

# PHASE 1: SOCIO-ECONOMIC ANALYSIS

## 1. SOCIO ECONOMIC DEVELOPMENT AND ANALYSIS: CONCEPT DEFINITION

Socio-economic analysis will for the purpose of this exercise comprise out of two segments:

- Demographic characteristics
- Economic factors

It is important to understand the socio-economic environment and characteristics of the Matjhabeng region in order to know what priorities should get preference to achieve a prosperous and dynamic economy in which society can function optimally.

## 2. PURPOSE OF SOCIO-ECONOMIC ANALYSIS

The purpose of this analysis is to give a clear indication of the social and economic profile of the region in order to understand the intricate shortcomings and opportunities that exist in the socio-economic environment. With that understanding it will be possible to narrow down on critical issues and priorities in order to broaden the economic base of the region and thereby benefitting all its inhabitants.

## 3. SITUATION ANALYSIS AND TRENDS

### 3.1 Demographics

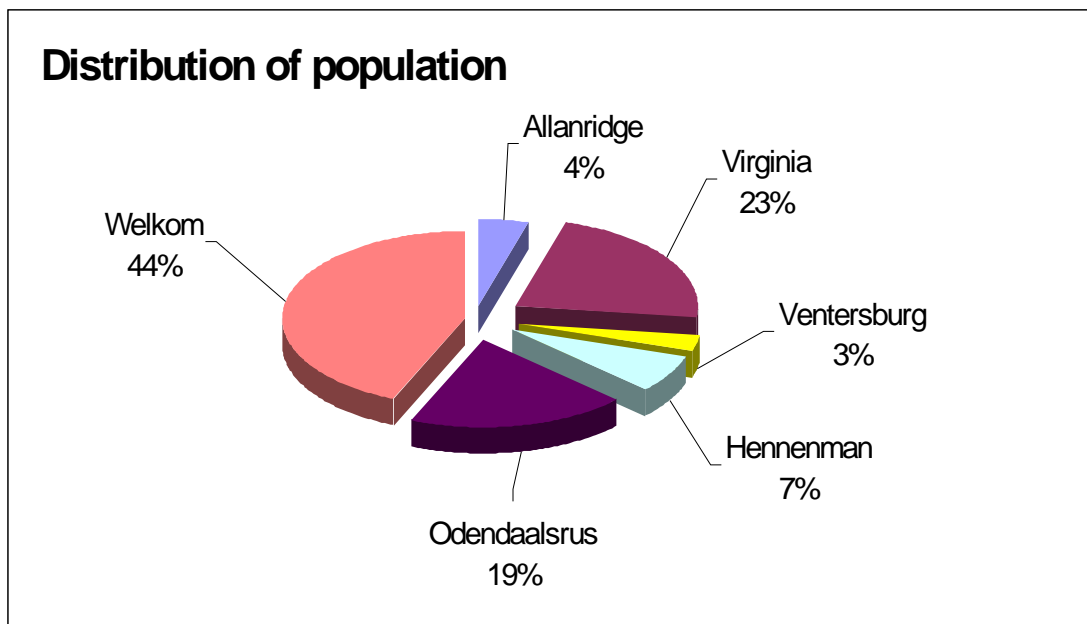
The word Matjhabeng means the "assembly of diverse people". Matjhabeng is home to almost half a million people. The bulk of the population is concentrated in three main nodes, namely Welkom, Virginia and Odendaalsrus. The smaller towns in the region surround these nodes and continue to play an important role in serving the wider region. The following official figures based on the 1996 Census was used by the Demarcation Board to demarcate the Matjhabeng Local Municipality:

<b>Average</b>	<b>Matjhabeng</b>	
No. of Households	110725	
Average people / household	4,3	
<b>Population</b>	<b>Matjhabeng</b>	<b>%</b>
African	396 812	83,2
Coloured	9 050	1,9
Indian	411	0,1
White	68 241	14,3
Other	2413	0,5

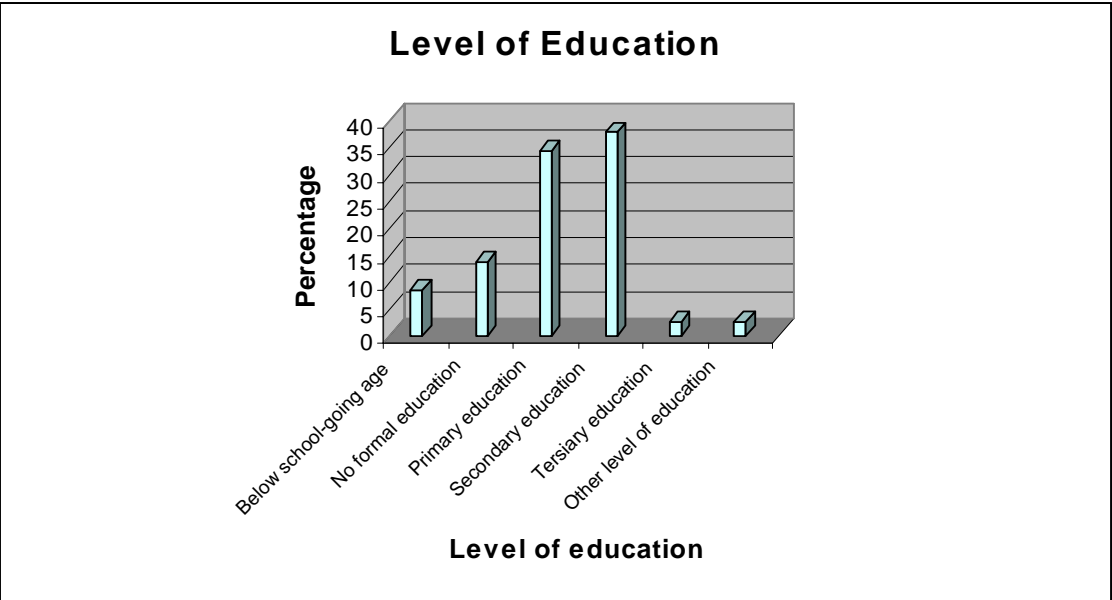
Gender	Matjhabeng	%
Male	264 018	55,4
Female	212 753	44,6

Age Breakdown	Matjhabeng	%
0-4	40 810	8,5
4-19	118 356	24,8
20-29	86 785	18,2
30-49	174 003	36,4
50-64	39 489	8,3
Over 65	13 426	2,8
Age unknown	4 642	1,0
<b>Total Population</b>	<b>477 411</b>	

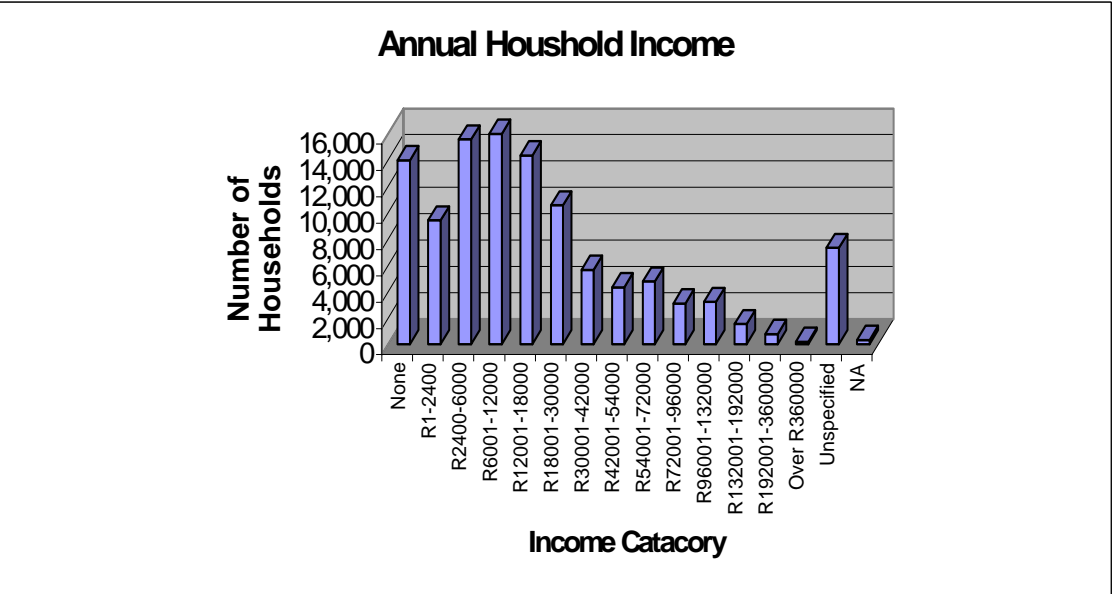
The distribution of the population between the various town in the region is illustrated below:



The education level in Matjhabeng is given below according to Statistics SA (1996 Census):



The annual household income of the people of the region according to Statistics SA in 1996 is as follows:



**3.2 Assessment of the Economic Base**

**INTRODUCTION**

The purpose of this section is to compile an economic development profile of the Matjhabeng region. The profile is based only on four of the six towns as Ventersburg and Allanridge were not included in a recent regeneration study. Due to the very small local economies, this will not negatively influence the overall profile of the region.

