



# **Draft Mpumalanga Economic Growth & Development Path**

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*“Towards a more equitable and inclusive economy”*

February 2011

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## ABBREVIATIONS AND ACRONYMS

BEE	Black economic empowerment
BRICS	Brazil, Russia, India ,China & South Africa
COGTA	Department of Cooperative Governance and Traditional Affairs
DARDLA	Department of Agriculture, Rural Development and Land Administration
DBSA	Development Bank of South Africa
DED	Department of Economic Development
DEDET	Department of Economic Development, Environment and Tourism
DoF	Department of Finance
DPWR&T	Department of Public Works, Roads and Transport
EMF	Environmental Management Framework
EPWP	Expanded Public Works Programme
ESR	Educator-school ratio
Exco	Executive Committee
GEAR	Growth Employment And Redistribution
GVA	Gross Value Added
IEC	Industrial and Economic Cluster
IPAP 2	Industrial Policy Action Plan
LER	Learner-educator ratio
LSR	Learner-school ratio
MEGDP	Mpumalanga Economic Growth and Development Path
MP	Mpumalanga Province
MPG	Mpumalanga Province Government
MTEF	Medium Term Expenditure Framework
MTSF	Medium Term Strategic Framework
PDC	Provincial Development Council
PGDS	Provincial Growth and Development Strategy
PIC	Public Investment Commissioners
PMC	Provincial Management Committee
RDP	Reconstruction and Development Programme
SASSA	South African Social Services Agency
SIC	Standard Industry Codes
SOE	State owned enterprises
StatsSA	Statistics South Africa
TSA	Tourism Satellite Accounts
UN	United Nations
WTTC	World Travel and Tourism Council

## **1. OVERVIEW OF THE GROWTH PATH**

### **1.1 Global economic situation**

The global economy continues to recover from the global crisis that erupted in 2008, however, economic growth thus far is uneven and fragile. Most advanced as well as a few emerging economies still face major adjustments, including the need to strengthen household balance sheets, stabilise and reduce high public debt and reform their financial sectors. By contrast, in emerging and developing economies cautious policies, implemented partly in response to previous crises, have contributed to a significantly improved medium-term growth outlook.

However, activity in these emerging and developing economies, particularly those in emerging Asia, remains dependent on demand in advanced economies. In this setting, the global economic growth is forecast to expand by 4.8 per cent in 2010 and 4.2 per cent in 2011, with a temporary slowdown during the second half of 2010 and the first half of 2011. Output of emerging and developing economies is projected to expand at rates of 7.1 per cent and 6.4 per cent in 2010 and 2011, respectively. In advanced economies, however, growth is projected to be only 2.7 per cent and 2.2 per cent, respectively.

Sustained, healthy recovery rests on two rebalancing acts. The first being an internal rebalancing task in advanced economies, through the strengthening of private demand and allowing for fiscal consolidation. The second is an external rebalancing, with an increase in net exports in deficit countries and a decrease in net exports in surplus countries, notably emerging Asia. If global growth threatens to slow appreciably more than expected, advanced economies could postpone some of the planned fiscal consolidation. Meanwhile, key emerging economies will need to further develop domestic sources of growth, with the support of greater exchange rate flexibility.

### **1.2 National economic performance and outlook**

As can be expected from an open economy such as South Africa, the domestic economy has tracked global growth relatively closely since 1994. Although South Africa did not suffer a banking crisis, the country nevertheless experienced the pain of global recession and the fragile economic recovery endured elsewhere. Unfortunately our forecasted growth rates, for the near future, are not in line with those of many of the emerging and developing economies, but are more in line with those of the advanced economies.

The South African economy experienced a decline in gross domestic product (GDP) of 1.7 per cent in 2009 and a loss of employment estimated at close to a million jobs. In the first six months of 2010, the productive sectors of the economy confirmed that the domestic economy emerged from the global recession at the end of 2009 with relatively healthy growth in economic value addition. However, the momentum of growth in manufacturing and mining in the second half of the year appears to have slowed somewhat.

The current expectations by the national government as well as the International Monetary Fund (IMF) are that overall economic growth of 3.0 per cent can be expected in 2010, rising to 3.5 per cent in 2011 and 4.4 per cent by 2013. The South African Reserve Bank (SARB) expects that growth in 2010 will be in the region of 2.8 per cent, increasing to 3.2 per cent in 2011. Employment and private investment, as historically lagging indicators, are expected to rise gradually as growth accelerates.

### **1.3 National labour market**

The labour force comprises of all the employed and the unemployed population in the province. The South African labour market still endures hardship from the recent recession and, despite economic recovery in GDP terms, evidence of employment as a lagging indicator is clear. This is evident in that the national labour force shrunk by 91 000 between the end of the second quarter 2010 and the end of the third quarter 2010. Further to the decline in the national labour force, 86 000 jobs were shed in the national economy over the same period. Although the South African economy, in terms of GDP growth, emerged from the recession in the third quarter of 2009, the labour market shed a total of 158 000 jobs since then. The resultant unemployment rate increased (worsened) from 25.2 per cent in the second quarter 2010 to 25.3 per cent in the third quarter 2010. In other words, 1 in every 4 members of the national labour force was unemployed at the end of the third quarter 2010.

### **1.4 The Central and Pressing Challenge**

The central and most pressing challenge that is faced by the country are **unemployment, poverty and inequality**. In examining economic trends it shows that the economy has been growing at reasonable growth rate since 1994 to 2008 and such growth has not been able to address the above mentioned challenges. Despite improved growth, the economy remained one of the most inequitable in the world.

The background to the new growth path includes unemployment (12.8 million in employment; 6.1 million either unemployed or too discouraged to seek work) and inequality (a gini coefficient rising from 0.64 to 0.69); the reduction in the employment intensity of the economy since 1970; and youth unemployment. At least 500 000 jobs per year on a sustained basis over at least a ten year period will be required to make a serious breakthrough in reducing unemployment.

There are structural constraints in the economy, including a decline in mining and agriculture employment, insufficient beneficiation, a low savings rate, investment concentrated either in capital-intensive or energy-intensive sectors, bottlenecks and backlogs in infrastructure, skills shortages, a current account deficit in a resource boom, reliance on short-term inflows, consumption-driven growth, and the increasing financialisation of the economy, strengthening of retail and the real economy (manufacturing and agriculture) squeezed between the two.

Mpumalanga, and South Africa as a whole, is faced with the task of replacing apartheid divisions, inequality and impoverishment with a more equitable and inclusive economy. The government has been committed to drive towards national emancipation that is in a very real way bound up with economic emancipation. Apartheid deprived the majority their due in the country's wealth; skills were suppressed and poverty and starvation remains a stark reality to the majority. The correction of these centuries-old economic injustices lies at the very core of government programmes.

South Africa's deep inequalities result from the exclusionary and divided economic and social systems established under apartheid. These systems privileged a minority by depriving the majority of access to assets, including land and finance; quality education and certified skills; decent government services; and access to market institutions. They aimed both to reduce the majority to poorly paid wage labour and to limit migration into the cities. That in turn provided more opportunities and state resources for the minority.

The exclusionary systems established under apartheid continue to influence the economy. In the late '00s less than half the working-age population earned an income from work. That contrasts with the international norm of around two thirds. In the former Bantustan regions, only a third of working-age people were employed. The International Labour Organisation found that South Africa ranked amongst the ten countries with the lowest levels of employment worldwide.



## **Structures of production and control**

Ultimately, the structure of ownership – of capital – lies at the heart of any understanding of the economy and especially of inequality. By definition, there is a dialectical relationship between capital relations (in the sense of who owns and controls economic activity) and the production structure. The specific nature of ownership both reflects and shapes investment and production decisions. In turn, those decisions determine employment opportunities and economic growth. Apartheid entrenched structures of production and ownership characterised by dependence on mining-based exports and heavily concentrated ownership. After 1994, this situation was modified by growth in the financial industry and newly deregulated service sectors; declining profitability in manufacturing and in the contribution to the GDP of gold mining and agriculture; and increased state support for black capital.

Through the years from 1994, exports based on the mining value chain, including heavy coal-based chemicals from SASOL and refined metals, accounted for half of all national exports although less than 10% of employment and 20% of total value added. Mining economies like Mpumalanga are typically highly concentrated, since most mining requires large producers. In addition, the system left South Africa with very limited production by small and micro enterprises compared to other middle-income countries. Domestic mining capital has largely reintegrated into international capital groups. The process has fragmented the historic conglomerate structure of mining and moved centres of control overseas. We need to analyse the implications of this for the province's long-term growth and competitiveness.

While mining exports remained critical after 1994, most growth in value added occurred in finance, communications, retail and business services. These four sectors accounted for two thirds of South Africa's economic growth between 1994 and 2009. Growth in construction and mining-based construction was somewhat faster than in business services and retail, but the sectors themselves remained relatively small.

From the 1980s, the profitability of finance and communications rose rapidly. In contrast, the profitability of agriculture and manufacturing declined. The share of finance, communications and construction in profits (that is, net operating surplus) climbed from 19% in 1994 to 31% in 2009. The share of mining rose from 6% to 14%, but the share of manufacturing and agriculture dropped from 32% to 12%. (Calculated from Quantec EasyData standardised industry series). Concentration remains pronounced in basic chemicals and metal refining, finance, retail and telecommunications.

The resulting monopoly pricing on key inputs and wage goods makes the economy more inefficient and raises the cost of employment. Yet regulation proves politically difficult because these sectors are important for emerging black capital.

State capital including the Development Finance Institutions and the Public Investment Commissioners (PIC), in effect, the SOEs and parts of the public service function as a path into business for black entrepreneurs. Conflicting mandates result as they try to balance demands for narrow BEE, improved service delivery and commercial sustainability. In order to confront these challenges effectively, we must therefore simultaneously accelerate economic growth and transform the quality of that growth to create decent work. The skewed patterns of ownership and production, the spatial legacies of our apartheid past and the tendencies of the economy towards inequality, dualism and marginalization will not recede automatically as economic growth accelerates. Therefore, decisive action, led by government, is required to thoroughly and urgently transform the economic patterns of the present in order to realise our goals. This requires that accelerated growth take place in the context of an effective strategy of redistribution that builds a new and more equitable growth path.

Looking at global trends it becomes imperative that there is a general shift in the long term, from a resource based to a knowledge economy. Skills are a prerequisite for the knowledge economy. It is also important to acknowledge, as a country, past mistakes that prohibited growth and development. These oversights include the tendency to hang to a mineral based economy, normally referred to as the mineral energy complex economy (MEC) when we should have diversified our economy and benefited long ago. Little has happened regarding investments on **research and development** despite the evidence that countries that prioritized research and development, like South Korea, have managed to grow their economies significantly. Korea researched the motor industry and they developed the Hyundai brand, which is worldwide brand today. Hyundai recently sponsored the FIFA World Cup. It is important for the country and most importantly for South Africa to find its niche in world markets through research and development. The Asian Tigers grew their economies at the back of the knowledge based sectors which they properly researched.

The government of Mpumalanga has in fact done a lot of work in the past, guided by some of the frameworks discussed above and others to ensure growth and development in the province. Some initiatives that were pursued by the provincial government included investing in high impact projects such as the corridors, and other infrastructure programmes. There were a number of foreign

missions to attract investors to the province. However, it is critical to note that this **growth did not translate** into the general improvement of the socio-economic conditions of the people of the province. Unemployment remained high and inequality persisted and it is against this backdrop that government must take up the challenge of “*doing things differently*”. While there has always been an emphasis on **agriculture** as a sector that can create jobs, especially considering that we are a rural province, it is important to note that we have missed an opportunity in this sector. The interventions put in place were insufficient considering that we now import a lot of the agricultural products that we used to produce in the past.

We also failed to select our investment options shrewdly, considering that all the sectors have investment requirements. In shaping our economic growth path it becomes important to carefully prioritize the sectors that can potentially grow the economy of the province. The sectors and programmes that are prioritized in the new growth path should be **labour absorbing** and have **regional impact**.

Whilst there are many gains that the country and the provincial government have made, there were limited efforts towards investing in **broadband infrastructure** which is central to the creation of a conducive business environment. We have not succeeded in developing **the skills base** required by the economy. The issue of **HIV/AIDS** is a major challenge as it impact negatively on the skills base. We have not succeeded well in developing clear government programmes to create employment in the past, and these are some of the challenges that the growth path seek to address. We have been slow in dealing with procurement challenges that are geared towards supporting **SMME’s** and **Cooperatives**. Our approach to development has remained disintegrated and this has resulted in a number of challenges in the past, i.e. houses have been built in areas where there are no amenities and at areas distant from any economic activity. We did not pay much attention on balancing our **economic activities** with **environmental sustainability**.

## **1.5 The Growth Path as a fulcrum to remedying the challenge**

The focus of the Growth Path is to improve the labour absorption of the economy (the jobs yields of each billion rand of investment and each one percent of growth in GDP), to reduce carbon emissions and to strengthen the link between science and technology on the one hand and growth and jobs on the other.

The New Growth Path seeks to provide bold, imaginative and effective strategies to create the millions of new jobs South Africa needs. It also lay out a dynamic vision for how we can collectively achieve a more developed, democratic, cohesive and equitable economy and society over the medium term, in the context of sustained growth. The strategy sets out critical markers for employment creation and growth and identifies where viable changes in the structure and character of production can generate a more inclusive and greener economy over the medium to long run. To that end, it combines macroeconomic and microeconomic interventions.

## **1.6 Sectors to Support Employment Creation outlined**

Government will prioritise efforts to support employment creation in the following sectors:

The first is **infrastructure development**, which has to be a catalyst for more than simply better roads and energy – it has to create jobs in construction and in creating a supplier industry.

The second area is **climate change and the green economy**. The IDC estimates that 296 000 jobs can be created over a ten year period through investment in green energy alone. R11.7 billion will be invested in green energy. Government is developing an Integrated Resource Plan for energy that will have clear commitments on the level of green energy and renewable energy. A commitment must be made on procurement that favours the local industry. A higher level of skills will also be needed. Small business policies and regulation of the building industry will need to be considered.

The third area is **agriculture and agro-processing and rural development**. Work is being done to finalise jobs estimates in this area. Fourthly, **minerals and beneficiation**: to increase the level of resources that are mined and to strengthen downstream and side stream activities. **Manufacturing** is the fifth area. The sixth area is the **knowledge based sectors** in the economy from ICTs to higher education.

**Tourism and business services** is the seventh area. Tourism alone can create 275 000 jobs by 2015 and business services another 50 000. The eighth area is the social economy: NGO, stokvels, burial societies, union and community investment funds that can be directed towards job creation.

The ninth area is **the public sector**: mainstream employment in the public sector (in health, education and combating crime); expanded public works and a youth employment programme which would have a training component, a community service component and finally integration

into the workplace. The tenth driver is **the regional economy**, both in strengthening existing links and finding new opportunities.

## 1.7 Job drivers

The Growth path identifies five job drivers and the above mentioned opportunities will take advantage of the potential of new approaches in the jobs drivers. In many areas of the jobs drivers, departments have already initiated strategies to support employment creation; in others, they are currently reviewing their policies and programmes. The New Growth Path builds on existing work. For each of the jobs drivers, targets have been set for employment creation. The job drivers identified are:

### a) Infrastructure

In relation to infrastructure, the national growth path estimates 250 000 jobs a year that can be created in energy, transport, water and communications infrastructure and in housing, through to 2015. According to the national growth path the jobs are in four activities: construction of new infrastructure; operation of the new facilities; expanded maintenance; and the manufacture of components for the infrastructure programme. In addition to these four activities, the impact of the massive infrastructure programme on job creation across the economy (the “multiplier effect”) will be substantial.

The second Integrated Resource Plan for electricity (IRP2) will play an important role in improving economic efficiency and to reduce emissions. Areas like the energy sector, the future upscaling of electricity capacity partly from renewable sources and from nuclear power will see jobs being created. Greater emphasis will also be placed on the expansion of rail transport, and water infrastructure to give effect to other economic activities such as agriculture. There will be significant investments to infrastructure to support broad-based growth and rising competitiveness linked to a coherent and sustainable strategy on rural development.

### b) Main economic sectors

The National Growth Path targets opportunities for 300 000 households in agricultural smallholder schemes plus 145 000 jobs in agroprocessing by 2020, while there is potential to upgrade conditions for 660 000 farm workers. Initial projections by the Industrial Development Corporation (IDC) suggest that mining can add 140 000 additional jobs by 2020, and 200 000 by 2030, not counting the

downstream and sidestream effects. Much of manufacturing is included under other jobs drivers, but IPAP2 targets 350 000 jobs by 2020 in the industries not covered elsewhere. High level services can create over 250 000 jobs directly just in tourism and business services, with many more possible in the cultural industries.

It also sets out a range of practical measures at sectoral level to achieve these employment targets with a special focus on restructuring land reform, Accelerating exploitation of mineral reserves, Refocusing the beneficiation strategy to support fabrication, Phasing support for manufacturing and strengthening measures to expand the tourism infrastructure and services.

c) Seizing the potential of new economies.

The new growth path puts technological innovation at the core for sustainable employment creation. The New Growth Path targets 300 000 additional direct jobs by 2020 to green the economy, with 80 000 in manufacturing and the rest in construction, operations and maintenance of new environmentally friendly infrastructure. The potential for job creation rises to well over 400 000 by 2030. Additional jobs will be created by expanding the existing public employment schemes to protect the environment, as well as in production of biofuels. A further 100 000 new jobs are targeted by 2020 in the knowledge intensive sectors of ICT, higher education, healthcare, mining-related technologies, pharmaceuticals and biotechnology. The strategies outlined in the growth path to achieve the targets are Comprehensive support for energy efficiency and renewable energy as required by the IRP2, Public employment and recycling schemes geared to greening the economy, Stronger programmes, institutions and systems to diffuse new technologies to SMEs and households; Greater support for R&D and reduced cost of and improve access to broadband.

d) Investing in social capital and public services.

According to the new growth path the social will be an important aspect of job creation, the social economy is described to include myriad not-for-profit institutions that provide goods and services, including coops, non-governmental organisations (NGOs) and stokvels. A number of 260 000 new employment opportunities are anticipated if the sector grows. The public service can also generate 100 000 jobs in health, education and policing by 2020 even if it grows by only 1% a year, as well as substantial opportunities through public employment schemes.

e) Spatial development.

Government will step up its efforts to provide public infrastructure and housing in rural areas, both to lower the costs of economic activity and to foster sustainable communities. Rural development programmes can achieve a measurable improvement in livelihoods for 500 000 households, as well as stimulating employment in other sectors. With regards to Regional development it envisaged that increased exports to SADC alone can generate almost 60 000 additional direct jobs by 2015 and around 150 000 by 2020. South Africa cannot succeed with regional development without strong partnerships with other countries on the continent.

### **1.8 Macroeconomic and Microeconomic Interventions**

The growth path on the macroeconomic stance argue for a looser monetary policy and a more restrictive fiscal policy backed by microeconomic measures to contain inflationary pressures and enhance competitiveness. The package entails the following:

- The monetary policy stance will continue to target low and stable inflation but will do more to support a more competitive exchange rate and reduced investment costs through lower real interest rates.
- Additional and larger purchases of foreign currency flowing into South Africa, as a result of foreign direct investment and portfolio inflows, in order to counter appreciation of the rand as required.
- Greater restraint in fiscal policy to slow inflation despite easier monetary policy. A counter-cyclical fiscal stance through the business cycle will manage demand in support of a more competitive currency while achieving critical public spending goals.
- Mobilisation of resources to finance growth path priorities, particularly jobs, skills and infrastructure.

