CHAPTER 1: INTRODUCTION, RESEARCH PROBLEM AND IMPORTANCE OF THE STUDY

1.1 INTRODUCTION

Several significant historical events have dictated the urban development pattern in the Vaal region. The establishment of the towns of Vereeniging in 1889 and Vanderbijlpark in 1943 were necessitated by the establishment of coal mines in the region in 1880, as a result of the discovery of coal in 1878 by George William Stow, and the erection of a new iron and steel works by the Iron and Steel Corporation of South Africa (Iscor, now known as Arcelor Mittal) respectively (VaallInfo, 2009).

As early as 1911, the Vaal region, which comprises the Emfuleni, Midvaal and Metsimaholo municipalities, situated in the southern part of Gauteng and the northern part of the Free State (Demarcation Board, 2003), has been known as South Africa's major centre for steel and steel engineering industries. These municipalities form a cohesive and intensively integrated economic unit that cannot be separated by politically demarcated boundaries (Slabbert & Slabbert, 2002b:3), and are linked by well-developed road and rail infrastructures which are, in turn, interlinked with the national roads infrastructure such as the N1 and R59 freeways, and provide very good access to the larger metropolitan areas such as the Witwatersrand and the East Rand.

Access to developed transportation networks enabled the manufacturing sector of the Vaal region to flourish. With a contribution of 38.7% to the Vaal gross geographical product (GGP) the manufacturing sector was responsible for 34 122 employment opportunities in the region during 2001 (Slabbert, 2005:90-94). According to the South African Iron and Steel Institute (SAISI, 2009) the steel industry is of particular importance to the region and to South Africa as a whole, representing almost a third of South Africa's total manufacturing activities and contributing 75% towards the GGP of the Vaal region in 2006. South Africa was ranked the 21st largest crude steel producing country and the 9th largest net primary steel exporting country in the world in 2006. South Africa is also the largest steel producer in Africa, producing approximately 52% of the

A logistical hub as a local economic development initiative for the Vaal region
continent's total steel production in 2006 (SAISI, 2007) and, according to the International Iron and Steel Institute, 50.4% in 2009 (IISI, 2009). The World Steel Association (WSA, 2009) ranked Arcelor Mittal 1st amongst the world's top steel producers in 2007 (producing 116.4 million metric tonnes) and in 2008 (producing 103.3 million metric tonnes).

Due to the historical sectoral development of the Vaal region and its resultant dependence on the steel industry, any change in the domestic economy that could affect the manufacturing sector would have a profound effect on the economy of the Vaal region (Slabbert, 2005:90-94). A prime example of this is the profound restructuring of the manufacturing sector in the wake of the election of the new democratic government in 1994 (VaalInfo, 2009; Bloch & Dorfling, 2000:4). A new trade regime and industrial policy aimed at promoting competitiveness and gearing the country away from highly protective productive sectors was established. This, along with the turbulence in global steel markets impacted negatively on the Vaal economy.

The need to operate in global markets and the progressive reduction in trade barriers, forced local manufacturing and steel firms to reduce their labour intensity and costs in order to respond and become internationally competitive. This can be seen by the increased unemployment and poverty rates experienced during this period. Unemployment for the region was recorded at 51.3% in 2000 and 53.8% in 2005. Slabbert (1997:77) determined that there is a strong link between poverty and unemployment in the Vaal region. As a result of the change in industrial policy and the resulting retrenchments the poverty rate increased from 46.1% in 2000 to 51.5% in 2003.

In the wake of the current global financial crisis, the need for an integrated solution to poverty and unemployment for the Vaal region is called for. Due to the close proximity of the major urban areas in the Vaal, there is a critical role for public goods that cross borders in bringing benefits that would not materialise by domestic public goods alone, states Fujimura (2004:3). An example of this would be the Blue IQ programme developed by the Gauteng Provincial Government.
Blue IQ is an important driving force and dynamic catalyst for funding and promoting strategic investment in Gauteng. More specifically, Blue IQ is a multi-billion rand initiative to invest in economic infrastructure development in identified mega projects in tourism, smart industries and high value-added manufacturing (Blue IQ, 2002a). The core responsibility of Blue IQ, according to Maharaj (2001), is to develop world-class infrastructure, implement marketing and investment strategies, reduce bureaucratic red tape for investors and suppliers, and encourage skills training and resource building in the areas mentioned.