Aspects that are analysed in this section include the following:

- Production profile
- Degree of diversity in the economy
- Comparative advantages
- Potential analysis

## **PRODUCTION PROFILE**

For analytical purposes, the Gross Geographic Product (GGP) is utilised as an indicator of economic activity. The GGP is a measure of the value of economic size and nature of economic activities found in an area. The economy of an area can be divided into three main categories, namely primary, secondary and tertiary sectors. Each of these categories is further subdivided into different economic sectors. These different economic sectors are defined as follows:

- **Primary sector**

- Agriculture/hunting/forestry/fishing – establishments primarily engaged in farming activities or the rendering of agricultural services. Also included are commercial hunting, game propagating and forestry, logging and fishing.
- Mining/quarrying – the extracting, dressing and beneficiation of minerals occurring naturally.

- **Secondary sector**

- Manufacturing – the physical or chemical transformation or assembly of materials or compounds into new products.
- Electricity/gas/water – production, collection and distribution of electricity, the manufacture and distribution of gas, the collection, purification and distribution of water.
- Construction – site preparation, demolition, building of constructions/buildings, civil engineering, installation, plumbing, decorating, etc.

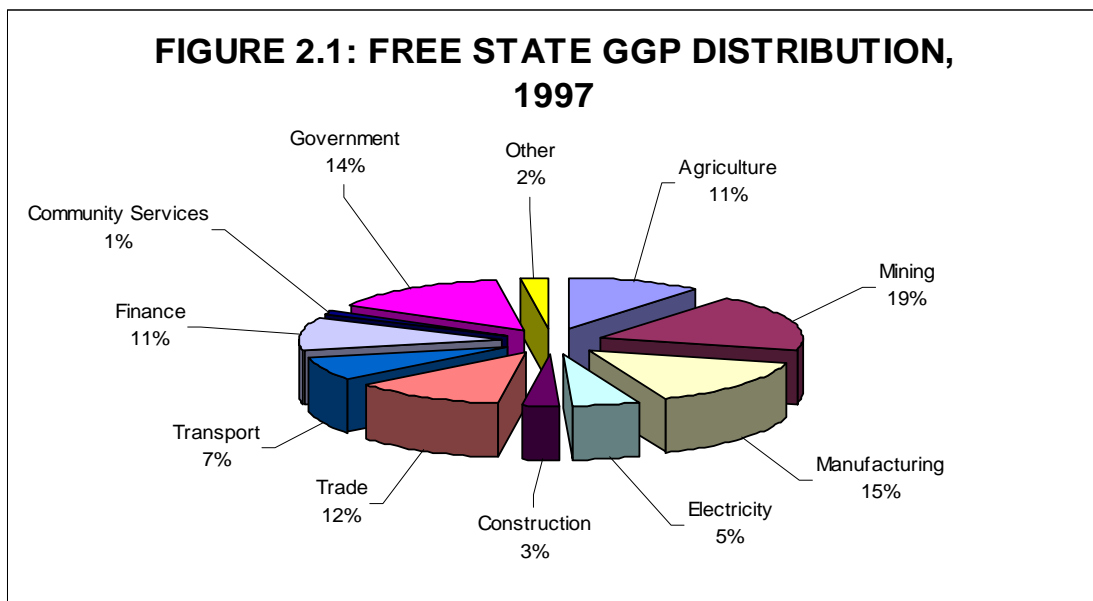
- **Tertiary sector**

- Trade/catering – the wholesale or retail resale of new and used goods in stores, stalls, markets, mail-order or other means as well as hotels, restaurants, bars and other tourist activities.
- Transport/communication – the providing of passenger or freight transport by rail, road, water or air. Includes cargo handling and storage, postal activities, courier activities and the transmission of sound, images, data or other information.
- Finance/ real estate – the activity of obtaining and redistributing funds, financial intermediation, insurance and pension funding. The buying, selling, renting and operating of owned or leased real estate.
- Government/community services – activities of central, provincial and local government. Provision of social services e.g. Education, health services, social work, and activities of professional organisations.

Economic activity is generally measured in terms of production/output. As such, production is an indicator of the magnitude and value of economic activity at a given point in time. An analysis of economic activity over time can provide information on structural changes that are taking place in the economy. This information is vital in determining future growth potential and strategic direction in an economy.

### Provincial production profile

As a point of departure, the GGP profile of the Free State Province is provided below. This profile serves as background against which the economies of the four towns in the study area can be compared.



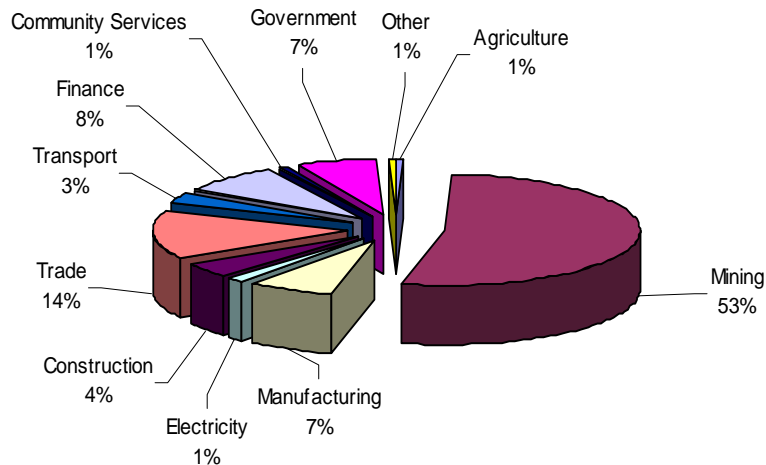
Source: Urban-Econ database, 1998

The above figure shows that the economy of the province is relatively well diversified with no major dominant economic sectors to speak of. The largest sectors in the province appear to be mining (19%), manufacturing (15%), government (14%) and trade (12%). The weak sectors in the province are community services (1%), other (2%) and construction (3%).

### Welkom production profile

The GGP profile for Welkom Magisterial District is illustrated in the following figure.

**FIGURE 2.2: WELKOM GGP DISTRIBUTION, 1997**



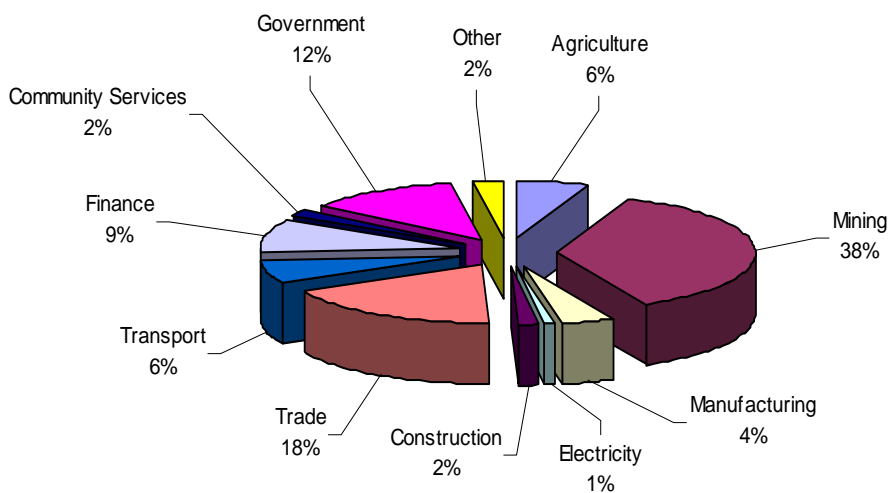
Source: Urban-Econ database, 1998

This figure shows that the economy of Welkom District is dominated by the mining sector with the remaining sectors being very small by comparison. The only other sectors showing any significance are trade (14%), finance (8%), government (7%) and manufacturing (7%).