The microeconomic package involves ten programmes to control inflationary pressures and inefficiencies combined with more pro-active strategies to support an inclusive economy, social equity and regional development. Microeconomic measures to control inflationary pressures include: (a) competition policy as discussed below, targeting monopoly pricing on wage goods and basic industrial inputs; (b) a review of administered prices to ensure that they do not increase above inflation without compelling reasons; and (c) targeted, efficient and sustainable interventions to contain other volatile and/or rapidly rising costs, such as private healthcare and spikes in basic food items. Proposals to introduce National Health Insurance, for instance, should reduce the share of the

GDP spent on health, which is now extraordinarily high for a middle-income economy, while improving access for the majority.

Measures to support long-term competitiveness also include a range of measures discussed below, including skills development, vigorous implementation of IPAP2, small business support and labour-market interventions. They also require reduced red tape and bureaucratic delays as well as competitive pricing of broadband and ports and more efficient rail links to the coast.

The Ten policy areas have been identified, are an Active industrial policy, Rural development policy, Competition policy, Stepping up education and skills development, Enterprise development: Broad-based Black Economic Empowerment (BBBEE), Labour policies, Technology policy, Developmental trade policies and Policies for African development. Some of these have very direct impacts on provinces and municipalities. The most important aspect is for provinces to strengthen their contribution to the national employment generation goals that have been set and to also forge cooperation in the way national and provincial government work with each other. There is a need to develop a common vision and strategic unity.



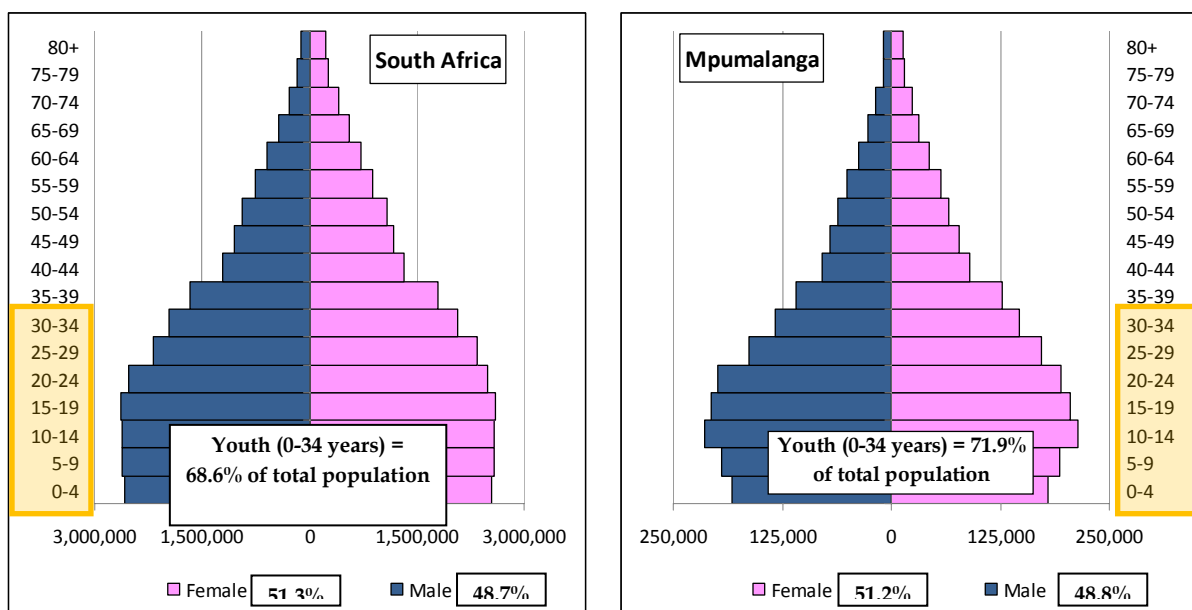
## 2. MPUMALANGA SITUATIONAL ANALYSIS

### 2.1.1. Population

The mid-year population estimates for 2010 indicate that Mpumalanga's population was 3 617 600. This is 7.2% of the South African population and makes Mpumalanga the 6<sup>th</sup> most populous province, ahead of the North West, Free State and Northern Cape.

Females constituted 1.85 million or 51.2 per cent of the provincial population distribution and males 1.76 million (48.8 per cent). The youth cohort (0-34 years) made up 71.9 per cent of the total population in the province whilst the age group 15-34 makes up 63.4 percent of the provincial population. The age cohort of 10-14 years represented the most populous age cohort with 429 300 individuals or some 11.9 per cent of the provincial population. Nationally the most populous age cohort was the 15-19 years group that represented some 10.5 per cent of the population.

Fig 2.1: Population Pyramid for South Africa & Mpumalanga



Data Source: Statistics South Africa-Mid Year Population Estimates 2010: Own Calculations

The youthful nature of the population is typical to developing economies. It requires a growth and development agenda that puts an emphasis on the youth for future sustainability. The fact that the most populous age group for Mpumalanga is lower than that of national, has implications for where to put more emphasis in terms of interventions and resources in areas such as education, health as well as social grants as compared to national. Timely interventions within the youth will reap better long term gains for provincial growth and development.

The population growth rate of South Africa and Mpumalanga declined over the period 2002 to 2010. During this period, the average annual population growth rate for Mpumalanga was 0.9 per cent compared with the 1.2 per cent recorded nationally. In Mpumalanga, although females outnumber males, the population growth rate of males exceeded that of females in each of the nine years. The average annual population growth rate for males was 1.0 percent and that for females was 0.7 percent.

### **2.1.2. Provincial Labour Market**

The labour market in Mpumalanga remains under pressure although the economic recession has lifted. The provincial labour force was stable at 1.2 million individuals between the end of the second and third quarter 2010. The number of employed at 890 000 at the end of the third quarter 2010 was 9 000 lower than at the end of the second quarter 2010. It was also 18 000 lower than the 908 000 employed at the end of the third quarter 2009. The number of unemployed increased from 344 000 to 353 000 between the end of the second quarter 2010 to the end of the third quarter 2010.

Mpumalanga contributed 6.9 per cent to the national number of employed. The trade sector (wholesale and retail trade) employed the largest share of individuals in the province at 24.0 per cent. Community and social services (18.9 per cent) was the second biggest employer followed by finance (10.0 per cent) and manufacturing (9.1 per cent). The sectors that contributed the least were transport (4.7 per cent) and utilities (2.4 per cent).

The occupational profile of Mpumalanga was heavily skewed towards semi- and unskilled occupations. The share of highly educated or skilled occupations (managers and professionals) was only 9.4 per cent. The share of the category of elementary occupations (unskilled or semi-skilled) was 26.2 per cent.

Disaggregation according to gender reveals that more males (57.7 per cent) than females (42.3 per cent) were employed in Mpumalanga. The age group of 30-34 years was the highest represented among the number of employed with a share of 18.5 per cent. The youth cohort (15-34 years) made up some 45.9 per cent of the number of employed.

According to Statistics South Africa's QLFS, 56.1 per cent of the employed found themselves employed in the urban areas of the province, whereas the remainder (43.9 per cent) worked in rural

areas. The local municipality with the highest number of employed was Mbombela, followed by Emalahleni and Govan Mbeki.

The unemployment rate in Mpumalanga was 25.5 per cent at the end of the third quarter 2009 and increased to 28.4 per cent at the end of the third quarter 2010. This was higher than the national average, which was recorded at 25.3 per cent at the end of the third quarter 2010. Mpumalanga, recorded the second highest unemployment rate among the nine provinces after Free State (29.5 per cent). The province contributed some 8.0 per cent to the national number of unemployed.

The unemployment rate of females (32.0 per cent) was 6.5 percentage points higher than that of males (25.5 per cent) in the province. Females, with 177 400, contributed some 50.3 per cent to the total number of employed, although only contributing 44.6 per cent to the labour force. The age group of 20-24 years was the highest represented among the number of unemployed with a share of 29.0 per cent. The youth cohort (15-34 years) with 258 000 unemployed individuals made up nearly three quarters (73.2 per cent) of the number of unemployed. The unemployment rate of the youth cohort was 38.7 per cent, some 10.3 percentage points higher than the provincial average unemployment rate.

Geographically, the number of unemployed was skewed towards rural areas with 55.2 per cent of the unemployed in the province found there. The unemployment rate of rural areas at 33.3 per cent was higher than the provincial rate as well as that of urban areas (24.0 per cent). The local municipality with the highest number of unemployed was Dr JS Moroka, whilst Emakhazeni was the municipality with the least number of employed. Although not official, it is calculated that Dr JS Moroka (58.2 per cent) had the highest unemployment rate whilst Thaba Chweu (9.7 per cent) had the lowest unemployment rate.

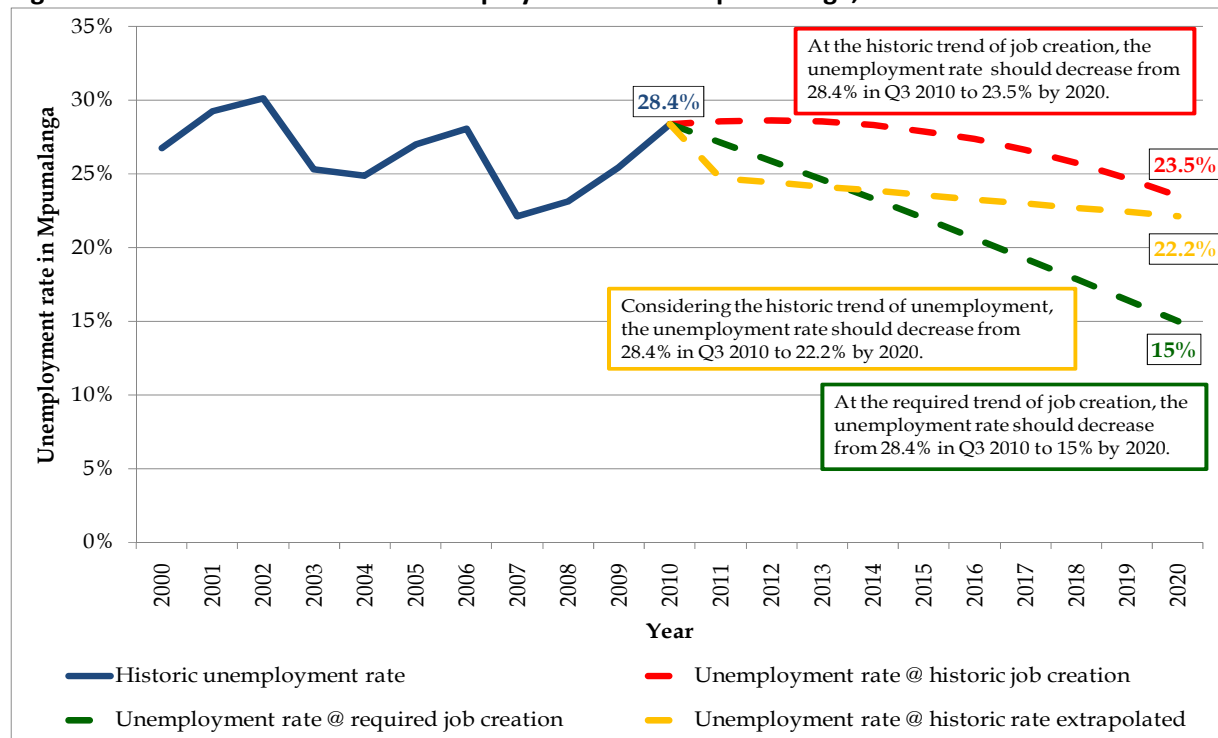
A worrying reality is the long term nature of unemployment in the province with some 70.4 per cent of the unemployed in Mpumalanga that have been seeking employment for one year and longer. This was marginally higher than the corresponding national figure of 65.8 per cent, a figure that emphasises the notion of the systemic and entrenched nature of unemployment in the country.

### *Reducing unemployment*

Three scenarios were modelled to determine where the provincial unemployment rate could be in the next 10 years, based on historic data. Figure 1 depicts the historic data up to 2010 and the three scenarios up to 2020. The broken yellow line portrays a continuance of the unemployment rate's historic trend in Mpumalanga. According to this scenario the unemployment rate will gradually

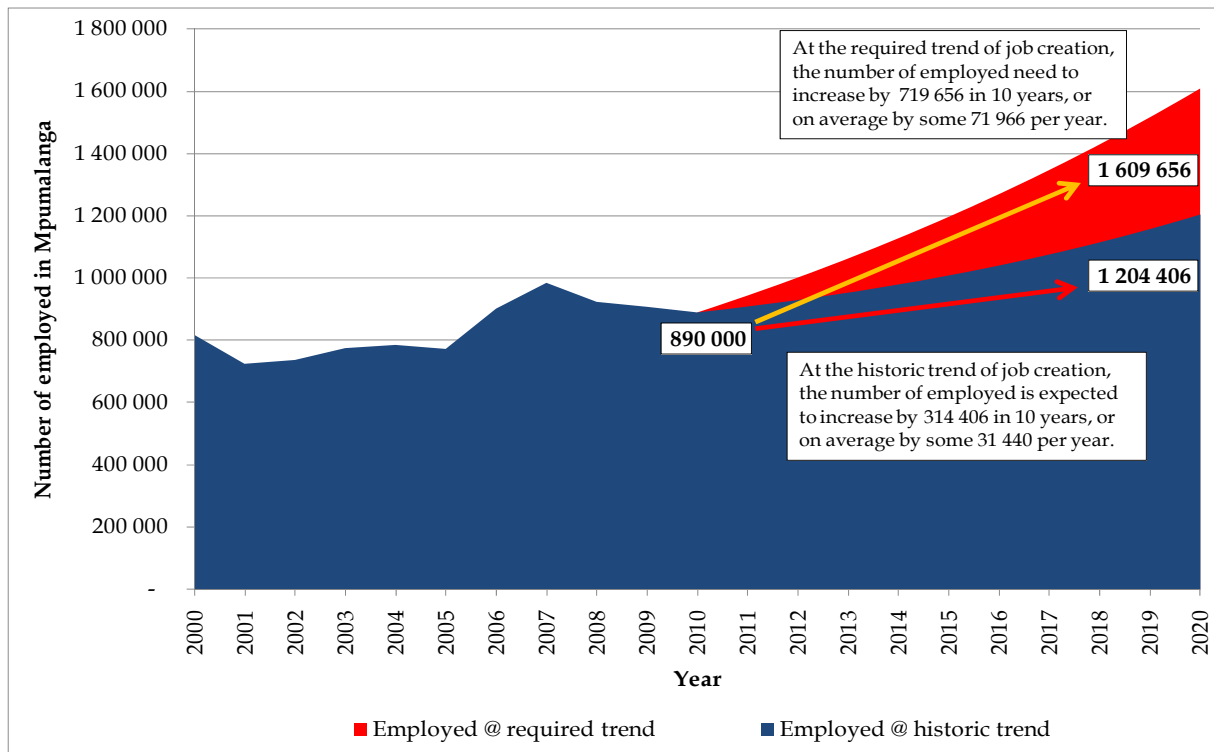
decline to approximately 22.2 per cent by 2020. Should, however, the historic job creation trend (broken red line) continue into the future, the unemployment rate can be expected to hover around 23.5 per cent by 2020. However, the overarching aim, both nationally and provincially, is to decrease the unemployment rate to 15 per cent within 10 years. This is shown by the broken green line and is referred to as the required job creation trend.

**Figure 1: Historic and forecasted unemployment rate in Mpumalanga, 2000-2020**



Source: Statistics South Africa – LFS & QLFS & own calculations

**Figure 2: Historic and forecasted employment numbers in Mpumalanga, 2000-2020**



**Source: Statistics South Africa – LFS & QLFS & own calculations**

Over the 10-year period from 2000 to 2010, Mpumalanga did not experience jobless economic growth. This stems from the fact that the number of employed increased from 818 000 in 2000 to 890 000 by the end of the third quarter of 2010 (Figure 2). By extrapolating this historic job creation trend into the future it can be expected that the number of employed will increase to 1.2 million by 2020. Under normal conditions based on historic trends, the Mpumalanga economy is expected to create 314 406 jobs in the next decade. By following this trend, coupled with moderate increases in the economically active population, the unemployment rate of 23.5 per cent as shown in Figure 1 may be reached by 2020.

Should the province, however, aim for an unemployment rate of 15 per cent by 2020 a much higher rate of job creation is necessary. This required number of new jobs is depicted as the red area in Figure 2. According to the outcome of the modelling scenario, 719 656 new jobs is necessary to reach 1.6 million jobs by 2020 and subsequently an unemployment rate of 15 per cent. This represents an average increase of 6.1 per cent in the number of employed per annum.

### 2.3 Inequality

South Africa has one of the highest imbalanced income distributions in the world. The national Gini-coefficient was calculated to be between 0.653 and 0.702 in 2009 depending on the data source (Table 1). Since 1995 the national level has deteriorated from between 0.640 and 0.674 to the current levels. The national Government through its outcome approach has targeted the national

Gini-coefficient to improve to 0.59 by 2014. It is evident from Table 2 that the provincial income distribution (between 0.65 and 0.68) followed the national scenario and became more unequal from 1996 to 2009. The local municipality with the highest inequality was Steve Tshwete (0.69), whilst Nkomazi (0.59) was the municipality with the lowest inequality.

**Table 1: Gini-coefficient measurements for South Africa and Mpumalanga, 1995-2009**

Measurement source	1995	1996	2000	2005	2008	2009
<b>South Africa</b>						
IES	0.640	-	0.680	0.690	0.679	0.679
AMPS	0.674	0.678	0.682	0.683	0.666	-
GHS – Income	-	-	-	0.712	-	0.702
GHS – Expenditure	-	-	-	0.686	-	0.683
ReX	-	0.623	0.650	0.666	0.662	0.653
<b>Mpumalanga</b>						
NIDS - Income	-	-	-	-	-	0.680
NIDS - Expenditure	-	-	-	-	-	0.650
ReX	-	0.606	0.644	0.660	0.659	0.650

Sources: *Presidency – Development Indicators, 2010*

*Global Insight – ReX, 2010*

*Note: The main data sources used for the calculation of the Gini-coefficient are the Income and Expenditure Surveys (IES) for 2000 and 2005, the General Household Surveys (GHS) for 2005 and 2009, the All Media and Products Surveys (AMPS) for 1993-2008 as well as the National Income Dynamics Study (NIDS) for 2009. The income sources that are included in the per capita income variable are wage income, income derived from self-employment, state transfers, private pensions and residual income (i.e. letting property, insurance claims).*

### **Reducing inequality**

After the political transition, government social spending per person increased in real terms by 21 per cent from 1995 to 2000 and by a further 40 per cent by 2006. Spending also became much better targeted. Fiscal redistribution through the grant system has had some success in reducing poverty. However, fiscal and state capacity sets limits to such redistribution and makes this an inauspicious tool for future change. The fiscal capacity constraint arises from the fact that grant spending already constitutes a high proportion of GDP and that such grants need to compete with other public spending. Transfers also cannot really affect inequality much. Their overall magnitude is too small, even in South Africa, to have a great effect on inequality measures, despite good targeting.

Job creation, though crucial for poverty reduction, will also do little to reduce overall inequality. The weak endowments of those currently unemployed would not assure them of high labour market

earning. Thus even if they were employed, it would probably be at low wages, thus leaving wage and hence aggregate inequality high and little affected. In the absence of improved education, direct interventions to artificially change labour market outcomes also hold little prospect of improving poverty and distribution and may reduce the efficient functioning of the labour market, with various possible side-effects.

