum and Taylor, 2003). The SDIs strength was that it was concerned with spatial targeting which often included a focus on infrastructure, development and investment.

3.3.3. Critiques

SDIs were associated with many problems, their objectives and visions were headed in the right direction but implementation was not always up to standard. The SDI in general was criticized for producing uneven growth where development occurred in certain areas and neglected others (Söderbaum and Taylor, 2003). It was also criticized for slow effects on communities predominantly in rural environments as resources and infrastructure needed to support many non-existent structures which were intended for the future. This means infrastructure did not represent the constraints of the present but heavily focused on future

use. The program in many areas was also judged on its inability to create permanent jobs, it either produced short term jobs or low wage jobs which were not enough to sustain the families throughout or generate wealth (Söderbaum and Taylor, 2003). SDIs have been vulnerable to political influence, the projects initiated need passionate leadership to ensure that the success of the project endures and that the distribution of wealth is not lost in the private sector. Successful projects were cut off due to the short term nature of the initiative, in 2001 the program was redirected and shut down. The core projects of SDIs were still in place, but new projects were shut down because of ineffective governance (Söderbaum and Taylor, 2003).

3.3. The Maputo Development Corridor (MDC)

The key principles underpinning the MDC are similar to those of the SDI, but the core project was based on the four objectives listed above. The MDC first focused on different mega-projects that were identified as essential for the success of the initiative. The MDC initially focused on key projects in order to rehabilitate the entire route, but later included an emphasis projects focused on the rehabilitation of the entire route. These were: Local Economic Development (LED) support, tourism, agriculture and forestry projects, Cluster and linkage studies, Capacity building, Small Micro and Medium Scale Enterprise (SMME) development, Community-public-private partnerships and Trans-border initiatives (De Beer and Arkwright, 2003). The projects key objectives were equally considered by the state, there was a shift to ensure that the community was included in the process when the state changed priorities by making the third objective the main guide[6] .The decision to make it a priority was taken due to the concern that there was a rather slow trickle-down effect of wealth (Ngwenaya and Taylor, 2003). The inclusion of communities was to ensure that the private sector was not the only organisation that saw reasonable profits, but that communities benefited from the entire project (De Beer and Arkwright, 2003). The projects were divided into infrastructure projects and economic development projects, which had different investment and application processes (Söderbaum and Taylor, 2003).

3.3.1. Main infrastructure projects

The largest and most expensive project that was the initiated on the project was the rehabilitation and development of the Witbank – Maputo N4 toll road which cost a total of

[6] The third objective is: To ensure that the development impact to this investment is maximised particularly with regards to disadvantaged communities.

US$250 million (De Beer and Arkwright, 2003). The project contributed US$38 million to SMMEs and created 6 220 jobs. These were permanent, temporary and casual jobs, they were also able to train 20 260 people in various programmes associated with the corridor (De Beer and Arkwright, 2003). This project was under the Built Operate Transfer (BOT) which was intended for the projects long term sustainability. The projects ability to produce these results has had development specialists interested in the functions of the corridor. The project has ensured the sustainability of the toll road by considering the state of infrastructure that has been put in place. Road quality, travelling times and safety was guaranteed because of the constant maintenance of infrastructure which was funded by the income received from the project. The second project was that of the US$65 million rehabilitation of the port of Maputo (De Beer and Arkwright, 2003). The project's rehabilitation and management was given over to a company by the name of Merseyside Docks and Harbour Company (MDHC). The company did not only manage it, but it also financed the rehabilitation process (De Beer and Arkwright, 2003).

The third infrastructure project was also part of the MDCH management. This was the rehabilitation and upgrade of the railway network in Southern Mozambique. The MDCH in its management agreement set the conditions that the rail network from Maputo port to Zimbabwe (Limpopo line), to Swaziland (Goba line), to South Africa (Ressano Garcia line) and the Marshalling yard in Maputo port must be adequate before the company can take over (De Beer and Arkwright, 2003 and De Beer et al, 2001). The company was concerned with the technical work associated with the planning and rehabilitation of the project. The fourth project included the construction of the 400 kilovolt electricity line from South Africa to southern Mozambique which cost US$100 million, this project also included the construction of a new sub-station in Maputo near Mozal (De Beer et al, 2001). These projects included the strengthening of trade and development in the area which further increased community's interests in initiating further projects which can benefit their lives. The fifth project was the upgrade of the Ressano Garcia boarder post situated between South Africa and Mozambique (De Beer and Arkwright, 2003). The rehabilitation of the route is in constant maintenance to ensure that the developments that are already there do not deteriorate in order to attract more investment (Jourdan, 1998). The private sector has also supported the development of the infrastructure programme by contributing over US$5.5 million and creating permanent jobs for communities which were affected by the projects (De Beer et al, 2001).

3.3.2. The Main Economic Development Projects

The development projects depend on infrastructure projects in order to succeed. This is because economic projects are dependent on the effectiveness of the infrastructure and the carrying capacity required for a particular area. The development of the Mozal is one of the key economic development initiatives that have shown great success on the MDC (De Beer and Arkwright 2003). The Mozal project is "… a world class low cost and aluminium smelter, situated just outside the city of Maputo" (De Beer and Arkwright, 2003: 23). The smelter was initially developed to produce 250 000 tons of aluminium per annum, then was later decided that the plant should double its output by producing 500 000 tons with addition construction on the actual structure (Hentz, 2003). The construction value of the smelter cost the PPPs US$ 2 billion to construct. This was viewed as a lucrative investment since a large sum of the aluminium was to be shipped off to Japan. Australia had an important role to play in the success of the smelter, it brought feed stocks which were essential to the production of the aluminium. This also had positive effects in the sense that the three countries were on the map for further attraction of investments especially for the Investment Promotion Centre of Mozambique (CPI), Chiefton (Australia) and Grinaker (South Africa). This lead to about a joint venture between these three areas where they would conceive an industrial free economic zone, this was known as Beluluane Industrial Park (BIP) (De Beer and Arkward, 2003).

The second project was the development of Maputo Iron and steel plant located in Mozambique. Sasol had shown interest over the development of the plant by exploring a gas line which moves from Mozambique's gas fields to Sacunda in Mpumalanga. It was planned that the gas pipe would be 1000 km long, this cost Sasol US$1 Billion to construct. The project has seen significant success where Sasol is even initiating further projects to link to the plant (Sasol Petroleum international, 2000). They have decided to develop a natural gas line which will extract natural gas in Mozambique, supply processed natural gas to Secunda South Africa, and that uses the underground pipeline to the Maputo iron and steel project (Sasol Petroleum international, 2000). These mega-projects have played a significant role in the development of the MDC. They have placed the area as one of the most successful corridors in the Southern hemisphere. The private sector has also contributed sufficiently to the provision and attraction of investment, the economic development projects alone were estimated to cost over US$5,500 million which assisted in creating over 15 000 jobs.

Lessons learned from the project

The success of great projects such as the MDC depends on various entities that have to work simultaneously as a unit to ensure that the project yields great results. Firstly, the involvement of senior officials in this kind of project is essential for its growth. Recognisable stakeholders such as ministers gives the public and potential investors the impression that the state in heavily invested in the MDCs success (De beer et al, 2001). The more trustworthy the project is the more investor it will attract. Secondly, the project was set out in an area that had underutilised spaces that bore great potential. The corridor already existed, but did not have enough infrastructure and development projects that would attract development and investment. Thirdly, the relationship between the public and private sector offered great financial viability that would sustain the project long after its implementation. Fourthly, the project had invested a great deal on a technical team which designed the place to suit the needs of the communities, the public and private sector. Lastly, the unity between the South African and Mozambican government offered institutional support which ensured that the implementation process went according to plan. The project certified that all decisions were taken on a reasonable timeframe that would not hinder the pace of the project. Transparency was vital in the development of the entire process as investor knew their stake in the project (De Beer and Arkwright, 2003).

The Maputo development corridor has been an influential corridor which is still recognised today. The impact of the corridor has allowed access to various communities which had minimal access. The corridor assisted the communities that are along the corridor to attract foreign direct investment (FDI) and grow their economies (Bowland and Otta, 2012). The corridor has faced challenges over the years, the progress of the corridor has been hindered by the restricted operational hours at border post. The short operations hours have caused backlogs which delay trade and transport between South Africa and Mozambique (Bowland and Otta, 2012). The facilitation of trade between the two governments has been a concern. There have been different approaches to the facilitation of trade, South Africa trades 120 times more than Mozambique and this has caused operational difficulties and logistics costs (Bowland and Otta, 2012). The rail services in South Africa have also been a problem, the rail system has irregular times which are inconsistent and cause confusion and delay. Bowland and Otta,(2012) suggest that this is because there is a shortage of competition and the existing rail system does not feel pressured to perform. They also suggest that the lack of capacity is not enough motivation for the rail company. The MDC is also not seen as a

political priority, administration and implementation interests by stakeholders has declined and this has resulted in a decrease in growth.

3.4. Conclusion

The attempt by the SDI to create a high profiled well-resourced corridor was achieved through the MDC. Infrastructure development has played an important part in the development of this corridor and it has assisted the regions along the corridor in providing an opportunity for growth. There have been challenges in the improvement of the corridor as various operating systems cause difficulties. The MDC however has been an influential programme which has been an example for African countries to grow their economies. The state hopes that the amount spent on the rehabilitation of the MDC will influence growth in areas along the corridor even further and attract more FDI in the future. The Chapter has identified the important element associated with the MDC and has considered the current state of the corridor.

Chapter 4: Profile of the selected municipalities

4.1. Introduction

The relationship between infrastructure and economic growth will be investigated through the Maputo Development Corridor (MDC) in four local municipalities. The municipalities are Emakhazeni local municipality, Emalahleni local municipality, Mbombela Local municipality and Steve Tshwete local municipality[7]. The purpose of the research is to investigate the effects of infrastructure in economic growth and the MDC has undergone infrastructure investment that was aimed at improving economic growth. These municipalities are along the Maputo Development Corridor (MDC) and they provide a view of the effects of infrastructure in economic growth. This chapter provides a basic description of the local economies and societies in the selected municipalities. The chapter investigates the economies, population and governance.

South Africa's economy has changed since apartheid. Growth has been significantly higher since 1994, there have been quarterly real Gross Domestic Product (GDP) of 7.6 per cent since the end of apartheid. The South African economy has had an increase in the tertiary sector especially the finance industry (Stattsa, 2014). Finance, real estate and business services have been increasingly dominant in the tertiary sector. There are three provinces that contribute highly to the country's economy, these are Gauteng, Kwazulu Natal and the Western cape. Gauteng is the largest contributor with a GDP percentage change of 4% compared to the 3.6% of the two other municipalities (Stattsa, 2014). South Africa has had problems in responding to high employment rates and poverty. The manufacturing sector in South Africa has been decreasing where there have been decreases throughout various municipalities in the country. This has caused concern as the manufacturing sector is an indication of development in the country (Stattsa, 2014).

Figure 4.1.1 is an illustration of the location of the four chosen municipalities. As seen on the illustration below, all the municipalities are aligned along the N4 road, which is the location of the MDC. The road had undergone infrastructure improvements in 1995/1996 [8] and the impact of the development is measured through these four municipalities (De Beer and

[7]The chosen municipalities fall under two municipalities Emakhazeni, Emalahleni and Steve Tshwete local municipalities fall under Nkangala district municipality. Mbombela local municipality falls under Ehlanzeni District municipality.

[8] Some literature argues that the MDC began in 1995, for the basis of this research the data will begin from 1996

Arkwright, 2001). Local municipalities often have to engage with communities on a closer context, this means that they are able to witness the changes in their societies. The profiled municipalities are situated in areas that are predominantly rural with fairly large city centres where most activities occur. The municipalities are all associated with the N4 road and the economic activities are documented in the municipality's IDP. The four municipalities are surrounded by small towns where the MDC intercepts, the economic activities often occur within these small towns then spread to the surrounding areas. The research investigates the entire municipality, not one particular city within the municipality.

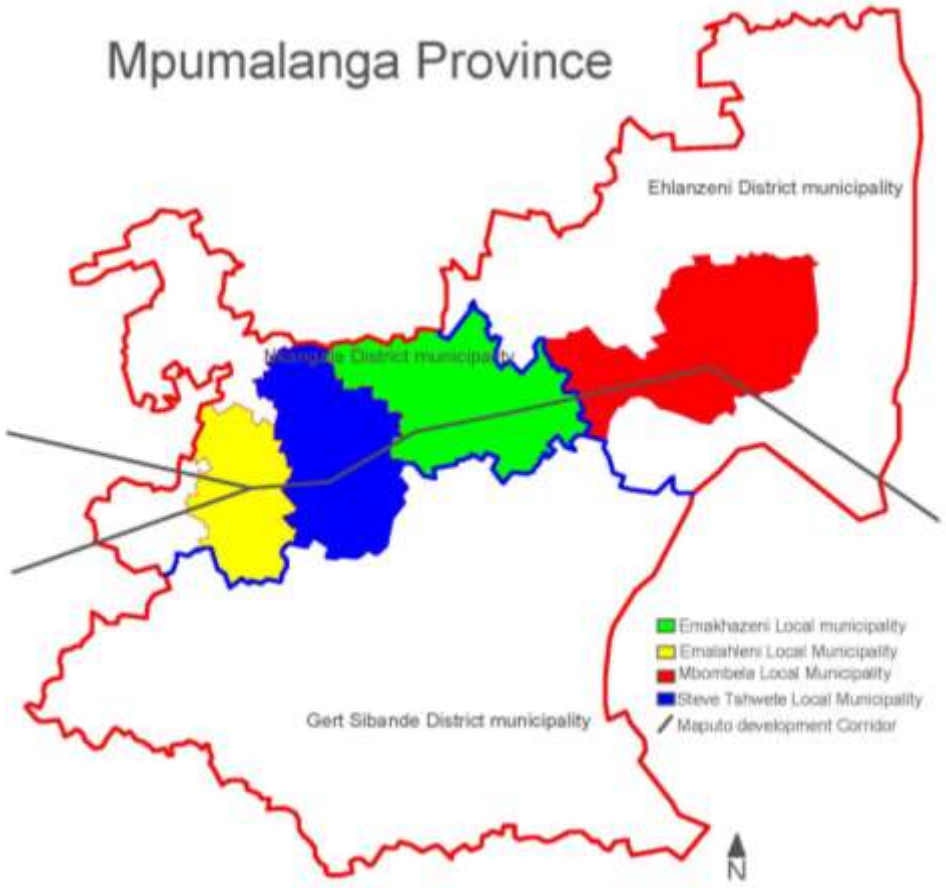


Figure 4.3.1.: Location of the MDC in relation to the four municipalities

The selected local municipalities have different economies which differ in size and distribution. Emakhazeni local municipality's is dominant in the mining sector, its economy has increased the amount of output it produced from 2001. According to Emakhazeni local municipality's IDP (2011/2012), the industry has had a significant contribution to the municipality's growth. Other industries which have made significant changes are the transport industry and community services. The municipality has other growing industries such as tourism and cultural nodes which are aimed at increasing employment and attract

people to the municipality (Emakhazeni, 2011) . Emakhazeni local municipality is connected to the Kruger National park and this has offered the municipality an opportunity to improve its shopping centres (Emakhazeni, 2011). One of the municipality's growing tourist centre is in Dullstroom, which is a town that has an environment attraction site that is most known for its fly-fishing activities. The municipality is still attempting to improve the link it has to the MDC. The municipality has four cities which are Dullstroom, Emgwenya (Waterval Boven), eMakhazeni (Belfast) and eNtokozweni (Machadodorp). The MDC travels through the town of Machadodor (Local government handbook, 2014).

Emalahleni local municipality has the largest total of power stations in the country. According to the municipality's IDP, the power stations have been the main investment attractors. The municipality has four towns, these are Kriel, Ogies, Phola, eMalahleni (Witbank) (Local government handbook, 2014). The MDC is connected through Witbank which is the most industrialised area in the district municipality and it is the city that has most of the coal mines within the municipality. Emalahleni local municipality has an advantage in terms of location, it is closely located near the most powerful cities in the country, which are Johannesburg and the City of Tshwane (Emalahleni, 2011). The municipality has invested in increasing tourism through its heritage sites telling of the history and development of the coal mines in region (Emalahleni, 2011).

Mbombela local municipality is one of South Africa's recognised municipalities due to its status. Mpumalanga province's capital city of Nelspruit is within this municipality (Mbombela, 2011). During the FIFA World Cup which was held in South Africa, Mbombela was one of the cities that were invested in by the government. Mbombela stadium was built in preparation for the 2010 World Cup, this influenced the municipality to invest in the infrastructure and the country to recognise the province as well as the municipality (Mbombela, 2011). It has fifteen towns which are Emoyeni, Entokozweni, Hazyview, Kaapschehoop, Kabokweni, Kanyamazane, Luphisi, Matsulu, Mbombela (Nelspruit), Mpakeni, Msogwaba, Ngodwana, Skukuza, Tekwane and White River. The municipality's economic structure is dominant within the tertiary sector, the municipality has one of the most famous parks in the country, it is home to the Kruger National park and many people travel through the N4 until they reach the park (Local government handbook, 2014). The municipality has two airports, Kruger Mpumalanga International airport and the General Aviation Nelspruit Airport. The municipality is often used to as a stooping point for those who have travelled long hours and are in need of a break. Mbombala municipality has used

this to increase growth by improving the accommodation inns for people who would wish to stay longer (Mbombela, 2011). The municipality has taken advantage of the MDC, the Corridor connects the local municipality to Johannesburg, which is the highest performing city in the country (Mbombela, 2011).