### **Odendaalsrus production profile**

The GGP profile for Odendaalsrus Magisterial District is illustrated as follows:

**FIGURE 2.3: ODENDAALSRUS GGP DISTRIBUTION, 1997**



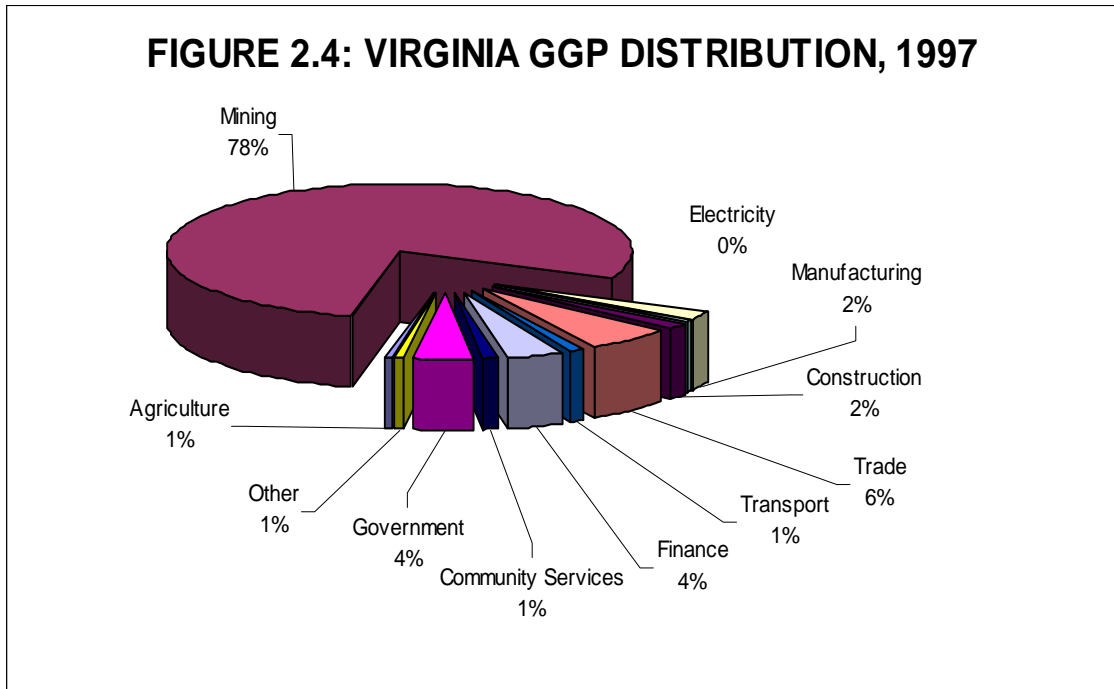
Source: Urban-Econ database, 1998

The Odendaalsrus economy appears to be relatively more diversified than that of Welkom, however, this economy is also too concentrated in the mining

sector. Other prominent sectors in the Odendaalsrus economy are trade (18%), government (12%) and finance (9%).

### Virginia production profile

The GGP profile for Virginia Magisterial District is illustrated below.



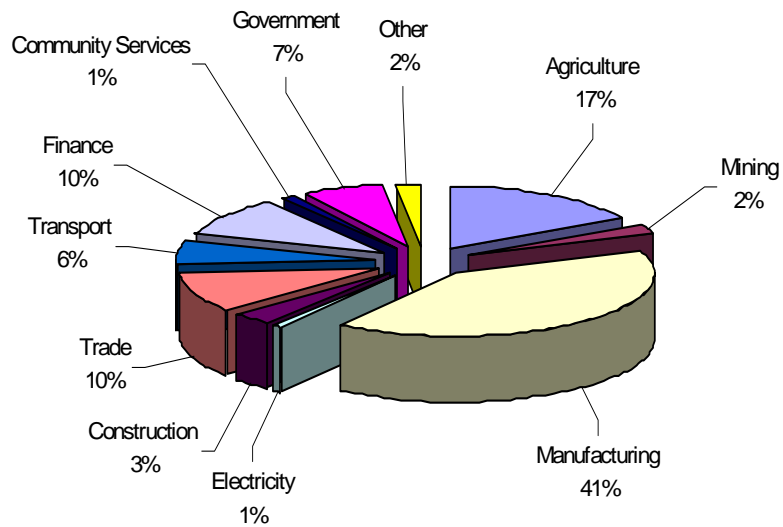
Source: Urban-Econ database, 1998

The mining sector plays an overwhelming role in the local economy of Virginia. The remaining sectors are very small by comparison with only the trade (6%) and government (4%) sectors showing any significance.

### Hennenman production profile

The GGP profile for Hennenman Magisterial District is illustrated as follows:

**FIGURE 2.5: HENNENMAN GGP DISTRIBUTION, 1997**



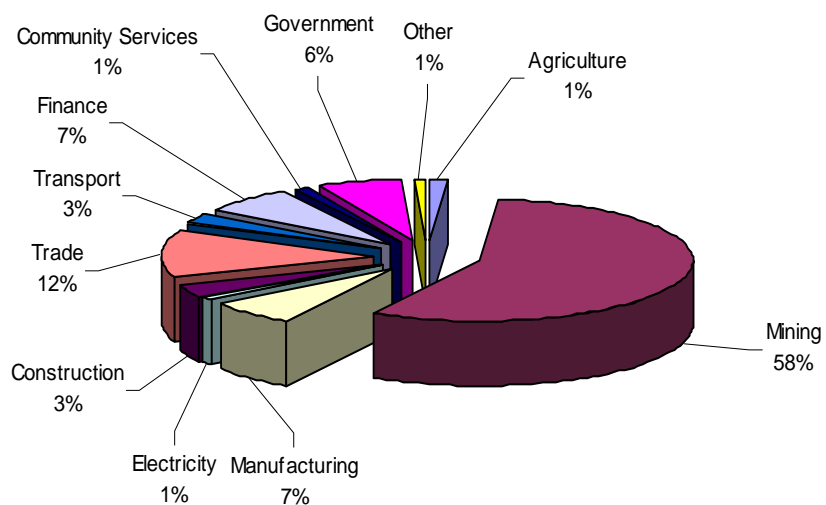
Source: Urban-Econ database, 1998

The Hennenman economy is the only economy in the study area that is not dominated by the mining sector. This economy has a stronger basis and the significant sectors are manufacturing (41%), agriculture (17%), trade (10%) and finance (10%).

**Study area production profile**

The GGP profile for the study area including all four Magisterial Districts is illustrated below.