Wharton Economic Forecasting Associates (WEFA, 1999) states that despite the important role that the Vaal economy plays in the province, with a contribution of 7.8% to the GGP of Gauteng in 2000, there are still no planned Blue IQ projects in the southern part of the province. This lack of planned development opportunities provides the perfect opportunity for local governments within the region to develop and establish developmental policies that will bring about significant economic changes to the region (Fuchs, 2001).

Projects that fit the Blue IQ framework in this regard would pose as the ideal vehicle for initiating an increase in local economic development (LED), which is essentially a process by which local governments manage their existing resources and enter into new partnership arrangements with the private sector, or with each other, to create new jobs and to stimulate economic activity in a well-defined economic zone (Blakely, 1994:58). Essentially, LED is an outcome that is derived from local initiatives and is driven by local stakeholders. There are several LED strategies available to local governments; however, infrastructural development is of great significance for regional sustainability. Benefits that could accrue as a result of infrastructural investment include (Fuchs, 2001):

- Income generation for individuals and enterprises within the study area;
- New enterprises that would take root as a result of the increased earning capacity of the region;
- The promotion of local employment creation;
- Lower cost to freight forwarders; and
• The opportunity of expanding local business to new markets.

One such LED initiative is the Vaal Logistical Hub (VLH), proposed by this study. The VLH would have at its core the Vaal Inland Container Depot (VICD), which would serve as a means of expanding existing infrastructure and promoting the establishment of new downstream industries in the manufacturing sector of the Vaal region. The Vaal International Airport (VIA), as part of the VLH, would facilitate the transportation of cargo to and from the rest of the Gauteng region. Both of these initiatives combined would promote the establishment of possible clustered downstream industries, known as the Vaal Industrial Development Zone (VIDZ), relating to the two infrastructural development projects and would also promote the relocation of existing industries in order to shorten the distance between supplier and end-user.

These three undertakings, which together form the VLH, will facilitate the expansion of trade and industry within the area as well as supplying various socio-economic benefits to the inhabitants of the Vaal region. It would serve to regenerate the flagging manufacturing sector by providing a means of opening up the economic potential of underutilised industrial and infrastructural capacity by targeting strategic industrial assets that are important to the growth of the regional economy states the Vaal Research Group (VRG, 2006).

1.2 RESEARCH PROBLEM AND IMPORTANCE OF THE STUDY

The Vaal region developed as a result of the establishment of the steel industry within the area. The steel industry accounts for almost a third of South Africa’s overall manufacturing activities (SAISI, 2009) and according to the Emfuleni Local Municipality, as of 2006, contributed 75% towards the GGP of the Vaal region. South Africa is also the largest steel producer in Africa, producing approximately 52% of the continent’s total steel production in 2006 (SAISI, 2007) and 50.4% in 2009 (IIISI, 2009). As evidenced by the 22.2% (in 2001) contribution to employment opportunities and the 38.7% (in 2001) contribution to the Vaal GGP, the result of this historical development was the heavy
reliance on the manufacturing sector as a source of economic growth, employment and overall development of the area.

However, the major obstacle to the development of the steel industry today is the emphasis placed on increasing levels of international competitiveness from 1994. This forced local steel manufacturers to reduce their labour intensity and costs in order to gain on the international market. The outcome of this strategy was increased unemployment and poverty levels during that period. As mentioned above unemployment was recorded at 51.3% in 2000 and 53.8% in 2005, while poverty increased from 46.1% in 2000 to 51.5% in 2003.

Despite the important role that the Vaal economy plays in the Gauteng province, with a total contribution of 7.8% to the GGP of the province in 2000, there has been few initiatives established to overcome the unemployment and poverty issues experienced in the Vaal region.

The proposed Vaal Logistical Hub would provide a means of furthering sustainability of the manufacturing industry and would gear the Vaal economy toward increased employment and a significant reduction in poverty.

1.3 OBJECTIVE OF THE STUDY

The objective of this study is to determine the impact of the establishment of a cross-border infrastructural development project on the economy of the Vaal region. More specific objectives are:

- Determining the effect of the proposed project on levels of LED in the Vaal;
- Assess the level of support for the project from local industry roleplayers.

1.4 STUDY AREA

The Vaal area comprises the Emfuleni, Midvaal and Metsimaholo municipalities, which are situated in the southern part of Gauteng and the northern part of the Free State respectively. These areas form a cohesive and intensively integrated economic unit that cannot be separated by politically demarcated boundaries (Slabbert & Slabbert, 2002b:3).
The Emfuleni municipal area (EMA) consists of the following suburbs and townships:

- Boipatong;
- Boitumelo;
- Bophelong;
- Evaton;
- Rust ter Vaal;
- Roshnee;
- Sebokeng;
- Sharpville;
- Tshepiso;
- Vanderbijlpark; and
- Vereeniging.