Steve Tshwete local municipality is located on the east of Mpumalanga province, it is connected to the MDC which in turn connects in to Johannesburg and Pretoria. There are four small towns within the municipality these are, Hendrina, Middelburg, Pullens Hope, Rietkuil. The municipality's local economy compromises of manufacturing industries and its tourist industry is centred on the Dutch settlement history and the Middleburg train station (Steve Tshwete, 2011). Steve Tshwete local municipality has an active participation in commercial agriculture, mines and power stations. The settlements are separated into three categories, firstly there are small agricultural service villages which consists of small localised agriculture centres (Steve Tshwete, 2011). These areas are classifies as rural centres due to their dispersed settlement type. Secondly there are 'holiday towns of Presidentsrus' these settlements are large, mainly for lodging and are predominantly occupied by the wealthy citizens in the municipality. They are highly regulated to prevent uncontrolled development. Lastly there are mining tows which were developed by Eskom to accommodate miners in the province (Steve Tshwete, 2011). These towns have good quality amenities and social infrastructure is well maintained.

4.2. Population

Table 4.1 and figure 4.2 illustrate population change in the selected locations as well the average annual growth. Emalahleni local municipality's growth rate had grown rapidly higher than that of national and provincial growth rates in both periods. Emakhazeni local municipality's growth rate had been higher than National and provincial between 1996 and 2001,it later decreased between 2001 and 2011 (Statssa, 2014). This suggests that the municipality has experienced out-migration and was not able to secure higher population growths throughout the years. Steve Tshwete local municipality experience higher growth rates than national and provincial growth rates between 2001 and 2011 (Statssa, 2014).

Location	1996	2001	Average annual growth rate (1996-2011)	2011	Average annual growth rate (2001-2011)
South Africa	40340660	44816888	2.1	51770562	1.5
Mpumalanga province	3124395	3366106	1.5	4039942	1.8
Emakhazeni Local municipality	37577	43009	2.7	47215	0.9
Emalahleni Local Municipality	236029	276445	3.2	395 466	3.6
Mbombela Local Municipality	425090	477360	2.3	588796	2.1
Steve Tshwete Local municipality	135395	142769	1.1	229835	4.9

Table 4.1.1. Population change for selected location in 1996. 2001 and 2011 (Source: Statssa, 2014)

Figure 4.1.1 indicates the difference in population in all the municipalities. It is clear through this graph that Mbombela has higher population growths than any of the municipalities. Mbombela municipality's growth has had higher populations throughout the selected years, the growth has shown that there has been significant economic activity which has been able to increase growth and keep some of its residents within the municipality (Mbombela, 2011). Emalahleni and Steve Tshwete local municipalities also have increasing populations, the growth resembles that of national statistics. Emakhazeni local municipality's population has shown a stagnant population growth throughout the years. The municipality's economy has not been able to attract more people to it, this is seen in the low number of population in the municipality (Emakhazeni, 2011).

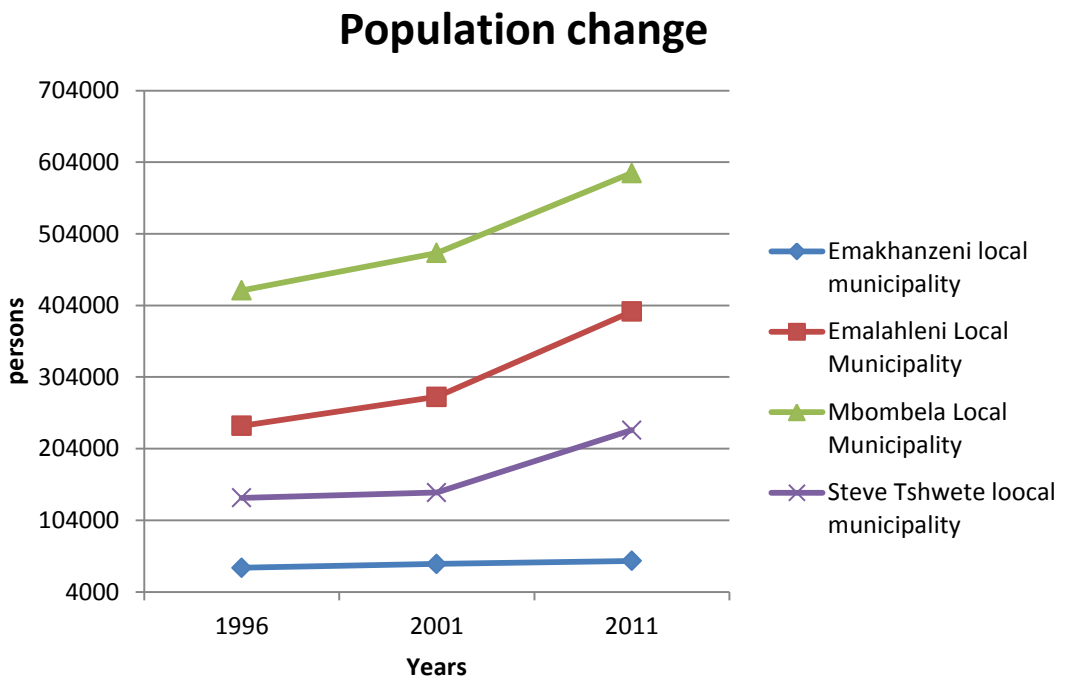


Figure 4.1.4.: Population for 1996, 2001 and 2011 (Source: Statssa, 2014)

The population in the four municipalities have varied results. Mbombela local municipality's population growth is high compared to other municipalities and its population has been growing significantly higher than others. The municipality's growth rate has maintained throughout the years and the annual average growth has grown in a similar pattern. The growth pattern illustrated on figure 4.1.2 has a similar trend, some grew larger than others, but they all ultimately experienced growth (Statssa, 2014).

4.3. Governance

Good governance is a necessity in economic projects since the implementation of plans and their success depend on the effectiveness of governance. " [Government] has to Decipher the relation between administrative structures and changing levels of economic output is, therefore, a perennial preoccupation of theorists and practitioners alike" (Evans and Rouch, 1999). The effectiveness of good governance can further promote growth by investing in projects that can benefit both the public and private sector (Asiedu, 2002). The four municipalities have had challenges which have resulted in badly planned and poorly implemented infrastructure projects. This has not aided the country's concern of creating more employment. Government in the country has been known to mismanage funds and this has discouraged many investors throughout the years (Asiedu, 2002). The municipalities have had challenges to responding to the many infrastructure challenges that have occurred.

The municipalities have had skills shortage which have hindered the implementation of new projects that could bene fit the economies. Emakhazeni has had a challenge in implementing sustainable infrastructure projects due to the lack of adherence from the members of the council (Emakhazeni, 2011). There have been conflicts within the municipality which have split the votes. This has led to slow service delivery and failed projects (Emakhazeni, 2011). Municipal workers have not complied with laws and policies which has resulted in low performance in the municipalities. The municipality has mentioned a possibility of attracting more Foreign direct investment especially in the development of new facilities which will increase employment in the municipality. This goal mentioned in the IDP has been threatened by inadequate implementation plans and lack of efficiency and effectiveness (Emakhazeni, 2011). The municipality has had very poor communication and this has caused mismanagement of resources which has led to the municipality's poor performance.

Emalahleni local municipality has had similar problems of skills shortage and mismanagement of funds, which have threatened the development of the municipality. There have been attempts by the local government to respond to basic service delivery problems, but they have not been sustainable (Emalahleni, 2011). Communication has been a problem both internally and externally, this has caused unsatisfactory results within the municipality as many projects are not effectively managed. Challenges within the municipality have resulted in poor performance and loss of confidence by interested parties. The municipal8ity however has attempting several strategies that have attempted to respond to the many ills of the municipality (Emalahleni, 2011). One of the strategies was to increase communication by being transparent and initiating projects that include different stakeholders that are concerned with the wealth and growth of their municipalities. Emalahleni local municipality has witnessed its potential to increase business by improving the coal sector and encouraging development through incentives (Emalahleni, 2011). The municipality has decided to invest in increasing economic activity by utilizing the old coal station as a tourism centre while attracting a different kind of market. The status quo of road infrastructure in Emalahleni local municipality has been highly maintained by logistic freight activities which have assisted the municipality to be recognisable and included in national strategies such as Industrial Development and Transport strategies (Emalahleni, 2011). Emalahleni local municipality's connection to the two municipalities has been an economic advantage to the municipality's growth strategies, their IDP has utilised the N4 and the bordering N12 to increase economic activity. Governance in the local municipality has not excelled, but there have been attempts

and success by the municipality to alleviate poverty and increase economic growth and employment (Emalahleni, 2011).

Mbombela local municipality has the highest economic output and activity within the four investigated municipalities (Mbombela, 2011). The municipality's local government has faced challenges which have threatened the growth of the municipality. One of the municipalities challenge has been uncoordinated planning projects and poor implementation strategies, which have been fuelled by skills shortages and poor management (Mbombela, 2011). The municipality has had to respond to the challenge of service delivery and lack of dependable plans that would assist the municipality to grow further. The municipality has had an advantage because it has had access to private sector investment that has motivated the municipality to implement more growth cantered development (Mbombela, 2011). The municipality has received credible financial ratings and has increased economic connections with metropolitan cities (mainly Johannesburg and Pretoria). Mbombela local municipality has one of the fastest growing economies in the country, Nelspruit is growing large enough to change its status from being a city to being a metropolitan city (Mbombela, 2011). The municipality has taken advantage of the natural resources and utilised then for growing the economy through tourism. The local government has taken advantage of these positive aspects and has aimed to provide solutions to its problems in order to improve the lives of the members of its municipality (Mbombela, 2011).

One of Steve Tshwete local municipality's problems has been aging infrastructure. The municipality has had poor financial management which could assist with the problem. There has been a shortage of qualified stuff which have the capability to respond to the growing mismanagement of funds and the decay of infrastructure (Steve Tshwete, 2011). These problems have discouraged investors and have held up development and growth. The municipality also faces problems of communication and implementation. The city has had an increased number fright movement, but the municipality's road infrastructure has not been able to accommodate increased growth (Steve Tshwete, 2011). The municipality has embarked on a journey to improve its infrastructure and increase economic activity in the city. The municipality's rural areas have been made a priority where there has been an interest in improving social infrastructure (Steve Tshwete, 2011). The municipality has ensured that they tackle unemployment by involving the community in new projects and ensuring that revenue is spread throughout the community. The projects have been well received by the communities, but the number of projects within the municipality have not

been enough to increase growth and decrease employment rates. There is a need to attract investment and alleviate poverty (Steve Tshwete, 2011).

The four chosen municipalities have had a location advantage as there has been increased access from Johannesburg and Pretoria through the MDC. According to Emalahleni's IDP the MDC has increased growth and assisting in creating new stronger economies. The N4 had existed before the implementation of the SDI program, but the maintenance was fairly poor. The road has increased freight movement and has encouraged investment in the main cities that the corridor streams through. The province has natural environment that have been tourist attractions e.g. Gods Window and Kruger National Park that have created movement in the province especially along municipalities that are along the MDC (Mbombela, 2011). The municipalities have benefitted from this as there are opportunities for new developments and the route has assisted in the creation of new developments for tourists going to the renounced areas. Population changes have indicated growth in the municipalities. Emakhazeni local municipality has had lower growth rates, which has displayed stagnant changes throughout the selected years. The other municipalities have experienced noticeable changes in population. Governance has also been a challenge in these municipalities where resources have been misused, and primarily this has discouraged investors as projects are mismanaged and growth is affected. This chapter has given the current situation of the municipalities as well as the challenges faced by the municipalities. This chapter has provided a basic image of the economy, the population and the state of the municipalities in order to be familiarised with the selected areas.

Chapter 5: Change and evolution of key sectors and indicators for the economic sector in Maputo Development Corridor

5.1. Introduction

This chapter analyses the municipalities that have been profiled in the previous chapter, it investigates the growth of key economic sectors in the selected municipalities as well as the national statistics for the same sectors. It investigates economic and social trends in Emakhazeni local municipality, Emalahleni local municipality, Mbombela local municipality and Steve Tshwete local municipality. The data is examined from 1996 to 2011 (with same data looking at year on year growth). The research investigates Changes in economic growth and employment along the along the Maputo Development Corridor (MDC). The MDC has been seen as an important economic growth generator for communities that are situated next to the project. This chapter analyses the extent of economic changes within the four municipalities and then compares the growth with national statistics. It is divided into two sections, the first section looks at economic indicators in the four municipalities as well as national statistics. The second section considers the social indicators so as to investigate the level of change in the chosen municipalities.

5.2. Employment

South Africa								
Sectors	1996	(%) sectorial percentage of total	2001	(%) sectorial percentage of total	Annual average growth rate (1996-2001)	2011	(%) sectorial percentage of total	Annual average growth rate (1996-2001)
Primary sector	2177939	17.0	1861059	15.4	-3.1	1267198	9.0	-3.8
Agriculture forestry and fishing	1603107	12.5	1451151	12.0	-2.0	751926	5.3	-6.4
mining	574831	4.5	409908	3.4	-6.5	515271	3.7	2.3
Secondary sector	3036948	23.7	2338116	19.4	-5.1	2424070	17.2	0.4
Manufacturing	1790737	14.0	1579420	13.1	-2.5	1380229	9.8	-1.3
utilities	50475	0.4	52001	0.4	0.6	63475	0.5	2.0
construction	1195736	9.3	706695	5.9	-10.0	980366	7.0	3.3
Tertiary sector	7608531	59.3	7871251	65.2	0.7	10375441	73.8	2.8
trade	2657572	20.7	2546557	21.1	-0.8	3512941	25.0	3.3
transport	644204	5.0	457929	3.8	-6.6	716493	5.1	4.6
finance	1092930	8.5	1534549	12.7	7.0	2080065	14.8	3.1
services	1665607	13.0	1922707	15.9	2.9	2161053	15.4	1.2

government	1548218	12.1	1409510	11.7	-1.9	1904889	13.5	3.1
Total	12823418	100	12070426	100	-1.2	14066709	100	1.5

Table 5.2.2. Employment status in South Africa (Source: Quantec Easydata®)

Total employment in South Africa has increased since 2001. The total economy in 2001 had witnessed decreases throughout the sectors. The annual average growth in the country had been fairly low. The construction sector had been on the highest industry to have declined in the country with an average annual growth rate of -10 between 1996 and 2001 (Quantec, 2014). The tertiary sector of the municipality had grown faster than the total of the entire economy. Although there was an increase in the secondary sector from 2001 and 2011, the sector's annual growth rate had been lower than any other in the country.

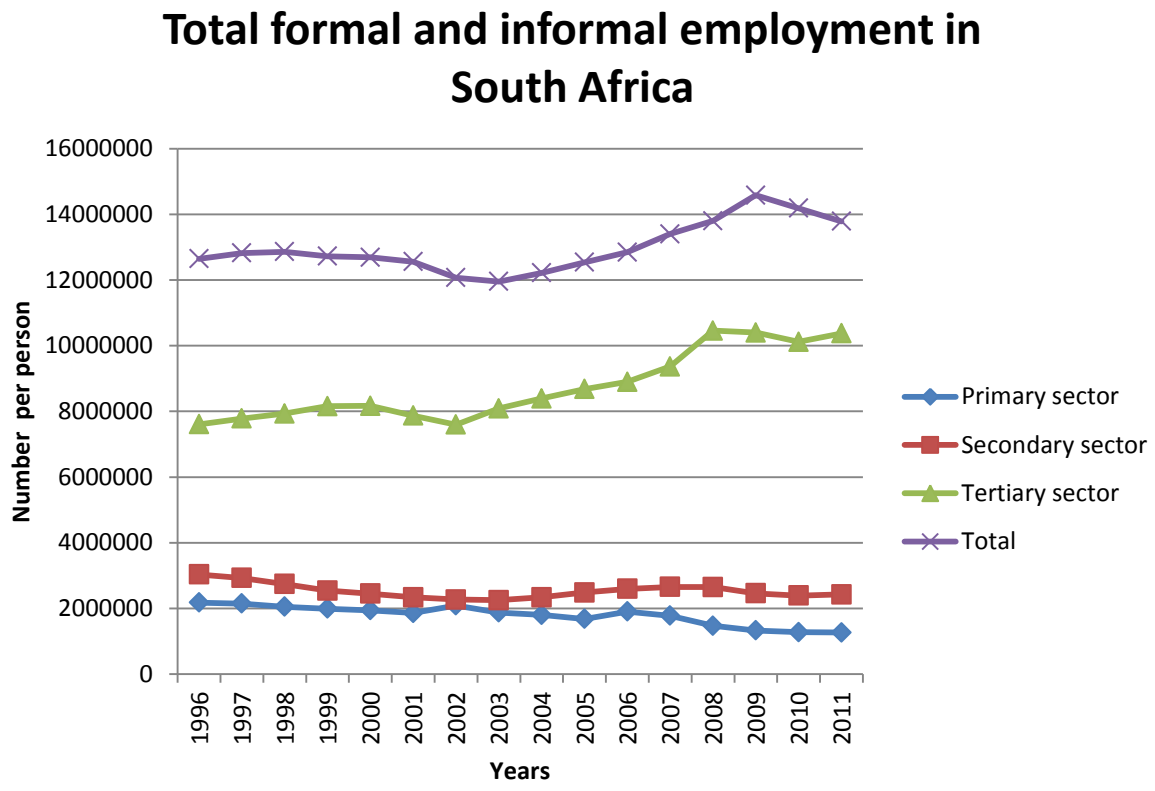


Figure 5.2.5: total formal and informal in South Africa from 1996 to 2011 (Source: Quantec Easydata®)

Figure 5.2.1 illustrates the change in total formal and informal employment in South Africa. The primary sector had had lower employments rates in the country. The tertiary sector has had higher numbers of people employed. There had been a decrease between in the sector in 2002, this was caused by the attacks in the United States in September 2001 (IDC, 2013). The attacks had disrupted the markets all over the world and employment in South Africa had been affected as seen on figure 5.2.1. The economy further decreased in 2010 of the global

financial crisis that occurred in 2008/2009 (IDC, 2013). The country had experienced job losses from 2009 and witnessed further job losses in 2010. It seems that the 2010 FIFA World Cup in South Africa had little effect on growth during that year (Quantec, 2014).