**FIGURE 2.6: TOTAL STUDY AREA GGP DISTRIBUTION, 1997**

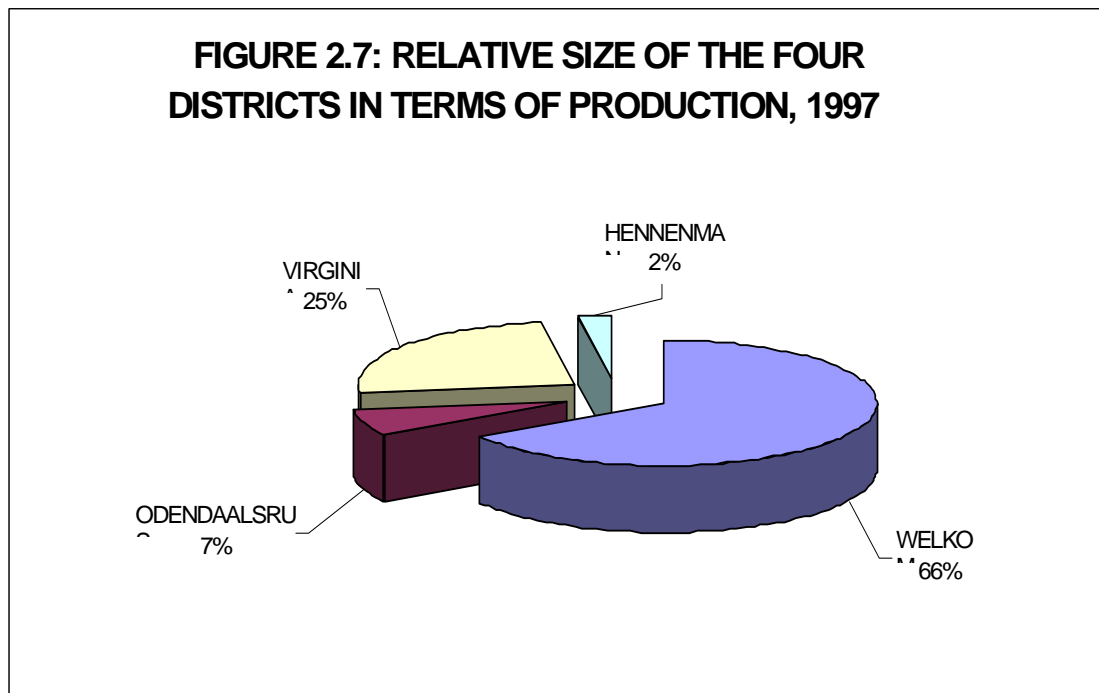


Source: Urban-Econ database, 1998

As expected, the mining sector dominates the study area economy followed by trade (12%), manufacturing (7%), finance (7%) and government (6%). This economy is too reliant on one sector (mining) and does therefore not have a sustainable basis from which it can further develop.

### Relative size of the four economies

Another aspect that needs to be highlighted is the relative strengths of the economies of the four respective districts in relation to each other. This aspect is illustrated in the following figure.



Source: Urban-Econ database, 1998

This figure shows that Welkom (66%) and Virginia (25%) dominate the study area economy. Hennenman and Odendaalsrus have very small economies in relation to the other two economies.

### ECONOMIC GROWTH

The growth in the respective sectors of a local economy provides a good indication of the relative strength and sustainability of that economy. In Table 2.1 the annual growth in GGP is provided for the four respective districts as well as the entire study area for the period 1985 to 1997. Furthermore the growth in the Free State Province over the same time period is also provided for the purpose of comparison.

**TABLE 2.1: ANNUAL GGP GROWTH, 1985-1997**

Sector	Percentage Growth					
	Welkom	Oden- daalsrus	Virginia	Hennenma n	Study Area	Free State
Agriculture	5,1	-1,5	9,1	22,7	4,7	3,1
Mining	-4,7	-2,9	-2,4	8,3	-3,9	-2,7
Manufacturing	0,6	-1,3	3,2	2,6	1,0	1,1
Electricity	5,3	0,9	2,2	0,3	4,5	7,0
Construction	-3,2	-4,0	1,7	4,1	-2,7	-0,9
Trade	1,2	1,4	1,9	-0,7	1,2	0,4
Transport	4,7	0,1	1,8	0,1	3,2	1,7
Finance	2,6	0,5	0,3	1,1	2,0	0,9
Community Services	4,4	4,5	8,5	0,8	5,1	0,9
Government	2,0	2,1	2,6	3,6	2,2	0,6
Other	0,8	0,8	0,8	0,9	0,8	1,8
<b>TOTAL</b>	<b>-2,5</b>	<b>-0,9</b>	<b>-1,6</b>	<b>3,2</b>	<b>-2,1</b>	<b>0,4</b>

Source: Urban-Econ database, 1998

Table 2.1 shows that the economy of the study area declined by 2,1% since 1985 while that of the province grew marginally over the same period. The Hennenman economy is the only local economy that showed positive growth (3,1%) which is largely due to the growth in its agricultural sector.

In general, the economy of Hennenman District is relatively small (refer to Figure 2.7) however, this economy is relatively well diversified and is showing healthy growth in all but one of its economic sectors. Consequently Hennenman appears to have the best economy in the study area although this is still a very small economy.

The Welkom local economy is the largest in the study area but also the one showing the largest decline. This decline is mainly as a result of the decline experienced in its mining and construction sectors. The remaining sectors in the Welkom economy all showed positive growth in the period under review, indicating that apart from mining and construction, the local economy does have some potential for future growth.

The same situation appears to be occurring in Virginia as is the case with Welkom. The local economy has declined but this is mainly due to a decline in the mining sector while the remaining sectors have experienced positive growth.

In Odendaalsrus the general decline is also a result of the decline in mining and construction but is aggravated by a decline in an additional two sectors

namely: agriculture and manufacturing. The decline in agriculture and manufacturing is a sign of more serious fundamental economic problems being experienced in this district. It is however, believed the decline in these two sectors may be directly related to the decline in the mining sector as all of these sectors are to a large extent interdependent on each other for growth.

## COMPARATIVE ADVANTAGE

A comparative advantage indicates a relatively more competitive production function for a product or service in a specific economy (regional or sub-regional) than in the aggregate economy (provincial or national). It therefore measures whether a specific economy produces a product or renders a service more efficiently.

One way to measure the comparative advantage of a specific economy is by way of the location quotient. A location quotient as a tool, however, does not take into account external factors such as government policies, investment incentives, and proximity to markets, etc., which can influence the comparative advantage of an area. If a specific economy has a location quotient larger than one in a particular sector or activity, per interpretation, that economy then enjoys a comparative advantage in that particular sector or activity. Table 2.2 presents the location quotients for the respective economic activities in the study area in relation to the Free State Provincial economy.

The location quotients in the table show that the study area has a comparative advantage in relation to the province in its mining, construction and trade sectors. Unfortunately the mining and construction sectors are those that have been declining in importance over the past twelve years (refer back to Table 2.1). This represents a fundamental problem in the study area economy, as the sectors in which it has a comparative advantage are the sectors which are in decline. This situation is reflected in the decreasing location quotient between 1985 and 1997 for the mining and construction sectors in the study area as shown in Table 2.2. However, the comparative advantage that the study area has in trade is a strength, which must be further developed to the advantage of the region.

**TABLE 2.2: STUDY AREA LOCATION QUOTIENT**

Sector	Welkom		Odendaalsrus		Virginia		Hennenman		Study Area	
	1985	1997	1985	1997	1985	1997	1985	1997	1985	1997
Agriculture	0,0	0,1	0,9	0,5	0,0	0,1	0,2	1,5	0,1	0,1
Mining	3,8	3,0	2,1	2,0	4,2	4,3	0,0	0,1	3,7	3,2
Manufacturing	0,5	0,5	0,4	0,3	0,1	0,2	2,2	2,7	0,4	0,4
Electricity	0,3	0,2	0,4	0,2	0,2	0,1	0,3	0,1	0,3	0,2
Construction	2,0	1,5	0,8	0,6	0,4	0,6	0,6	1,2	1,5	1,2
Trade	1,1	1,2	1,3	1,5	0,4	0,5	0,9	0,8	0,9	1,0
Transport	0,3	0,4	1,1	0,9	0,2	0,2	1,0	0,8	0,3	0,4

Finance	0,6	0,8	0,9	0,9	0,4	0,4	0,9	1,0	0,6	0,7
Community Services	0,5	0,8	1,0	1,6	0,4	0,9	1,0	1,0	0,5	0,9
Government	0,4	0,5	0,7	0,9	0,2	0,3	0,3	0,5	0,4	0,4
Other	0,3	0,3	1,2	1,1	0,3	0,3	1,0	0,9	0,4	0,3

Source: Urban-Econ database, 1998

The comparative advantage of the study area is reflected in the Welkom local economy which has an advantage in the same sectors. Odendaalsrus has a further comparative advantage in the community services and other sectors, while Virginia only has a comparative advantage in mining.

Once again Hennenman appears to have the soundest economy with comparative advantages in the agriculture, manufacturing, construction, finance and community services sectors. Furthermore, all of these sectors have become relatively more important in relation to the provincial economy since 1985, proving that these are growth sectors in Hennenman with good potential for further future development.

