

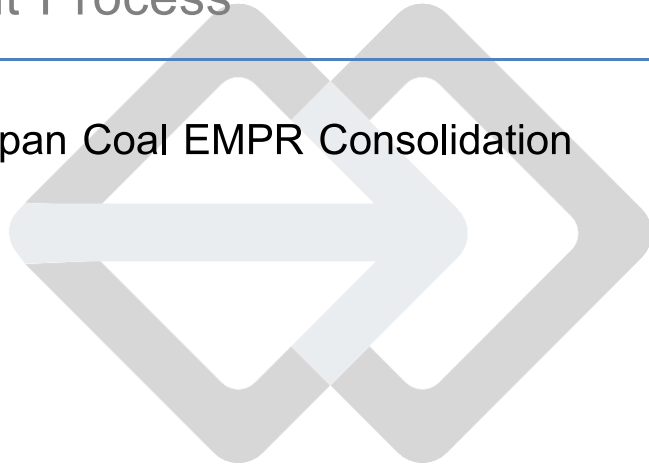


Appendix N

Socio Economic Study

Scoping Report as part of the Economic Impact Assessment Process

Exxaro Leeuwpán Coal EMPR Consolidation



1. Preliminary Baseline Information

1.1. Macroeconomic issues of importance

Due to the integrated nature of the South African economy and the heavy reliance of rural areas on urban centres for goods, services and labour, it is important to consider high-level economic forces. Such forces help to understand and define local impacts and effects in the area in which the project operates.



Name	Description	Implications relating to the project area
Return of energy and resources demand	<p>A mild and gradual economic recovery has led to a return of the demand for resources and energy from both the developed world as well as large middle income countries such as Brazil, India and China. The trend can be seen in the high price of export Coal (between \$55 per ton and \$75 per ton) and in current oil prices (between \$100 and \$125 for the last 12 months. Additionally, continuous South African and worldwide population growth makes long term resource and energy growth inevitable.</p>	<p>The project area is expected to experience increased interest from mining operations in order to capitalise on resource demands. The DM may further lose productive agricultural land as mineral deposits that were previously not economically viable become so. Operations which have been marginally profitable during the economic downturn may return to profitability in the near future if the current trends continue and global resource demands recover fully.</p>
International focus on clean energy	<p>The development of renewable energy feed-in tariffs and recent comments by the International Monetary Fund (IMF) regarding a preference for financing cleaner energy during the application by Eskom for project financing are likely to influence the energy sector. They may also increase public resistance to traditional generation</p>	<p>Coal producers (such as those found in the Nkangala District Municipality area) may be affected in the long term as an increasing number of renewable Independent Power Producers attempt to provide energy to the grid and provide off-grid solutions. These IPPs may benefit from better economic viability due to increasing economic policy incentives for renewable</p>

methods, leading eventually to policy shifts and further energy.
economic incentives for cleaner energy such as tax advantages and rebates.

Large scale water groundwater and surface water impacts in coal mining areas

There is a growing body of evidence that suggests that widespread coal deposit exploitation in the Mpumalanga highlands has results in significant water quality impacts, and that high quality potable water is increasingly difficult to obtain. For example, the Olifants river catchment is known to be one of South Africa's most degraded rivers because of impacts primarily from coal mines (WWF, 2011). This has increased the costs associated with potable water supply and water treatment.

The further expansion of mining projects in the Delmas area is likely to contribute to this trend, and water treatment costs, economic impacts on agriculture and health costs as a result of water impacts are possible. This impact may or may not be relevant, as determined by the results of the ground and surface water impact studies.

1.2. Regional and Local Economic Composition and Trends

Information below on the regional and local economic sectors were sourced from the Department of Economic Development and Planning, Mpumalanga Provincial Government, Nkangala District Municipality (DM), Delmas Local Municipality (LM) and the Department of Cooperative Governance and Traditional Affairs.

The site is located within the Delmas Local Municipality area and the Nkangala District Municipality area. The economic growth rate of the Nkangala DM area was 3% average per year between 1996-2003, compared to 2% for Mpumalanga province and the national average of 2.5%. Nkangala contributed 3.32% to the national economy in 2003, compared to the 6.87% contribution by Mpumalanga province to the national economy (Department of Cooperative Governance and Traditional Affairs, 2005). The overall economic growth for the Nkangala DM area declined to 1.9% during the period 2005-2007 (Mpumalanga Provincial Government, 2008). These statistics are outdated, but reflect the most recent information that could be sourced. A more intensive search of growth statistics will be done for the impact assessment phase.

The main economic sectors that are dominant in this district are mining, manufacturing and energy/electricity sectors which contributed 34,1%, 21,8% and 16% respectively to the local economy during 2003 (Department of Cooperative Governance and Traditional Affairs, 2005). The mining contribution is due to the activities of a number of large scale coal miners such as BHPBilliton, Anglo Coal and Xtrata. Mining and electricity activities are concentrated in the area to the south of Witbank and Middelburg, and determine the economic landscape of the DM area. The area surrounding Middelburg (Steve Tswete LM) is the main contributor to agricultural activity. Information from the Nkangala municipality indicates that the Delmas LM area contributes between 3 and 4% to the economy of the DM area, and is dwarfed by the contributions of the Emalathleni and Steve Twete LM areas (between 42% and 47% each).