Decomposition analysis shows that most income inequality originates in the labour market, through the distribution of jobs and the wage formation processes. Thus change in South African inequality must start with a reduction of inequality in wage earnings. Without more equal labour market outcomes, aggregate inequality will remain high and will undoubtedly encourage further direct labour market interventions in an attempt to affect distributional outcomes. Thus the labour market is at the heart of inequality, and central to labour market inequality is the quality of education. To reduce income inequality substantially requires a different wage pattern based on better human capital for the bulk of the population.

## **2.4 Poverty**

Poverty income is defined as the minimum income needed to sustain a household and varies according to the size of the household. For example, the monthly poverty income in 2009 for a household of four, as calculated by the Bureau for Market Research (BMR), was R2 440 and R3 396 for a household of six. The poverty rate then is the percentage of people living in households with an income less than the poverty income.

In 2009, Mpumalanga's poverty rate of 46.8 per cent was higher than the national rate of 41.3 per cent. Mpumalanga's poverty rate was the fourth highest (worst) among the nine provinces. It was estimated that 1.75 million of Mpumalanga's citizens lived in households with an income less than the poverty income. Over the 13-year period from 1996 to 2009, the poverty rate in Mpumalanga deteriorated (increased) by 0.8 percentage point, which was more than the 0.4 percentage points at which the poverty rate increased by nationally.

Among the local municipalities, Mbombela (253 500) registered the largest number of poor individuals followed by Nkomazi (245 500) and Bushbuckridge (221 000). Mkhondo (70.4 per cent) recorded the highest poverty rate, whereas Emalahleni (30.1 per cent) recorded the lowest poverty rate.

A shortcoming of the poverty rate as an indicator of poverty is that it does not give any indication of the depth of poverty i.e. how far the poor households are below the poverty income level. Here, the poverty gap proves useful in that it measures the difference between each poor household's income

and the poverty line. It thus measures the depth of poverty of each poor household. The aggregate poverty gap is calculated by summing the poverty gaps of each poor household. It is thus equivalent to the total amount by which the incomes of poor households need to be raised each year to bring all households up to the poverty line and hence out of poverty.

According to this dimension of poverty measurement, the poverty gap in Mpumalanga was R5.6 billion in 2009. As might be expected from a country experiencing an economic recession the poverty gap in South Africa increased (deteriorated) by 1.6 per cent between 2008 and 2009. Mpumalanga's (4.4 per cent) poverty gap increased the fastest, marginally ahead of Gauteng that deteriorated by 4.2 per cent. Over the 13-year period under review, the national poverty gap deteriorated by 7.9 per cent annually. Mpumalanga's increase was even worse with a 10.0 per cent annual deterioration between 1996 and 2009. Bushbuckridge registered the largest poverty gap with a value of R1.3 billion followed by Dr JS Moroka (R1.2 billion), whereas the poverty gap in Emakhazeni (R41 million) was the smallest)

Another indicator of poverty levels is the percentage of people living on less than a dollar (US\$) a day. In Mpumalanga, this indicator showed much improvement from a rate of 4.7 per cent in 1996 to 0.9 per cent of the population in 2009. The national figure was slightly better at 0.8 per cent in 2009, however the improvement over the 13-year period was not as large as in the province.

### *Reducing poverty*

In order to reduce the province's poverty rate from the 2009 level of 47.8 per cent to 25 per cent in 10 years it was calculated that on average 62 100 individuals need to be taken out of poverty annually for the next 10 years. This equates to approximately 18 400 households whose combined earnings needs to increase to at least the poverty line every year. It is important to note that once at this minimum level of the poverty line, the households must be kept at that minimum level for the remainder of the 10 year period.

In monetary terms the noted number of individuals will require a combined R218 million in the first year to meet or exceed the poverty line. At 0.8 per cent of Mpumalanga's provincial budget it may seem small enough to even consider funding it from government coffers, however, to meet the 2020 poverty rate target of 25 per cent they need to be kept at the poverty line again the following year together with the next 62 100 individuals. Cumulatively, by 2020 some 620 000 individuals or 185 000 households need be kept at the minimum poverty line with a combined R2.2 billion (8.4 per cent of Mpumalanga provincial budget).

SASSA, currently distributes social assistance grants in Mpumalanga in the order of R6 billion per



annum to approximately 1 million beneficiaries and, whilst adding more or increasing the monetary value of individual grants is possible, it appears unsustainable in the long run. It is therefore more desirable that at least one person in each the 185 000 households benefit from one of the 719 656 jobs calculated in the unemployment scenario's. Together with focusing on job creation, through tools such as public works programmes and employment guarantee schemes, the provincial government can focus on infrastructure and service provision as well as education and skills attainment of people in poverty.

### **2.1.5 Human Development Index (HDI)**

HDI level equal to SA by 2020: South Africa's HDI was calculated to be 0.56 in 2009 and that of Mpumalanga 0.50. At the current rate of improvement South Africa's HDI score will be 0.64 by 2020, whereas Mpumalanga's HDI will be 0.57. To equal South Africa's HDI level in 2020 three indicators must improve as follows over next 10 years:

#### *Literacy level*

Over the period 1996-2009, 40 045 more individual became literate per annum - an improvement of some 2.1 per cent per annum. In order to catch up to South Africa's level of HDI by 2020, it is necessary to achieve an improvement of 3.7 per cent per annum over the period 2010-2020. In other words, 62 671 more individuals need to become literate per annum to achieve the goal. Such an improvement necessitates either a doubling of the current expenditure or doubling the efficiency and effectiveness of interventions that improves basic literacy.

#### *Life expectancy*

Over the period 2004-2009, the life expectancy in the province improved by 0.2 per cent per annum. In order to catch up to South Africa's level of HDI by 2020, it is necessary to achieve an improvement of 0.7 per cent per annum over the period 2010-2020. Such an improvement necessitates either three times more expenditure or tripling the efficiency and effectiveness of interventions that improves life expectancy.

#### *Per capita income*

Over the period 1996-2009, the per capita income in Mpumalanga improved by 2.3 per cent per annum or some R346 annually. In order to catch up to South Africa's level of HDI by 2020, it is necessary to achieve an improvement of 4.9 per cent per annum or some R1 110 annually. Such an improvement necessitates either a doubling of the expenditure or doubling the efficiency and effectiveness of interventions that create sustainable jobs. Should the employment growth of

70 000 net jobs per annum therefore materialise over the next 10 years, the improvement should be sufficient to help Mpumalanga catch up to South Africa's level of HDI.

## **2.1. Resource Analysis**

It is imperative to recognise that for any meaningful growth and development, certain fundamentals need to be in place and these include natural resources such as land, water and biodiversity; material resources such as electricity, road and rail infrastructure, ICT and financial services; human resources such as skills, education, research and development. An analysis of these resources in the case of Mpumalanga is outlined as follows:

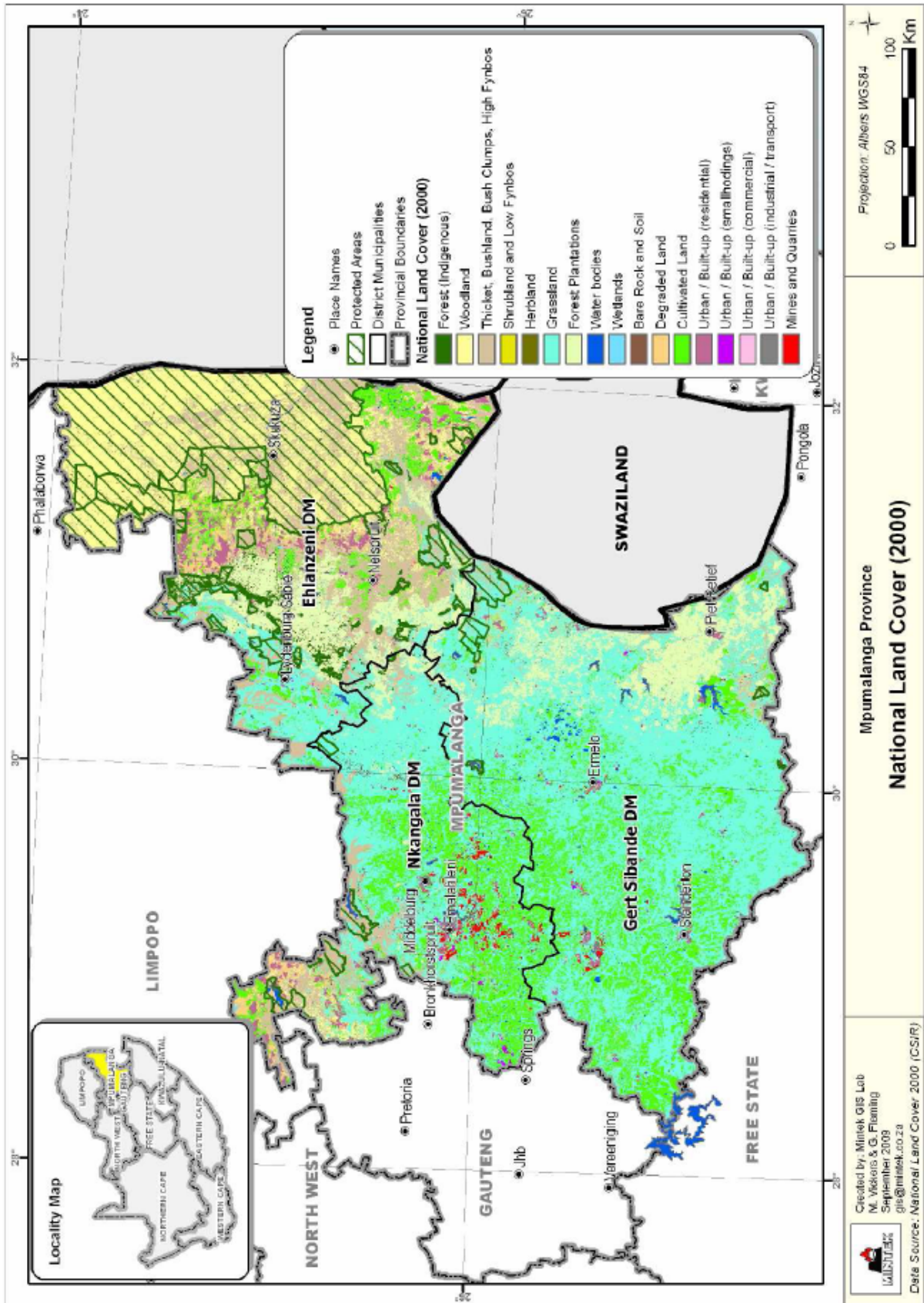
### **2.1.1. Land**

#### **Land Utilization**

The Mpumalanga Province covers an area of 76,495 km<sup>2</sup> (7,649,460 ha), or 6.3% of the country. Agriculture is the largest land user, utilising approximately 68% of the Province. Cultivation using 15% and grazing 53% of the land cover. Nature reserves cover 19% and forestry plantations 9% of the Province. The remaining part of the Province is used by human settlements, water bodies (dams and pans) and mines.

The primary land use requirements in Mpumalanga are for agricultural production, mining, industries, forestation, ecotourism, private game farming, and protected areas for nature conservation (Figure 2.3). The Province is dominated by vast open areas of natural vegetation which accounts for around 71% of the total land area in the Province. The extent of transformed land and/or degraded land is reportedly relatively small. Most of the converted land is under some form of cultivation (26%), including commercial plantations, which comprise 8% of the total area of Mpumalanga. Urban areas only comprise about 1.25% of the Province which is relatively small.

**Figure2.4: Land cover patterns**



Source: MINTEK 2009

The continued expansion of agricultural, mining and industrial activities in the Province have impacted on the biodiversity of the region through land clearing, deterioration of soil quality, erosion and contamination. Since land is a limited resource, demand for land will become more competitive in the years to come and measures have to be put in place to regulate and balance economic growth priorities, with population growth requirements and the preservation of the environment.

It must be noted that about 70% of all the arable land in the province is under claim. There is a need to pay attention to the land reform legislation to expedite all the backlogs in land claim in the province. The question of land availability is a serious concern in the province and land remains one of the critical means of production, and should be given attention. The ownership patterns of strategic land in the province are in private hands. This inhibits the state's capacity to influence development aimed at the poor and previously disadvantaged. There is a need for the province to embark on a process of empowering the state by **proactively acquiring strategic land and use it as a tool to foster economic development**. The maps below show the land claims in the province per district.