Total employment for Emakhazeni local municipality

The tables to follow indicate the employment pattern of the four selected municipalities. They indicate the workforce of the areas and the percentage, they also outline the average growth rate of the municipality. Table 5.2.2 illustrates total formal and informal employment in Emakhazeni local employment. Total employment in Emakhazeni local municipality has decreased over time, the municipality has not followed national trends as shown above (Quantec, 2014). The primary and secondary sectors have been decreasing showing negative annual average growth rates. The primary sector has witnessed a much larger decrease in the mining sector between 1996 and 2001. The mining industry's annual average growth increased between 2001 and 2011 and the agriculture, forestry and fishing decreased further. The secondary sector has performed poorly in this municipality, it has the lowest percentage of employment compared to the primary and secondary sectors and its annual average growth is still on the negatives (Quantec, 2014).

Emakhazeni local municipality								
Sector	1996	(%) sectorial percentage of total	2001	(%) sectorial percentage of total	Annual average growth rate (1996-2001)	2011	(%) sectorial percentage of total	Annual average growth rate (2001-2006)
Primary sector	5692	37.0	4466	31.4	-4.7	2377	18.3	-6.1
Agriculture, forestry and fishing	4558	29.6	3631	25.6	-4.4	1289	9.9	-9.8
mining	1134	7.4	835	5.9	-5.9	1088	8.4	2.7
Secondary sector	3426	22.3	2053	14.4	-9.7	1440	11.1	-3.5
Manufacturing	2067	13.4	1122	7.9	-11.5	682	5.2	-4.9
utilities	42	0.3	36	0.3	-3.0	70	0.5	6.9
construction	1317	8.6	895	6.3	-7.4	688	5.3	-2.6
Tertiary sector	6266	40.7	7690	54.1	4.2	9194	70.7	1.8
trade	2681	17.4	3172	22.3	3.4	3292	25.3	0.4
transport	697	4.5	437	3.1	-8.9	871	6.7	7.1
finance	490	3.2	836	5.9	11.3	1196	9.2	3.6
services	1557	10.1	2243	15.8	7.6	2513	19.3	1.1
government	841	5.5	1002	7.1	3.6	1322	10.2	2.8
Total	15385	100	14209	100	-1.6	13011	100	-0.9

Table 5.3.2: Total formal and informal employment in Emakhazeni local municipality (Source: Quantec Easydata®)

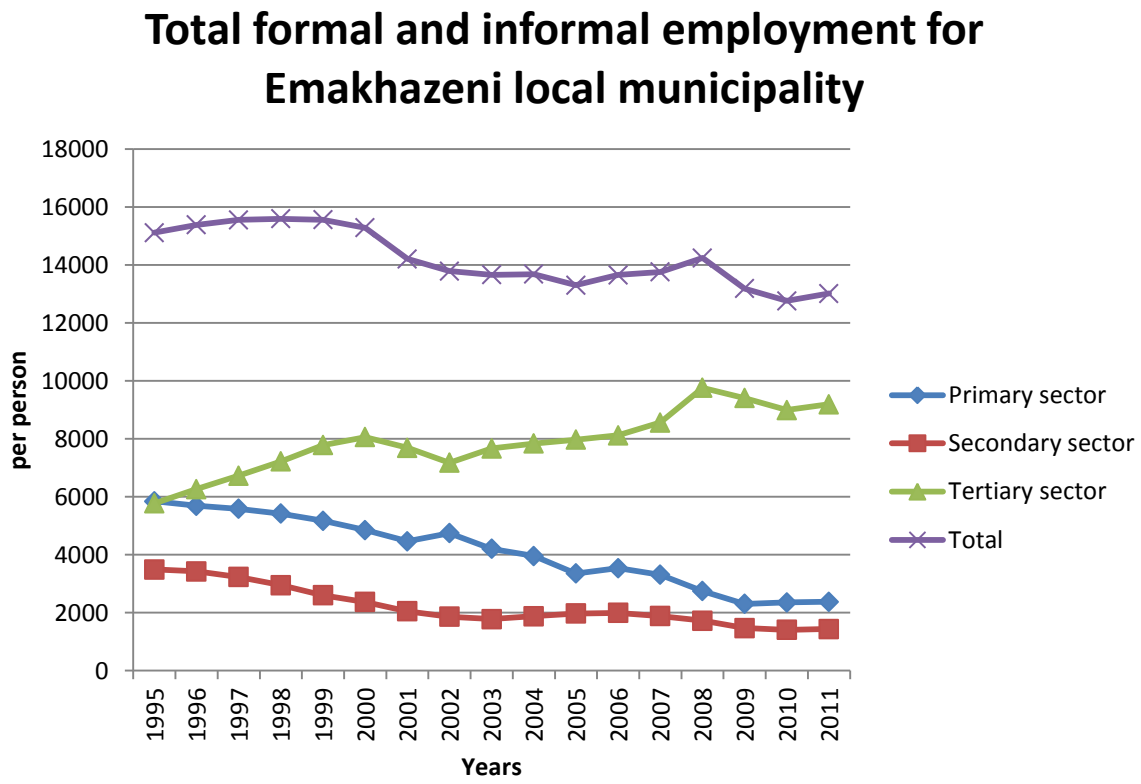


Figure 5.6.2.: Total formal and informal employment in Emakhazeni local municipality (Source: Quantec Easydata®)

Figure 5.2.2. illustrates employment in Emakhazeni local municipality from 1995 to 2011. Total employment in South Africa has been growing gradually over the years, total employment in Emakhazeni local municipality has been decreasing over time. The primary sector has contributed to the decline of total employment in the municipality. In 1995 the municipality's primary sector had been producing similar to the tertiary sector, since then the primary sector experienced decreases. The secondary sector in this municipality has not performed over time and it has been gradually decreasing.

Total employment for Emalahleni local municipality

Table 5.2.3 demonstrates employment in Emalahleni local municipality along with sectorial percentage change and average annual growth rate. The percentage of people employed in this sector is slightly lower than those of the former municipality. Some 46.6 per cent of the population worked in tertiary sector in 1996 and 58 per cent fifteen years later (Quantec, 2014). Total employment in the municipality has had a substantial increase from 2001, the annual average growth rate in the municipality between 2001 and 2011 had changed from a negatives in the previous calculation to a higher more positive change (Quantec, 2014). The growth rate in Emalahleni local municipality has been much faster than national annual average growth rate. All the municipality's sectors have grown faster than the national employment rates. The primary sector in Emalahleni local municipality has had an annual average growth of 6.1, which is an achievement due to its change from being one of the municipality's sector with the lowest growth rate, to being the highest compared to other sectors within the municipality. Mining has influenced the growth of this sector significantly. The annual growth rate in the mining sector grows more quickly than the national growth, the industry in Emalahleni grew twice as quick to the national growth (Quantec, 2014).

Emalahleni local municipality								
Sector	1996	(%) sectorial percentage of total	2001	(%) sectorial percentage of total	Annual average growth rate	2011	(%) sectorial percentage of total	Annual average growth rate
Primary sector	25061	23.2	23024	23.1	-1.7	41446	26.0	6.1
Agriculture, forestry and fishing	3695	3.4	3049	3.1	-3.8	5201	3.3	5.5
mining	21366	19.8	19975	20.0	-1.3	36245	22.7	6.1
Secondary sector	32540	30.2	22196	22.2	-7.4	25529	16.0	1.4
Manufacturing	19464	18.1	11437	11.5	-10.1	10675	6.7	-0.7
utilities	3459	3.2	4790	4.8	6.7	5282	3.3	1.0
construction	9617	8.9	5969	6.0	-9.1	9572	6.0	4.8
Tertiary sector	50200	46.6	54640	54.7	1.7	92558	58.0	5.4
trade	21760	20.2	22357	22.4	0.5	39131	24.5	5.8
transport	3382	3.1	2687	2.7	-4.5	6721	4.2	9.6
finance	6829	6.3	8847	8.9	5.3	12708	8.0	3.7
services	10053	9.3	12354	12.4	4.2	18131	11.4	3.9
government	8176	7.6	8395	8.4	0.5	15867	9.9	6.6
Total	107801	100	99860	100	-1.5	159533	100	4.8

Table 5.2.4.: Total formal and informal employment in Emalahleni local municipality (Source: Quantec Easydata®)

Figure 5.2.3 illustrates the trend in employment for Emalahleni local municipality from 2005 to 2011. Overall employment in the municipality has increased over time, sine from 2002 total employment has increased rapidly (Quantec, 2014). The 2008/2008 global financial crisis had affected employment, the effects were recognised in 2010 (IDC, 2013). Overall employment has increased however since from then. The graph suggests that there will be more growth if the markets to not experience catastrophes. The primary sector had been the lowest in the municipality 1999 to 2000 (Quantec, 2014). The sector has been increasing ever since, especially in 2007 where there was a surge in the number of people employed (Quantec, 2014). The secondary sector the lowest performing sector in the municipality, growth in this sector has been stagnant as illustrated on the graph below (Quantec, 2014).

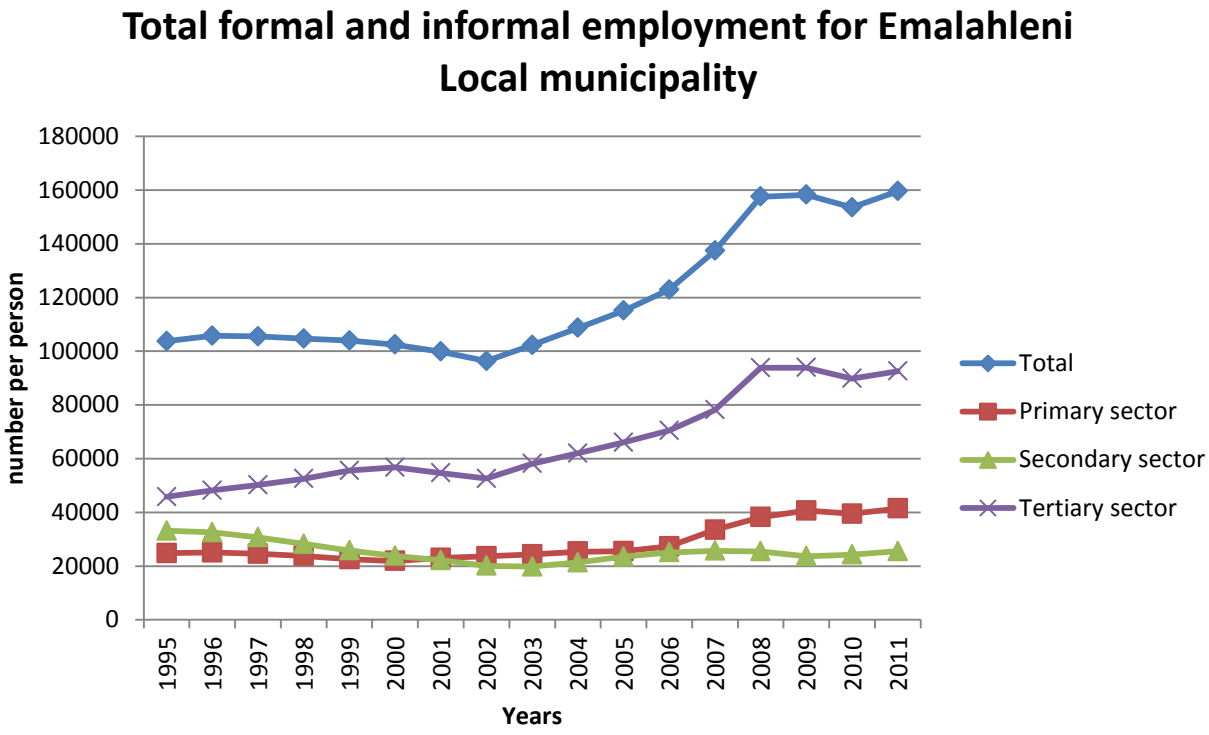


Figure 5.2.7.: Formal employment in Emalahleni local municipality from 1996 to 2011(Source: Quantec Easydata®)

Total employment for Mbombela local municipality

Table 5.2.4 illustrates formal employment and annual average growth rate for Mbombela local municipality. Overall growth in the municipality has increased over the years. The

annual average growth has grown from -1.1 between 1996 and 2001 to 3.4 between 2001 and 2011. Total employment in Mbombela local municipality has grown higher compared to national statistics. The primary and secondary sectors have had low percentage increase in the municipality (Quantec, 2014). The tertiary sector has dominated the sectors in the municipality, the sector contributes 76 per cent of total employment in the municipality. The secondary sector has had high employment rates compared to the primary sector, the construction industry is the largest contributor in the sector. The mining industry has had one of the municipality's highest average annual growth rates between 2001 and 2011. The industry had grown from -15.8 between 1996 and 2001 to 14.7 between 2001 and 2011 (Quantec, 2014). Employment growth in the mining industry has also increased in percentage, but the contribution of the mining sector is one of the lowest contributors in the municipality.

Mbombela Local Municipality								
Sector	1996	(%) sectorial percentage of total	2001	(%) sectorial percentage of total	Annual average growth rate	2011	(%) sectorial percentage of total	Annual average growth rate
Primary sector	21632	14.4	19801	13.9	-1.8	19350	9.7	-0.2
Agriculture, forestry and fishing	19718	13.1	18991	13.3	-0.7	16146	8.1	-1.6
mining	1914	1.3	811	0.6	-15.8	3204	1.6	14.7
Secondary sector	40515	26.9	27955	19.6	-7.2	28534	14.3	0.2
Manufacturing	20202	13.4	15372	10.8	-5.3	11709	5.9	-2.7
utilities	880	0.6	939	0.7	1.3	1177	0.6	2.3
construction	19433	12.9	11644	8.2	-9.7	15648	7.8	3.0
Tertiary sector	88231	58.7	94852	66.5	1.5	151693	76.0	4.8
trade	38747	25.8	41398	29.0	1.3	58350	29.2	3.5
transport	5330	3.5	3961	2.8	-5.8	6959	3.5	5.8
finance	10698	7.1	13905	9.8	5.4	26885	13.5	6.8
services	18067	12.0	21027	14.7	3.1	31376	15.7	4.1
government	15389	10.2	14561	10.2	-1.1	28123	14.1	6.8
Total	150378	100	142608	100	-1.1	199577	100	3.4

Table 5.2.5.: Final employment for Mbombela local municipality (Source: Quantec Easydata®)

Figure 5.2.4 is an illustration of the trend in formal employment in Mbombela local municipality. Overall employment in Mbombela local municipality has slightly similar trends

to the national trends, but the municipality has sharper increases. Employment had experienced a decrease between 2008 and 2009, the decrease only lasted those two years and employment increased steadily until it decreased again in 2009 (Quantec, 2014). The tertiary sector in Mbombela local municipality dominates employment in the municipality. The tertiary sector's employment trends resemble overall employment. The primary sector has performed poorly over the selected period. The secondary sector has performed poorly as well and the divide between the tertiary sector and other sectors is increasing yearly (Quantec, 2014). Employment increases in the tertiary sector in Mbombela local municipality and South Africa have been representing the economies of the regions, the growth of the tertiary sector has contributed more to employment in the country and it has been increasing annually (Meintjes, 2000)

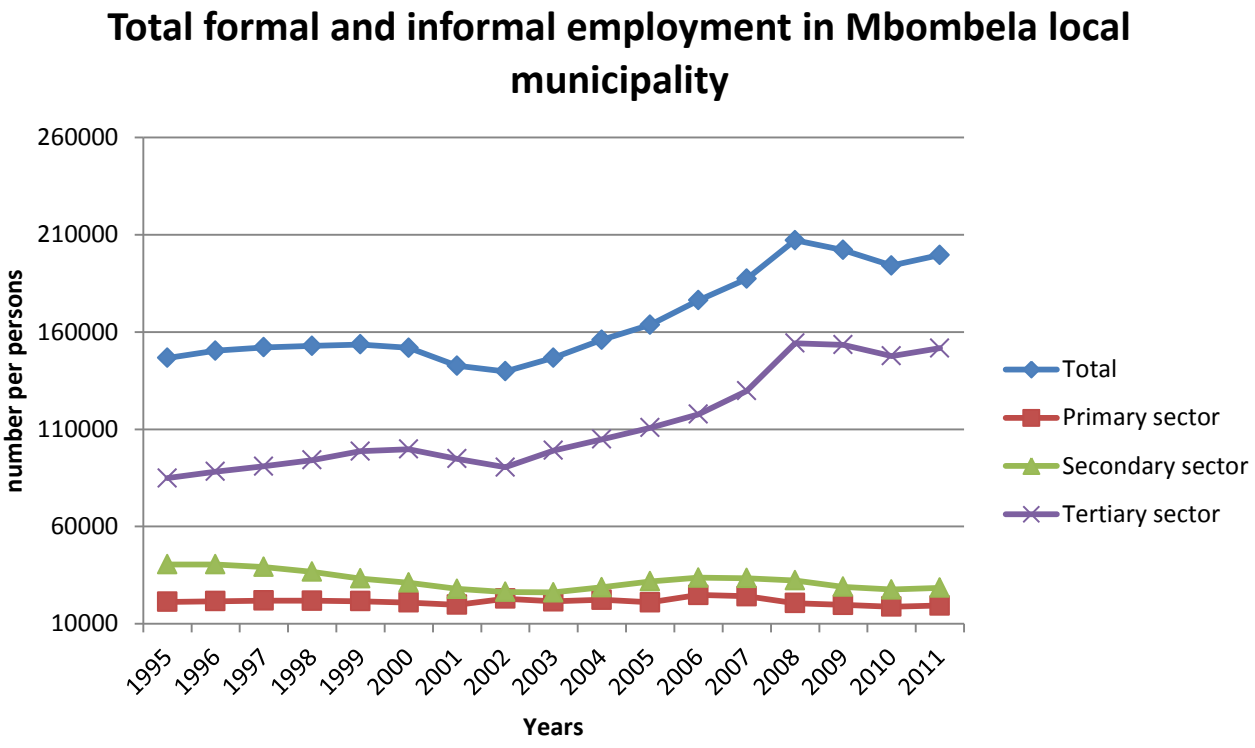


Figure 5.2.8: Total employment in Mbombela local municipality from 1995 to 2011 (Source: Quantec Easydata®)

Total employment for Steve Tshwete local municipality

Figure 5.2.5 illustrates employment in Steve Tshwete local municipality in 1996, 2001 and 2011. Overall employment in this municipality has grown over the years. Between 1996 and 2001 employment in Steve Tshwete local municipality had a negative growth rate, overall employment then improved to a 2.5 between 2001 and 2011 (Quantec, 2014). Employment growth in this municipality has grown much faster than national growth. Total national growth in South Africa has an annual average growth of 1.5, which was lower compared to Steve Tshwete local municipality. The tertiary sector, like national statistics, is dominant in this municipality. It compromised of 57 per cent of all the sectors in the municipality, although the sector dominates, it has decreased in percentage from 58 per cent in 2001 to 57 per cent in 2011 (Quantec, 2014). The tertiary sector in this municipality has performed better than the secondary sector in 2001. The two sectors had similar percentages in 1996, but the primary sector increased by 3 per cent between 2001 and 2011 (Quantec, 2014).