Based on the information provided in Table 2.2 as well as the change experienced in the location quotients of each area between 1985 and 1997, the following sectors are showing potential for further future development and expansion:

Welkom	Odendaalsrus	Virginia	Hennenman
<ul style="list-style-type: none"> <li>▪ Mining</li> <li>▪ Construction</li> <li>▪ Trade</li> <li>▪ Finance</li> <li>▪ Community services</li> </ul>	<ul style="list-style-type: none"> <li>▪ Mining</li> <li>▪ Trade</li> <li>▪ Community services</li> <li>▪ Transport</li> <li>▪ Finance</li> </ul>	<ul style="list-style-type: none"> <li>▪ Mining</li> <li>▪ Construction</li> <li>▪ Trade</li> <li>▪ Community services</li> </ul>	<ul style="list-style-type: none"> <li>▪ Agriculture</li> <li>▪ Manufacturing</li> <li>▪ Construction</li> <li>▪ Trade</li> <li>▪ Transport</li> <li>▪ Finance</li> <li>▪ Community services</li> </ul>

## DEGREE OF DIVERSITY IN THE ECONOMY

The degree to which an economy is diversified or concentrated in specific activities is an indicator of functional specialisation. The degree to which an economy is diversified/concentrated can be illustrated in terms of a tress index. The tress index is measured on a scale from 1 to 100. The higher the value of the tress index for an area, the lower the degree of diversity of that economy. Subsequently the lower the value of the tress index for an area the higher the degree of diversity of the economy. An indication of the degree of economic diversity of the study area is provided in Table 2.3.

**TABLE 2.3: STUDY AREA TRESS INDEX, 1997**

Area	Tress Index
Welkom	70,9
Odendaalsrus	58,3
Virginia	85,5
Hennenman	61,3
Study area	71,9
Free State	37,4

Source: Urban-Econ database, 1998

The Tress Index for Virginia and Welkom is very high illustrating that these economies are highly concentrated. The economies of Odendaalsrus and Hennenman are slightly less concentrated but still not diversified enough when compared to the larger provincial economy of the Free State.

The high tress value of the study area economy can be ascribed to the dominance of the mining sector in Welkom, Virginia and Odendaalsrus. The high level of concentration of the study area economy is disconcerting since a high concentration level makes the economy vulnerable to external factors that may have an impact on the performance of the economy.

### SECTORAL OPPORTUNITY ANALYSIS

The purpose of this subsection is to evaluate the economy in order to identify the development potential of each economic sector. In order to achieve the aforementioned, the following aspects are outlined per sector:

- Production
- Growth trends
- Development trends
- Spatial development.

### Agriculture

Indicator	Welkom	Oden- daalsrus	Virginia	Hennen- man	Study Area
<b>% Contribution (1997):</b>	1	6	1	17	1
<b>% Growth (1985-1997):</b>	5,1	-1,5	9,1	22,7	4,7
<b>Comparative advantage (1997):</b>	0,1	0,5	0,1	1,5	0,1

The agriculture sector plays a significant role in the Hennenman District where it is showing very strong growth as well as a high comparative advantage. Within the study area the agriculture sector experienced a relatively high growth (4,7%) between 1985 and 1997.

Even though the contribution of this sector to GGP in the study area is relatively small, it is an activity that promotes job creation and self-employment among local residents. Agriculture is an important form of sustainable livelihood in the rural areas and it is believed that the employment creation potential of this sector is still greatly under-utilised in the area. There are multiple linkages that can be established between agriculture and other economic sectors to promote, in particular, SMME development. From an economic development perspective, the agricultural sector in study area provides the following opportunities:

- Promotion of urban agriculture
- Promotion of small scale, intensive farming
- Organic and hydroponic product cultivation
- Promotion of agro-industries
- Promotion of agri-tourism.

## Mining

Indicator	Welkom	Oden- daalsrus	Virginia	Hennen- man	Study Area
<b>% Contribution (1997):</b>	53	38	78	2	58
<b>Growth (1985-1997):</b>	-4,7	-2,9	-2,4	8,3	-3,9
<b>Comparative advantage (1997):</b>	3,0	2,0	4,3	0,1	3,2

The mining sector dominates the economies of Welkom, Odendaalsrus and Virginia and it has a major comparative advantage in the study area. This sector is however, in decline and expectations are that it will continue to decline in future. The problem inherent in the study area (with the exception of Hennenman) is that the local economies are too dependant on this sector and face a major challenge in terms of diversifying their economies and subsequently reducing their reliance on the mining sector. Compounding this problem is the fact that most of the other economic sectors are to a large degree also reliant on the success of the mining sector for their own sustainability.

The above problem has been identified in the past and some progress has been made by local authorities and other local role-players in trying to reduce their reliance on this sector. The need for diversification of the local economies can therefore not be over-emphasised and to this end, it is believed that this study should not concentrate too much on development opportunities that have the mining sector as basis.

Due to the fact that gold mining is the most important mineral found in the area, strong backward and forward linkages have developed between the mining sector and other economic activities, most notably the manufacturing

sector. Consequently, the mines in the area represent a substantial local market for the following products:

- Machinery and plant (mainly spares for the following categories of machinery and plant) such as - bearings, compressors, conveyors, water coolers, cranes and chain blocks, diamond drills, fans, fire fighting appliances, headgear and shaft equipment, vehicles, ventilation and cooling equipment, water purification plant, etc.
- Mining timber, including - sleepers, fabricated timber, squared timber, poles, pack mats, chock pieces and wedges.
- Iron and steel products, including - axles and shafts, drill bits, drilling steel, plating and sheeting, rails, rail accessories, ropes, rope fittings, and steel sections.
- Explosives, including - high grade, low grade, permitted explosives, detonators, fuses, and general accessories such as cord.
- Foodstuffs, including - dried beans and peas, bread, fish, corn, maize, fresh meat, offal, rice, sugar, fresh vegetables, etc.
- Piping and tubing, including - ventilation piping, general piping, pipe fittings, cocks and valves.
- Electrical machinery (including spares), such as - generators, lifts, locomotives, motors, switchgear, transformers, winders, etc.
- Chemicals, including - cyanide, nitric acid, sulphuric acid, flocculating agent, resins, etc.
- Electrical equipment (including cap lamps, cable and wires).

The continued decline of the mining sector will therefore have a direct impact on the manufacturing sector, but also an indirect effect on the entire economy as a result of declining sales in retail trade, electricity, water, etc. A positive implication of the decline in mining activity is that mining land is lying dormant and the possibility of utilising such land for creative, alternative economic activities should be investigated.

During the remaining economic life span of the mining industry, its backward and forward linkages in the area should be optimally developed in order to diversify the economic base. In this regard specific opportunities are envisaged, especially for small, medium and micro enterprises (SMME's) and tourism. The tourist value of mining sites extends far beyond the operational life span of the mines themselves. By means of innovative techniques, the impact of the declining mining sector on the economy can be mitigated and mining land can be re-integrated into the urban economy. The mining sector provides the following opportunities:

- Subcontract small scale entrepreneurs to rehabilitate mining land
- Potential re-usage of buildings, equipment and other infrastructure by small-scale entrepreneurs
- Establishment of economically feasible land uses on mining land with a high development potential

- Potential for educational and tourism related tours at mine sites.

## Manufacturing

Indicator	Welkom	Oden- daalsrus	Virginia	Hennen- man	Study Area
<b>% Contribution (1997):</b>	7	4	2	41	7
<b>Growth (1985-1997):</b>	0,6	-1,3	3,2	2,6	1,0
<b>Comparative advantage (1997):</b>	0,5	0,3	0,2	2,7	0,4

An indication of the relative importance of each town with regards to manufacturing employment is provided in Table 2.4.

**TABLE 2.4: DISTRIBUTION OF MANUFACTURING EMPLOYMENT IN THE STUDY AREA (1993)**

Area	Percentage distribution
Welkom	70,5
Odendaalsrus	7,2
Virginia	10,6
Hennenman	11,7
<b>Total Study Area</b>	<b>100,0</b>

Source: Urban-Econ calculation based on Census of Manufacturing, 1993, CSS

In terms of employment opportunities, Welkom dominates manufacturing in the study area with the remaining three towns contributing in the region of 10% each. A more detailed manufacturing profile for each town is provided in Table 2.5. This profile is provided according to the major Standard Industrial Classification (SIC) of economic activities.