Figure 2.5: Land claims- Ehlanzeni District

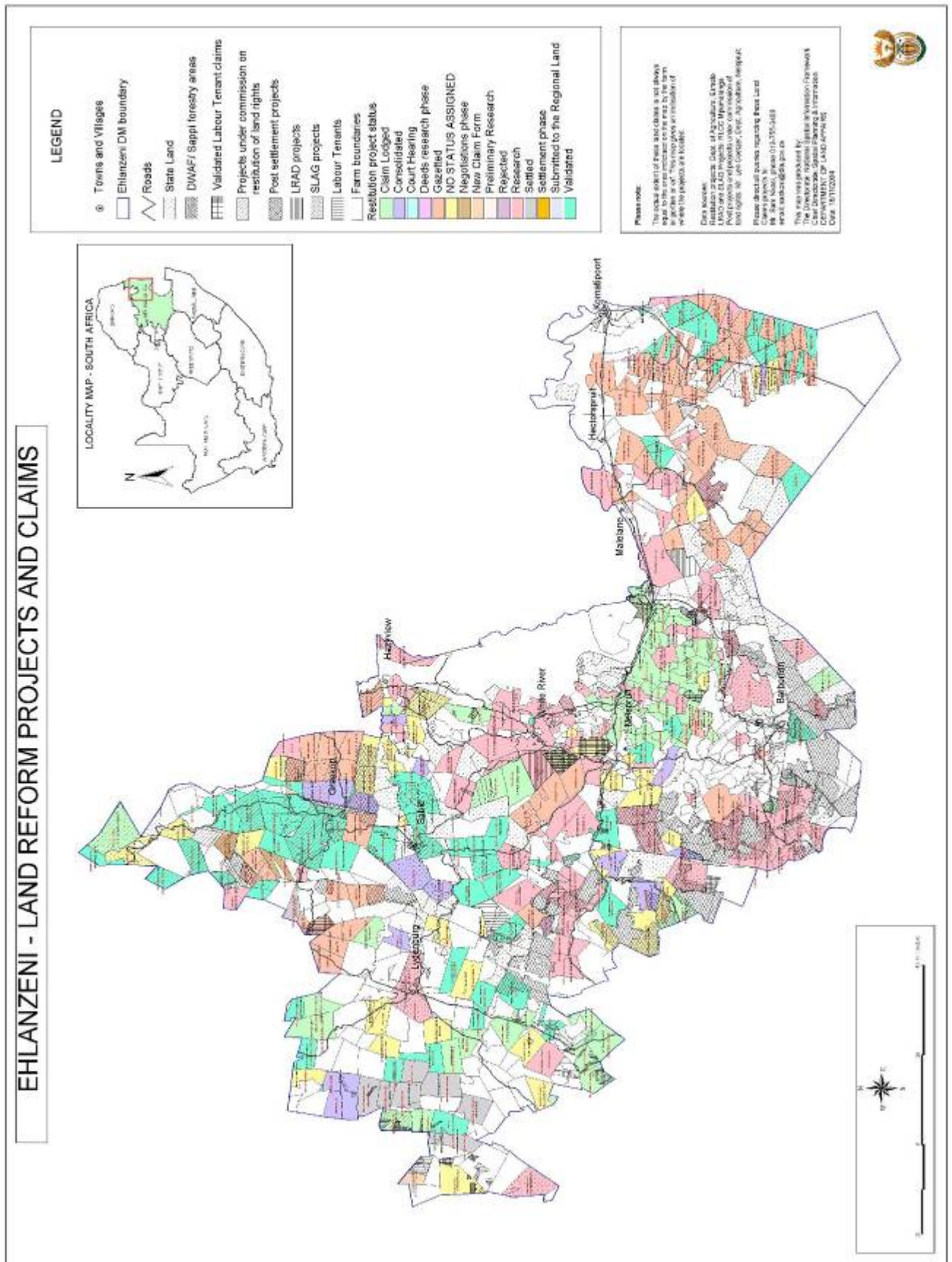


Figure 2.6: Land claims- Nkangala District

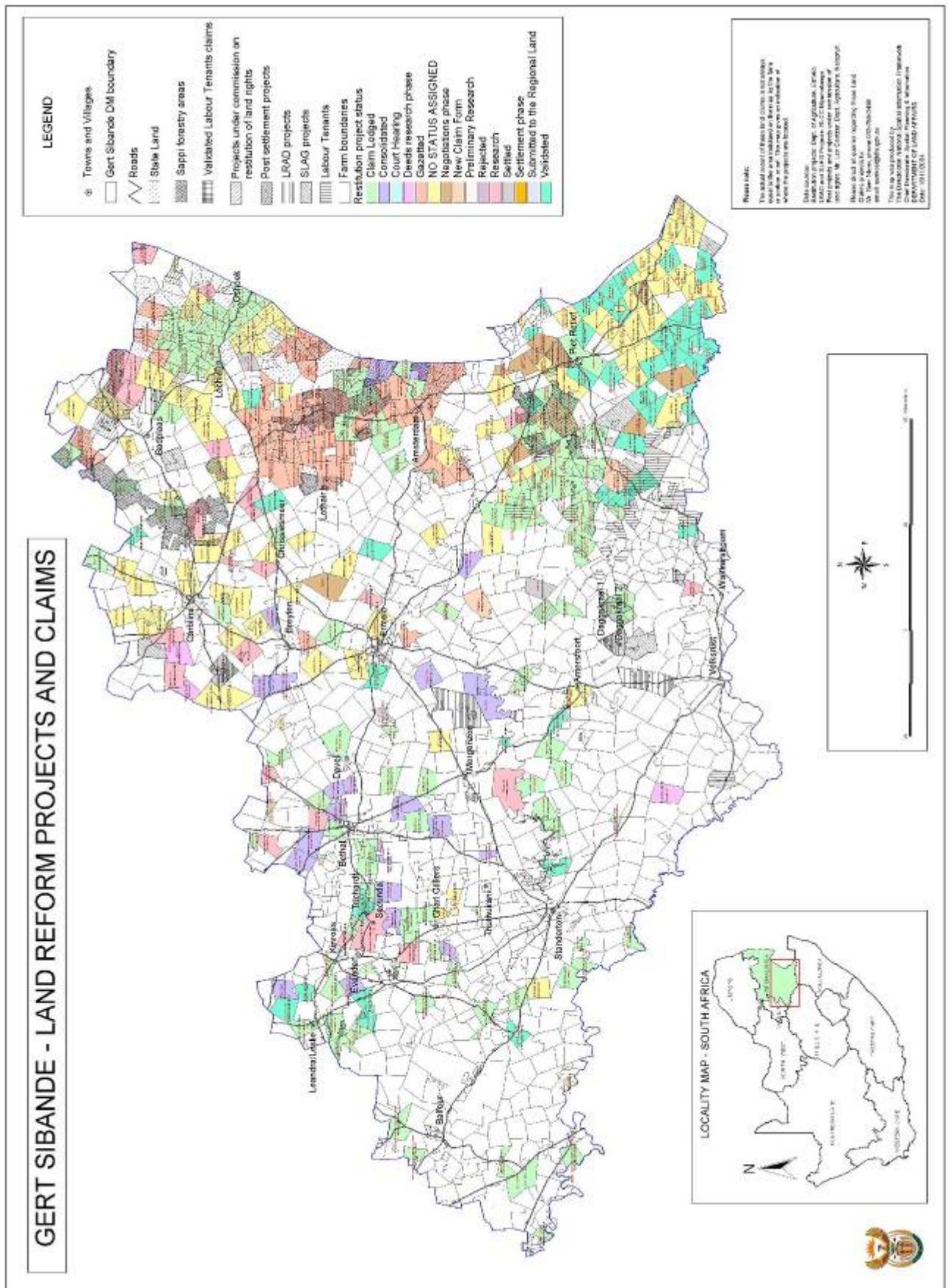
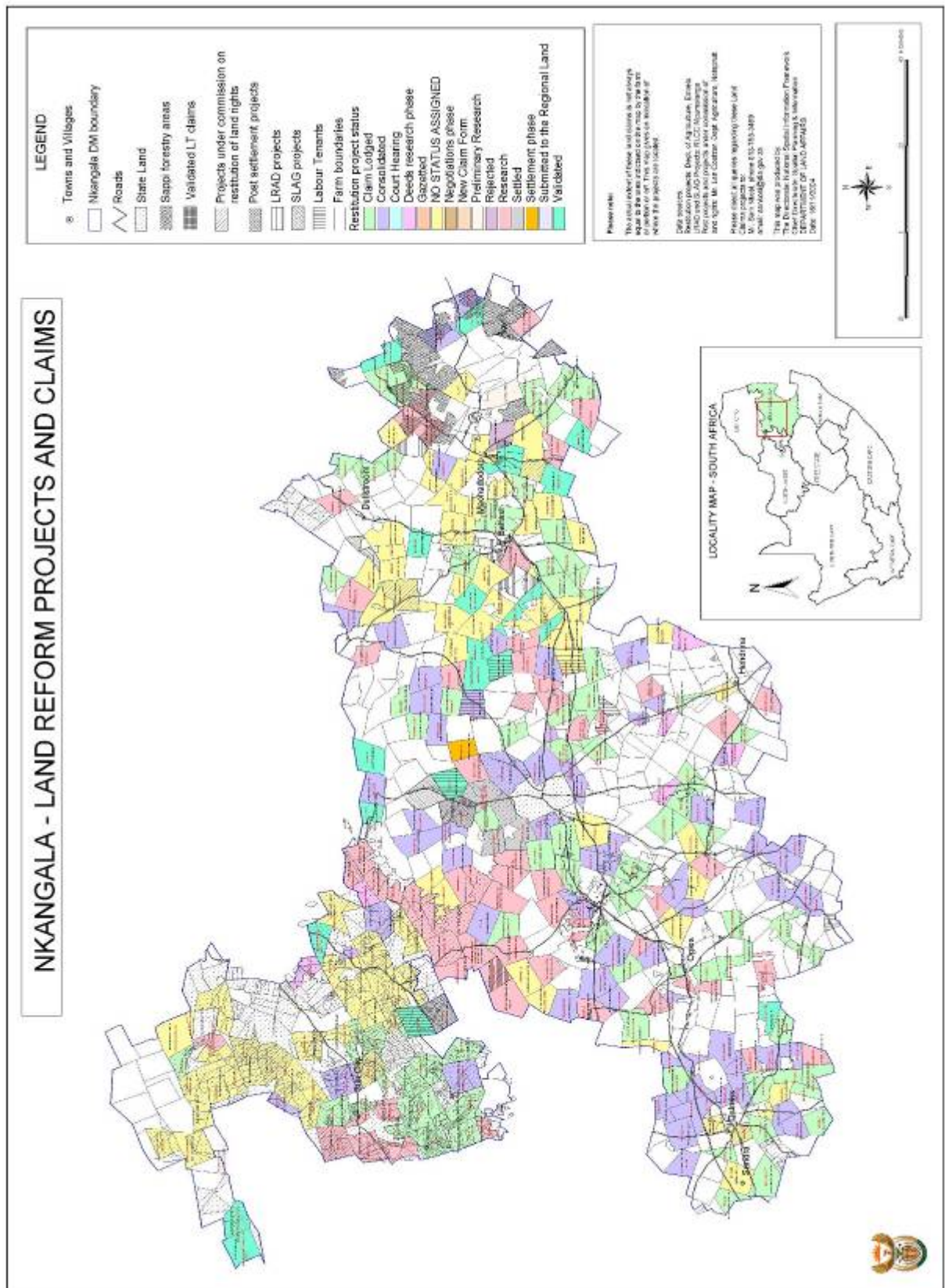


Figure 2.7: Land claims- Nkangala District





Land tenure on traditional land is also a key challenge that needs to be addressed. Land tenure reforms in rural areas could unlock dormant capital and be an incentive as well as a source of empowerment for communities.

### **2.1.2. Water**

As a semi-arid country, South Africa is faced with a critical situation with regard to its water resources. The long-term preservation and sustainability of ecosystems, communities and economic activities depends on the continued availability and accessibility to fresh water sources, principally obtained through rainfall (precipitation), surface flow (rivers) and groundwater. According to the Department of Water Affairs (DWA) maintains that all three of these sources, which are intimately linked in the hydrological cycle, are currently under stress.

The annual precipitation varies from less than 500 mm in the eastern Lowveld and 700 mm in the western Highveld to more than 1 100 mm in the escarpment. Water is acknowledged by the Provincial Government as a scarce resource and there is concern that there has been a general decrease in water quality and quantity over the past few years.

Water quality indicators indicate an increase in surface water nutrients which portray a potential for enrichment, which could compromise riverine eco-systems and human health. The most significant impacts on water quality are a result of mining, malfunctioning sewage treatment works and soil erosion from various practices especially agriculture and urban and rural development projects

With regards to water quantity, the water resources in all the catchments in the Mpumalanga Province, with the exception of the Sabie River and upper Usutu, are over committed with current demands on the available water outstripping the water available in the system. New development initiatives must consider the water availability prior to engaging in unsustainable developments with high water demands.

Mpumalanga is the source of four of Southern Africa's major river systems with as much as 53% of the Province drained by the Olifants River System, the Orange River System (Vaal River), Nkomati River System (Crocodile, Sabie, Sand and Komati Rivers) and the Pongola River System (Usutu River). Water resources are controlled and regulated within four Water Management Areas (WMAs) – the Olifants, Nkomati, Usutu and Upper Vaal WMAs. The Mpumalanga provincial boundary runs variously through each of these WMA. The entire Inkomati WMA sits within the provincial boundary whereas approximately 50% of the Olifants WMA (the southern portion) resides within

Mpumalanga. Around 15% of the upper Vaal WMA (the upstream Vaal Dam sub-WMA) and 20% of the Usutu WMA (Upper Usutu sub-WMA) reside within the provincial boundary.

There are pronounced differences in water availability within each WMA. DWA estimates, the Olifants and Upper Vaal WMAs to be under stress, while the Inkomati and Usutu WMAs have available water resources per capita above these two.

The Olifants WMA, as much as 47% of water available is derived from surface resources, 30% is made available from transfers into the WMA, and 11-12% from return flows and groundwater. Large transfers exist from both the Usutu and the Inkomati WMAs into the Upper Olifants sub-WMA for power generation. Transfers into the Middle Olifants sub-WMA are from releases from Loskop Dam to downstream users.

Within the Inkomati WMA surface water contributes 88% of water availability and return flows about 9.5%, mainly from irrigation (75% of total return flows). A very small contribution arises from groundwater (1%) and only 1.5% from transfers into the WMA. In the Upper Usutu sub-area, surface water contributes 96% of water available while the upstream Vaal Dam sub-area has water resources available from both surface water (51%) and from transfers into the area (39%). Within Mpumalanga, the greatest volume of water available per annum (412 million m<sup>3</sup> per annum) can be found in the Upper Olifants sub-area, followed by the Crocodile with 339 million m<sup>3</sup> per annum. The smallest volume of water available per annum in the province is in the Steelpoort sub-area. Water availability within a catchment or sub-WMA must however be assessed in light of the demand placed on that water by users. This gives an indication of the stress under which the catchment is placed.



According to DWA, Water use in South Africa is dominated by irrigation. This is also true for Mpumalanga as 46% of its water is required for irrigation. This demand for water is localised in a few of the WMAs, as is the demand for water for power generation. Water use for agricultural purposes is unevenly distributed throughout the WMAs. The second largest requirement for water is for 'transfers out'. Water resources in Mpumalanga are therefore important in supplying water to neighbouring catchments and WMAs. The issue of water sharing, both internationally with Mozambique and Swaziland as well as internally (between provinces) is extremely important, and one which requires careful management. The issue of water trading as well as water use licensing need to be given attention for the Mpumalanga government to realise its growth trajectory.

Use of water in the urban sector in Mpumalanga is slightly less (8%) than the requirements for the whole of South Africa (11%), while the requirements of the industrial, forestry and mining sectors are the same as those of South Africa (8%).

It is evident that in the Olifants WMA, irrigation is the biggest single user of water resources while power generation (dominant in the Upper Olifants) accounts for about 17% of total requirements, then mining, urban and rural. Sixty percent of irrigation requirements are from the Middle Olifants sub-area and 20% from the Lower Olifants. Almost all (82%) of water for power generation is required in the Upper Olifants sub-area, with the remainder in the Vaal sub-area. As much as 97% of transfers out of the Olifants WMA occur from the Upper Olifants sub-area.

In the Inkomati WMA, irrigation is the biggest single user of water resources, followed by afforestation – which accounts for 17% of the WMAs water requirements. Irrigation and afforestation are the biggest users of water in the Komati West, Crocodile and Sabie sub-areas. Around 46% and 38% of total irrigation requirements are from the Crocodile and Komati North sub-areas, respectively. Irrigation requirements in the Komati North area are followed by transfers out. This amounts to 35 million m<sup>3</sup> per annum which flows into Mozambique. Transfers to the Olifants WMA from Komati West are for use in power generation. Transfers out of the Crocodile sub-area flow across the border to Mozambique (28 million m<sup>3</sup> per annum).

The Upper Usutu sub-WMA is dominated with large transfers to the Upper Olifants sub-area for use in power generation. Afforestation accounts for 23% of total water resources required in the area, followed by irrigation and the urban-rural sectors. In the Upstream Vaal Dam sub-area, mining accounts for 38% of total water requirements. This is followed by the urban sector, requirements for

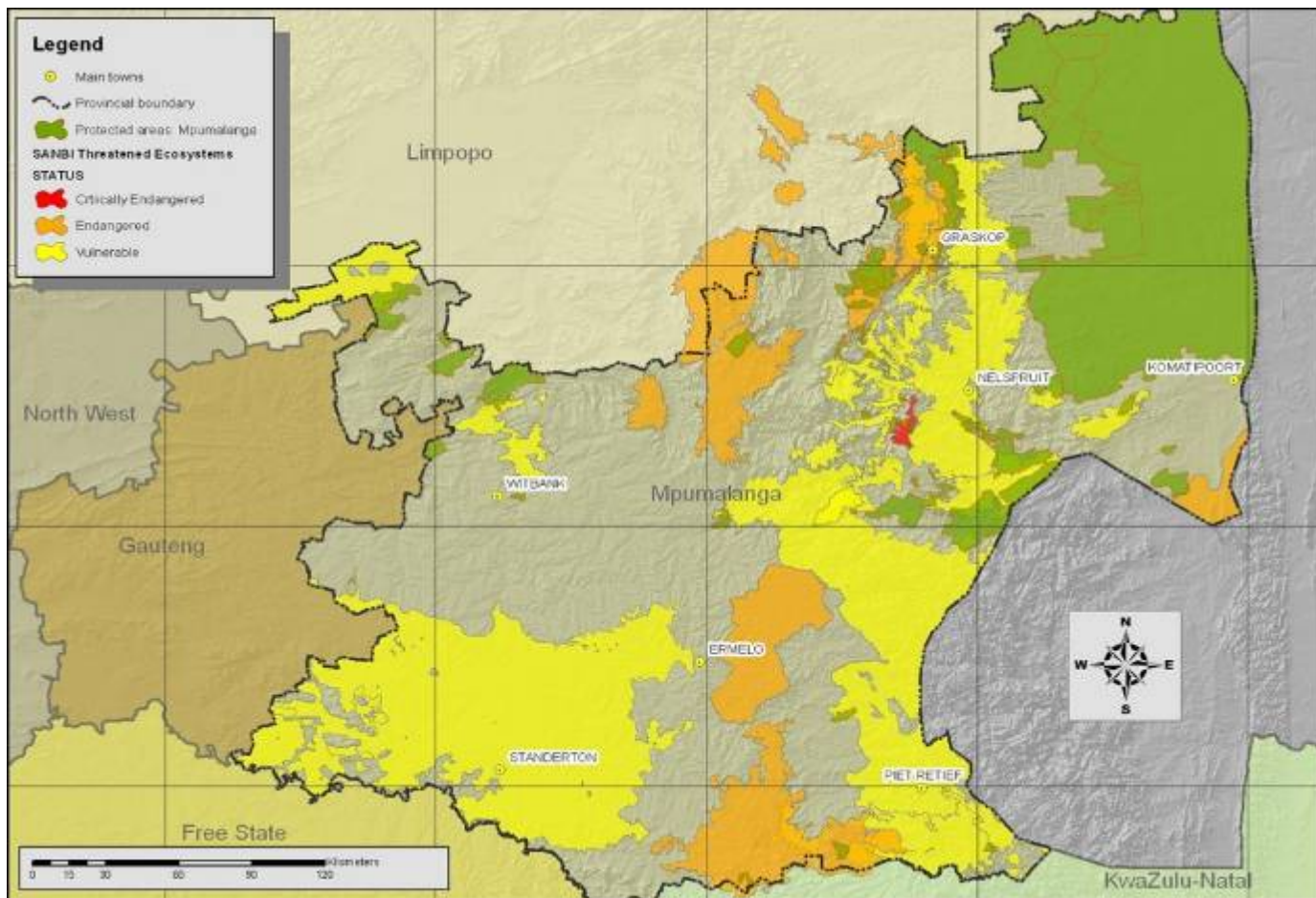
power generation and transfers out, which each account for 15% of total requirements. Requirements for irrigation follow with 11% (DWA).

### **2.1.3. Biodiversity**

The province is experiencing losses in its biodiversity. The 3 biomes occurring within the province comprise of 68 vegetation types as described within the Vegetation Map of South Africa, Lesotho and Swaziland (Mucina et. al, 2005). Vegetation types provide a good representation of terrestrial biodiversity because most organisms (animals, birds, and insects) are associated with a particular vegetation type. Of the 68 vegetation types occurring within the province, 9 are forest types, 28 are grasslands and 31 are savannas. 37.8% of land within Mpumalanga has been transformed, primarily within the grassland biome.

An assessment, conducted by the province through the Mpumalanga Tourism and Parks Agency (MTPA) in conjunction with SANBI, of the status of ecosystems occurring within the Province, has indicated that close to 9% of the surface area of the province is categorized as critically endangered or endangered (see Figure 1). This status is based on the relative proportion of the original natural habitat that remains for each of the vegetation types, as well as the conservation status of land as determined from the Systematic Biodiversity Conservation Assessment conducted for the province.

Figure 2.9: Biodiversity



### Protection Status

Most of the threatened ecosystems occur within the grassland biome. The threatened ecosystems are moderately too highly transformed and are also poorly protected within formal conservation areas. The main drivers of transformation of the vegetation types/ecosystem have been as a result of forestry and agriculture. The proposed future expansion of mining operations within the Mpumalanga Highveld is also likely to further threaten the ecosystem status of vegetation types within this region and to pose a serious threat to water quality within pristine catchments.

A total of 18.1% of the province is under formal biodiversity protection within national parks, provincial parks or private reserves. Much of this protected land/conservation land is located within the Kruger National Park (KNP) (12%). Thus the protection status for vegetation types (primarily savanna) occurring within the KNP, is high, whilst other ecosystems, such as grasslands remain largely unprotected (only 2.4% of grasslands protected). Overall 6.1% of the province outside of the KNP, is formally protected (MPAES, 2009). Figure 2 shows the protection status of the various

vegetation types relative to their national protection targets. The majority of the grassland vegetation types are afforded no protection at all, or with less than 5% of their targets protected. It is in these areas that many of the countries coal reserves currently lie.

#### **2.1.4. Transport Infrastructure**

Mpumalanga offers an established and advanced transport infrastructure and modes of transport to move people, goods and services between the main centres of the Province, the country and globally .The transport infrastructure in the province include road, rail and air transport.

##### *Roads*

The two main transport infrastructures in the province are the Maputo Development Corridor (MDC) that runs from Gauteng province to the port city of Maputo in Mozambique and the coal haulage routes mainly within the Gert Sibande and Nkangala district municipalities.

The MDC acts mainly as a trade route from the economic hub of South Africa in Gauteng to the port of Maputo, which links to international markets. It acts secondly as a commuter route between Gauteng province and Mpumalanga as well as Mozambique. It also acts as a tourism route from Gauteng Province to Mozambique. The coal haulage route is firstly a network that supplies coal to the power stations and secondly, supplies coal to the Richards Bay Coal Terminal (RCBT) for export

At present, the road network in Mpumalanga comprises 7 000 km of paved roads and 9 000 km of gravel roads. A condition survey conducted around 2005 revealed that around 25% of the paved road network is in a poor condition compared to approximately 20% of the gravel road network that is in a poor condition. Of this, 2 000 km are included in the greater total of 3 000 km of the paved road network where the surfacing is old and requires resealing to prevent moisture ingress and arrest further deterioration. A major contributor to the deterioration of the paved road network is a dramatic increase in coal haulage by road, mostly in the Gert Sibande District Municipality south of the N4, as well from increased freight transport arising from outside of South Africa (Zimbabwe and Mozambique). In 2007, overloading in the area on the section of the N4 between Pretoria and the South African/Mozambique border stood at 30-35% with the average number of trucks travelling along the N4, the R25 and R104 corridor amounting to 2 500. The road is designed for about 1 650 trucks. The current utilisation of the road network throughout Mpumalanga is about 5 000 coal trucks per day.

The Mpumalanga provincial government has rebuilt and upgraded some of the critical coal haulage road networks, which in most cases required an additional two structural layers to be added to the roads. The long term strategic approach to the coal haulage challenge undertaken is to:

- **Define a Coal Network Grid** which will be ring-fenced and coal movements restricted to this network. Any movement of coal outside this network will be penalised. End-users of the coal will have to construct private roads to interface with the grid should this network prove inadequate to move coal to their required locations;
- **Introduce and step up a dedicated freight vehicle overload control enforcement capacity;** and
- **Increase investment in rail infrastructure** to minimise the impact of coal freight on the road.

In addition to bulk transportation, the road network is utilised by private vehicle owners, buses and shuttles and mini-bus taxis commuting within and between other provinces and countries adjacent to Mpumalanga.

### *Rail*

Transnet and the Passenger Rail Agency of South Africa (PRASA) control South Africa's rail network. The Mpumalanga rail system covers a distance of 2 233 km and generates the most freight traffic in South Africa enabling the Province to play an important strategic economic role in the national economy. The most important lines are the Pretoria-Maputo and the Johannesburg-Durban lines (of which portions run through the Province). The remainder of the Province is generally fairly served in terms of rail infrastructure which serves most of the urban nodes. The Moloto Rail Development Corridor project will expand the rail system of the province.

Products that are transported within and outside of the Province include coal, fuel and chemicals, timber, iron and chrome ore, fruit, maize, animal feed, wholesale and retail goods, steel, building supplies, fertiliser and consumer goods. On the Mpumalanga to Richards Bay line minerals, grain and fuel are transported.