Steve Tshwete local municipality								
Sector	1996	(%) sectorial percentage of total	2001	(%) sectorial percentage of total	Annual average growth rate (1996-2001)	2011	(%) sectorial percentage of total	Annual average growth rate (2001-2006)
Primary sector	14228	22	11478	21	-4.2	16424	23	3.6
Agriculture, forestry and fishing	6903	10	4416	8	-8.5	5334	8	1.9
Mining	7324	11	7062	13	-0.7	11089	16	4.6
Secondary sector	19898	30	11969	21	-9.7	14391	20	1.9
Manufacturing	12238	19	6836	12	-11.0	5535	8	-2.1
utilities	1640	2	1674	3	0.4	2367	3	3.5
construction	6019	9	3460	6	-10.5	6488	9	6.5
Tertiary sector	31982	48	32256	58	0.2	40215	57	2.2
trade	13523	20	13292	24	-0.3	17608	25	2.9
transport	1808	3	1184	2	-8.1	2958	4	9.6
finance	4031	6	4642	8	2.9	6363	9	3.2
services	7139	11	8052	14	2.4	7580	11	-0.6
government	5481	8	5086	9	-1.5	5706	8	1.2
Total	66108	100	55703	100	-3.4	71030	100	2.5

Table 6.2.5.: Total formal and informal employment in Steve Tshwete local municipality (Source: Quantec Easydata®)

The annual average growth rate in the primary sector has also increased much faster than the secondary sector, the primary sector's average annual growth rate in Steve Tshwete local municipality is also higher than the national growth rate in the primary sector (Statssa, 2014).

Figure 5.2.5 illustrates total formal and informal employment in Steve Tshwete local municipality from 1995 to 2011. Overall employment in Steve Tshwete municipality has had a varied trend to national trends. Total employment had been decreasing until 2002, it increased in 2003 and had been increasing until 2009. Total employment has not reached the level it was in 2009.

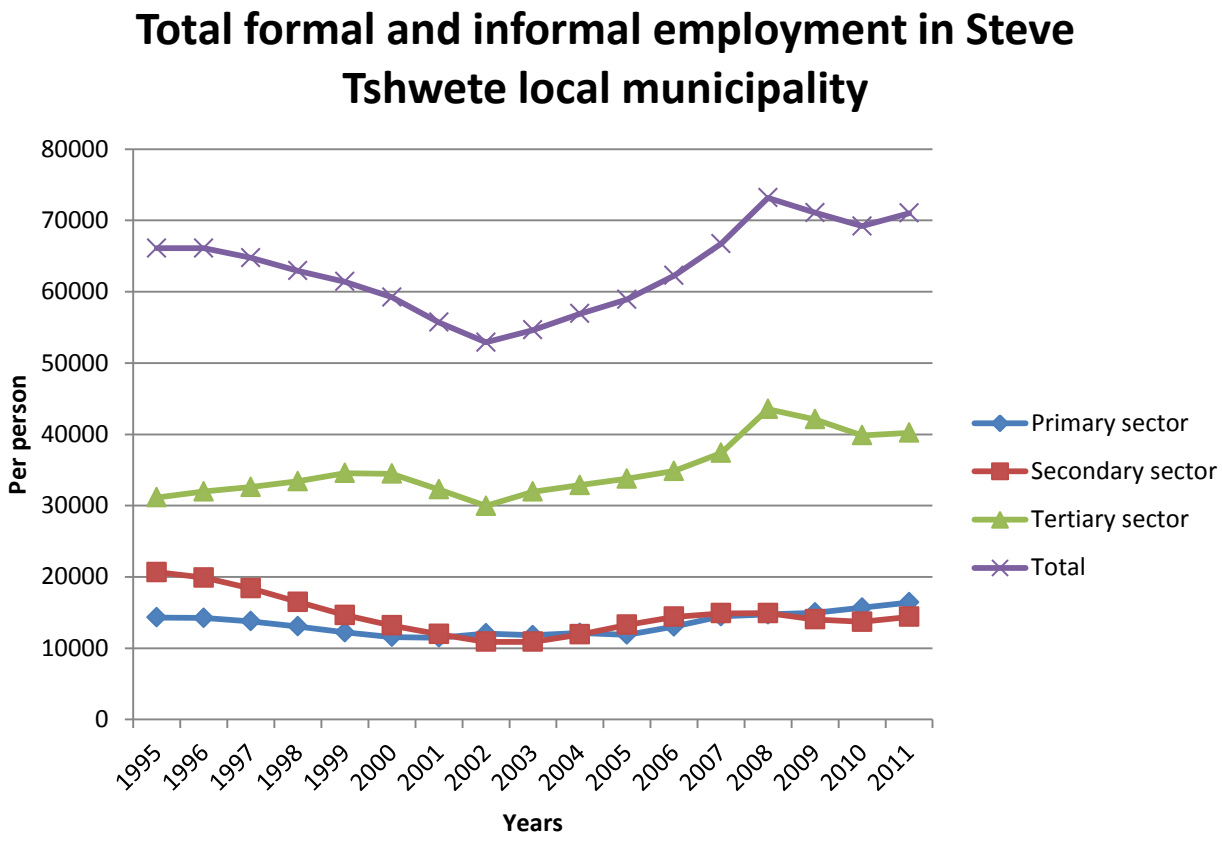


Figure 9.2.5.: Total formal and informal employment in Steve Tshwete local municipality from 1995 to 2011 (Source: Quantec Easydata®)

The tertiary sector in Steve Tshwete local municipality is dominant, the pattern is similar to the overall employment of the municipality. The secondary sector was much greater than the secondary sector until 2001 (Quantec, 2014) . Since from then, the primary and secondary sectors have dynamic. The two sectors differ from national trends above, the secondary sector in the South Africa is much more linear in its growth and employs more people than the primary sector.

5.3. Growth performance index (GPI) for total formal and informal employment

Growth performance index (GPI) measures the growth of a specific sector in a particular economy relative to the growth of the same sector in an aggregate economy (Meintjes, 2001). The index is measured on a base of 100, a sector that has less than 100 on the index indicates a lagging sector and one with an index greater than a hundred indicates a leading sector relative to national figures (Quantec, 2014). Table 5.3.1 indicates the growth performance index for the four investigated municipalities along with national statistics for all three

Location	Sectors	1996	2001	Growth Performance indices 1996 - 2001	2011	Growth Performance indices 2001-2011
South Africa		12823417	12070427	100	13551437	100
Emakhazeni local municipality		15384	14209	98.1	13011	81.6
	Primary	14228	11478	85.7	16424	127.5
	Secondary	19898	11969	63.9	14391	107.1
	Tertiary	31982	32256	107.1	40215	111.0
Emalahleni local municipality		107801	99860	98.4	159533	142.3
	Primary	25061	23024	97.6	41446	160.3
	Secondary	32540	22196	72.5	25529	102.4
	Tertiary	50200	54640	115.6	92558	150.9
Mbombela local municipality		150378	142608	100.7	199577	124.7
	Primary	21632	19801	97.2	19350	87.0
	Secondary	21632	27955	137.3	28534	90.9
	Tertiary	88231	94852	114.2	151693	142.4
Steve Tshwete local municipality		66108	55703	89.5	71030	113.6
	Primary	14228	11478	85.7	16424	127.5
	Secondary	19898	11969	63.9	14391	107.1
	Tertiary	31982	32256	107.1	40215	111.0

Table 5.3.1.: Growth Performance index for total employment in South Africa and four municipalities (Source: Quantec Easydata®)

sectors. The table indicates that a predominant number of sectors in these municipalities are lagging especially in the primary and secondary sectors. Emalahleni local municipality has the highest GPI on the table. This means the municipality's growth is faster to that of South Africa. The primary and secondary sectors have performed poorly relative to the national economy between 1996 and 2001 (Quantec, 2014). . The sectors had performed below a 100 which made them lagging areas. Both the sectors improved in the second calculation as seen on table. They both grew faster to the national growth and could be classified as leading sectors in the municipality. Emalahleni local municipality's growth had been through the tertiary sector, it employed more people in the municipality and its growth relative to the national economy has been much higher (Quantec, 2014).

Mbombela has had a strong GPI in throughout the calculated years. The municipality has the second highest GPI of 124.7 on the table. This means employment growth was growing faster than the national economy (Quantec, 2014). The primary and secondary sectors in the municipality however have performed poorly relative to the national economy, the primary sector had a GPI of 97.2 between 1996 and 2001 which decreased to 87.0 between 2001 and 2011 (Quantec, 2014). The secondary sector did not perform well either, it changed status from a leading sector between 1996 and 2001 with a GPI of 137.3 to a lagging sector between 2001 and 2011, this means the primary sector grew slower to the national economy (Quantec, 2014). The tertiary sector has had a strong GPI in the municipality and has only increased. It increased from 114.2 between 1996 and 2001 to 142.4 between 2001 and 2011 (Quantec, 2014). The overall GPI between 2001 and 2011 indicates that the area is still a leading region, with a GPI of 142.4, but most importantly, the tertiary sector's growth has grown much faster than the national economy (Quantec, 2014).

Steve Tshwete local municipality's overall GPI grew slightly similar to the national economy between 2001 and 2011. It had a GPI of 113.6 which was higher than the previous calculation for the municipality (Quantec, 2014). Between 1996 and 2001, the municipality had an overall growth of less than a hundred, it grew much slower than the national economy. The primary sector's GPI in this municipality had grown faster relative the national economy between 1996 and 2001. It had a GPI of 127.5, which was much higher than GPI in the previous calculation. The sector had had a GPI of 85.7 between 1996 and 2001 (Quantec, 2014). The primary sector has a higher GPI than all the sectors in the municipalities, it grew much faster relative to the national economy. The secondary sector had one of the lowest GPI's in the four municipalities, it had a GPI of 63.9 which meant the sector grew slower

than the national economy. The secondary sector had a much higher GPI between 2001 and 2011, it grew similar to the national economy with a GPI of 107.1 (Quantec, 2014).

5.4. Gross Value Added

Total GVA for South Africa

Gross Value added (GVA) measures the value of goods and services in an economy. This section measures GVA in South Africa and the four chosen municipalities. The measure will

South Africa								
Sectors	1996	(%) sectorial percentage of total	2001	(%) sectorial percentage of total	Annual average growth rate (1996-2001)	2011	(%) sectorial percentage of total	Annual average growth rate (1996-2001)
Primary sector	132854	12.6	132649	11.1	-0.03	141274	8	0.6
Agriculture, forestry and fishing	32735	3.1	33630	2.8	0.5	41587	2	2.1
mining	100119	9.5	99019	8.3	-0.2	99687	6	0.1
Secondary sector	254535	24.2	284951	23.9	2.3	384703	23	3.0
Manufacturing	199882	19.0	229698	19.3	2.8	291785	17	2.4
utilities	28620	2.7	27542	2.3	-0.8	35049	2	2.4
construction	26033	2.5	27711	2.3	1.3	57869	3	7.6
Tertiary sector	663108	63.1	774938	65.0	3.2	1177824	69	4.3
trade	136512	13.0	164601	13.8	3.8	235295	14	3.6
transport	79520	7.6	108902	9.1	6.5	172530	10	4.7
finance	186575	17.8	234450	19.7	4.7	405479	24	5.6
services	65777	6.3	77433	6.5	3.3	104026	6	3.0
government	194724	18.5	189552	15.9	-0.5	260494	15	3.2
Total	1050497	100	1192538	100	2.6	1703801	100	3.6

Table 5.4.1.: Total GVA for South Africa (Source: Quantec Easydata®)

compare output in the municipalities and compare it to the national output in determine whether the municipalities grow at as similar rate to the country. This will assist in determining the growth patterns of the municipality compared to South Africa. Table 5.4.1 illustrates GVA in South Africa for 1996, 2001 and 2011 (Quantec, 2014). Overall Growth in South Africa has increased since the last calculation. South Africa's output has increased from 2.6 between 1996 and 2001 to 3.6 between 20o1 and 2011 (Quantec, 2014). The

increase occurred mainly in the tertiary sector. The sector compromised 69 per cent in all the industries, its average annual growth was also the highest compared to the other sectors in the country. The finance sector has contributed 24 per cent in 2011, compared to the 19.7 per cent in 2001 (Quantec, 2014). The industry's growth has grown much faster to the overall growth of the country and of the municipality. The secondary sector's average annual growth rate demonstrates the growth of the secondary sector over the years (Quantec, 2014). It grew similar to the overall growth of the country, the manufacturing industry is the largest contributor in the sector, contributing 17 per cent of the 23 per cent of the sector. The primary sector has performed poorly in the country, throughout the years the percentage of output in the country has decreased. It changed from 12.6% in 1996 to 11.1% and finally to 8% in 2011 (Quantec, 2014) . The sector's overall growth has been much lower to that of the country.

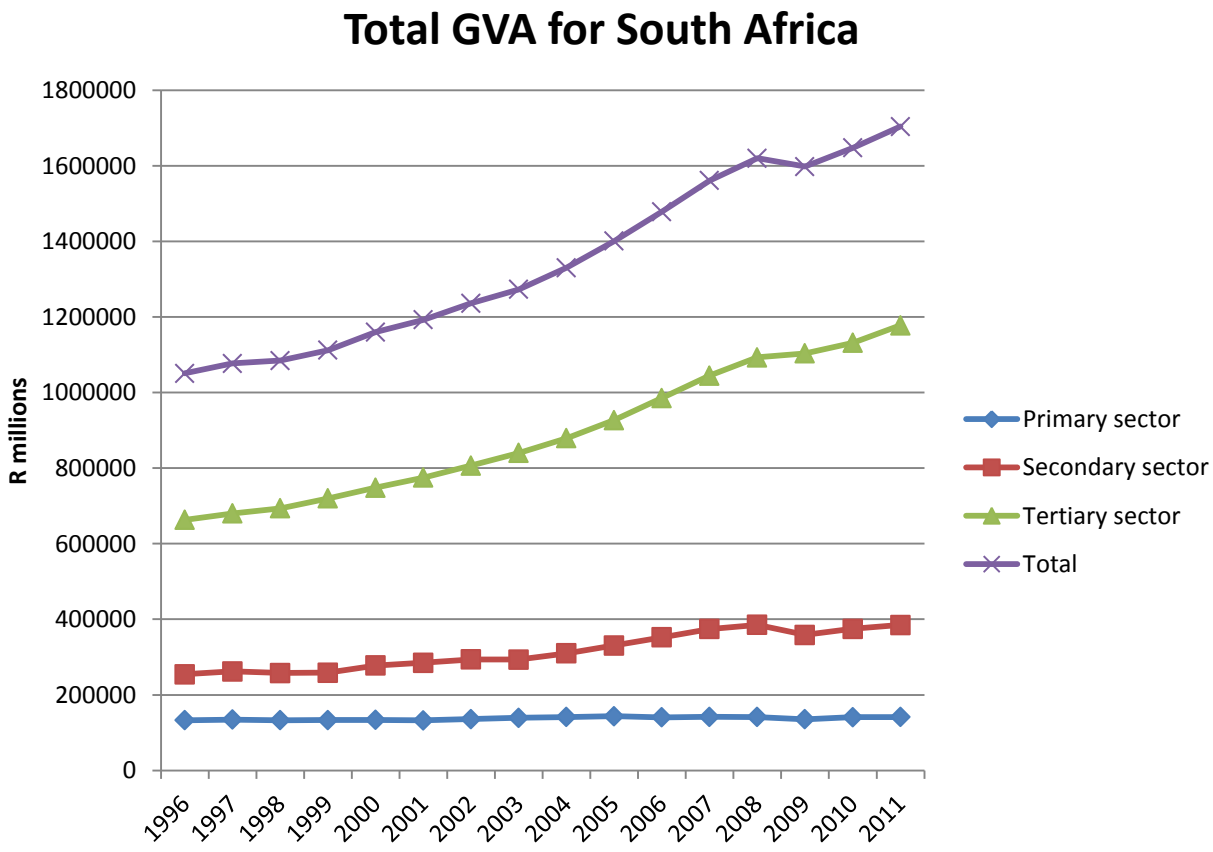


Figure 5.4.1.: Total GVA for South Africa (Source: Quantec Easydata®)

Figure 5.4.1 illustrates total GVA in South Africa from 1995 to 2011. Total GVA in the country has been increasing annually. There have only been minor changes in output especially in 2008/2009 during the global financial crisis (Quantec, 2014). Overall GVA has increased steadily. The tertiary sector has had the highest output in the country as seen on the

figure above. The secondary sector has been gradually increasing in the country, it has had one decrease which is similar to the total GVA of the country which was due to the global financial crisis in 2008/2009 (IDC, 2013). The secondary sector has been increasing as well since the decline. The primary sector has been stagnant, there has been little difference in growth in the sector and the graph shows little indication of growth or decline in the future (Quantec, 2014).