Figure 1.1 shows the location of the EMA, as well as the various suburbs and townships that can be located in the area based on the municipal boundaries set out by the Demarcation Board in 2003.
The Metsimaholo municipal area (MMA), situated in the northern part of the Free State, includes the following suburbs and townships:

- Coalbrook;
- Deneysville;
- Oranjeville;
- Refenkgotso;
- Sasolburg;
- Viljoensdrif; and
- Zamdela.
The location of the MMA is illustrated in Figure 1.2, which is based on the new municipal demarcations set out by the Demarcations Board in 2003. The Midvaal local municipality (MLM) can be seen in Figure 1.3. Suburbs that can be located in the MLM include:

- Meyerton;
- Randvaal;
- Risiville; and
- Walkerville.
Figure 1.3: The Midvaal local municipality

Source: Demarcation Board (2003)

The proposed site for the Vaal Logistical Hub is illustrated in Figure 1.4. A location to the west of Arcelor Mittal’s main plant has been earmarked for the project. A triangular piece of land between the R57 and K45 roads has already been included in city planning documents provided by Mr. Straffen Short.
1.5 RESEARCH METHODOLOGY

Firstly, a literature review of the theoretical concepts of local economic development will be covered. The various concepts regarding the establishment and composition of spatial development initiatives will also be analysed. This is done in order to propose the establishment of the VLH under a spatial development initiative framework and also to evaluate the various methods that could be applied (Blue IQ initiatives and industrial development zones amongst others).

Secondly, a situational analysis of the Vaal region will be conducted in order to determine the current level of sectoral participation in the area, thereby enabling the development of a strategy specifically tailored to the needs of the region. Data regarding the current levels of sectoral contribution to the Vaal economy...
will be gathered using data collected from Stats SA. Also, an existing input-output model of the Vaal will be used in order to determine the final impact of the project on the economy of the region.

Lastly, the possible benefits accruing to the various role-players within the area will be identified in order to determine whether the VLH would be a key developmental initiative for the area. This data will be gathered using two questionnaires. The industry questionnaire is designed to gather procurement and distribution data from respondents. It pertains to the method of transportation used in the production process as well as the type of products needed by the relevant producer. Several statements regarding the opinion of the producer in respect of the Vaal Logistical Hub are also included. An interview with the logistics manager of Arcelor Mittal (Vanderbijlpark) was conducted in order to gather insight into any potential opportunities that the VLH would expose to its primary users.

The freight forwarder questionnaire is designed to ascertain the current problems experienced by freight forwarders in as much as getting their cargo to the consumer. Also, statements regarding the possible relocation of the freight forwarder to the proposed VLH are included to test the feasibility of the establishment of the project.

1.6 OUTLINE OF THE STUDY

Chapter 1 (Introduction, research problem and importance of the study) describes the research problem, the objective of the study, the research methodology and also outlines the geographical boundaries of the study area, as well as the layout of the chapters.

Chapter 2 (A theoretical analysis of local economic development) provides an analysis of the theoretical perspectives regarding local economic development. LED strategies will also be outlined and the planning and implementation of LED will be discussed.

Chapter 3 (Spatial development initiatives, industrial development zones and industrial clusters) provides an analysis of the theoretical perspectives
regarding the establishment of a key LED strategy, i.e., a spatial development initiative (SDI). The significance of the Blue IQ initiative with regard to SDIs will be discussed. The establishment of an industrial development zone (IDZ) as a possible vehicle for the implementation and development of an SDI will be investigated and, to further strengthen the standpoint that clustering of economic activity (as in an IDZ) would bring about greater development, industrial clustering and value chain analysis as a means of upgrading these clusters will be discussed.

Chapter 4 (A situational analysis of the Vaal region) provides an economic and demographic analysis of the Vaal area. The historical background of the Vaal area will be discussed as well as the level of sectoral participation as a result. Evidence will also be provided as to the need for enhancing the manufacturing capacity of the Vaal region.

Chapter 5 (The economic importance of transport infrastructure and logistical hubs: the case of the Vaal Logistical Hub) provides an examination of the end users of the proposed logistical hub in terms of current usage of infrastructure and will determine the level of possible economic impact of the proposed project on the Vaal economy. This chapter relies on data collected from questionnaires and an existing input-output model of the Vaal that will be used to determine the final impact of the project.

Chapter 6 (Summary, conclusion and recommendations) summarises and concludes the study, highlighting possible recommendations regarding the proposed logistical hub project.