Management and control of the rail network in Mpumalanga is the responsibility of the Mpumalanga Freight Logistic Forum (MFLF). It becomes imperative from a rail perspective to implement a seamless rail service from Gauteng to Maputo. The province needs to engage and work together with the rail partners of neighbouring countries through Transnet. The expedition of the rail line stabilisation in order to increase the export volumes through the Maputo harbour should be given immediate attention. We need to promote the restoration of rail reliability and to



communicate progress on the rail seamless service agreements; promote the movement of rail friendly cargo currently on road back to rail in an orderly manner.

In addition to freight transportation, the rail network is also used for commuter services. The Shosholoza Meyl offers regular passenger rail services between Johannesburg and Komatipoort. Amongst others, stops include Malelane, Nelspruit, Middelberg and Pretoria. More luxurious tourist trains travel to Mpumalanga's game reserves from Gauteng, the Cape, KwaZulu-Natal, Mozambique and Swaziland. Over the past few years, government has contributed an estimated R884 million to the remodelling and refurbishment of rail commuter stations. The private sector provided investment of about R1.6 billion in more than 120 projects on land and properties adjacent to and surrounding rail commuter stations.

#### *Air*

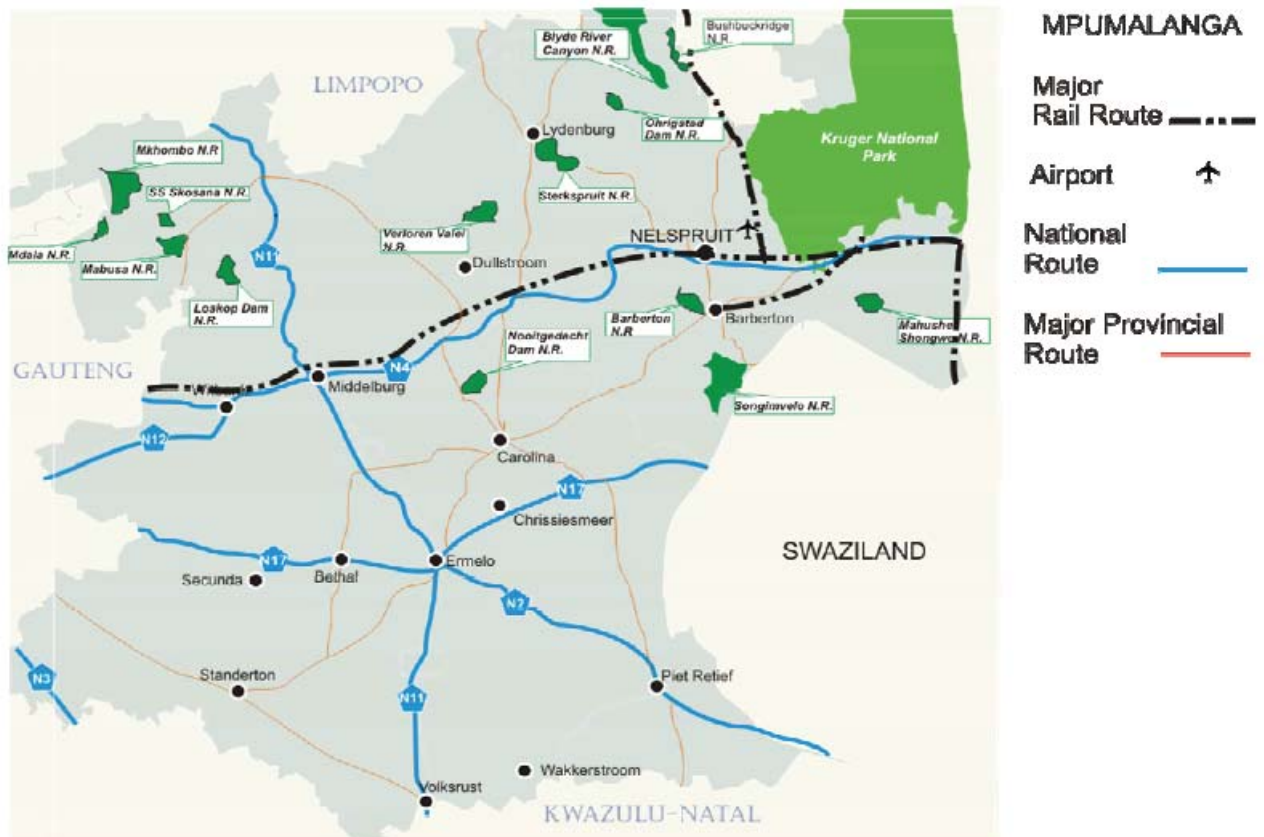
In total, there are 15 licensed aerodromes or landing strips in the Province, of which eight are public licensed airports/landing strips, while the remaining seven are private licensed aerodromes/landing strips. KMIA is Mpumalanga's only international airport, but there are few international services at present.

KMIA is owned and operated by Primkop Airport Management (Pty) Ltd. which is presently 90 percent-owned by ABB (of Switzerland), with the local community (on whose land the airport is built) owning the remaining 10 percent. The community receives R5 per passenger.

The airport can handle all types of aircraft up to B747-400F, but not the new Airbus A380. Although the runway is 3.1 km long and 60m wide, its present length limits the takeoff payload for a B747-400F to 79 percent of the total payload for a long haul flight to (say) LHR/London

At times KMIA is operating close to its capacity constraints. In preparation for the future, there are plans to add more parking bays; improve the radar system; extend the terminal building; provide a dedicated international terminal; provide night landing facilities; provide dedicated bus and taxi terminals; widening of the entrance road and new cargo terminal. This expansion is expected to create more jobs in the province. The proposed Delmas cargo terminal to relieve the OR Tambo is also expected to create a number of job opportunities.

Figure2.10: Road and Rail and Air infrastructure



Source: Mpumalanga Tourism Growth Strategy

### Contribution of the sector

In terms of provincial contribution to national GVA, Mpumalanga with a 6.1 per cent share occupied sixth place among the nine provinces in 2009. Transport and Communications contributed 9.7 per cent to the provincial economy in terms of GVA in 2009. In 2009, Ehlanzeni (38.5 per cent) was followed closely by Nkangala (36.6 per cent) in terms of provincial transport GVA contribution, with Gert Sibande in third position (24.8 per cent).

The expected future annual average growth of 4.4 per cent from 2009 to 2014 should be the highest among the nine sectors and higher than the provincial economy's forecasted 3.2 per cent growth. The employment elasticity of transport was calculated to be 0.32 over the period 1996 to 2009. Transport was the third most labour productive sector in the provincial context. The transport sector exhibited a low level of labour intensity because of the high capital outlay that is required of business. In light of the low employment elasticity and the low level of labour absorption and despite high growth expectations, the transport sector is not expected to be a driver of employment growth.

Mpumalanga with a 4.5 per cent share, occupied sixth place among the nine provinces in 2009, the same position as in 1996. The construction sector was the smallest contributor to the provincial economy with a 2.5 per cent share of Mpumalanga's GVA in 2009. Ehlanzeni was the major contributor to the construction sector of the province with a share of 41.2 per cent with Nkangala (32.0 per cent) and Gert Sibande (26.8 per cent) second and third, respectively.

### *Challenges*

Mpumalanga then has a number of roads infrastructure that varies in state from good to extreme disrepair. The backlog in roads infrastructure maintenance is a major challenge and has negative implications for commerce and industry. The farming industry is particularly affected by the state of rural access roads as transport costs affects competitiveness. The lack of good surfaced roads into many of the rural nodes could seriously hamper the future tourism development of these areas. The province also does not have adequate train stations which is vital for expanding rail services to all parts of the province.

#### **2.1.5. Electricity**

Due to its large coal deposits, the generation of electricity through coal-fired power stations in South Africa takes place primarily in Mpumalanga. Of the 24 power generation facilities owned by Eskom in the country, 13 are coal-fired power stations. Eleven of the currently operational coal-fired power stations in the country are situated in Mpumalanga and contribute roughly 76% of the total electricity generated in South Africa. In addition, the three Eskom return-to-service (RTS) coal-fired power stations are also situated in Mpumalanga.

The use of coal for energy production results in both the primary environmental impacts associated with the mining and removal of coal for use in coal fired power stations in the province, as well as the secondary impacts resulting from the burning of this coal for energy production.

The coal deposits in the Springs-Witbank belt are steadily being mined out and are said to have a future life span of no more than 30 years.

According to the World Energy Council (WEC), coal will continue to be an expanding source of cheap energy for the foreseeable future. Environmental considerations will mean that coal mining and utilization should increasingly use clean technologies.

Figure 14 presents the power stations and electricity network in Mpumalanga. Mpumalanga receives its main electricity supply via the national grid from Eskom.



Clean Coal Technologies (CCTs) will be fully implemented in South Africa when new mines and power stations, needed to supply more power to the grid, are developed and built. CCTs aim to control and reduce solid, liquid and gaseous emissions, improve operating efficiency and will identify methods for the effective utilisation of combustion by-products. South Africa, a member of the International Energy Agency Clean Coal Science (CCS) Agreement since April 2003, has access to all the CCS resources and projects. Given the right technology, coal will no longer be a threat to the environment, but will remain the world's major energy resource (DME, 2006).

Mpumalanga is also a beneficiary of the Eskom expansion programme with a new Eskom mega power station which is under construction named Kusile. The construction of Kusile presents the province with a number of economic opportunities. The provision of the new power station will ensure that the power shortages experienced by the country in 2008 does not occur in future and that will ensure a conducive business environment for the country and Mpumalanga.

#### *Contribution of the Sector*

In terms of provincial contribution to national utilities GVA, Mpumalanga with a 14.4 per cent share occupied third place among the nine provinces in 2009 and held a comparative advantage over the national sector. However, the sector only contributed 4.7 per cent to the total GVA of Mpumalanga in 2009. The majority of economic activity in the provincial utilities sector was recorded in Nkangala with a GVA contribution of 72.0 per cent in 2009. Gert Sibande (25.3 per cent) and Ehlanzeni (2.7 per cent) added the remainder to provincial utilities GVA.

The future growth, that is expected to be around 3.7 per cent per annum, will exceed the provincial economy's forecasted 3.2 per cent growth from 2009 to 2014. The employment elasticity of utilities (0.50) was the third lowest among the nine sectors. The utilities sector recorded the highest labour productivity in the provincial context. The utilities sector exhibited a low level of labour intensity due to the capital intensive nature of processes. This fact, together with the relatively low employment elasticity should only result in marginal employment contribution despite its relatively high labour productivity.

#### *Challenges*

The transportation of coal for power generation has a major impact to the provincial road network especially in the Highveld. The generation of electricity through coal-fired power stations produces pollutants such as particulates, sulphur dioxide and nitrogen oxides. Emissions from coal-fired power stations are a serious concern for Mpumalanga as they cause impaired air quality in areas close to and away from the emission source and much of the demand for electricity in the country thus

generates ambient air quality impacts that are felt largely in Mpumalanga and the surrounding areas. Coal combustion can also contribute to acid rain and run-off from mining can contaminate groundwater, while waste coal may spontaneously ignite.

Coal intensive activities contribute to large-scale water and air pollution, including significant carbon dioxide emissions, which contribute to global warming. In addition to power generation, coal combustion in stoves and coal heated boilers in hospitals and factories contribute to low-level coal-related atmospheric pollution. Such use of coal for domestic and industrial purposes also adds to the environmental impacts associated with commercial energy production from coal-fired power stations in the province. Other environmental impacts associated with energy production include air pollution from synthetic fuel production and vehicle emissions, pollution and health impacts associated with the use of leaded petrol, and oil and fuel spills and leaks can contaminate surface and groundwater.

#### **2.1.6. Information Communication Technology (ICT)**

The assessment to ICT infrastructure illustrates a clear disparity in ICT access within the province. The research conducted by the Department of Economic Development Environment and Tourism on the ICT sector shows that Mpumalanga and South Africa have limited access to and use of ICT infrastructure. A mere 9% of households in Mpumalanga have access to fixed telephone lines, and South Africa is one of the few countries in the world that has a negative growth rate in terms of fixed lines. The decline in Telkom's fixed-line network has hindered Internet growth and therefore has implications for the development of widespread affordable access to a full information infrastructure. Mobile communications do provide a suitable alternative to fixed-line telephony; however the high costs of telecommunications remains a key obstacle in achieving the critical mass required for providing a connected society with a sufficient skill base that is able to impact positively on the economy. By 2007 Mpumalanga only has 4, 5% of all broadband connections in South Africa.

According to the Community Survey 2007, published by StatsSA in July 2008, there were approximately 940,400 households in Mpumalanga. Table 2.1 reflects the number of households that had access to ICT infrastructure per District in Mpumalanga Province.

**Table 2.2: ICT Consumer Penetration**

ICT CONSUMER PENETRATION								
DISTRICT	Local Municipality	Radio	Cellphone	Television	Telephone	Internet	Average	Total Households
GERT SIBANDE DISTRICT	Albert Luthuli LM	78%	72%	58%	3%	2%	35.9%	<b>46,036</b>
	Msukaligwa LM	88%	84%	70%	12%	5%	45.6%	<b>31,751</b>
	Mkhondo LM	80%	76%	60%	6%	3%	38.8%	<b>29,926</b>
	Pixley ka Seme LM	80%	64%	67%	15%	4%	39.8%	<b>21,605</b>
	Lekwa LM	86%	81%	76%	16%	7%	46.6%	<b>26,685</b>
	Dipaleseng LM	80%	68%	69%	14%	6%	41.1%	<b>12,322</b>
	Govan Mbeki LM	77%	77%	64%	15%	7%	43.1%	<b>79,191</b>
NKANGALA DISTRICT	Delmas LM	77%	80%	70%	10%	6%	42.7%	<b>15,129</b>
	Emalahleni LM	80%	81%	62%	15%	5%	43.1%	<b>105,594</b>
	Steve Tshwete LM	86%	82%	73%	20%	8%	48.0%	<b>50,449</b>
	Emakhazeni LM	85%	83%	60%	15%	2%	43.1%	<b>12,127</b>
	Thembisile LM	83%	83%	70%	4%	0%	41.1%	<b>65,394</b>
	Dr JS Moroka LM	81%	77%	70%	4%	1%	39.7%	<b>56,874</b>
EHLANZENI DISTRICT	Thaba Chweu LM	70%	77%	54%	8%	4%	37.5%	<b>28,259</b>
	Mbombela LM	79%	79%	67%	10%	5%	42.4%	<b>137,353</b>
	Umjindi LM	75%	75%	59%	13%	4%	39.9%	<b>18,768</b>
	Nkomazi LM	72%	76%	54%	4%	3%	35.7%	<b>78,252</b>
<b>MPUMALANGA</b>	<b>78%</b>	<b>77%</b>	<b>64%</b>	<b>9%</b>	<b>4%</b>	<b>33%</b>	<b>940,404</b>	

Source: Own study 2009

The situation depicted by the table need to be changed as Information opens up more possibilities and opportunities for people. Information and knowledge empower people to become more self-sufficient. ICTs make information acquisition and management easier and more efficient, and open up possibilities for universal access to knowledge and markets. The specific advantages of using ICTs include:

- a) Access to information for private and professional decision-making: ICTs expand the range of choices and opportunities by facilitating greater access to economic, educational and development-related information;
- b) Reduction of geography and distance as a factor in social and economic participation: research is much easier with ICTs, especially through the Internet; it could assist businesses about market information and empower communities with much needed knowledge.
- c) Access to opportunities: ICTs empower individuals, businesses, especially SMEs, local and community groups, women and marginalized or disenfranchised people or groups to do what they do, only better. With ICTs and the capacity to use ICTs, these groups can access the same information that government and large corporations use. Access to information can help level

the playing field by increasing participation in economic and human development activities and in those applications that depend on information, such as markets;

- d) Greater ability to learn: distance learning permits students to get accreditations online from recognized universities;
- e) Greater environmental awareness: information about the weather and the environment is more readily available. It can help to predict and prepare for environmental perturbations and catastrophes.
- f) More awareness of factors affecting individual well-being; Greater ability to influence and participate in decision-making; Transaction processing: ICTs speed up and ease transactions of all types, and are especially important for business and government transactions; and
- g) Improved trade: ICTs enhance and facilitate trade. ICTs make markets more efficient. Commerce is enabled and extended. With ICTs, all markets have the potential of being international or of being selective, depending on their requirements.

#### **2.1.7. Human Capital**

The new growth path advocate for improvements in education and skill levels and further hold that they are a fundamental prerequisite for achieving many of the set goals. General education must equip all South Africans to participate in our democracy and economy, and higher education must do more to meet the needs of broad-based development. The growth path also requires a radical review of the training system to address shortfalls in artisanal and technical skills. The growth path also requires a radical review of the training system to address shortfalls in artisanal and technical skills. The Draft National Human Resource Strategy for South Africa addresses these goals. There are proposals on meeting shortfalls in the important economic skills such as, Target at least 30 000 additional engineers by 2014, Target at least 50 000 additional artisans by 2015, Improve skills in every job and target 1, 2 million workers for certified on-the-job skills improvement programmes annually from 2013, Information and communications technology (ICT) skills taught in all secondary schools, and to Finalise the National Skills Development Strategy.

The Mpumalanga situation is no different from what the entire country is experiencing in this aspect and as a result, the provincial government is a process of finalising a HRD strategy for the province which will align to the National Human Resource strategy with further alignment to the National Skills Development Strategy. The HRD strategy for Mpumalanga will also pay attention to the issue of HIV/AIDS as it impacts negatively on the skills base. Mpumalanga has the second highest prevalence of HIV/AIDS after KwaZulu Natal.



## **2.2. Sector Analysis of the Provincial Economy**

### **2.2.1. Provincial Gross Domestic Product (GDP)**

In 2009, Mpumalanga contributed R169.9 billion in current prices and R114.7 billion at constant 2005 prices to the GDP of South Africa. Mpumalanga's contribution was the fifth largest among the nine provinces and registered a marginal decrease from a 6.9 per cent contribution in 1996, to 6.4 per cent in 2009. The provincial economy has not outperformed the national economy in terms of GDP growth since 1999. The economic recession that stretched from the end of 2008 until midway through 2009, resulted in both South Africa and Mpumalanga recording negative GDP growth for 2009 of 1.7 per cent.

The average annual growth rate for the country and Mpumalanga over the period 1996 to 2009 was 3.2 per cent and 2.6 per cent, respectively. Expectations are that the economies of South Africa and Mpumalanga grew by 2.8 per cent and 2.1 per cent, respectively, in 2010 after the contraction in 2009. Looking towards the future, the forecasted annual average growth rates for South Africa and Mpumalanga from 2009 to 2014 is 3.5 per cent and 3.2 per cent, respectively. According to expectations, Gert Sibande is expected to record annual average growth from 2009-2014 of 3.5 per cent followed by Nkangala (3.1 per cent) and Ehlanzeni (3.0 per cent).

#### **Contribution to national and provincial economy**

In 2009, the province was a substantial role-player in the national mining and utilities (mainly electricity) sectors, with respective shares of 20.0 per cent and 14.4 per cent. The contribution by mining (from 17.3 per cent to 20.0 per cent), manufacturing (from 6.7 per cent to 7.7 per cent), transport (from 6.0 per cent to 6.1 per cent) and community services (from 4.7 per cent to 4.9 per cent) increased between 1996 and 2009, whilst the other sectors' contribution to the national figure, declined.