Total GVA for Emakhazeni local municipality

Table 5.4.2 indicates total GVA in Emakhazeni local municipality for 1996, 2001 and 2011. Overall GVA in Emakhazeni local municipality has been low compared to the national growth. The municipality has witnessed a negative increase in total growth between 2001 and 2011, this is the lowest overall growth in the compared municipalities. The municipality had had a higher growth compared to the total of South Africa between 1996 and 2001 (Quantec, 2014). It has then decreased in most sectors. The tertiary sector's annual average growth has decreased, but its sectorial percentage has increased. The primary sector has had a negative growth between 2001 and 2011, the largest contributor to this growth has been in the mining industry, with an average annual growth of -7.3. The sectorial percentage from both the primary and secondary sectors had had decreased by more than 20%.

Emakhazeni local municipality								
Sectors	1996	(%) sectorial percentage of total	2001	(%) sectorial percentage of total	Annual average growth rate (1996-2001)	2011	(%) sectorial percentage of total	Annual average growth rate (1996-2001)
Primary sector	380	37.2	556	42.6	7.9	278	23.8	-6.7
Agriculture, forestry and fishing	88	8.6	82	6.3	-1.4	57	4.9	-3.6
mining	365	35.7	474	36.3	5.4	221	19.0	-7.3
Secondary sector	228	22.3	200	15.3	-2.6	249	21.4	2.2
Manufacturing	196	19.	168	12.9	-3.0	204	17.5	2.0
utilities	12	1.2	8	0.6	-7.8	18	1.5	8.4
construction	20	2.0	24	1.8	3.7	27	2.3	1.2
Tertiary sector	414	40.5	549	42.1	5.8	639	54.8	1.5
trade	99	9.7	141	10.8	7.3	127	10.9	-1.0
transport	109	10.	124	9.5	2.6	161	13.8	2.6
finance	90	8.8	129	9.9	7.5	171	14.7	2.9
services	48	4.7	68	5.2	7.2	79	6.8	1.5
government	68	6.7	86	6.6	4.8	10	0.9	-19.4

Total	1022	100	1305	100	5.0	1166	100	-1.1

Table 5.4.2.: total GVA for Emakhazeni local municipality (Source: Quantec Easydata®)

Figure 5.4.2 illustrates GVA in Emakhazeni local municipality from 1996 to 2011. The municipality's total GVA has had a different trajectory compared to the country's total GVA. Overall GVA increased from 1996 to 2000 and experienced decreases until 2003 (Quantec, 2014). It only increased minimally until it decreased again in 2006. Its lowest GVA was in 2009, even though there has been growth in 2011, it has not recovered enough to reach the state it was in 2005. The figure suggests that the primary sector has been responsible for the decline experienced in overall growth.

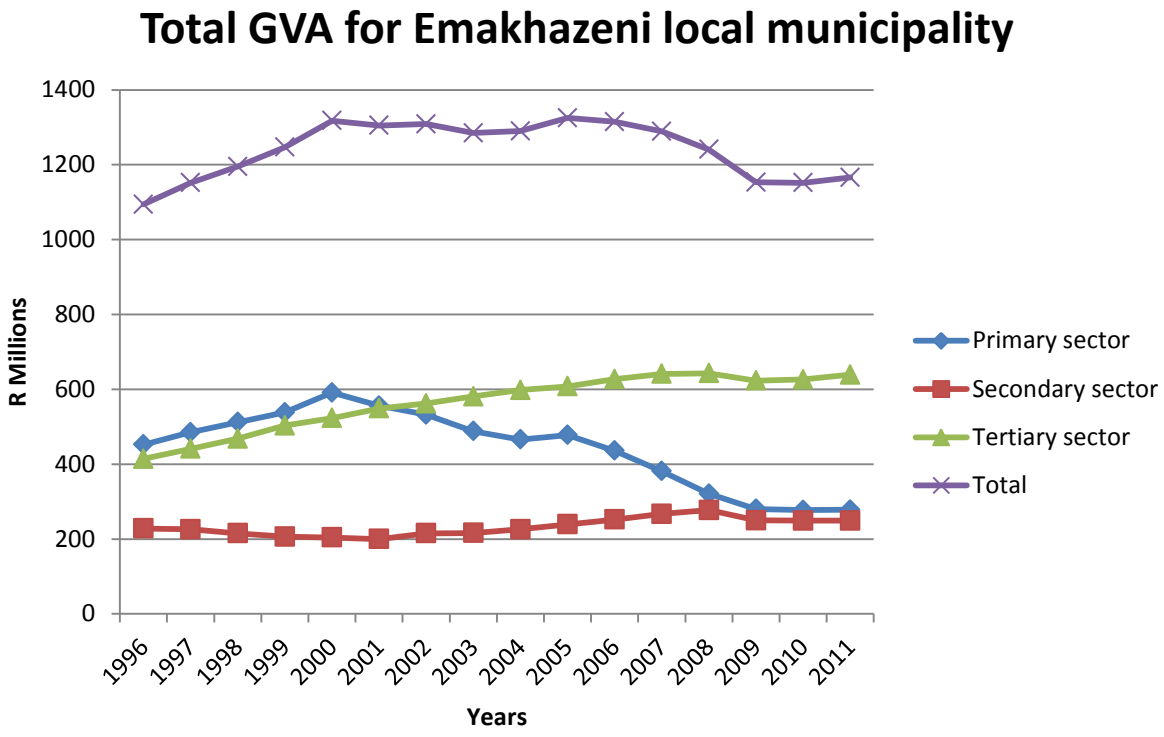


Figure 5.4.2.: Total GVA for Emakhazeni local municipality (Source: Quantec Easydata®)

The primary sector had a steady increase until 2000, since from then the primary sector has been decreasing annually. It moved from being the highest performing sector in the municipality to being one of the lowest performing sector (Quantec, 2014). The primary sector's growth does not resemble the national figure, but the sector's GVA is similar to the national towards the end. The secondary sector has had slight increases and decreases over the years. The secondary sector is has the lowest outputs in the municipality and it seems to be decreasing further as seen on figure 5.4.2. It does no resemble the national trend, but there

are similarities in the trend of the graph, especially in 2008 at the beginning of the global financial crisis (Quantec, 2014).

Total GVA for Emalahleni local municipality

Table 5.4.3 indicates GVA and average annual growth rate in Emalahleni local municipality in 1996, 2001 and 2011, it also captures the annual average growth rate in the municipality. The primary sector in this municipality has performed well especially in 1996 and 2001 (Quantec, 2014). Overall annual average growth has decreased in the municipality. Between 1996 and 2001 the average annual growth in Emalahleni local municipality has been higher than that of South Africa. In the second calculation of growth, the municipality's average annual growth had had decreased and was much slower than the national growth (Quantec, 2014). The tertiary sector's average annual growth has marginally increased within the two calculations. The secondary sector's growth however has grown much faster to the national growth in the secondary sector, it has also witnesses growth in the percentage from 25% in 2001 to 28% in 2011 (Quantec, 2014).

Emalahleni local Municipality								
Sector	1996	(%) sectorial percentage of total	2001	(%) sectorial percentage of total	Average annual growth rate (1996-2001)	2011	(%) sectorial percentage of total	Average annual growth rate (2001-2011)
Primary sector	5475	42	7104	45	5.3	8166	38	1.4
Agriculture, forestry and fishing	82	1	79	1	-0.7	199	1	9.7
Mining and quarrying	5393	41	7025	45	5.4	7967	37	1.3
Secondary sector	3782	29	3968	25	1.0	6008	28	4.2
Manufacturing	1866	14	1840	12	-0.3	3743	17	7.4
Utilities	1749	13	1948	12	2.2	1844	9	-0.5
Construction	167	1	180	1	1.5	421	2	8.9
Tertiary sector	3782	29	4687	30	4.4	7282	34	4.5
Trade	973	7	1165	7	3.7	1751	8	4.2
Transport	605	5	937	6	9.1	1767	8	6.5
Finance	1024	8	1209	8	3.4	1571	7	2.7
Services	402	3	520	3	5.3	790	4	4.3
Government	749	6	856	5	2.7	1403	7	5.1
Total	13039	100	15759	100%	3.9	21456	100	3.1

Table 5.4.3.: GVA and annual growth rate in Emalahleni local municipality in 1996, 2001 and 2011. (Source: Quantec Easydata®)

Figure 5.4.3 illustrates GVA per sector in Emalahleni local municipality from 1996 to 2011 (Quantec, 2014). The graph illustrates the trends of the sectors within the municipality. According to the graph, the primary sector is dominant in this sector as seen on the graph below. The primary sector has had increased GVA from the beginning, as seen on the graph. The secondary sector has shown a steady increase as well and the trend is similar to that of the primary sector especially in the years 2008 and 2009 (Quantec, 2014). There is a decrease in GVA in these sectors, the total also show a decrease within that year. The tertiary sector experienced an increase within those years unlike the other sectors. The sectors are closely aligned on the graph suggesting that all three sectors in the municipality perform well, especially the primary sector. The total GVA suggests that contribution of output in the municipality is high in all three sectors (Quantec, 2014).

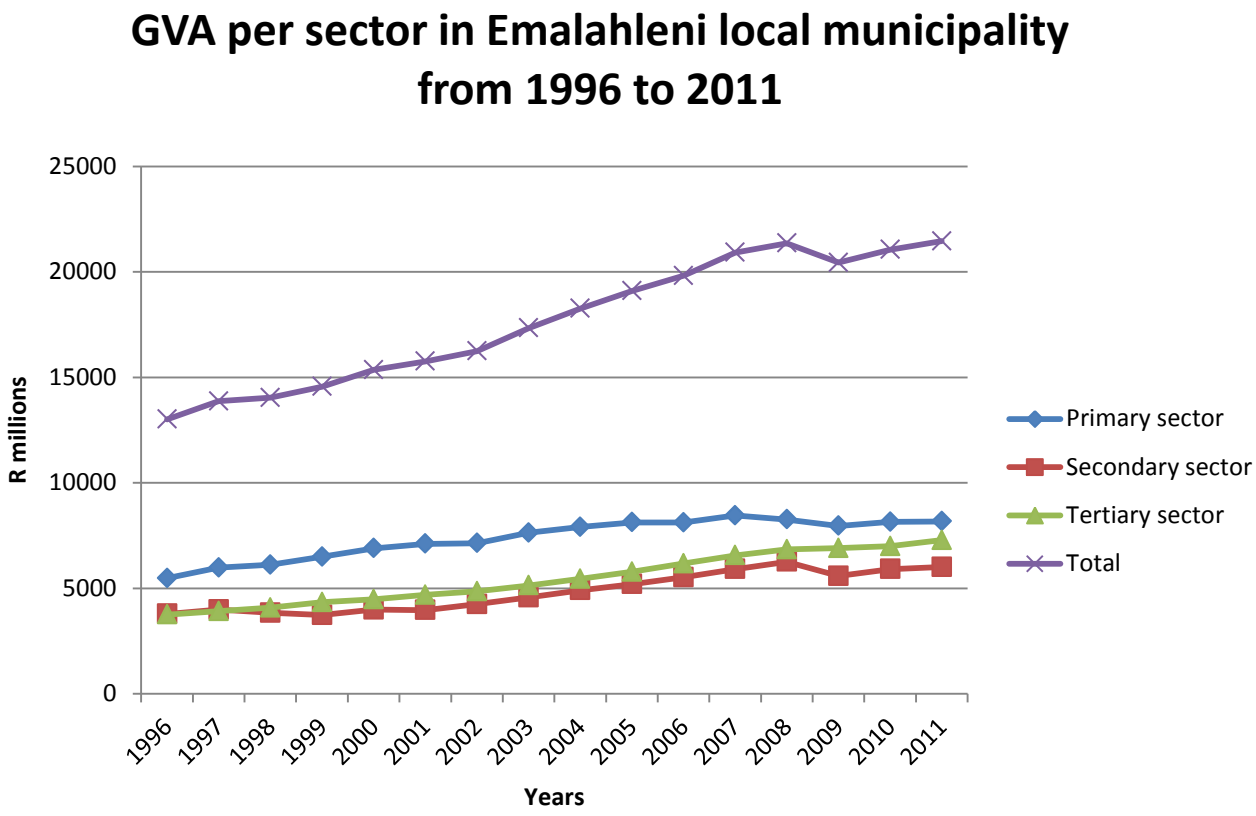


Figure 5.4.3.: GVA per sector in Emalahleni local municipality from 1996 to 2011 (Source: Quantec Easydata®)

5.4.4 Total GVA for Mbombela local municipality

Table 5.4.4 indicates the GVA and the average annual growth in Mbombela local municipality for 1996, 2001 and 2011. The overall growth in the municipality has grown

higher than the national figures specifically between 2001 and 2011. The country had overall growth rate of 2.6 while Mbombela local municipality had overall growth of 4.1 (Quantec, 2014).The municipality illustrates a high percentage in the tertiary sector since 1996. It increased from 66 per cent in 1996 to 69 per cent in 2001 and a further 70 per cent in 2011. The average annual growth indicates that the sector has had a high growth rate, it grew from 3.1 between 1996 and 2001 to 4.2 between 2001 and 2011 (Quantec, 2014). The secondary sector has witnessed a decrease in percentage contribution to the local economy compared to the tertiary sector. It decreased from 25 per cent in 1996 to 24 per cent in 2001 and 23 per cent in 2011. The average annual growth rate between 1996 and 2001 was low with a growth rate of 0.8 but this increased to 3.9 per annum between 2001 and 2011 (Quantec, 2014).

Mbombela local municipality								
Sector	1996	(%) sectorial percentage of total	2001	(%) sectorial percentage of total	Average annual growth rate (1996-2001)	2011	(%) sectorial percentage of total	Average annual growth rate (2001-2011)
Primary sector	852	8	784	7	-1.6	1134	7	3.8
Agriculture, forestry and fishing	415	4	469	4	2.5	634	4	3.1
Mining and quarrying	437	4	315	3	-6.3	500	3	4.7
Secondary sector	2637	25	2750	24	0.8	4015	23	3.9
Manufacturing	2082	20	2232	19	1.4	3120	18	3.4
Utilities	285	3	235	2	-3.8	338	2	3.7
Construction	270	3	283	2	0.9	557	3	7.0
Tertiary sector	6856	66	7997	69	3.1	12076	70	4.2
Trade	1596	15	1951	17	4.1	2304	13	1.7
Transport	877	8	1311	11	8.4	1738	10	2.9
Finance	1875	18	2049	18	1.8	3652	21	5.9
Services	814	8	960	8	3.4	1507	9	4.6
government	1694	16	1726	15	0.4	2875	17	5.2
Total	10345	100	11531	100	2.2	17225	100	4.1

Table5.4.4.: GVA per sector in Mbombela local municipality for 1996, 2001 and 2011 (Source: Quantec Easydata®).

The primary sector in this municipality has had a low GVA from 1996. Between 1996 and 2001 the sector experienced a negative growth of -1.6, but recovered between 2001 and 2011 with an annual average growth of 3.8. The total GVA for the municipalities has grown significantly over the years (Quantec, 2014). The average annual growth rate for the

municipality has increased from 2.2 between 1996 and 2001 to 4.1 between 2001 and 2011. There has been a positive increase throughout the municipality (Quantec, 2014).

Figure 5.4.4 indicates GVA trends for Mbombela local municipality from 1996 to 2011. The tertiary sector in Mbombela local municipality is the highest in terms of its GVA, the graph suggests that the sector will continue to grow towards the future (Quantec, 2014). The gap between the tertiary sector and the other two sectors show that there is a concentration of tertiary services than the primary and secondary sectors. The secondary sector also seems to have decreased its share of the local economy over the years. It had increased from 1999 until 2008 where it first decreased. Towards 2010, it increased and decreased again in 2011 (Quantec, 2014). The primary sector has had very little change in the over-time. It has produced some of the lowest numbers throughout.

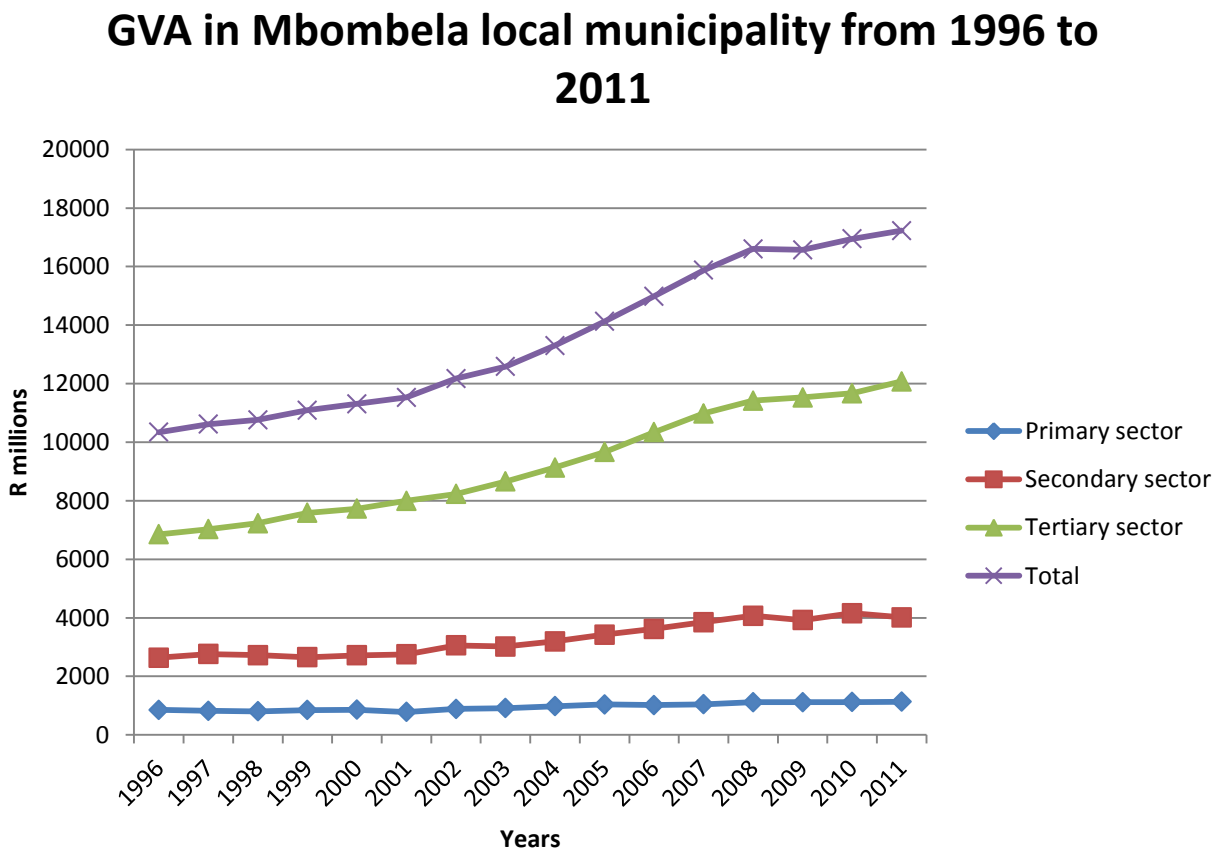


Figure 5.4.4.: GVA in Mbombela municipality in R millions from 1996 to 2011 (Source: Quantec Easydata®)

The total indicated the overall pattern for the sectors within the municipality and it suggests an increase in all sectors from 2002 until 2008 (Quantec, 2014). There is a slight decrease

from 2008 to 2009, but is soon followed by an increase in 2010. In all of the sectors this seems to be the general pattern as seen on the total (Quantec, 2014).