**TABLE 2.5: DISTRIBUTION OF MANUFACTURING CONCERNS IN THE STUDY AREA, 1993**

Type of manufacturing concern	SIC	Percentage distribution				Study Area
		Welkom	Oden- daalsru s	Virgini a	Henne n-man	
Manufacture of food products, beverages and tobacco products	301	1,6	-	-	-	1,1
Manufacture of dairy products	302	0,8	-	-	-	0,5
Manufacture of grain mill products, starches and starch products and prepared animal feeds	303	0,8	5,9	4,2	18,2	2,6
Manufacture of other food products	304	4,0	5,9	4,2	-	3,7
Manufacture of beverages	305	1,6	-	-	-	1,1
Manufacture of other textiles	312	2,4	-	-	-	1,6

Type of manufacturing concern	SIC	Percentage distribution				
		Welkom	Oden- daalsru s	Virgini a	Henne n-man	Study Area
Manufacture of wearing apparel, except fur apparel	314	1,6	5,9	4,2	-	2,1
Manufacture of leather, leather products and footwear (316 and 317)	316	-	5,9	-	-	0,5
Manufacture of footwear	317	0,8	-	-	-	0,5
Saw milling and planing of wood	321	1,6	-	-	-	1,1
Manufacture of products of wood, cork, straw and plaiting materials	322	3,2	-	-	-	2,1
Manufacture of paper and paper products	323	0,8	-	4,2	-	1,1
Publishing	324	0,8	-	-	-	0,5
Printing and service activities related to printing	325	0,8	5,9	-	-	1,1
Petroleum refineries/synthesisers	332	-	-	4,2	-	0,5
Manufacture of other chemical products	335	-	-	-	9,1	0,5
Manufacture of rubber products	337	1,6	-	-	-	1,1
Manufacture of plastic products	338	4,0	-	4,2	-	3,2
Manufacture of non-metallic mineral products n.e.c	342	10,4	5,9	33,3	18,2	19,5
Manufacture of basic iron and steel	351	0,8	-	-	-	0,5
Manufacture of structural metal products, tanks, reservoirs and steam generators	354	11,2	17,6	4,2	-	9,5
Manufacture of other fabricated metal products; metalwork service activities	355	12,8	5,9	4,2	9,1	10,0
Manufacture of general purpose machinery	356	6,4	-	-	-	4,2
Manufacture of special purpose machinery	357	12,0	17,6	20,8	27,3	13,7
Manufacture of household appliances n.e.c.	358	-	5,9	-	-	0,5
Manufacture of electricity distribution and control apparatus	362	0,8	-	-	-	0,5
Manufacture of other electrical equipment n.e.c.	366	4,8	-	4,2	-	3,7
Manufacture of medical appliances and instruments and appliances for measuring, checking, testing, navigating and for other purposes, except optical instruments	374	1,6	-	-	-	1,1
Manufacture of bodies (coachwork) for motor vehicles; manufacture of trailers	382	0,8	-	-	9,1	1,1

Type of manufacturing concern	SIC	Percentage distribution				
		Welkom	Oden- daalsru s	Virgini a	Henne n-man	Study Area
and semi-trailers						
Manufacture of parts and accessories for motor vehicles and their engines	383	4,8	-	4,2	-	3,7
Manufacture of railway and tramway locomotives and rolling stock	385	1,6	17,6	-	-	2,6
Manufacture of furniture	391	3,2	-	4,2	9,1	3,2
Manufacturing n.e.c.	392	2,4	-	-	-	1,6
<b>TOTAL</b>		<b>100,0</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>

Source: Urban-Econ calculation based on Census of Manufacturing, 1993, CSS

Table 2.5 shows that manufacturing in Welkom is concentrated in the manufacture of other fabricated metal products; metalwork service activities (12,8%). This SIC group includes the following activities:

- Forging, pressing, stamping and roll-forming of metal; powder metallurgy
- Treatment and coating of metals; general mechanical engineering on a fee or contract basis
- General mechanical engineering on a fee or contract basis
- Manufacture of cutlery, hand tools and general hardware
- Manufacture of other fabricated metal products n.e.c.
- Manufacture of metal containers, e.g. cans and tins
- Manufacture of cables and wire products
- Manufacture of springs (all types)
- Manufacture of metal fasteners
- Manufacture of other metal products n.e.c.

Other strong manufacturing sub-sectors in Welkom are:

- The manufacture of special purpose machinery (12,0%) (turbines, pumps, compressors, taps and valves, bearings, gears, gearing and driving elements, ovens, furnaces, lifting and handling equipment, etc.),
- The manufacture of structural metal products, tanks, reservoirs and steam generators (11,2%) (structural metal products, metal structures or parts thereof, metal doors, windows and gates, tanks, reservoirs and similar containers of metal, steam generators, etc.)
- Manufacture of non-metallic mineral products n.e.c (10,4%) (non-structural non-refractory ceramicware, refractory ceramic products, structural non-refractory clay and ceramic products, cement, lime and plaster, articles of concrete, cement and plaster, cutting, shaping and finishing of stone).

The above strong manufacturing sub-sectors all appear to have strong linkages with the mining sector. In Odendaalsrus, the manufacturing profile is similar to that

of Welkom, but includes a strong concentration in the manufacture of railway and tramway locomotives and rolling stock which is most likely also linked to the mining sector. The situation in Virginia is also similar to that of Welkom, but even more concentrated in the manufacture of non-metallic mineral products (33,3%). In Hennenman, the manufacturing profile is slightly more concentrated in agricultural-related products such as the manufacture of special purpose machinery (27,3%), the manufacture of grain mill products, starches and starch products and prepared animal feeds (18,2%) and the manufacture of non-metallic mineral products (18,2%).

## **Gap Analysis**

Based on the information provided in Table 2.5 it is possible to identify the types of industries which are not currently found (or not well represented) within the study area. This list includes the following:

- Production, processing and preservation of meat, fish, fruit, vegetables, oils and fats
- Manufacture of tobacco products
- Manufacture of textiles, clothing and leather goods
- Spinning, weaving and finishing of textiles
- Manufacture of knitted and crocheted fabrics and articles
- Dressing and dyeing of fur; manufacture of articles of fur
- Tanning and dressing of leather; manufacture of luggage, handbags, saddlery and harness
- Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials; manufacture of paper and paper products; publishing, printing and reproduction of recorded media
- Manufacture of wood and products of wood, except furniture; manufacture of articles of straw and plaiting materials
- Reproduction of recorded media
- Manufacture of coke oven products
- Manufacture of basic chemicals
- Manufacture of man-made fibres
- Manufacture of glass and glass products
- Manufacture of basic precious and non-ferrous metals
- Casting of metals
- Manufacture of office, accounting and computing machinery
- Manufacture of electrical machinery and apparatus n.e.c.
- Manufacture of electric motors, generators and transformers
- Manufacture of insulated wire and cable
- Manufacture of accumulators, primary cells and primary batteries
- Manufacture of electric lamps and lighting equipment
- Manufacture of radio, television and communication equipment and apparatus and of medical, precision and optical instruments, watches and clocks

- Manufacture of electronic valves and tubes and other electronic components
- Manufacture of television and radio transmitters and apparatus for line telephony and line telegraphy
- Manufacture of television and radio receivers, sound or video recording or reproducing apparatus and associated goods
- Manufacture of optical instruments and photographic equipment
- Manufacture of watches and clocks
- Manufacture of transport equipment
- Manufacture of motor vehicles
- Manufacture of other transport equipment
- Manufacture of furniture.

The above list represents potential types of industries that are missing in the study area, this does not necessarily mean that they are well-suited to be developed in the study area as access to markets and a range of additional factors need to be taken into account when considering the location of an industry.

The manufacturing sector in the study area is still relatively small but the potential of this sector should be noted. The manufacturing sector is known for its job-creating and economic multiplier potential. This sector is furthermore effective in promoting economic clustering that leads to value-adding forward and backward linkages with other sectors.

### Electricity, Gas & Water

Indicator	Welkom	Oden-daalsrus	Virginia	Hennen-man	Study Area
% Contribution (1997):	1	1	0	1	1
Growth (1985-1997):	5,3	0,9	2,2	0,3	4,5
Comparative advantage (1997):	0,2	0,2	0,1	0,1	0,2

This sector is very small in the study area and does not appear to pose any significant potential for major future growth. This sector generally provides vital support to the entire spectrum of economic activities, in other words the value of this sector reflects the distribution of electricity, water and gas, rather than the *production* thereof. Given the nature of this sector, output growth is expected to closely accompany the overall level of economic activity.