Nkangala District was the largest contributor to the provincial economy's Gross Value Addition (GVA), with a share of 39.9 per cent in 2009. This was due mainly to the district's considerable contributions to the province's utilities (71.9 per cent) and mining (67.9 per cent) sectors in 2009. The generation of electricity from coal mining therefore makes Nkangala District a leader in the mining and utilities sectors. Gert Sibande District, with a 31.2 per cent share in 2009, was the second largest contributor to the provincial economy. In 2009, Gert Sibande was the main contributor to Mpumalanga's manufacturing (54.8 per cent) and agriculture sectors (41.3 per cent). This manufacturing was almost entirely due to SASOL's activities in Govan Mbeki local municipality.

Ehlanzeni District was in third place adding 28.9 per cent in 2009 to the provincial economy., It's strength was in the province's community services (45.2 per cent) and trade (44.9 per cent) sectors.

### **Sectoral contribution and growth**

In 2009, the primary sector in Mpumalanga contributed 22.2 per cent, secondary sector 27.3 per cent and tertiary sector 50.5 per cent to the provincial GVA. This relatively large dependence on the primary sector stood in contrast to the national primary sector's small contribution of 8.5 per cent in 2009. Nationally, the secondary industries added 22.5 per cent and the tertiary sector 69.0 per cent in 2009. This structural difference between the provincial and national economy explains partly why the province currently achieves lower growth than the country as a whole. Provincially, the primary sector grew only by a modest 0.9 per cent annually over the 13-year period under review. This is in contrast to the provincial tertiary sector that achieved average annual growth of 3.6 per cent per annum.

In 2009, the three largest contributors to the provincial economy were manufacturing (20.1 per cent), mining (18.6 per cent) and community services (16.4 per cent). This was slightly different from 1996, when mining (24.1 per cent) was the leading sector followed by manufacturing (18.6 per cent) and community services (17.1 per cent). The manufacturing sector dominated the district economy of Gert Sibande in 2009 with a 32.8 per cent share. Mining activities dominated the Nkangala economy as it added 29.7 per cent to the district's economy in 2009. The largest contributing sector in Ehlanzeni in 2009 was community services with a share of 27.3 per cent.

In 2010, the leading sectors in terms of GVA growth should be manufacturing (5.0 per cent) and trade (4.6 per cent). Over the period 2009-2014, it is expected that transport will record the highest average annual GVA growth of 4.4 per cent per annum followed by manufacturing (3.8 per cent) and utilities (3.7 per cent).

When combining forecasted growth and forecasted GVA share, manufacturing (1.0 per cent) and trade (0.6 per cent) sectors can be regarded as the main drivers of the provincial GVA growth for 2010. Community services (0.4 per cent) and transport (0.4 per cent) are expected to aid provincial growth to a lesser degree, whereas agriculture is expected to hold provincial growth back in 2010.

### **2.2.2. Agriculture & Forestry**

The agricultural sector plays an essential role in the fight against poverty and securing food security for the people of Mpumalanga. The role of agriculture in supplying employment to unskilled workers, ensuring food security to rural people as well as stimulating other sectors in the value-chain such as manufacturing and trade makes it an important sector towards the attainment of growth and development.

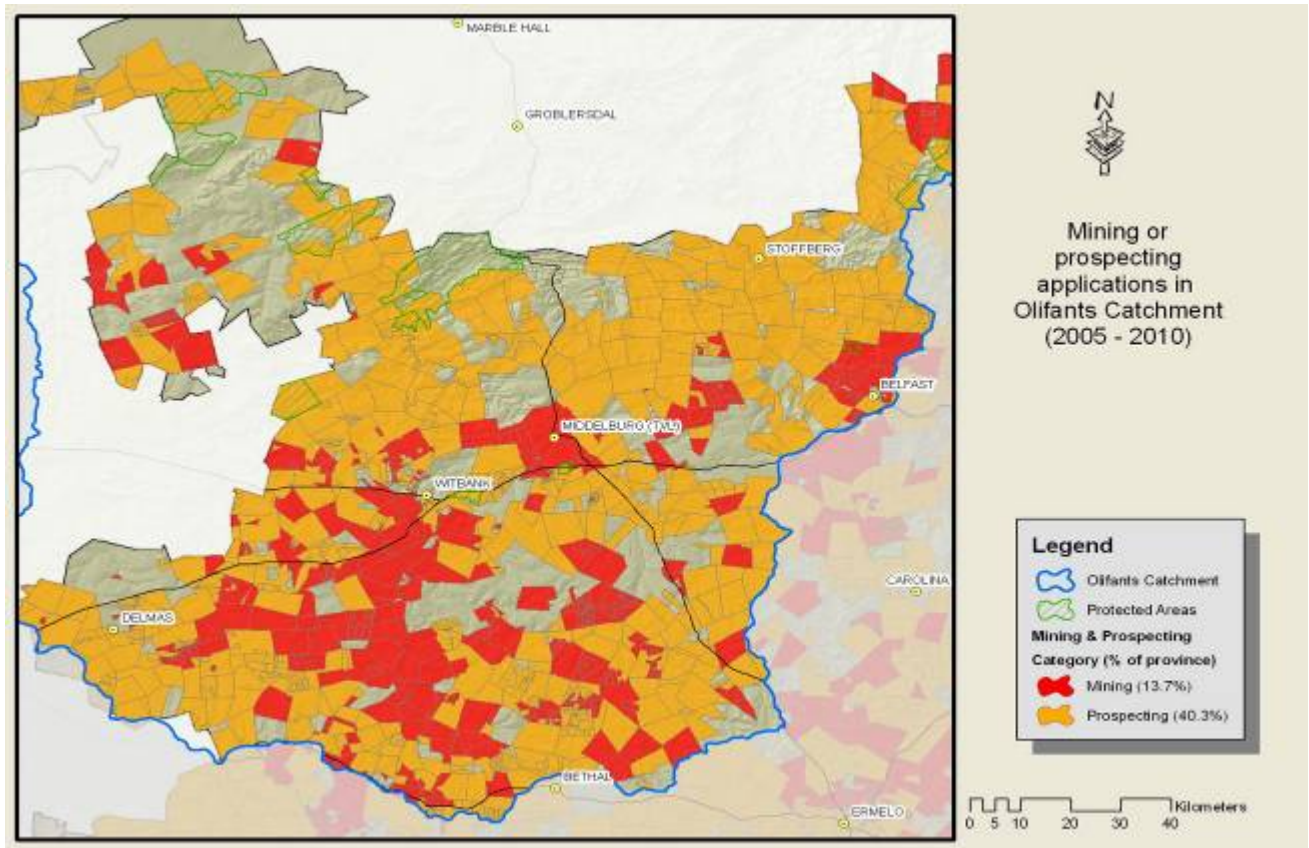
The current land utilization by agriculture is determined by the natural resources, such as soils, water and climate, and land ownership. Land utilized for commercial farming is about 90% of the total farm land whilst for small-scale/emerging farming is less than 10%.

In terms of agricultural production, summer cereals and legumes (sunflower seed, sorghum, dry beans, soy beans, potatoes, cotton and maize) dominate the Highveld region, while subtropical and citrus fruit and sugar are grown extensively in the Lowveld. Fruit farming includes apples, peaches, citrus, nuts and subtropical fruit such as mangoes, litchis, and avocado pears. Mpumalanga is also well known for intensive and extensive beef production and the production of other animal produce such as chickens, eggs and pork. For the most part, dry land farming is utilised in agricultural production in the Highveld, with intensive irrigation activities taking place in the Loskop area near Groblersdal and in the Lowveld area adjacent to the Crocodile and Komati Rivers. Considerable potential for increased agro-processing exists in the Province, but this is constrained by access to water resources. The maps below show agriculture production in the province;



The protection of high potential and productive agricultural land is necessary. The agricultural sector is competing with other land users for the same land. Most notably are the expansion of the mining industry and urbanization. This has serious implications on land reform and food security.

**Figure 2.12: Mining or Prospecting Applications**



Source: Own Map 2010

The figure above shows the serious extent to which mining is threatening agriculture in the Olifants catchment area. The level of mining, which is already high, and prospecting applications combine to cover the greater majority of the land area thus putting agriculture and the environment to high risk.

*Contribution of the Agriculture sector*

In terms of provincial contribution to national agriculture GVA, Mpumalanga (8.9 per cent) occupied third place among the nine provinces in 2009. The provincial agriculture sector holds a comparative advantage over the national sector and improved from the fourth to the third largest contributor to the national agriculture GVA between 1996 and 2009. However, the sector contributed only 3.6 per cent to the total GVA of Mpumalanga in 2009. Gert Sibande (41.3 per cent) was the leading district in terms of agricultural GVA followed by Ehlanzeni (35.5 per cent) and Nkangala (23.3 per cent).

Average annual growth between 2009 and 2014 is expected to be around 0.4 per cent and should fall short of the provincial economy's forecasted 3.2 per cent growth.

The economic contribution of the agricultural sector can grow through research to improved farming techniques, improved cultivars, higher productivity, skills development, increase value adding and agro-processing.

#### *Employment in the sector*

The agriculture sector exhibited a high level of labour intensity, but low labour productivity. For agriculture to be an employment driver, interventions will need to change its employment elasticity from negative to positive.

#### *Challenges in the sector*

The agricultural sector is threatened by various internal and external constraints. Some of the constraints are the poor conditions of the rural road infrastructure, ownership of land, land reform failures, mining activities, urbanization, climate change, access to finances, water availability, lack of agro-processing and markets, human capacity, governance and marginal soils.

### **Forestry**

Mpumalanga is the country's major forestry production area and accounted for 22.8% of South Africa's forestry and logging GVA in 2009. Forestry and logging, as a subcomponent of agriculture, added some 1.4% to Mpumalanga's total GVA in 2009. About 39 of the 148 primary processing plants in the country are located in the Province, including the continent's largest integrated pulp and paper mill at Ngodwana, and softwood mill. Over R9.5 billion is invested in the province's forestry industry. The Provincial Growth and Development Strategy stresses the very low growth per annum in formal employment opportunities, at 1.2% per annum, when there is a 4.6% per annum growth in the labour force. The Province struggles to provide enough formal employment opportunities and this has resulted in a high increase in the number of unemployed people. The need for additional development opportunities, including forestry as an important primary employer, must be viewed in this context.

Mpumalanga Province has extensive commercial forests and sophisticated processing plants dealing with everything from sawn logs, pulp and paper to board. The province has South Africa's biggest sawmill and its largest panel and board plant, as well as the biggest integrated pulp and paper mill in Africa. Whilst forestry and logging contributed 1.4% to Mpumalanga's GVA in 2009, downstream

production of wood and wood products, as a subcomponent of manufacturing, added another 1.1% to the province's GVA in 2009 and is an important part of the manufacturing profile of the province.

In light of its importance to the province's economy, the tough times experienced by the forestry and paper sector in 2009 were a cause for concern. Since 2003, reduced demand for paper is something that companies in the sector have become accustomed to. The sharp dip in demand for timber, however, has come as something of a shock. York Timbers, employer of about 3,500 people in Mpumalanga, entered into discussions with unions about the possibility of closing three of its eight processing plants in mid-2009. Paper and packaging giant Mondi reduced paper production at its KwaZulu-Natal plant and shut down several mills and machines in Europe. Shares of companies in the sector fell sharply for the six-month period to December 2008. Two factors will help the sector weather difficult times. Firstly, the nationwide programme of spending on infrastructure will increase timber demand, particularly by the construction industry. This boom includes spending for rail, road and port upgrades and is set to continue for some years. The second factor that will help this sector is the fact that old coal mines are being reopened and new ones commissioned.

#### *Contribution of the Mpumalanga Forestry Sector*

The Province has the ideal climate and topography for forests. The north-eastern sector of the province around Sabie and Graskop is regarded as the hub of the industry, but commercial forests are also found along the province's eastern border with Swaziland. It is the national leader in terms of total hectares under forest (514,000) and export earnings from within the sector. Mpumalanga accounts for 40% of the total forestry income of the country. About 11% of the province is forested, with 4% of that being natural forest. The 7% of the province that is commercially run represents 40% of South Africa's commercial forest stock. Softwood accounts for 315,382 hectares with hardwood hectares totalling 199,448. Private companies own 75% of the province's wood and 706 new hectares were planted by private concerns in 2008. York Timbers owns and leases 86,900 hectares across the province. The company's plywood plant in Sabie is an important part of the processing industry.

Mondi's softwood sawmill in the same town is South Africa's largest of its type, while the same title can be attached to the panel and board plant run by Sonae Novobord. Sappi owns and manages 235,000 hectares in Mpumalanga, 44% of the company's South African holdings. Of the company's sawmills, the Lomati Sawmill in Barberton is one of the busiest, with an annual sawn-timber capacity of 85,000 cubic metres. Its products are used for structural timber, furniture and construction. The commercial forest sector offers attractive business opportunities for small-scale entrepreneurs,

particularly growers, contractors and saw-millers. In addition, the pulp and paper industry in the province creates income opportunities for waste-paper vendors.

#### *Contribution to Regional Gross Geographic Product*

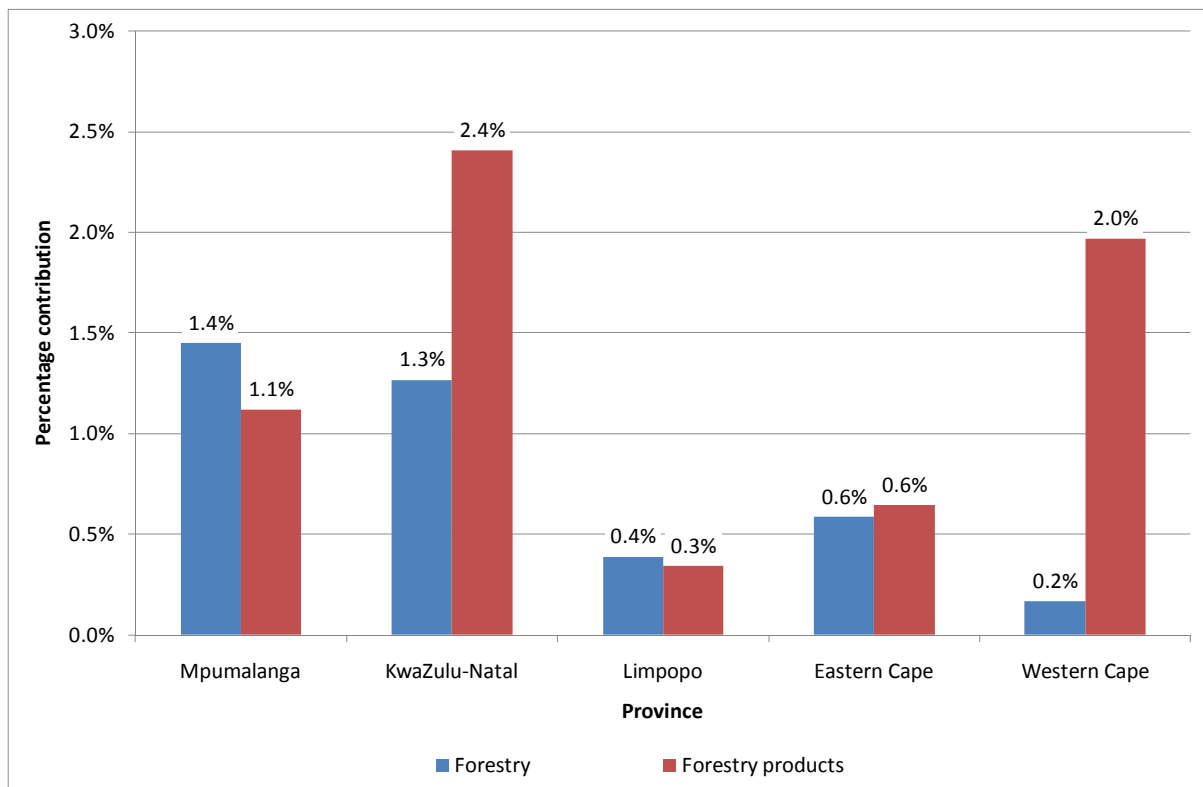
Forestry is one of the sectors identified as a key growth area in terms of the Accelerated and Shared Growth Initiative of South Africa (AsgiSA), which aims to reduce poverty and unemployment and help the country achieve an economic growth rate of 6% per annum. South Africa earned R14.2-billion from forestry exports in 2009, but imports cost R12.1-billion.

The forestry sector comprises every link in the chain from forestry and logging to sawmilling and the manufacture of wood products and pulp and paper. The province is at the forefront of the country's manufacturing capability in areas such as sawn timber, chipboard, furniture and manufactured wood products for the building industry. Pulp and paper are the main industry exports, along with sawn lumber, woodchips and wattle extract.

The major export markets are the Far East, Europe and the UK. Black empowerment group Vuka Forestry Holdings has grown its holdings in the sector in recent years in terms of hectares under forest and by acquiring trading companies. The Council for Scientific and Industrial Research's (CSIR) forestry research unit is at the forefront of the drive to improve tree breeds and, in association with Sappi Saiccor, researches all aspects of the industry. Project Hybrid Resources aims to improve saw timber and the Pine Platform programme (with York Timbers and Merensky Timber and Lumber) has successfully created new genetic resource.



**The provincial sector’s contribution to the regional GGP is reflected in Figure 2.12**



Source: Global Insight – ReX, January 2011

With reference to the preceding illustration, it is recorded that Mpumalanga’s forestry industry as a whole has the highest rate of contribution to regional GVA at 1.4%, while forest products contribute 1.1% to regional GVA. The provincial contributions indicate that it is important to further develop the forestry sector in order to exploit the potential in this sector. The figure above depicts that Mpumalanga has the highest proportion of forestry, however, the manufacturing activities for the forestry products are lower. Therefore, it means that Mpumalanga must improve on the production of forestry products within the province, thus will result in the creation of job opportunities.

#### *Ownership patterns*

In Mpumalanga Province 75% (383,862 ha) of forests plantations are owned by the private sector and 25% (125,528 ha) by the public. The contributing factor, to a larger share of the private sector ownership is land purchases by larger companies. Although ownership is dominated by the private sector, there are many farmers who participate in the forestry industry; many black farmers have entered the forestry industry, largely under contract to the big companies. Most of these farmers are dependent on these companies and are not able to operate freely in a competitive market.

### *Employment*

According to the Forestry South Africa (FSA) statistics, the forestry plantation sub-sector is the highest contributor to employment in the forest industry in South Africa. It is estimated that the Forestry sector had a total of 77,000 direct jobs and 462,000 indirect jobs in the Province prior to 2008. The sector is estimated to be at 24 400 direct jobs and 146 300 indirect jobs in 2011.