Total GVA for Steve Tshwete local municipality

Table 5.4.5 illustrates total GVA for Steve Tshwete local municipality for 1996, 2001 and 2011. Overall GVA for the municipality has had little change from 2001 to 2011 (Quantec, 2014).. The municipality's annual average growth had been lower than the total national average growth in both calculations of the GVA. The tertiary sector for this municipality has not been as dominant as the national tertiary sector. The sector only consisted of 38.5% in 2011. Its average annual growth however has changed from 1.4 between 1996 and 2001 to 2.7 between 2001 and 2011 (Quantec, 2014). The tertiary sector's growth has been much lower compared to the national figures. Both the secondary and the primary sectors have higher sectorial percentages than national percentages (Quantec, 2014). The secondary sector had a 34.7% in 2011 of GVA, which is far greater than the national secondary sector. Its growth rate was also higher, it changed from having a negative growth of -2.4 between 1996 and 2001 to 5.9 between 2001 and 2011 (Quantec, 2014).

Steve Tshwete local municipality								
Sectors	1996	(%) sectorial percentage of total	2001	(%) sectorial percentage of total	Annual average growth rate (1996-2001)	2011	(%) sectorial percentage of total	Annual average growth rate (2001-2006)
Primary sector	1955	29.4	2766	37.2	7.2	2546	26.8	-0.8
Agriculture, forestry and fishing	139	2.1	105	1.4	-5.5	192	2.0	6.2
mining	1924	28.9	2661	35.8	6.7	2353	24.8	-1.2
Secondary sector	2092	31.	1856	25.0	-2.4	3294	34.7	5.9
Manufacturing	1204	18.1	1116	15.0	-1.5	2039	21.	6.2
utilities	781	11.7	633	8.	-4.1	963	10.1	4.3
construction	107	1.6	107	1.4	0.0	293	3.	10.6
Tertiary sector	2611	39.2	2804	37.8	1.4	3650	38.5	2.7
trade	588	8.8	659	8.9	2.3	724	7.6	0.9
transport	381	5.7	503	6.	5.7	1121	11.8	8.3
finance	737	11.1	718	9.7	-0.5	931	9.8	2.6
services	279	4.2	306	4.1	1.9	297	3.1	-0.3
government	626	9.4	618	8.3	-0.3	578	6.1	-0.7
Total	6658	100	7426	100	2.2	9490	100	2.5

Table 5.4.5: Total GVA for Steve Tshwete local municipality (Source: Quantec Easydata®)

The primary sector has had a higher percentage than national figures for the primary sector. The sector however has experienced decreases in both percentage and average annual growth. It decreased from positive growth rate of 7.2 between 1996 and 2001 to negative growth of -primary sector. 0.8 between 2001 and 2011 (Quantec, 2014). The growth rate in the primary sector is much lower than that of the national primary sector.

Figure 5.4.5 is a demonstration of total GVA in Steve Tshwete local municipality. Overall GVA in this municipality is fairly high, it resembles that of total national output. Total GVA has increased steadily every year until if had a decrease in 2008. The municipality was also affected by the global financial crisis of 2008/2009 (IDC, 2013). The tertiary sector is the highest performing sector in the municipality, but output in the municipality in all the three sectors is close (Quantec, 2014). There is a much shorter gap between the tertiary sector and the other sectors compared to the national distribution of these sectors (Quantec, 2014). The secondary sector has been the second highest performing sector since 2006. The sector has experienced growth since then with the only decrease experienced during the global financial crisis (IDC, 2013).

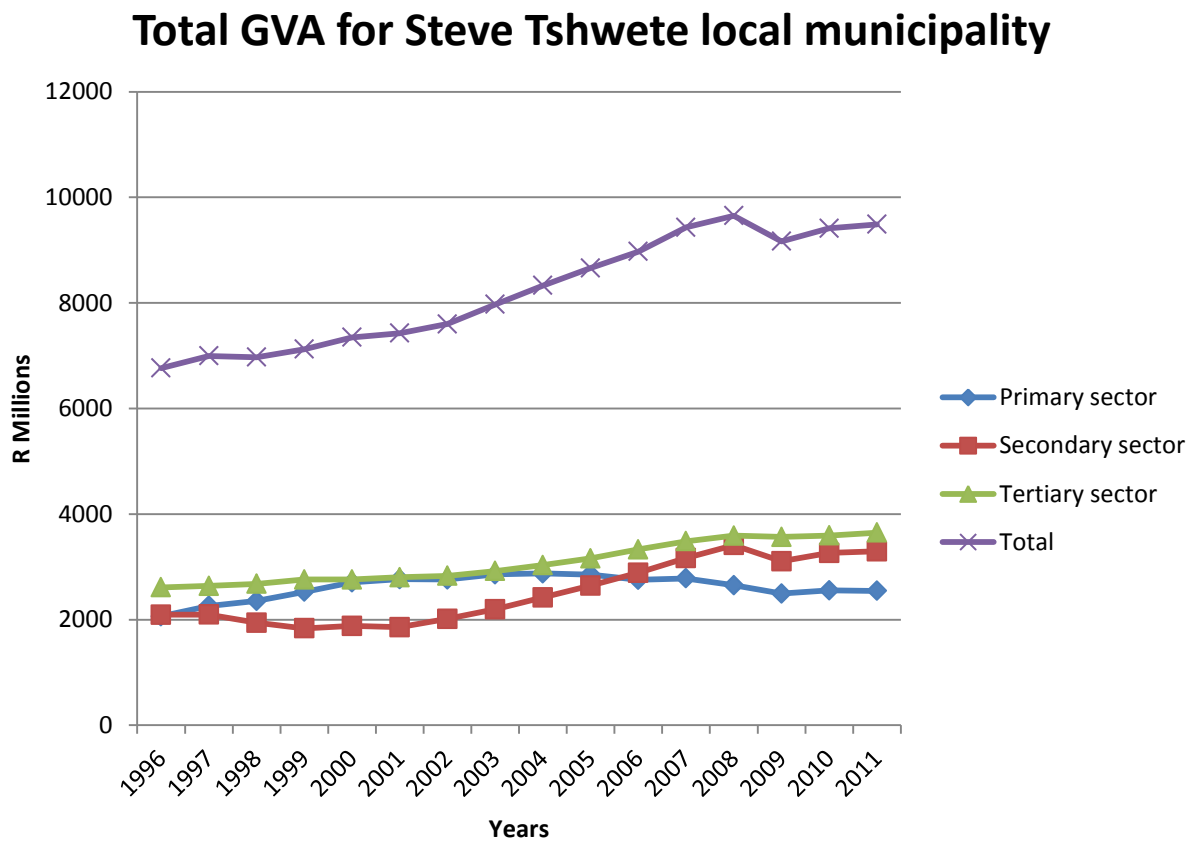


Figure 5.4.5.: Total GVA for Steve Tshwete local municipality from 1996 to 2011 (Source: Quantec Easydata®)

The primary sector had produced similar output with the tertiary sector from 2000 to 2003, but the sector has since declined producing the lowest output in the municipality (Quantec, 201

5.5. Growth Performance index (GPI) for GVA

Table 5.5.1 compares the different municipalities the national economy. It shows the growth performance index (GPI) of each sector in the various municipalities. Mbombela local municipality is the only municipality that is growing at the same pace relative to the national economy. The municipality has had a lower GPI between 1996 and 2001 relative to the national economy, while Emalahleni and Emakhazeni local municipalities had higher GPIs. Mbombela local municipality's growth had occurred in all three sectors in the second calculation of the GPI.

Growth performance Indices						
Location	Sectors	1996	2001	Growth Performance indices 1996 - 2001	2011	Growth Performance indices 2001-2011
South Africa		1050497	1192538	100	1703801	100
Emakhazeni local municipality		1022	1305	112.5	1166	62.5
	primary	380	556	128.9	278	35.0
	secondary	228	200	77.3	249	87.1
	tertiary	414	549	116.8	639	81.5
Emalahleni local municipality		13010	15760	106.7	21457	95.3
	primary	5475	7104	114.3	8166	80.5
	secondary	3783	3968	92.4	6009	106.0
	tertiary	3752	4688	110.1	7282	108.7
Mbombela local municipality		10344	11531	98.2	17227	104.6
	primary	852	784	81.1	1134	101.2
	secondary	2637	2750	91.9	4016	102.2
	tertiary	6855	7997	102.8	12077	105.7
Steve Tshwete local municipality		6658	7426	98.3	9490	89.4
	primary	1955	2766	124.6	2546	64.4
	secondary	2092	1856	78.2	3294	124.2
	tertiary	2611	2804	94.6	3650	91.1

Table 5.5.1: Growth performance index for the chosen municipalities in 1996, 2001 and 2011. (Source: Quantec Easydata®)

Emakhazeni local municipality has had a low overall annual average growth rate relative to the national economy, especially between 2001 and 2011 (Quantec, 2014). The municipality's contributing sector has been the primary sector. The primary sector had a higher GPI of 128.9 between 1996 and 2001. By the second calculation GPI had decreased to a GPI of 35 (Quantec, 2014). This means the primary sector in Emakhazeni local municipality has grew much slower relative to the national economy. Other sector within the municipality also grew slower than the national economy (Quantec, 2014).

Emalahleni local municipality's has witnessed a decrease in GPI in the compared periods. The municipality had an overall GPI of 106.5 between 1996 and 2011, it decreased to a GPI of 95.3 between 2001 and 2011(Quantec, 2014). This means that growth is much slower in Emalahleni local municipality relative to the national economy. The GPI for the primary sector decreased from 114.3 from 1996 to 2001 to 80.5 between 2001 and 2011. The sector had lower GVA relative to the national economy. Its decrease had affected the overall GVA of the municipality (Quantec, 2014). . The tertiary sector also decreased from 110.1 between 1996 and 2001 to 108.7 between 2001 and 2011, it still however managed to maintain its growth relative to national statistics. The secondary sector's GPI has increased from 92.4 between 1996 and 2001 to 106 between 2001 and 2011. The sector has performed similar to the country's economy (Quantec, 2014).

Mbombela local municipality experienced an overall increase in GPI between 2001 and 2011, all the sectors are leading and have increased from the previous years. The overall GPI moved from a lagging region of 98.2 between 1996 and 2001 to a leading region of 104.6 between 2001 and 2011 (Quantec, 2014). According to figure 5.11, there has been a significant growth in all the three sectors in Mbombela municipality, but performance was similar to the national growth. The primary sector's GPI increased from 81.1 between 1996 and 2001 to 101.2 between 2001 and 2011. The secondary sector increased from 91.9 between 1996 and 2001 to 102.2 between 2001 and 2011 (Quantec, 2014). The tertiary sector also increased from 102.8 between 1996 and 2001 to 105.7 between 2001 and 2011. These increases have contributed to the total increase of the municipality and have maintained similar performance to the national figures (Quantec, 2014).

Steve Tshwete local municipality has grown at a much slower rate relative to the national economy. The municipality's GPI has been affected by the decline of the primary sector. The sector has performed at the slowest rate compared to South Africa in the entire municipality

(Quantec, 2014). The secondary sector has had the highest performing GPI in the region between 2001 and 2011, which has grown much faster relative to the national economy. The sector has increased from a low performing sector between 1996 and 2011 of 78.2 to a high performing sector in the second calculation. The tertiary has performed slow compared to the national output. The sector has decreased in performance from 94.6 between 1996 and 2001 to 91.1 between 2001 and 2011. Overall GPI for GVA in the four municipalities has been slower relative to the national economy (Quantec, 2014).

5.6. Social indicators

Poverty has been a problem in the South African economy for many years, the government has attempted to alleviate poverty since 1994 with various development strategies. One of the attempts of the MDC had been to improve the standard of living in communities that are closer to the project (De beer et al, 2001). This section will review the increase in quality of life in the four chosen municipalities. This section will measure the different social indicators in South Africa and in the chosen municipalities.

5.6.1 Human Development Index

The Human Development Index (HDI) is a measure of social and economic development which determines its results through four categories. These are life expectancy, literacy, income and health (Gordon, 2006). The HDI was developed by the United Nations in order to rank countries and establish which countries were of concern. It is measured on a scale of 0 to 1, 1 indicating a high level of human development, and 0 indicating the opposite. The measurement of HDI on this document is measured through district municipalities (Gordon, 2006). Figure 5.11 below indicates the HDI for South Africa, Mpumalanga, Nkangala district municipality, Gert Sibande district municipality and Ehlanzeni district municipality[9].

[9] Emakhazeni, Emalahleni and Steve Tshwete local municipalities fall under Nkangala District municipality and Mbombela local municipality falls under Ehlanzeni district municipality

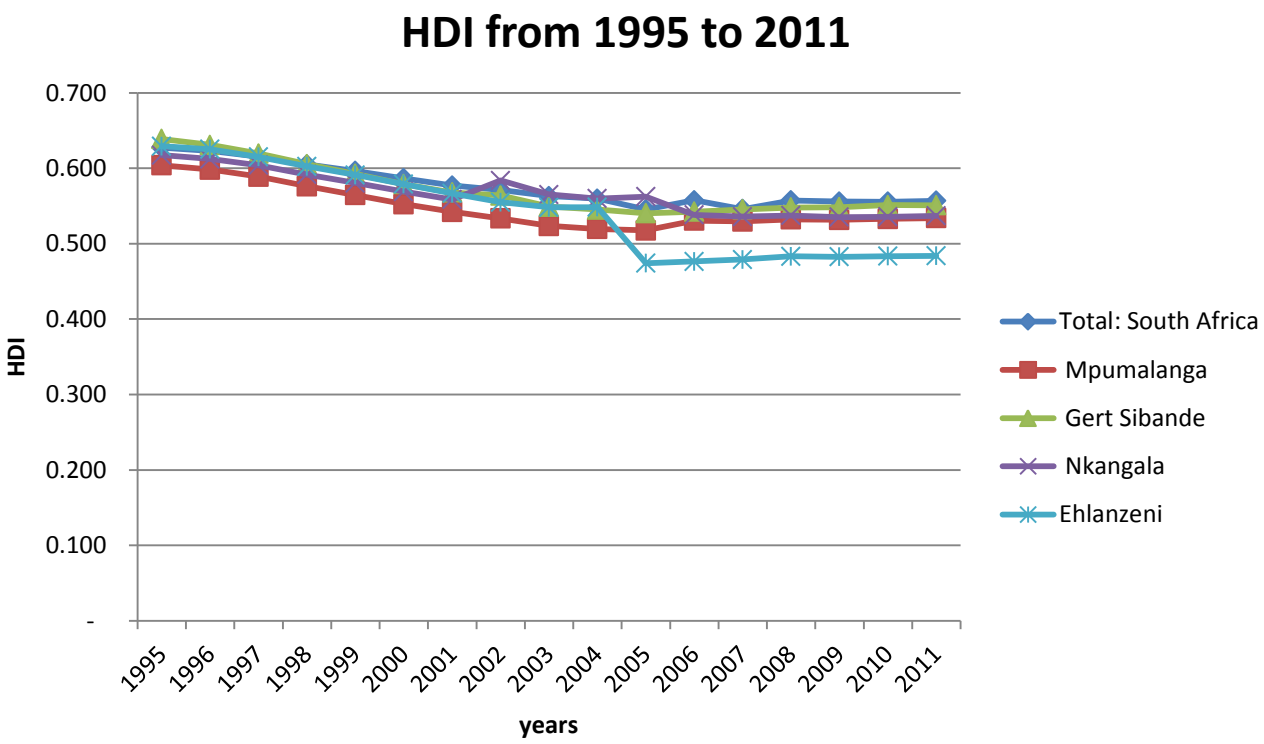


Figure 5.6.1.1: Human Development Index in the investigated municipalities and South Africa (Source: Quantec Easydata®)

HDI in the different municipalities and Mpumalanga follow a similar trend to South Africa, except for Ehlanzeni district municipality. In 2005 Ehlanzeni district municipality experienced a decrease in the HDI, since then the municipality's HDI has been gradually increasing.