## Construction

Indicator	Welkom	Oden- daalsrus	Virginia	Hennen- man	Study Area
% Contribution (1997):	4	2	2	3	3
Growth (1985-1997):	-3,2	-4,0	1,7	4,1	-2,7
Comparative advantage (1997):	1,5	0,6	0,6	1,2	1,2

The construction sector is also relatively small in the study area and, as is the case with electricity, this sector usually is dependent on growth in the rest of the economy for it's own growth.

## Trade, Catering & Accommodation

Indicator	Welkom	Oden- daalsrus	Virginia	Hennen- man	Study Area
% Contribution (1997):	14	18	6	10	12
Growth (1985-1997):	1,2	1,4	1,9	-0,7	1,2
Comparative advantage (1997):	1,2	1,5	0,5	0,8	1,0

The trade sector is a significant sector in the study area and has a relatively good comparative advantage in most of the four districts. There are a range of supermarkets, restaurants, recreational facilities, other retail outlets and accommodation facilities to be found throughout the study area most of which are concentrated in the Welkom CBD. The informal sector also plays a significant role in this sector and potential exits for expansion of both formal and informal activities.

## Transport, Storage & Communication

Indicator	Welkom	Oden- daalsrus	Virginia	Hennen- man	Study Area
% Contribution (1997):	3	6	1	6	3
Growth (1985-1997):	4,7	0,1	1,8	0,1	3,2
Comparative advantage (1997):	0,4	0,9	0,2	0,8	0,4

This sector is relatively small in the study area but does appear to have some future growth potential especially in Odendaalsrus and Hennenman. Similar to the electricity/water/gas and construction sectors the performance in the transport, storage and communication services sector is closely related to the general state of the overall economy.

This sector includes all modes of transport, including passengers and goods by road, rail, water and air and auxiliary activities such as parking garages, cargo handling and storage. It is evident from the composition of this sector that it has very strong linkages with other economic sectors, since it is responsible for the transportation of people, goods and information, in other

words the vital ingredients of an economy, namely labour, capital and technology.

It is believed that there is some development potential in this sector given the central location of the study area in the province as well as the country. This potential will however, be dependent on growth in other sectors, especially in the trade, agriculture and manufacturing sectors.

### Financial & Business Services

Indicator	Welkom	Oden- daalsrus	Virginia	Hennen- man	Study Area
<b>% Contribution (1997):</b>	8	9	4	10	7
<b>Growth (1985-1997):</b>	2,6	0,5	0,3	1,1	2,0
<b>Comparative advantage (1997):</b>	0,8	0,9	0,4	1,0	0,7

The financial and business services include activities in obtaining and redistributing funds, insurance and pension funding, real estate activities (buying, selling, renting and operating of owned or leased real estate), computer and related activities and general business services (legal activities, accounting, marketing, technical and advertising). The contribution of 7% to GGP in 1997 ranks this sector as the joint third (with manufacturing) largest sector in the study area economy. The contribution of this sector to the local economy has increased at an average growth rate of 2,0% per annum between 1985 and 1997.

It is believed that this sector in the study area and especially in Welkom, plays a regional role, which provides a service to the entire Goldfields area and possibly in an even larger catchment area. As the study area economy diversifies and matures with time, it will become increasingly service orientated. This means that the finance sector should play an increasing role in the local economy in future.

### SECTOR IDENTIFICATION

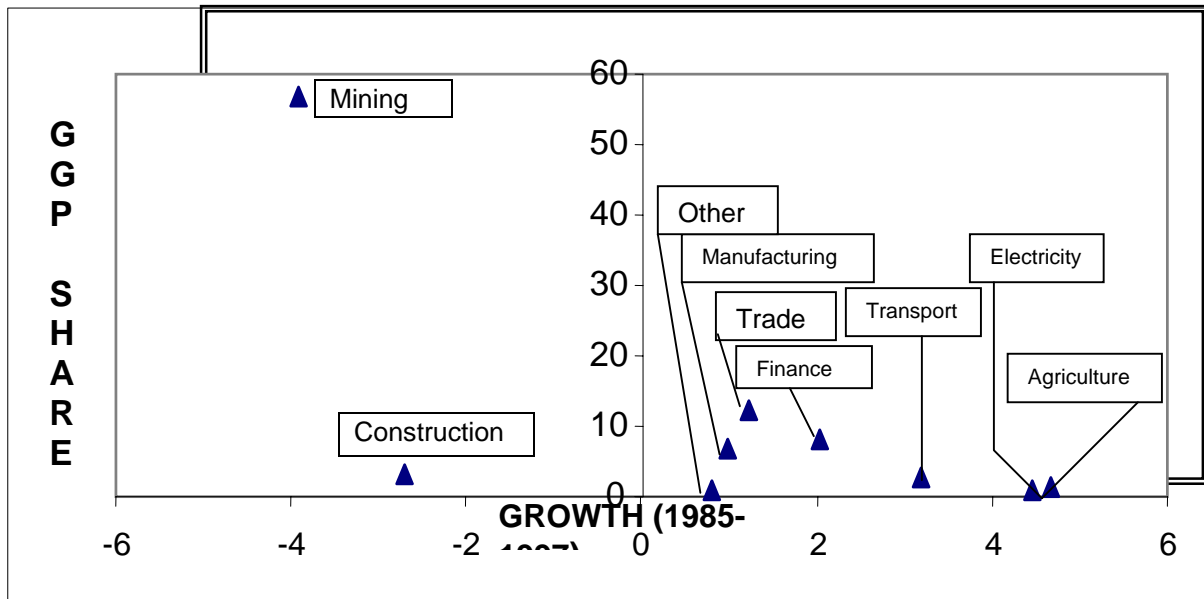
An economic assessment is of vital importance in the sense that it provides a clear and concise indication of the wellbeing of an economy in terms of growth sectors and sectors in decline. Diagram 2.1 provides a general overview of the significance of each economic sector in the study area economy. The matrix was derived from the preceding economic analysis. It maps each sector's position on a growth/share matrix that indicates the relationship between a sector's contribution to GGP and production growth recorded in that sector.

It is evident from Diagram 2.1 that the trade, manufacturing and finance sectors are growth sectors, which have a relative high share in the local economy. The mining sector, on the other hand, is a high share/low growth (declining) sector, while the agriculture sector is a low share/high growth

sector. Based on the growth/share performance as well as the development potential of the economic sectors, it is anticipated that the following sectors will most likely form the future cornerstone of the economy in the study area:

- Agriculture
- Manufacturing
- Trade/catering
- Finance/real estate

**DIAGRAM 2.1: GROWTH/SHARE MATRIX: STUDY AREA**



The sectors that will also grow but as a direct result of growth in the above sectors, are the following:

- Transport/communication
- Construction
- Electricity/gas/water

Balanced growth in **all** the economic sectors of the study area will ensure sustainable future economic growth.

Similar growth/share matrixes were compiled for the four respective towns and it became evident that the development/growth sectors identified in the respective towns are also the same as those identified for the study area as a whole (refer to Table 2.6).

**TABLE 2.6: IDENTIFIED DEVELOPMENT/GROWTH SECTORS**

Identified development/growth sectors	Study area	Welkom	Odendaalsrus	Virginia	Hennenman
Agriculture	4	4		4	4
Manufacturing	4	4		4	4
Trade	4	4	4	4	
Finance	4	4	4	4	4
Transport			4		

## CONCLUSION

The analysis found that the four local economies are relatively weak and highly concentrated in one or two sectors. Mining is the dominant sector in the study area however; it is a sector experiencing decline, a decline that is expected to continue into the foreseeable future. It can therefore not be recommended that any further development in this sector be encouraged.

The transport, construction and electricity sectors in the study area show some potential for future growth but they are not leading economic sectors and any future growth will be as a result of growth in the leading sectors of the local economy. In other words, these sectors are dependent on growth in other sectors for their own growth.