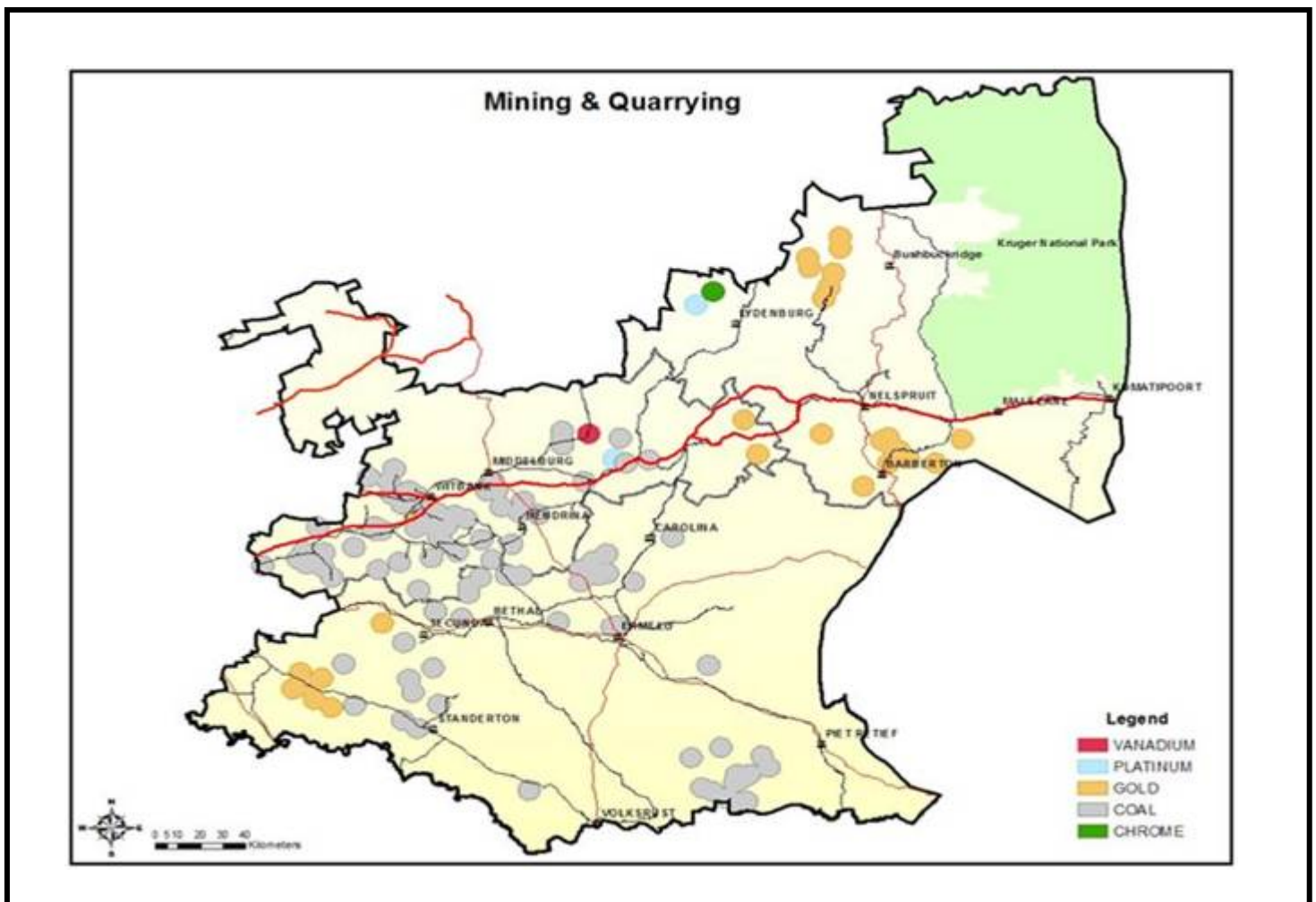
### *Challenges in the sector*

In studying the sector a number of challenges were identified which include Land claims and Lack of access, inadequate allocation of water, Lack of skills within the forest sector, Fire damages, Lack of business support systems for small players, etc.

### **2.2.3. Mining**

Mpumalanga is endowed with precious metals (platinum, gold), precious stones (diamond, beryl, emerald), non-ferrous and base metals (copper, zinc, lead, cobalt, molybdenum, tungsten, tin), ferrous and related metals (chrome, iron, manganese, nickel, silicon, titanium, vanadium), energy minerals (coal, torbanite, uranium) and various industrial minerals (aggregate, alumino-silicates, asbestos, clay, corundum, dimension stone, fluorspar, graphite, limestone, magnesite, silica, talc). This diversity of resources has contributed to the emergence of significant downstream linkages, most notably to the establishment of heavy industrial activities such as power stations, steel making operations, paper mills, and chemical plants. Such industries have been critical in facilitating additional linkage development by attracting related and supporting industries and hence, contributing to a greater role of secondary and tertiary activities in the Province.

Figure 2.13: Mpumalanga Mining and Quarrying



Source: Own Map

#### *Contribution of the mining sector*

In terms of provincial contribution to national GVA, Mpumalanga occupied third place among the nine provinces in 2009. Mpumalanga's substantial share of 20.0 per cent improved from 17.3 per cent in 1996. Not only does mining hold a comparative advantage over the national mining sector but it also played an important role in the provincial economy with an 18.6 per cent contribution to provincial GVA. Nkangala (67.9 per cent) was the dominant district in terms of GVA contribution and Ehlanzeni the smallest (6.8 per cent).

The future growth, that is expected to be around 2.1 per cent per annum, will lag the provincial economy's forecasted 3.2 per cent growth from 2009 to 2014.

### *Employment in the sector*

The employment elasticity of mining was 1.63 from 1996 to 2009. Mining was the fourth most labour productive sector in the provincial context. The mining sector exhibited a low level of labour intensity as the sector moved to more capital intensive processes. However, as the demand for coal and other minerals in the province is set to remain strong in the near future, the resultant GVA growth should stimulate healthy employment growth through the strong employment elasticity.

The impact of the economic recession on mining employment was clear to observe. While South Africa's mining labour force shrunk with 7.8 per cent between the fourth quarter of 2008 and the fourth quarter of 2009, Mpumalanga's mining labour force declined by 15.3 per cent or some 9 000 jobs. Other provinces such as the Eastern Cape (-66.7 per cent) recorded even higher losses, whilst the mining labour force in others, such as Limpopo, increased by 19.0 per cent.

### *Challenges in the sector*

Mining activities are associated with pollution and loss of fertility of soil after mining in the province and this is of great concern. This is a threat to food security if not properly managed. The other major challenge is water contamination due to mining activities, there are no rehabilitation programmes to cater for post mining .mining if not properly monitored has a potential to compromise future tourism opportunities as it degrade the heritage of the province. A number of challenges that relate to mining were identified and they include skills shortage, minimal enforcement and compliance to mining legislation, social labour plans not properly crafted to benefit communities, local employment being a challenge, shortage of infrastructure for human settlement and the degradation of roads infrastructure due to mining activities etc. The South African Mining Sector is not only faced with high level of shortage of critical skills, there are other negative factors such as the scourge of HIV/AIDS hat might affect the sector negatively

#### **2.2.4. Manufacturing**

In terms of provincial contribution to national GVA, Mpumalanga occupied fifth place among the nine provinces in 2009. Mpumalanga's share was 7.7 per cent in 2009, slightly higher than the shares recorded in 2001 (7.0 per cent) and 1996 (6.7 per cent). Manufacturing was the largest contributor to the provincial economy with a 20.1 per cent share of Mpumalanga's GVA in 2009. Manufacturing activities were predominantly situated in Gert Sibande (55.5 per cent) followed by Nkangala with a 25.7 per cent contribution to provincial manufacturing GVA.

The expected future growth of 3.8 per cent per annum from 2009 to 2014 will be higher than the provincial economy's forecasted 3.2 per cent growth. The employment elasticity of manufacturing was calculated to be 0.56 over the period 1996 to 2009. Manufacturing was the fifth most labour productive sector in the provincial context. The manufacturing sector exhibited a low level of labour intensity as the industry is characterised by capital intensive processes. Therefore, despite the drive to expand the province's manufacturing sector, the manufacturing sector is not expected to contribute as much to employment growth as it will to economic growth.

#### **2.2.5. Trade**

Mpumalanga, with a 5.3 per cent share, occupied seventh place among the nine provinces in 2009, the same position as in 1996 although its share was marginally lower than the 5.6 per cent registered then. The sector contributed 11.1 per cent to the total GVA of Mpumalanga in 2009 – the fifth largest sector in the province. The district with the largest contribution to provincial trade GVA in 2009 was Ehlanzeni with a 44.9 per cent share. Nkangala added 29.6 per cent whilst Gert Sibande's share was 25.4 per cent.

The forecasted growth of 3.5 per cent per annum between 2009 and 2014 is expected to be the fourth highest among the nine sectors in Mpumalanga. The employment elasticity of the trade sector (2.00) was the highest among the nine sectors. The trade sector was only the seventh most labour productive industry in the provincial context. The trade sector exhibited a high level of labour intensity because of the labour intensive nature of business enterprises in the sector. Despite the sector's relatively low labour productivity, it is likely that the sector will remain an important employment driver due to its size, healthy economic growth and favourable employment elasticity.

### **2.2.6. Tourism sector**

In South Africa, as is the convention internationally, the tourism sector is not measured as a sector in its own right in national accounts, because tourism is not a clearly defined industry in the SIC. This is because industries are classified according to the goods and services they produce, while tourism is a consumption-based concept that depends on the status of the consumer.

Tourism was therefore the first economic activity to use worldwide Satellite Account standards to measure its impact on national economies – as approved by the United Nations (UN) in March 2000. A Satellite Account is a term developed by the UN to measure the size of economic sectors that are not defined as industries in national accounts.

However, since full tourism satellite accounts (TSA), as measured by Statistics South Africa, take considerable time and resources to develop, the World Travel and Tourism Council (WTTC), an independent body, produces simulated TSAs on an annual basis. For example, the first Draft Tourism Satellite Account for South Africa, 2005 was only released in May 2009, whereas the WTTC annually releases its simulated TSAs.

According to the WTTC, South Africa's tourism industry was simulated to have contributed some 2.9 per cent to GDP in 2009. South Africa's 389 000 tourism industry jobs accounted for 2.9 per cent of total employment in 2009 and are forecasted to total 462 000 jobs or 2.9 per cent of the total by 2020. In other words the tourism industry generates one in every 34 jobs across the entire employment spectrum. The current lack of sufficient baseline data of tourism supply on a provincial level makes an assessment of the supply side, and therefore a similar exercise such as the TSA for South Africa on a provincial basis, impossible. Therefore the only official tourism data, on a provincial level, are of tourist arrivals/visits, bed-nights spend and tourism expenditure.

According to Tourism South Africa's Annual Report 2009, Mpumalanga was the third most visited province by foreign visitors in 2009 with a share of 14 per cent of total foreign arrivals. This was up from 13.4 per cent of total arrivals in 2008. Of this 1 390 755 foreign tourists in the province, 76.6 per cent were from land markets (i.e. Mozambique and Swaziland) and 23.4 per cent from air markets. Mpumalanga, however, captured only 6.7 per cent of the total bed-nights spent by all foreign tourists in South Africa. This was lower than the 7.2 per cent in 2008, although the province remained in fourth position overall. Of this 4.8 million bed-nights spent in the province in 2009, 53.9 per cent were by tourists from land markets and 46.1 per cent from air markets. Over 128.4 million bed-nights were spent nationally by domestic tourists in 2009, of which Mpumalanga contributed 5.6 per cent or some 7.2 million bed-nights. Despite declining from a 6.8 per cent share of domestic bed-nights in 2008, the province remained in sixth position nationally.

### **2.2.7. Community services**

In terms of provincial contribution to national GVA, Mpumalanga was placed second from last among the nine provinces in 2009. Mpumalanga's undersized share of 4.9 per cent was slightly higher than the 4.7 per cent it contributed in 1996. Despite the small national contribution, the sector was the third largest sector provincially with a 16.4 per cent contribution to the total GVA of Mpumalanga in 2009. The districts' GVA contribution was dominated by Ehlanzeni with a 45.2 per cent share of provincial GVA. Nkangala was second and Gert Sibande third with contributions of 32.2 per cent and 22.6 per cent, respectively.

Future growth, that is expected to be around 3.4 per cent per annum, will exceed the provincial economy's forecasted annual average 3.2 per cent growth from 2009 to 2014. The employment elasticity of community services (1.60) was the third highest of all nine sectors. In the provincial context, only three other sectors performed lower in terms of labour productivity. The community services sector exhibited a high level of labour intensity. Despite the low labour productivity registered, the high labour absorption potential as well as the evidence deduced from the high employment elasticity it is likely that the sector will be an important employment driver.

### 3 THE MPUMALANGA ECONOMIC GROWTH AND DEVELOPMENT PATH

#### 3.1 Strategic objectives

The primary objective of the Mpumalanga Economic Growth and Development Path (MEGDP) is to foster economic growth that creates jobs, reduce poverty and inequality in the Province.

#### 3.2 Mpumalanga in the next ten years

- 3.2.1** According to the latest statistics, the **unemployment rate** in Mpumalanga is standing at approximately **28 %**. As the Province we are aiming at reducing the **unemployment rate** to **15%** by 2020. According to the analysis conducted, this means that the Province has to create approximately **719 000 jobs** over a period of ten years, that is, moving from **890 000 currently employed** people to **1 609 656** employed people in the next ten years
- 3.2.2** With regard to **poverty**, the Province will increase the income level of **620 000** individuals above the **poverty line** by 2020.
- 3.2.3** Increase the Human Development Index (HDI) from the current level of 0.50 to a higher level over the next ten years. The Province will increase the literacy level from the current 40 000 per annum individuals to 63 000 individuals per annum, increase the percentage of life expectancy from 51 years to 62 years.
- 3.2.4** Relating to **inequality**, the Province will reduce the Gini-coefficient from **0,65 to 0,55** by 2020.
- 3.2.5** For the province to realise these broad targets indicated above, the provincial economy has to grow at the rate of between **5 and 7 percent** per annum.

The following main economic sectors have been identified as key to spur economic growth and employment creation:

##### 3.2.5.1 Sectors to support economic growth and employment creation

- a. Agriculture and forestry
- b. Mining and energy
- c. Manufacturing and beneficiation
- d. Tourism and cultural industries



The following job drivers will be utilised to secure a strong and sustainable growth in the next decade.

### 3.2.4.2 Job Drivers

#### a. Main economic sectors

##### 1. Agriculture

The contribution of the agricultural sector to GDP by Mpumalanga has been declining in the past ten years or so and consequently shedding jobs in the process.

However, analysis is also showing that, despite this declining trend in production and job absorption over time, this sector is still not exploited to its optimal level yet. There is potential for growth and generation of more jobs. This sector can grow through research to improved farming techniques, improved cultivars, higher productivity, and skills development, increase value adding and agro-processing.

#### Opportunities in the agricultural sector

These jobs will be generated from existing opportunities in crop and animal production, including the entire value chain.

In the Lowveld area, largely the Ehlanzeni district, focus will be placed on the production of sugarcane, nuts, vegetables, citrus and sub-tropical fruits.

In the Highveld area, which includes Gert Sibande and Nkangala districts, crops that will be prioritised are summer grains, oilseeds and deciduous fruits. Animal production will also be given special attention in these districts.

***In the light of these opportunities, the province is targeting to create approximately 27 000 jobs in this sector in the next ten years. However, there are certain bottlenecks that will need to be resolved.***

#### Constraints to be addressed

To exploit these opportunities optimally, there are bottlenecks that will require urgent attention. This includes, primarily:

- **Inadequate water for irrigation**

Water is a scarce resource in the province. Unfortunately, for sustainable development to take place in the province, adequate water will be required. Agriculture and mining are the major consumers of water currently. However, to exploit the opportunities in the agricultural sector for growth and job creation, additional allocation of water will be imperative for irrigation, especially for small-scale farmers.

- **Outstanding land claims**

Access to land for economic growth and development is critical in the province. Some of the prime land for this purpose is still under claim. It is lying fallow because the claimant and business could not invest in it due to high risk. This has a negative impact on economic growth and development, including job creation. Therefore, a speedy process to settle all claimed land could assist in releasing land for growth and job creation.

- **Access to land**

Land is one of the most important factors of production. Land distribution is still skewed in the province. The land reform legislation, policies, strategies and programmes initiated thus far have failed to accelerate the distribution of land as expected. Of critical importance is that, if we have to bring more people in the mainstream economy, the process of land distribution has to turbo-charge. This will allow growth of small-scale farmers and agri-businesses in the agricultural sector, subsequently economic growth, development and job creation.

- **Competition between mining and arable land**

The agricultural sector is competing with other land users for the same land. Most notably are the expansion of the mining industry and urbanization. This has serious implications on land reform and food security. The protection of high potential and productive agricultural land is necessary because of its sustainability in terms of food security, growth and job opportunities.

#### **Key areas for intervention to facilitate growth and job creation in the agricultural sector**

1. Massive drive on infrastructure development. This includes, among other things: dams, irrigation, farm roads, silos, pack houses, mechanisation, electricity and infrastructure for agro-processing
2. Massive drive in skills development
3. Comprehensive support to small-scale farmers and agri-businesses
4. Fast-track the settlement of the outstanding land claims
5. Optimal utilisation of restituted and distributed land
6. Increase acquisition of agricultural land for the previously disadvantaged
7. Revisit current legislation to create balanced development in areas of competition between mining and farming

#### **2.1 Forestry**

Mpumalanga is one of the country's major areas in forestry production and accounts for 22.8% of the country's forestry GVA. Mpumalanga further accounts for 40% of the total

forestry income of the country. This sector is currently employing 24 400 people in sustainable jobs and contributing to 46 300 indirect jobs.

The north-eastern part of the province, that is, around Sabie and Graskop, is regarded as the hub of the commercial forest, including the Mkhondo municipality and the adjacent areas bordering Swaziland.

The industry is extensively commercialise and run sophisticated processing plants, ranging from sawn logs to pulp and paper, and board production.

The commercial forest sector offers attractive business opportunities for small-scale entrepreneurs, particularly growers, contractors and saw-millers. In addition, the pulp and paper industry in the province creates income opportunities for waste-paper vendors.

### **Opportunities in the forestry sector**

The forestry sector presents opportunities that have the potential for economic growth and job creation. These opportunities range from community forestry to charcoal production, afforestation, industrial forestry, multiple-use forestry and forestry protection. Let us look at these key areas individually.

#### **Community forestry**

Community forestry has the potential to contribute substantially towards sustainable development, poverty alleviation and job creation, particularly in rural areas. The Whitepaper on Sustainable Development defines community forestry as forestry designed and applied to meet social and environmental needs of local households. It is a policy that fosters community-driven development.

#### **Charcoal production**

According to the study conducted by the Department of Water Affairs and Forestry on charcoal production, it is argued that the production of charcoal is concentrated in the Natal midlands and the South- Eastern areas of Mpumalanga. The study also showed that there is a growing demand for charcoal in South Africa. Therefore, this opportunity of charcoal production is seen as ideal for SMMEs development. Some large charcoal producers have also shown an interest in forming joint ventures with small-scale producers to secure huge charcoal supplies on a regular basis. They are often prepared to provide funding, training and the initial investment required for small-scale production plants.

#### **Afforestation**

Afforestation is the conversion of bare or cultivated land into forest. The White Paper on Sustainable Forest Development, as assessment by the Department of Water Affairs, indicates that most of the land which is suitable for afforestation lies in Mpumalanga, KwaZulu-Natal and the Eastern Cape. This provides Mpumalanga with a window of opportunity to take full advantage of exploiting its underutilized land. The increase or enhancing of new afforestation is a good mechanism of increasing round-wood supply.

#### **Industrial forestry**

Industrial forestry includes large planted forests, established for the purpose of supplying raw materials to the mining sector, construction and other industrial markets. Wood as raw material also provides value adding opportunities. Most of South Africa's wood demand is met predominantly from industrial forest plantations. Common industries based on wood/forestry include the pulp and paper sector, which have proved to be internationally competitive.

#### **Multiple use forestry**

Multiple use forestry occurs in cases that forestland is utilized for purposes other than wood supply. These products include non-wood or minor forest products and the utilization of forests for recreation and tourism. This also presents good opportunity for job creation.

#### **Forest protection**

Protection of the conservation and commercial value of forests necessitates protection of forest areas from potentially harmful effects of diseases, weeds, pests (including feral animals), chemicals and wildfire. Government gives high priority to the protection of public forests from these agents. Further, since public and private lands are closely linked, active protection of public forests needs to be coordinated with appropriate action on private lands. Therefore, this area of work also presents opportunities for job creation.