5.6.2 Household expenditure

Household expenditure is important to investigate as it provides the amount of money spent in each households, this will help establish the change in income and expenditure of the communities around the MDC. Household expenditure is measured in rand millions on the following charts, which were calculated from 1996 to 2011. Figure 5.6.2.1 illustrates final consumption by South African households from 1996 to 2011. Final consumption in South Africa is rising annually. People in the country increase their consumption based on their needs and satisfaction annually (Eurostat, 1995). The figure indicates a linear increase until 2008 where the is a slight change in the route of the graph, this indicates the change in expenditure during the 2008/2009 global financial crisis (IDC, 2013)

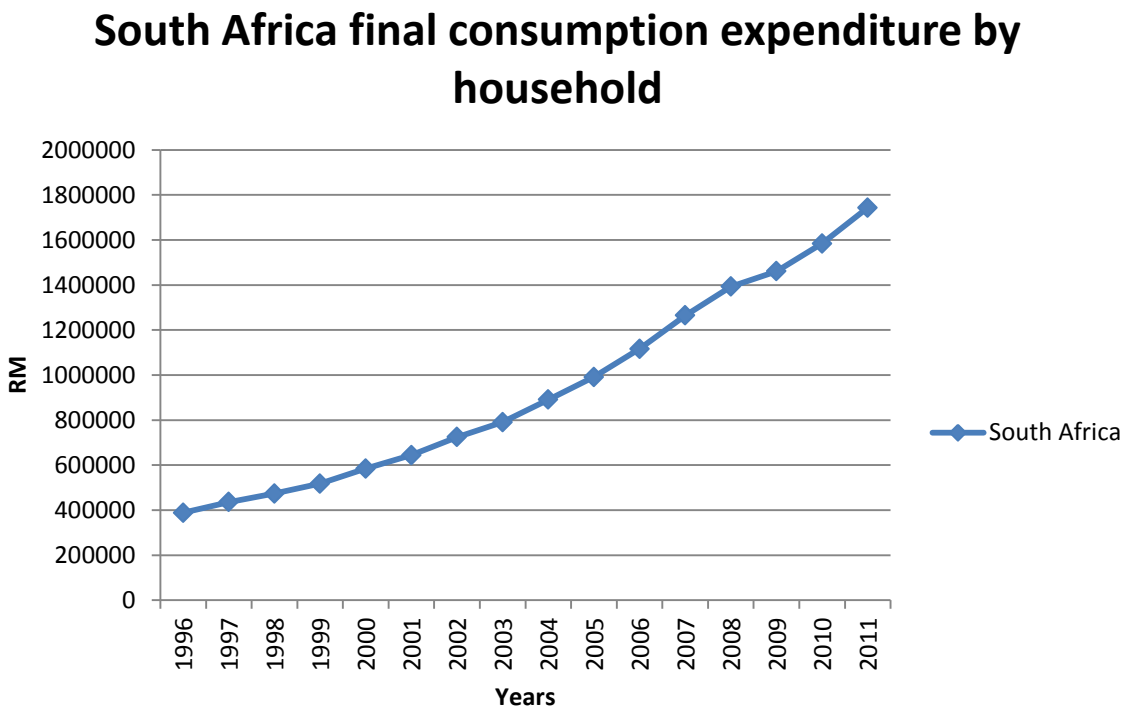


Figure 5.6.2.1: National statistics for final consumption (Source: Quantec Easydata®)

Figure 5.6.2.2 considers household expenditure in the four chosen municipalities over time. Mbombela and Emalahleni local municipalities have higher final expenditure than the other municipalities. Emalahleni municipality had higher expenditures than Mbombela municipality from 1996 to 2008 until they spent similar amounts in 2009 . According to the graph, Steve Tshwete local municipality's final expenditure has been growing and is following the pattern of Mbombela and Emalahleni local municipalities

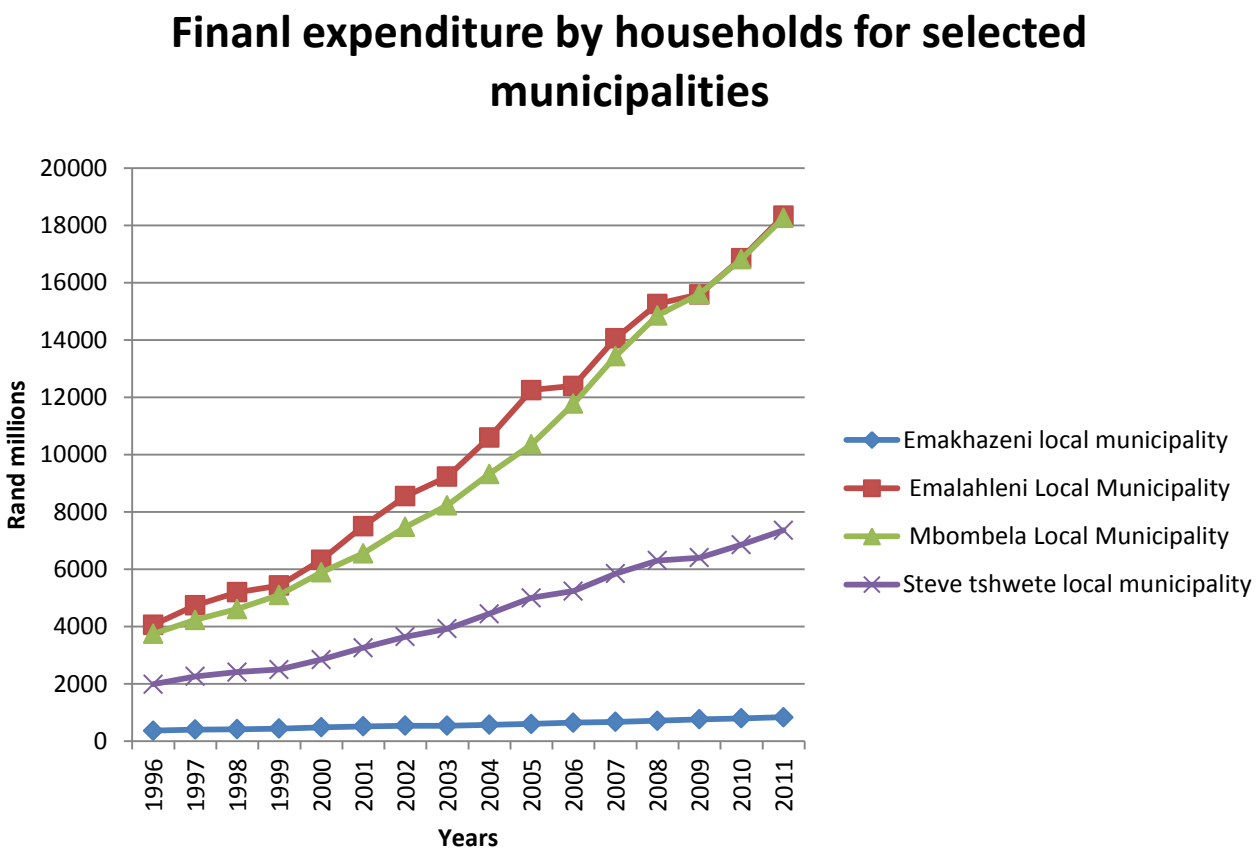


Figure 5.6.2.2 Final consumption for the four investigated local municipalities in millions (Source: Quantec Easydata®)

Emakhazeni local municipality has had little change in final expenditure, the municipality's final has been growing, but growth has been too low compared to the other three municipalities. The gap between the two highest municipalities and Emakhazeni local municipality has been increasing every year and the gap seems to be increasing every year. Final expenditure for Mbombela local municipality is similar to the national pattern. Emalahleni has had a slight difference, but expenditure in the region resembles that of the country. Steve Tshwete local municipality has also had increases, but kit has had a gentle slope compared to the national slope. Emakhazeni local municipality has had an extremely gentle slope to that of national growth in expenditure.

5.6.3. Disposable income

Disposable income measures spending power after deduction of taxes and social investments. It is the amount of money people have to spend after all the deductions (Eurostat, 1995). South Africa's disposable income has been declining from 1998 to 2008 (Quantec, 2014). it had reached the negative axis after 2005 and has been decreasing until 2008. There has been an increase from then until 2011 (Quantec, 2014). Disposable income has not reached the positive axis on the graph, this indicates reluctance in expenditure from the country. Disposable income reached its lowest in 2008 at the beginning of the global financial crisis,

so far the graph indicates that disposable income is gradually rising and might reach the positive axis in the near future (IDC, 2013).

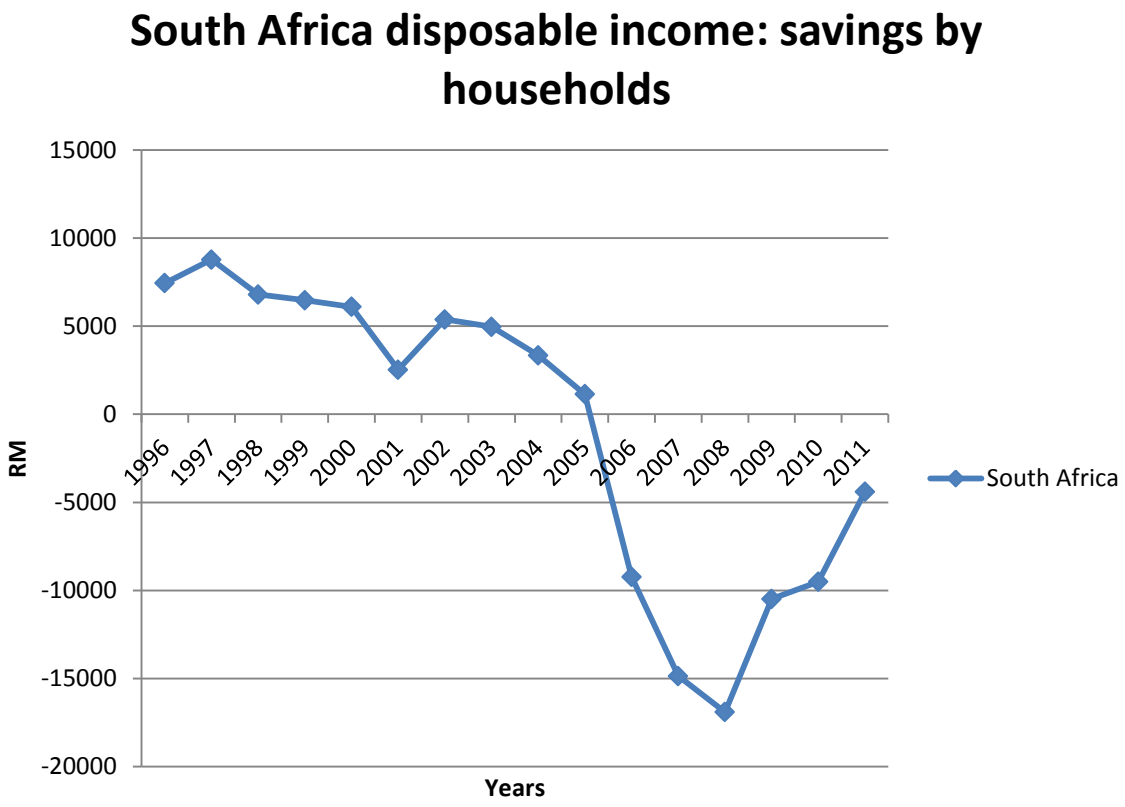


Figure 5.6.3.1: National statistics for disposable income for households in millions (Source: Quantec Easydata®)

Figure 5.6.3.1 illustrates the changes in disposable income in South Africa. In 2001, there was a decrease in disposable income which was influenced by the United States of America's attacks (IDC, 2013). The attacks had an effect on the economy of many countries around the world, according to the graph South Africa was affected by them and experienced a decrease in disposable income. The largest decrease was experience in 2008/2009 during the global financial crisis (IDC, 2013). Disposable income has been increasing ever since.

Disposable income in the four municipalities differs significantly to each other and to the national trends. Emalahleni local municipality is the only municipality between the compared municipality's that resemble national figures. The local municipality was affected by the USA attacks in 2001 as seen on figure 5.6.3.1, disposable income increased until it decreased again in 2006 (IDC, 2013). The shaper decrease in 2006/2007 where spending power decreases. Unlike national figures the municipality's disposable income increases in 2008 and

2009 during the global financial crisis. Mbombela local municipality only suffers from global disturbances during 2001, the municipality then experiences increases (Quantec, 2014).

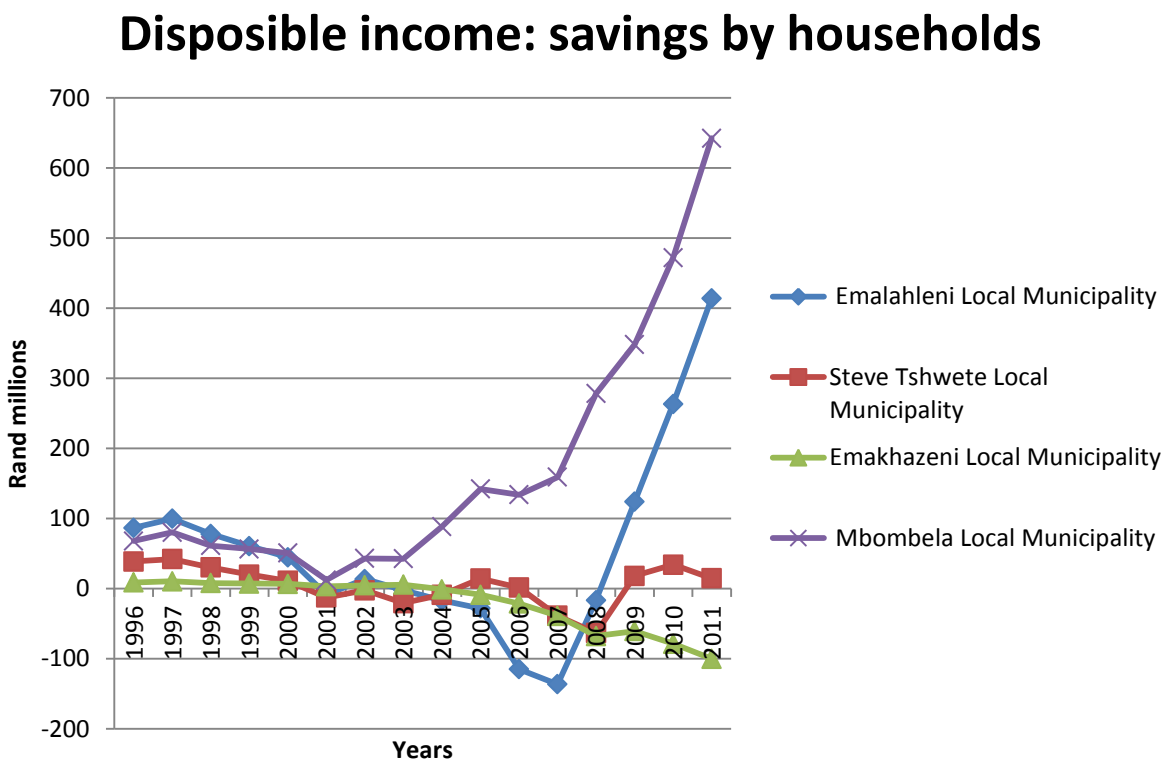


Figure 5.6.3.1: Disposable income for the four investigated municipalities in millions (Source: Quantec Easydata®)

Emakhazeni local municipality's disposable income per household has been stagnant until 2004, it had decreased in 2005 and reached the negative y-axis (Quantec, 2014). Emakhazeni's disposable income has been low ever since it has decreased in 2005, the municipality has had negative outcomes as seen of figure 5.6.3.1 and there have not been any significant increases since the municipality crossed the negative y-axis. Steve Tshwete local municipality has had a dynamic disposable trend. The municipality has had decreases and increases, in 2001 it has crossed the negative axis but had managed to recover in 2005 (Quantec, 2014).. Disposable income decreased again in 2007 and managed to increase again in 2009 until it decreased again in 2011. Disposable income in these municipalities varies from the national data, there have been similarities to the overall total of South Africa in some decreases that occurred around the same period, but overall disposable income in the municipalities differ from the national savings (Quantec, 2014).

5.7. Conclusion

The chapter has investigated the economic and social indicators in order to examine the change in the four chosen municipalities over the years. The municipalities have shown different characters in employment and output compared to the national data. The municipalities sectors have grown differently, in some municipalities there was dominance in the tertiary sector while others had similar output and employment in both the primary and secondary sectors (Quantec, 2014). The overall growth of these municipalities varied from total growth of the country, in employment however there had been similarities between overall growth of the municipality and overall growth of the country. South Africa's total GVA has had different growth patterns from total GVA in the selected municipalities. Overall GVA in the country has had a steeper slope than those of the investigated municipalities. HDI in the district municipalities and the province has been similar to the country's HDI, expect for one district municipality (Ehlanzeni local municipality). HDI in the country, municipalities and the province has shown that South Africa is just below the average mark. Expenditure in the selected municipality has resembled that of national figures for at least two municipalities, the others have a much gentler slope but are increasing altogether. Disposable income in the four municipalities has had the most varied results compared to national figures. Each municipality has displayed different characteristics to the national data and the some have progressed further than the national figure.

Chapter 6: Analysis

6.1. Introduction

Chapter 5 has charted various graphs and tables in attempts to answer the research question. This chapter analysis the findings in the previous chapter and attempts to answer the research questions that were mentioned in chapter one. There is one important question the research has attempted to answer, this is:

Has infrastructure in the Maputo Development Corridor been associated with economic growth?

The sub-questions are:

- How has economic growth and employment improved in the municipalities along the corridor since the commencement of the project?
- How has the quality of life improved along the corridor?
- How have the municipalities performed relative to the national economy?

The analysis will be looking at the impact of the MDC within the four municipalities concerning these questions. Output and employment indicates the growth of the municipalities, this is compared to the national output and employment. The rate of economic growth in the municipalities offers an insight on the impact of infrastructure by tracking economic growth in the selected municipalities. The relationship between infrastructure and economic growth is often not clear and the association between infrastructure and economic growth cannot be identified specifically from other factors that are contributing to the economy. There are however strong relationships between infrastructure and economic growth on regions that are located well, and determining a location depends on the amount of access an area has to grow its economic growth. The MDC has created many opportunities for the municipalities along the corridor to grow their economies due to the amount of access it created. This chapter analyses how employment and GVA patterns compare as seen on chapter 5 and how these trends attempt to answer the research question. This chapter will also attempt to analyse the social indicators, they will also be compared to national growth to establish the type of society the municipalities have relative to South Africa.