With regard to the trade, finance and “other” sectors, the local population and current economic base of the study area are both too small to sustain any significant growth in these sectors. The reason for this is that these sectors are usually dependant on large consumer bases and economic agglomeration advantages for their growth.

The manufacturing sector does appear to have potential for growth, however this growth has in the past been inextricably linked to the mining sector. Due to the continued decline in the mining sector, it is of the utmost importance that the manufacturing sector diversifies and changes its focus from producing mining-related products to other products in which it can compete nationally and internationally.

The remaining sector is agriculture. This sector is still relatively small in the study area but is the fastest growing sector in the study area. To this end, it was decided that a more detailed study of this sector is necessary in order to determine if there is any significant potential for future growth and development of agriculture in the study area. Should this sector prove to be the catalyst sector for the local economy, it can also be utilised as the new focus area and growth stimulus for the ailing manufacturing sector in the study area.

## **4. CAUSES, PROBLEMS AND THREATS**

### **4.1 Causes**

The Matjhabeng economy was built on the primary sector. At first agriculture was the reason for small towns like Ventersburg, Odendaalsrus and Hennenman to exist. With the discovery of gold in the 1940's Welkom, Allanridge and Virginia were established whilst Odendaalsrus grew significantly due to mines developing in and around the town.

Mining still dominates the production profile (Figure .....) whilst agriculture is almost unimportant (1 % of GGP). All other economic sectors are heavily reliant on the mining sector and 90 % of all manufacturing in the region used to be reliant on the mines as a source of work. With the decline in mining activities since 1989 the manufacturing sector was the first to be adversely affected.

The construction sector also declined significantly due to the fact that the development of new shafts with subsequent office-, workshop- or hostel construction took place. Consumption of water and electricity came down drastically, causing the price of both commodities to rise sharply in the past five years.

The image of the region as a vibrant growing area deteriorated to a point where it is seen as a risk area for any investment and the financial sector is not readily willing to invest in the region.

Although the FGF Development Centre was instituted in 1992 and initial successes were achieved, politics, low investor confidence, blatant refusal by banks to finance projects and the image of a dying region caused a serious decline in investment- and expansion plans by local businessmen, whilst nobody from a national or international origin were prepared to invest in the region.

The small basis from which each economic sector must grow and perform and the subsequent small market for foreign traders to do business with this region, are prime reasons for investors from China, Taiwan and Europe to be very hesitant to invest in available projects in different economic sectors.

The region is furthermore not spending enough money and effort in marketing the region properly or to enable the FGF Development Centre to function effectively. This is a serious problem that needs to be addressed if economic growth and job creation are to remain the top priorities of the Matjhabeng Council.

### **4.2 Threats**

It is a reality the world over that resource based towns and cities like Matjhabeng can die and disappear from the map of South Africa. This was already suggested in discussions with senior government officials and serious attention should be paid to this fact. The culture of non-permanence displayed

over the years by so many inhabitants due to various reasons, must be seen as a threat to the future existence of the city.

Political unwillingness displayed at times by provincial and national government levels to seriously get involved in the problems of the region and to solve the economic issues of job losses ( $\pm$  120 000), resultant poverty and the non-supporting of major catalyst projects are a further threat to economic recovery and may well lead to a total decline.

The vast infrastructure that is left unutilised by the closing mines can in some ways be seen as a threat. With no apparent major catalyst to spark new development and the subsequent threat that according to law these facilities must be rehabilitated, tension between existing privately owned facilities and that of the mines, are evident. By redeveloping and utilising mining facilities, the existing industrial areas are left vacant with resultant losses to private owners. In a strong growing economy and should investor confidence and image be restored, both sets of facilities can simultaneously be utilised, but currently this is not happening.

Matjhabeng can ill afford the total rehabilitation of these facilities which are mostly in a very good condition. It was recognised in the 1989 Welkom structure Plan and various governmental development plans that as mining activities will stop, these areas will become activity nodes, including industrial and commercial development. Matjhabeng must eliminate these threats immediately by introducing major catalyst projects that will not only utilise the vacant infrastructure, but will convince the authorities to adapt and revise the stringent rehabilitation laws to allow time and future opportunities to take its course.

The poor state of existing municipal infrastructure e.g. sewerage pipelines and electricity supply and the massive costs to upgrade and replace such services are not only definite threats to the economic development potential of the city, but it is also breaking down the image and capability of the city to act as a vibrant and growing entity.

In the short term the amalgamation of six towns into one city and the resultant problem of interlinking the economies of each node into one single policy framework which will ensure the development of every individual economic opportunity, may pose a threat. The implementation of a universal incentive scheme in all six nodes and the immediate implementation of these incentives by the various departments to the benefit of investors are crucial for future development.

## **5. TRENDS**

The situation analysis identified certain sectors of the economy in which Matjhabeng should strive to develop. Due to the high concentration in the mining sector and the relative small size and basis of the other sectors from where it could grow, special measures are needed to impact on any sizeable development and restructuring of the local economy.

As is the case worldwide, cities and regions facing the loss of its basic economic resource, Matjhabeng will have to implement a strategic approach that will bring about the identification and successful establishment of a major catalyst or even more than one such catalyst. Such catalyst(s) will hopefully be large enough to replace the impact of the gold mining industry on the local economy and to reverse the negative trends currently experienced.

Within such developments it is crucial to include the emerging sector and to create as many opportunities for emerging and small entrepreneurs to cross the bridge and become fully commercially viable entities. The trend worldwide is to enable emerging businesses to grow beyond subsistence levels so that they can become job creators and taxpayers. A certain percentage will remain on a subsistence level due to various factors, but the ultimate objective must be to take an ever increasing percentage through to a commercially viable level. To be able to do that, major sectoral projects need to be introduced to diversify the economy and to broaden the economic base. Without that the existing base will not be able to institute major growth as the market will not and cannot increase substantially.

## **6. IMPACT**

The current economic situation impacts heavily on various sectors:

- **The Local Authority**

The Local Authority is facing a serious threat due to a lack of income and ever increasing debt by taxpayers. It has been for years now the trend not to put out capital expenditure projects and maintenance of existing services and infrastructure was abandoned. The culture of non-payment by a percentage of taxpayers as well as the ever growing number of people that cannot afford to pay for services (due to a lack of job opportunities) further aggravate to burden of the Local Authority.

The financial constraints on Council also impacts on its ability to make available personnel and finances to properly market the region and to successfully establish new companies. The provision of bulk services and sufficient and correctly zoned land for industrial development is a nett result of the economic problems.

- **The Private Sector**

The collapse of the gold mining industry wreaked havoc with the private sector and many industries and commercial establishments had to close doors due to a lack of spending by the main industry of the region. The impact of closing mines is mind boggling and millions are lost to local entrepreneurs. This resulted in closures, job losses, empty buildings and a tarnished image as a dying city. Although some businesses adapted or changed their product line, the impact thereof is not big enough to change the total negative image.

- **The Community**

With less people and less spending power, the situation also impacts on the community.

- Crime sky-rocketed
- Shops closed
- Empty office- and retail space
- Job losses at schools due to less children
- Churches closed their doors to amalgamate with other congregations
- Sporting facilities closed or became less important
- Much more emphasis is placed on charity and welfare
- Gardens are neglected
- Negativity rules with the general public

These impacts need to be reversed and can only be done with sectoral development that are on such a scale that it will have a total impact on the economy and future trends.

## **7. WEAKNESSES**

Several major weaknesses exist:

- Lack of funds
- Large debts by Local Authority
- Lack of personnel that are directly involved with economic development
- Vast area to be governed efficiently
- Lack of support by higher authorities
- Economic development is not a top priority
- Political will is at times lacking

## **8. RESOURCES AVAILABLE**

Though the overall complaint is that resources to stimulate economic growth are lacking, some positives need to be mentioned:

- The FGF Development Centre with vast experience in dealing with these problems. A developmental strategy comprising 5 economic sectors is on the table, ready to implement.
- The Matjhabeng Council and more specific the Mayoral Committee with specific portfolios that allows dedicated attention to the various problems. Active participation from relevant Departments is also of cardinal importance.

- Closer co-operation between Provincial Government, the District Municipality and Matjhabeng that is currently developing.
- A core of business people that have decided to stay and make things work.
- A greater participation and assistance from mining houses and the opportunities that can be derived from that.