***Given these opportunities in this industry, the province is targeting to create 4500 jobs by 2020. Like in the agricultural sector, there also some constraints that has to be resolved in this industry.***

#### **Constraints to be addressed**

- Inadequate water for forestry expansion

Mpumalanga has an immediate opportunity to create 750 sustainable jobs and ----- indirect jobs. These jobs could be generated from 15 000 ha which is readily available in the Province. However, non-availability of water is a serious bottleneck limiting the expansion of the forestry industry.

- **Land claims**

The slow rate of settling land claims under forestry limits prospects for economic growth and job creation in the industry. Addressing this challenge will create more opportunities for land claimants and agri-businesses.

### **Key areas for intervention to facilitate growth and job creation in the forestry sector**

1. Resolve water issues to foster expansion in the forestry industry
2. Accelerate settlement of land claims under forestry
3. Comprehensive support to SMMEs, particularly cooperatives.
4. Invest in infrastructure

### **3. *Mining and energy industries***

#### **Mining**

Mining industry remains one of the important economic sectors in the Province for economic growth and job creation. Studies show that Mpumalanga Province is endowed with a variety of mineral resources. Among others, the Province is blessed with gold deposits in the areas of Leandra, Kinross, Evander, Sabie, Pilgrim's Rest, Graskop and the Barberton Mountain Land.

It is the largest producer of coal and represents 76.6% of coal production in South Africa followed by Free State at 8%, Limpopo at 7.5% and KwaZulu-Natal at 1.4%. It is also the third largest coal exporting region in the world.

It is the largest producer of ferrochrome and represents 75% of ferrochrome production in South Africa followed by North West at 18%, Kwa-Zulu Natal at 3%, Limpopo at 3% and Gauteng at 1%.

It is having deposits of granite, gabbro, marble and verdite. Granite operations are located in the eastern part of the Province near Nelspruit as well as in the middle clustered around Belfast and Emalahleni.

Mpumalanga Province is the largest producer of ferrochrome and represents 75% of ferrochrome production in South Africa followed by North West at 18%, Kwa-Zulu Natal at 3%, Limpopo at 3% and Gauteng at 1%.

Mpumalanga is also possessing platinum deposits which are at edges of the Eastern Limb of the Bushveld Complex in the Roossenekal area. Platinum is also recovered at the Nkomati Nickel mine near Machadodorp.

### **Opportunities in the mining industry**

Recent studies conducted by the Province show that opportunities in the mining industry will come from these key commodities comprising of coal; chrome; gold; and dimension stones, now of recent is platinum. These commodities are critical for growing the economy and creating jobs as are easily accessible as deposits are located close to or at surface, whether in dumps or un-mined deposits. They are in high demand in the local market and hence there is a level of market demand that continuously persists; and the capital outlay required for some projects are not excessively high to preclude pursuing.

### **Strategic procurement**

The studies further show that in recent years the largest cause for the emergence of new enterprises has been the changes made in procurement patterns. The significance of this is captured in the Mining Charter where rural enterprise development and procurement objectives are both noted as two areas where transformation will occur.

### *Corporate Social Investment Activities*

Another conduit for enterprise development and job creation involves Corporate Social Investment activities by mining companies operating in Mpumalanga. These companies interface at several levels with adjacent communities and with businesses. As a result, they provide a range of opportunities for upliftment and entrepreneurship development.

Statutory regulation under the *Mineral and Petroleum Resources Development Act* is one of the important instruments that is assisting in this regard. The Act compels mines to have Social and Labour Plans approved by the Department of Mineral Resources (DMR) in terms of which socio-economic developments undertaken by the mines are to be in line with the Integrated Development Plans (IDP) of local municipalities where mines are situated. In essence, it supports activities geared towards the growth of SMMEs, community participation and BBBEE arising from Corporate Social Investment initiatives by major mining companies operating in the Mpumalanga Province.

### **Beneficiation**

The development of a **centralised mining refinery** may be important to act as a centre where consolidation of production can occur. Currently the large Rand Refinery in Springs, Gauteng, processes most of the output and spare capacity at this refinery acts as a means to deter further refinery installation. However, small scale refineries could be beneficial if local output is to be used for further beneficiation.

#### **Retreatment of sub-economic deposits and dumps**

The retreatment of sub-economic deposits and dumps can be considered for local development. Most mines (predominantly coal mines and some gold mines) have stockpiles of sub-economic coal ore that, when treated at smaller scales, can be made viable due to different operational requirements.

The coal deposits in Mpumalanga are predominantly used locally for energy production, the expansion of the energy sector presents many job opportunities. However some small niche markets are available (metallurgical coal or washed coal for unique uses) can be explored. This can particularly encouraged around small high grade deposits that are typically overlooked by larger companies.

Consolidation of the output of smaller operators can be done to achieve better economies of scale. This can be centralised with Provincial support.

#### **Mining of dimension stone**

Dimension stone mining is **labour intensive** and the increase of export infrastructure (dimension stone mines are closely linked to international demand) within the province will lead to an increase in mining operations.

One of the lucrative components of dimension stone mining lay in the profit pools that exist around transport. The transporting of dimension stone, from the province to the largest markets in Gauteng can provide numerous SMME opportunities.

Export via Maputo may present a unique opportunity to move dimension stone outside of the Transnet infrastructure which is not specifically geared to low volume exports of such products.

Reprocessing waste for road paving around municipal buildings that is both labour-

intensive and creates an attractive civic space.

***Given these opportunities in this industry, the province is targeting to create 39000 jobs by 2020***

#### **Constraints to be addressed**

Critical barriers to advancing mineral development in the Province include, among other things, the following:

- Inadequate water supply
- Energy insecurity
- Skills availability
- Land claims
- Competition between mining, agriculture and human settlement
- Inadequate infrastructure

#### **Key areas for intervention to facilitate growth and job creation in the mining industry**

1. Upgrading and maintenance of the coal haulage network
2. Increase the level of higher skilled graduates
3. Expand the water network and increase reliance on water transfer schemes
4. Increase South Africa's base load and improve alternate energy supply
5. Establishment of a mining supplier park to enhance enterprise development in the province
6. Resolve land claims to release land for development
7. Comprehensive support to small-scale mining enterprises to exploit opportunities presented by corporate social investment initiatives, retreatment of sub-economic deposits and dumps, and dimension stones.

#### **Energy industry**



The generation of electricity through coal-fired power stations in South Africa takes place primarily in Mpumalanga. Of the 24 power generation facilities owned by Eskom in the country, 13 are coal-fired power stations. Eleven of the currently operational coal-fired power stations in the country are situated in Mpumalanga and contribute roughly 76% of the total electricity generated in South Africa. In addition, the three Eskom return-to-service (RTS) coal-fired power stations are also situated in Mpumalanga. This industry is also contributing directly and indirectly to economic growth and job creation.

### **Opportunities in the energy industry**

Eskom is in the processes of building new generation and transmission capacity. It is argued that South Africa would require additional 20 000 MW by 2020. The following initiatives taken by Eskom present opportunities for economic growth and job creation:

#### **The New Build Programme**

The New Build Programme involves three massive projects, namely, Medupi in Lephalale, Kusile in Delmas, and Ingula in Ladysmith. These projects will:

- Contribute to economic growth of the country and create employment opportunities
- Empower the industrial development
- Ensure the continuous supply of power in grid
- Build capacity and confidence for the future needs of the country
- Provide opportunities for new technologies in renewable energy

#### **Social Corporate Investment**

Eskom has a section 21 company, The Eskom Development Foundation, responsible for executing Corporate Social Investment (CSI) initiatives on their behalf. The CSI programme contributes towards the improvement of the quality of life of communities where Eskom operates. It supports social and economic projects that primarily focus on initiatives for education, skills development, poverty alleviation and job creation. In Mpumalanga, the Foundation has granted overall funding of over R11.8m over the last four years, impacting over 200 000 people.

#### **Re-commissioning of old power station**

The re-commissioning of old power stations presents opportunities for economic growth and job creation, particularly in your forward and backward linkages.

#### **Constraints to be addresses**

- Inadequate water supply for expanding power generation
- Negative impact of coal mining and coal-fired power stations on environment and underground water
- Inadequate infrastructure to unlock economic growth and job creation opportunities

- Shortage of skills, particularly engineers, artisans and project managers

#### **Key areas for intervention to facilitate growth and job creation in the energy sector**

1. Resolve water supply bottlenecks
2. Invest in infrastructure, that is, dams, power stations, roads, rail, etc
3. Enhance the requisite skills
4. Comprehensive support to SMMEs to exploit opportunities presented by Eskom

#### **5. Manufacturing and Beneficiation**

Analysis shows that Mpumalanga has seen increasing prominence of secondary and tertiary activities over primary activities in the sectoral composition of the Province's GDP. The manufacturing sector is also one of the largest contributors to the economy of Mpumalanga and is projected to remain the largest earner in the economy, followed by mining and quarrying and, community and government services, trade and finance.

In terms of employments figures for the third quarter 2010, manufacturing is further shown as one of the biggest absorbers of employment after trade (24%), community services (19%), Finance (10%), manufacturing (9%) and construction (8%).

Evidently, the manufacturing sector remains critical to economic growth and job creation in the province.

#### **Opportunities in the manufacturing sector**

Given the mineral resources that the Province is endowed with, investment in the manufacturing sector could increase its current capacity and contribute to economic growth and job creation, particularly if more focus could be given to beneficiation and agro-processing.

In the ferrochrome industry, there is potential for a new smelter to be established in the Province which can create a number of job opportunities. This industry has readily available markets locally and internationally. The extension of the value chain into the Province, will be encouraged as it will result to more jobs. The availability of critical inputs will support this.

*In terms of the analysis conducted, the province is targeting to create 47 000 jobs in the next ten years.*

#### **Constraints to be addressed**

- Infrastructure development
- Access to funding
- Non-availability of requisite skills

### **Key areas for intervention to facilitate growth and job creation in the manufacturing sector**

1. Invest in industrial infrastructure to encourage enterprise development
2. Enhance skills development, especially in the areas of engineering, artisan, business and project management.
3. Provide comprehensive support to SMMEs development

### **6. *Tourism and cultural industries***

Tourism and cultural industries are other important sectors of the provincial economy. These industries also contribute meaningfully towards economic growth and job creation. The wealth of natural and cultural resources that Mpumalanga possesses provides it with a base upon which to develop a sustainable industry. This will include attractions such as the world renowned Kruger National Park with its diversity of wildlife, the world's 3<sup>rd</sup> largest canyon – Blyde River Canyon, breathtaking vistas from the Bulembu Mountains, a diversity of flora and the world's oldest exposed rocks in Barberton, Wetlands and much more.

The Mpumalanga Tourism Growth Strategy (2007) argues that Mpumalanga has the potential to be a premier international and domestic tourism destination if it could translate this resource base into a significant tourism industry

#### **Opportunities in the tourism and cultural industries**

Analysis from the Mpumalanga Tourism Growth Strategy shows that the tourism products of Mpumalanga could be diversified and expanded to cover a wide range of product market segment. The following key areas have the potential for economic growth and job creation:

- wildlife & nature tourism,
- activity & adventure tourism,
- resort tourism, sports tourism,
- residential tourism,
- conference & meetings,
- leisure/entertainment,
- industrial & township tourism, and
- Cultural heritage

#### **Constraints to be addressed**

To grow the tourism and cultural industries to higher levels and create more jobs, reducing poverty and inequality, the following constraints will have to be addressed:

- Infrastructure for different tourism products
- Skills shortage
- Funding

### **Key areas for intervention to facilitate growth and job creation in the tourism and cultural industries**

Broadening and diversifying the primarily nature-based tourism product offerings of Mpumalanga into more main-stream segments of the market such as sports events, business/conference meetings, theme/amusement park, and subsequently grow the economy that create jobs, the following key interventions will be critical:

1. Sustained investment in all aspects of the industry – new products, destination marketing, human capital development in the service industry
2. Investing in economic infrastructure, e.g., airport, International Conference Center, Sports Academy, roads for tourism routes, etc.
3. Comprehensive support to SMMEs to exploit opportunities in the tourism and cultural industries.

#### **b. New economies**

With regard to the province as far as new economies are concerned, focus will be placed on the green economy and Information, Communication and Technology. Looking at the economic situation of the Province, these two areas of work will provide Province with new opportunities for economic growth and development.

##### **The Green Economy**

The use of coal for energy production results in both the primary environmental impacts associated with the mining and removal of coal for use in coal fired power stations in the province, as well as the secondary impacts resulting from the burning of this coal for energy production. Coal intensive activities contribute to large-scale water and air pollution, including significant carbon dioxide emissions, which contribute to global warming.

While energy is key for the socio-economic developmental objectives of the Province, it is obvious that there has not been enough focus on renewable energy development as a key aspect of this developmental agenda. In order to adequately address the information gaps and to allow the Province to meet its integrated energy needs for sustainable socio-economic development, there is a need for research to be conducted on a number of key areas with a view of developing an Integrated Renewable Energy Plan for the Province. This will include research work in areas such solar energy; biomass (bagasse; wood-waste (saw-dust, wood off-cuts, etc.) and putrescible waste (including municipal solid waste, abattoir waste) and Hydro-power.

The work on Bio-fuels in the Province has already set the scene for extensive research for other sources of renewable energy.

## Information, Communication and Technology (ICT)

The South African government has noted the potential to leverage Information and Communications Technologies (ICTs) to facilitate and promote growth in the economy and the country. The Mpumalanga Provincial Government (MPG) acknowledges that there is a worldwide shift from a natural-resource based economy to innovation and the knowledge Economy and that ICTs are a powerful enabler that, if correctly harnessed and deployed, can result in the development of many sectors in the Province.

The era of the information revolution necessitates that the Mpumalanga Provincial Government should take advantage of technology in the design of its programmes and this will result in significant improvements in business opportunities, household income, quality of life, time saving as well as general access to sources of information and knowledge.

### Constraints to be addressed

The ICT sector in Mpumalanga has seen slow growth over the years due to a number of factors which include a combination of the following:

- The lack of a more competitive telecommunications landscape that offers reduced, competitive pricing to consumers
- The lack of ICT skills development in the province
- Access to ICT infrastructure

### **Key areas for intervention to facilitate growth and job creation in the green economy and ICT**

1. Invest in research for new technologies to promote green economy
2. Invest in infrastructure for ICT development
3. Train and assist SMME's to provide them with the necessary tools for moving their businesses on-line

### **c. Rural development**

Mpumalanga is a rural Province. The majority of the people who live in rural areas are very poor. The unemployment level is very high and most of the people are illiterate. Access to basic services is still a huge challenge. The income levels are also low since most of them rely on government grants and remittance from those working at urban areas.

Government has placed rural development as one of its key priorities. The Comprehensive Rural Development Programme is a tool that government is utilising to intervene in rural areas.

While this programme is meant to improve the lives of the people, it has also a huge potential for economic growth and job creation, especially in the area of infrastructure development (both economic and social infrastructure).

This programme will be utilised largely to bring the **620 000** individuals above the **poverty line in the next ten years**.

#### **d. Regional and international cooperation**

The proximity of Mozambique, Swaziland and the other SADC countries, including the memoranda of understanding signed with few overseas countries, provide Mpumalanga with trade, investment and tourism opportunities. With regard to our neighbouring countries, road, rail and air infrastructure is key in terms of facilitating trade and other economic opportunities.

#### **e. Infrastructure as a major job driver**

Infrastructure development is one of the key drivers for economic growth and job creation. All the sectors that have been discussed above rely, in the main, on infrastructure development for their own growth and development. Investment in massive infrastructure development by both government and the private sector will go a long way in terms of unlocking opportunities for economic growth and development, including massive jobs. In essence, for the Economic Growth and Development Path to succeed, infrastructure development will be critical.

The Mpumalanga Infrastructure Development Plan (MIDP) will guide the Province with regard to the rollout of infrastructure projects. The Plan is covering both the economic and social infrastructure.

What is also worth noting is that the Expanded Public Works Programme will feature high during the roll-out of the Infrastructure Plan.

## 3.2 Infrastructure Projects

### A. Economic infrastructure

Economic Sector	Project	Location
Agriculture	Fresh produce market	Ehlanzeni
	Sugar Mill Plant to support SMMEs in sugarcane production	Nkomazi
	Bio-fuels Plant	Gert Sibande
	Construction of two dams/irrigation mechanisation	Ehlanzeni
Forestry	Paper and Pulp Production Plant to support SMMEs in the forestry industry	Ehlanzeni
Mining	Mining supplier Park	Ehlanzeni
Manufacturing	Ferrochrome smelter	
	Industrial Parks	
Tourism and Cultural Industries	International Convention Centre (ICC)	Ehlanzeni
	Theme/Amusement Park Resort(Afro Disney Concept)	Nkangala
	Commercialisation of state reserve parks	All districts
	African library	
	Sports Academy	
	Craft Hub	
ICT	Installation of broadband infrastructure particularly in rural areas	All districts
Transport	Upgrading of the coal haulage	Nkangala, Gert Sibande
	Moloto rail development corridor	Nkangala
	Delmas cargo Terminal	Nkangala
	Komatipoort Logistics Hub	Ehlanzeni
Regional Cooperation	One border post (Mozambique and Swaziland)	
	Upgrading of the airport	

b. Social Infrastructure

Focus Area	Project	Location
Education	Establishment of a University	
	Construction of schools	
Health	Establishment of a Tertiary Hospital	
	Revitalisation programme	
Human Settlement	Construction of houses	
	Tarring and Paving of streets	
	Bulk water infrastructure	
Sustainable resource management	Rehabilitation of old mines	
	Mine water purification and reclamation	
	Plant for solar energy to electrify rural areas on a mass scale	

**Sustainability of the Mpumalanga Economic Growth and Development Path (MEGDP)**

For the MEGDP to realise its objectives, it has to be supported by the following plans:

- Provincial Infrastructure Development Plan
- Provincial Water Management Plan
- Energy Distribution Plan
- Provincial Skills Development Plan
- Provincial Spatial Development Plan
- Provincial Bio-diversity Plan

**Institutional Arrangements**

The recent Outcome-Based Approach introduced by government provides institutional arrangement adequate enough to support the implementation of the MEGDP. The Implementation Fora, as indicated by the Approach, provide the necessary platform for consultation and joint decision making on issues that affect all stakeholders. The Implementation Fora that deal with economic issues and led by the different Members of the Executive Committee will be responsible for driving the economic development agenda of the Province.



### **Monitoring and Evaluation**

The Office of the Premier will be responsible for the Monitoring and Evaluation of the implementation of the MEGDP. However, it will be working together with Departments, municipalities, private sector, labour and communities in the monitoring of the implementation plans related to this growth path.

### **Programme of Action**

The programme of Action will be developed after consultation with stakeholders.

## REFERENCES

1. Industrial Policy Action Plan 2 (IPAP 2)
2. Provincial Growth and Development Strategy (PGDS)
3. Regional Industrial development strategy (RIDS)
4. Draft Mpumalanga Provincial Economic Development Strategy 2008: A Strategy for Globally Competitive Provincial Economy, Mpumalanga Province
5. Department of Economic Development, Environment and Tourism, Draft Mpumalanga Information Communication Strategy 2009
6. Department of Economic Development, Environment and Tourism, Draft Mpumalanga Cooperatives Strategy 2008
7. Department of Economic Development, Environment and Tourism. Revised SMME Development Strategy, Mpumalanga Province 2008

## **ANNEXURE 1**

1. Provincial Infrastructure Development Plan
2. Provincial Water Management Plan
3. Energy Distribution Plan
4. Provincial Skills Development Plan
5. Provincial Spatial Development Plan
6. Provincial Bio-diversity Plan