6.2. How has economic growth and employment improved in the municipalities along the corridor since the commencement of the project?

6.2.1. Economic indicators

The relationship between employment and GVA illustrated in chapter 5 has been interesting to track. There have been several differences than have been notable between total employment and GVA in the country that were documented in Chapter five. Comparing total GVA and total employment in South Africa has shown a relationship in some instances and has differed in other instances. Total GVA (Figure 5.6) in South Africa has a steeper slope than overall employment in the country. On the one hand, the amount of GVA in the country has been increasing steadily annually. On the other hand, Employment has been increasing, but at a much lesser rate than GVA. Between 1997 and 2001 the number of employed person had been decreasing and at around the same time GVA in the country had been increasing (Quantec, 2014). Both overall employment and GVA had been affected by the 2008/2009 global financial crisis because they both experienced a decrease around the same time (Quantec, 2014). GVA had increased by 2010 and had been on the same path it was before the decrease. Employment has had varied results, the number of people employed has not reached the level it was before the major decrease, it has been decreasing ever since the crisis.

The tertiary sector's relationship between GVA and Employment is similar to the overall employment and GVA of the country. The tertiary sector in GVA is much steeper to employment in the same sector for South Africa. The secondary sector's GVA has grown much faster than employment. The graph, like total GVA, is much steeper than employment. The secondary sector's employment growth has not been similar to the total GVA of the country, while the secondary sector's output increases, employment has not had a steady increase over the years. Since employment had decreases after the global financial crisis in the secondary sector, it has not recovered to the state it was in before the crisis (Quantec, 2014). The primary sector's GVA has been stagnant, employment on the other had had been decreasing in this sector, especially since 2007. GVA and employment in South Africa have not shown a similar pattern, GVA has produced more in all the three sectors, while employment has had decreases which had not affected total GVA to an extent. The relationship between GVA and employment have not been identical, the major market crisis have affected them both, but the recovery pattern has differed. Overall average annual growth for South Africa has been much lower than that of GVA especially between 2001 and 2011.

Employment trends in Emakhazeni local municipality have been slightly similar to total GVA in the same municipality. Overall employment and GVA had been decreasing, employment however has been decreasing at a much faster rate than GVA in Emakhazeni local municipality compared to the national figures. Employment in Emakhazeni local municipality has been linear until 2001 when it decreased (Quantec, 2014). During the time GVA in Emakhazeni local municipality had been increasing at the similar pattern to South Africa's GVA. In 2001 there was a change in GVA in the municipality, but the change had not been recognised in the total GVA of the country. Employment also had a decrease around that period and there effects were also evident in the country's overall employment. While GVA has increased in the country Emakhazeni's GVA had had growth, but not as consistent as South Africa's output. In 2009 the municipality had a decrease in GVA which was also experienced in overall employment in the municipality.

Emalahleni Local municipality has had a higher growth rate in employment than in GVA, overall employment in the municipality has grown faster the national growth and the GVA b3tween 1996 and 2001 (Quantec, 2014). The relationship between employment and GVA in Emalahleni local municipality has not been dependant on each other. Employment in the sector has had a downward slope from 1995 to 200. In the same period GVA had had a steady increase and only witnessed a slight change between 2008 and 2009. In 2010 both employment and GVA had increased at the same slope[10]. The tertiary sector in both total employment and total GVA in Emalahleni local municipality had not had a similar growth pattern. The tertiary sector had been the highest employer in the municipality, but the highest producing output has been the primary sector (Quantec, 2014). The tertiary sector has had output similar to the secondary sector, but the latter sector has produced slightly lower output. The secondary sector has the lowest number of people employed in the in the municipality since from 2006. South Africa's largest employment and GVA are witnessed in the primary sector. Emalahleni local municipality's employment and GVA differ from national employment and GVA (Quantec, 2014).

GVA and employment in Mbombela local municipality has not had similar pattern in the same period of time. Average annual growth in Mbombela local municipality has grown much faster than national figures and total formal and informal employment. Overall GVA in

[10] See figure 5.3 and figure 5.8 in chapter 5

the municipality had been increasing annually[11], total employment on the other hand had had decreases which have not affected GVA as much as it had affected total employment. The tertiary sector in Mbombela local municipality have had the highest output and has the highest number of people employed. The gradient of total employment has had many more decreases than total GVA. Secondary sector has had a much linear GVA and decreasing number of people employed in the municipality. The slope of the GVA in the secondary sector is increasing every year, but employment has been decreasing (Quantec, 2014). This indicates that GVA and employment are not directly proportional to each other.

GVA and total formal and informal employment in Steve Tshwete local municipality has differed within the concerned period. Total GVA and Total employment have shown little relationship. Average annual growth between 2001 and 2011 in the municipality for GVA has been equal to total employment in the same period. The relationship between GVA and employment in Steve Tshwete local municipality has not been clear. The tertiary sector has had the highest number of people employed, but it is not had the highest output compared to the number of people employed (Quantec, 2014). The primary sector had the lowest number of people employed in the municipality, but it is the second highest sector of output. The secondary sector has had a decreasing number of people employed, but it has the second highest GVA (Quantec, 2014). The patterns on the graphs demonstrated on chapter five show that the relationship between GVA and employment in Steve Tshwete local municipality has not had a similar relationship. The patterns witnessed in total GVA are not witnessed in total employment in the same municipality (Quantec, 2014).

6.3. How has the quality of life improved along the corridor?

6.3.1 The social indicators

The social indicators in chapter five offer an insight of the type of living conditions and income the societies have. The Human Development Index in South Africa has indicated that the number of people living in the country fall under 0.6 on the scale. The level indicates that there is a breakeven between people who live on a higher scale and those that live under dire condition (World Bank, 2014).. The measure of the HDI looks at different factors to those of the gini-coefficient. Gini coefficient measures the distribution of income within countries. A country that has a gini-coefficient of 0 has an equal distribution of income, while a country with a gini-coefficient of 100 has a total unequal distribution of income (World Bank, 2014).

[11] See figure 5.4 and figure 5.9

South Africa had a gini- coefficient of 63.1 in 2009 when it was last measured, meaning the country falls under a classification of an unequal distribution of income. The poor are largely isolated from the interests of the economy unless the government offers solutions (Castro-Leal et al, 199). The HDI also shows that South Africa's HDI is not satisfactory according to world measurement institutions. Emalahleni local municipality has the lowest HDI on figure 5.11 in chapter 5. The decrease occurred from 2005 and has had lower figures since then. The other three municipalities are closer to the national HDI which suggests that the country has high numbers of poor communities(World Bank, 2014).

Household final consumption expenditure in South Africa has been on an increasing trajectory. The municipality's final consumption expenditure has illustrated similar outcomes to that of the national statistics (Quantec, 2014).. This means that the country's final consumption expenditure is similar to most investigated municipalities, even though some municipalities spend less. Disposable income in the investigated municipalities has had different outcomes to that of national statistics. Each municipality has shown different effects to the different globally faced challenges e.g. 2001 USA attacks and the global financial crisis in 2008/2009 (IDC, 2013). Some municipalities where largely affected by these market disturbances while others where resilient through them. The increase of disposable income in Mbombela and Emalahleni indicates that there is much more income to be spent compared to Emakhazeni and Steve Tshwete local municipalities (Quantec, 2014). The two former municipalities mentioned have higher increasing millions in disposable income while the latter two have decreasing income. These indicators have offered an insight in to the income of the municipalities and their spending power (Quantec, 2014).

6.4. Conclusion

The growth of the municipalities in chapter 5 have varied, each municipality differs from the national data. Employment and GVA have shown varied results as well. The growth of one employment does not guarantee increase in GVA, and GVA is not dependant on the number of people employed in that economy. There seems to be growth in the municipalities and there is a slight increase in output and employment after 2001 in South Africa and the chosen municipalities (Quantec, 2014). This chapter has analysed the results of the data in chapter five by describing the existence of some relationship and the lack of other relationships.

Chapter 7: conclusion

7.1.1. Introduction

The growth of economy plays an essential part in the development and growth of the country. The purpose of this research was to understand the influence infrastructure has had in economic growth specifically along the Maputo Development Corridor. The research identified four municipalities which were along the corridor and investigated their growth. Chapter one outlined the basis of the research, which was to investigate whether there is a significance of infrastructure in economic growth. The methodologies had identified several indicators which would assist in attempting to find the significance of infrastructure in economic growth. The following chapter explains the conclusions made on each chapter and the findings of the research.

7.2. Findings

Chapter two has examined the literature which was concerned with the significance of infrastructure in economic growth. National economic growth and regional economic growth had had variances in the manner in which they respond to infrastructure development. National economic growth has had an influence in the manner in which regions grow, according to Perkins (2006), the pre-1994 government had influenced the space economy drastically in the country and ensured that regions grew unequally. Chapter two however discussed literature on the importance of infrastructure in economic growth (Banister and Berechman, 2001).. The chapter concluded that the relationship could not be easily defined because the effects of infrastructure only manifest over a long period and regional economic growth depended on the region's capability to sustain growth. The case studies of China and India showed that there is a significance of infrastructure in economic growth. The latter country has shown that there needs to be an investment in both social and economic infrastructure to ensure that growth is sustainable and that people are able to maintain both types of infrastructure (Lall, 1999).

China's economy has been mainly successful in one region, there have been uneven development throughout the country where the eastern region has grown more than the western and central regions. The reforms that had occurred in the 1960s had influenced growth through the implementation of industrial and foreign trade reform that occurred predominantly in the eastern region (Démurger, 2001). There was an emphasis on the growth of the coastal region by government that was influenced by trade in the eastern region. Investment in infrastructure in that region became mandatory for the central government as

the economy grew stronger and demand for infrastructure increased. The lack of economic activity in the western region in China had caused poor infrastructure investment, the government had implemented different infrastructure projects aiming to increase economic activity, but there was little improvement because there was little demand (Yu et al, 2012).

The lessons learned from the two case studies were that infrastructure provides the foundation for development, but it alone cannot increase or generate economic growth. It acts as grounds for economic growth in society, but cannot bring growth independently without existing economic activities (Perkins, 2006 and Démurger, 2001). The literature also concluded that national economic growth and regional economic growth differ in the sense that they require different investment capabilities. The elements utilized for the success in national economic growth do not necessarily apply to the success of regional economic growth, each regions success is determined by the conditions of that region and the support structures that are in place to ensure regional growth occurs. Infrastructure investment aimed at increased national economic growth often required investment in infrastructure that allows the country to trade and increase the potential for competitiveness within international markets. Infrastructure investment does not necessarily guarantee the growth of the economy, in both national and regional economic growth, but can assist and act as a basis for growth.

Chapter three has offered an insight into the Maputo Development Corridor (MDC). The corridor was a rehabilitation of the road that had already existed. It was rehabilitated to attract investment and develop the regions that were along the corridor (De Beer et al, 2001). One of the key objectives was to ensure that development in the region will impact and improve the communities along the corridor through employment creation and regional growth. The corridor was one of the projects in the Spatial Development Initiatives (SDI) that were introduced by the South African government to increase growth in different parts of the country. The corridor is one of the programs most successful projects. The MDC had aimed to promote trans-boundary collaborations, sub-regional economic integration and the selection of growth in selected sub-national regions. It also connected two countries and strengthened trade between South Africa and Mozambique (De Beer et al, 2001). The main infrastructure projects were the rehabilitation and development of the Witbank – Maputo N4 toll road, the rehabilitation of the port of Maputo, the construction of a new sub-station in Maputo near Mozal, and the upgrade of the Ressano Garcia boarder post situated between South Africa and Mozambique (De Beer et al, 2001). Infrastructure investment was an attempt by the government to attract growth, the infrastructure in these regions had already

existed, but they were weak. The rehabilitation and implementation of the corridor attracted investment because it had improved and maintained infrastructure along the corridor.

Chapter four profiled the four municipalities, it considered their current economies, population and governance. Emakhazeni local municipality, Emalahleni local municipality, Mbombela local municipality and Steve Tshwete local municipality are situated along the MDC. These municipalities have been selected because of their location to the MDC and their economic activities. The research analysed the municipalities from 1996 to 2011, their current economic status was provided by the municipalities' IDPs which highlighted some of the key factors in the economies of the municipalities. They have different economies and population sizes, population growth had grown much faster in some municipalities and was stagnant in others. The main cities within the municipalities have provided most of the revenue and employment, in some areas there is dependence in agriculture and tourism which has also provided employment growth in the communities. The municipalities have benefited in some way from the MDC and the IDPs show that growth in the municipalities is still planned around the access opportunities the MDC has presented. Governance in the municipalities has been a challenge and with poor governance, the municipalities have struggled to maintain and promote growth further (Mbombala, 2011). The municipalities that have better governance have had better economic opportunities and growth than those that have had poor governance.

Chapter five examined the municipalities' economies and examined the changes that had occurred over time and compared them to national figures. Chapter five first examined employment growth in the area. Over the years there has been overall growth in employment in the municipalities, with a few municipalities experiencing decreases. Around the time the MDC was built (which was between 1996 and 2000), it was assumed that the construction sector would have grown, but the sector had shown different outcomes for different municipalities (Quantec, 2014). Overall employment in the construction industry for South Africa had decreased over a period of time, showing a declining industry. Throughout employment, in all four municipalities, there has been a decrease in the sectorial percentage change of the construction industry. The average annual growth has also decreased in the country and in the four municipalities for that industry. The development of the MDC had little impact on the growth of the construction industry.

In 2001 there had been a decrease in employment and GVA in all sectors, they all recovered by 2011 and overall growth had grew in some municipalities and had declined in others. The annual average grown between 2001 and 2011 in total formal and informal employment in Emalahleni, Mbombela and Steve Tshwete local municipalities have grown at a higher rate. The GPI shows that the three municipalities have grown faster relative to the national economy and their sectors have grown in a similar nature. Between 1996 and 2001 only Mbombela local municipality was growing at the same pace as the national economy, while the others were slow (Quantec, 2014). There has been little evidence of the relationship between employment and GVA trends. The change in employment had little effect on output for South Africa and the selected municipalities. GVA in South Africa has been growing at a faster rate than that of the other municipalities, only Mbombela local municipality had been growing at the same rate relative to the national economy between 2001 and 2011 (Quantec, 2014). Between 1996 and 2001 Emakhazeni and Emalahleni local municipalities have grown at the same or higher pace than the national economy, but their GVA decreased over the years. These show that the municipalities have a dynamic economic nature, this means that the economies of the municipalities produce different outcome even though they experience similar challenges.

The social indicators have shown an interesting pattern. The HDI looked at the quality of life in South Africa, Mpumalanga and the three district municipalities, which the four local municipalities fall under, these were Nkangala, Ehlanzeni, and Gert Sibande district municipalities[12]. The social and economic development in these areas is similar to that of the country. Only one municipality experienced changes around 2005 but it has been increasing. The HDI tells us that the municipalities are similar in social and economic development to the country. Household expenditure in Mbombela and Emalahleni local municipalities resembles that of South Africa, the other municipalities have had much lower numbers in expenditure. This indicates that the Mbombela and Emalahleni local municipalities have higher access to income and more income to spend (Emalahleni, 2011). Disposable income in the municipalities has varied with National disposable income, there have been increases in disposable income in some municipalities and decreases in others. Mbombela local municipality has had the highest disposable income within all the municipalities, and its trend does not resemble national trends. This is because the city of Nelspruit (which is in

[12] Emalahleni, Emakhazeni and Steve Tshwete local municipalities fall under Nkangala district municipality. Mbombela local municipality fall under Ehlanzeni district municipality

Mbombela local municipality) is increasingly becoming a metropolitan city (Mbombela, 2011). The level of growth in the municipality has been higher than most of the other municipalities.

Chapter six analysed the results in chapter five with regards to the research questions. The first question was addressing economic growth and employment in the four municipalities. There has been growth in the municipalities in both GVA and employment. There have been different outcomes for different municipalities. In Mbombela and Emalahleni local municipalities there has been employment growth, and the municipalities have performed much faster relative to the national economy. The graphs on chapter five indicate that employment numbers have been decreasing up until 2001 (Quantec, 2014). There was an increase in the number of people employed in after 2001 in most of the municipalities. Emakhazeni local municipality was the only one that experienced further decreases in employment. GVA in the municipalities have had slight similarities to the national economy. The municipalities, except for Emakhazeni local municipality, have had increases in GVA similar to South Africa, but the slope of the increases has been much gentler than that of the country. Employment growth and economic growth have been evident in the municipalities. According to the IDPs of these municipalities the growths have been sustained by the link that the corridor has created (Quantec, 2014). The second question addressed the quality of life in the municipalities. Compared to national figures the quality of life in these municipalities is similar to South Africa's quality of life. The HDI indicated that the municipality's social and economic development is similar to that of the country (Quantec, 2014).. There is only one district municipality, Ehlanzeni district municipality, which showed variance in the level of development. There has been improvement in expenditure in the municipalities, especially in Mbombela and Emalahleni local municipalities.

7.3. Conclusion

The significance of infrastructure and economic growth is not clear. The data has shown growth in all the four municipalities, but it has not been clear whether the MDC is responsible and if it is the extent of its contribution to the growth of those municipalities. The growth of the municipalities has varied, there have been municipalities that have grown similar or faster than the national economy, and have had higher employment rates. The municipalities have asserted their growth to the existence of the MDC, Mbombela local municipality for instance has used its link to the Kruger National Park to increase its growth (Mbombela, 2011). The existence of the MDC has had positive effects to the development

and growth of economic activities of these municipalities, but there are no direct indications of the extent of growth.

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