There is evidence that total output of the agricultural sector has experienced significant levels of growth in the DM area while the mining and minerals sector declined both within the DM area and at a provincial level (Mpumalanga Provincial Government, 2008).

In contrast to these mining dominated LM areas the main sector in the Delmas LM area is trade and hospitality, followed by agriculture. Both mining and manufacturing do however play a major role, contributing just over 10% each. The electricity, gas and water industry contributes less than 5% of the local economy despite the fact that Eskom operates a number of large power stations in the DM area that comprise a large portion of South Africa's electricity generation capacity.

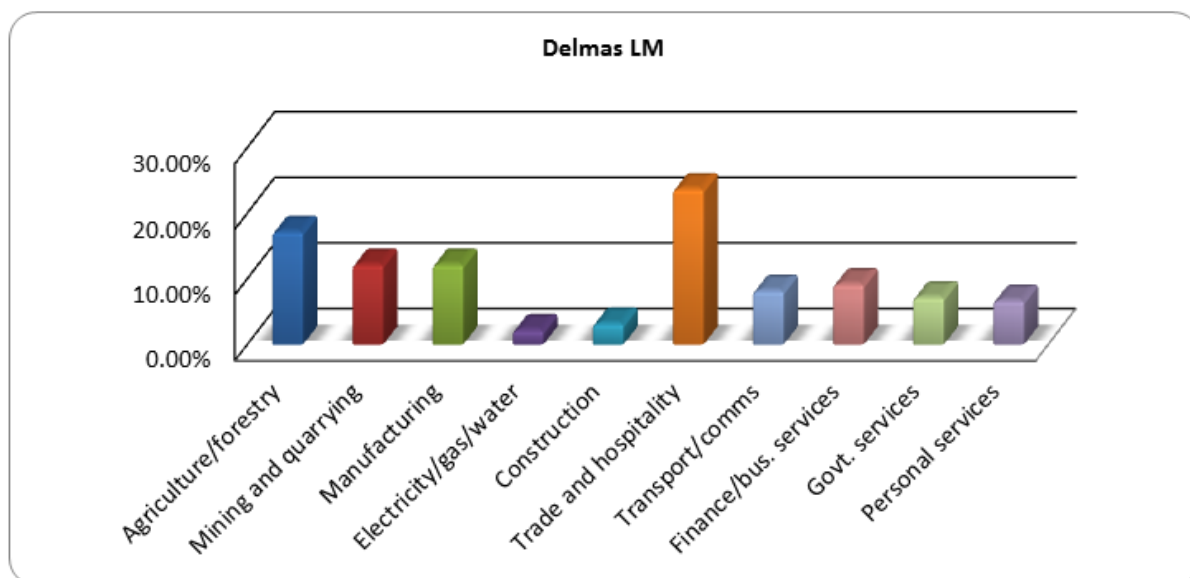


Figure 1.1: Contributions to Delmas LM area GGP

Source: Delmas Local Municipality (2009)

Implications for the project

The economy of the Delmas LM area is currently small compared to other areas in the DM area and the province, therefore economic development and opportunities may be welcomed both by local residents and government, depending on how environmental impacts are perceived.

The extent to which local businesses are able to provide services to the project must be

investigated further.

1.3. Site Economic Activity

Large portions on the southern part of the site is characterised by both dry land and irrigated maize or soya farming. Irrigated lands in these areas are watered using central pivot irrigation systems. It seems that crop yields are generally good and farms are generally profitable due to medium to high rainfall received. For example, maize yields in the South-east corner of the site has been estimated as 8.5 tons per hectare (ha) for dry land and 12 tons per ha for irrigated fields. It appears there may be several areas of high-potential agricultural land in the area. This is problematic as the Department of Agriculture has implemented policies against the sterilisation of high potential agricultural land in the Demarcation of Agricultural Land Act (70 of 70), in order not to compromise the food security situation in South Africa. Verification of areas of high agricultural potential is recommended for the impact assessment phase. Subsequent to a site visit on the 11 April 2012, fields irrigated by means of large central pivots were also observed on the Northern border of the site and dry land agriculture was identified on the North-Eastern corner using Google Earth imagery. These areas need to be investigated further through site visits, and conversations with current tenants/owners once identified. Some cattle farming was also observed on the eastern border of the site.



Figures 1.2 and 1.3: Irrigated maize farming and cattle grazing on the site.

At least half the site has already been transformed on the surface due to mining and no other land uses remain. It is likely that mining is a source of significant local employment and business activity in the area, but this must be verified during the impact assessment phase. The current level of supply from local companies to the mine must also be investigated.

Landowners, tenants and workers reside on the site in several locations and the farming operations seem to employ a fair number of workers. Numbers will be investigated fully during the impact assessment phase. Worker villages on the site are found in various levels of formalisation. Some villages have formal structures with services provided, while others seem to be more informal in nature. Although initial indications were that few landowners remain that land inside the site is mostly farmed by tenants, this may not be true. According to H. Potgieter, a landowner in the South-east corner of the site, several farming operations on owned land will be affected by mining activities. The extent of the effect differs for each landowner, and some may lose enough land to make farming unsustainable.

Implications for the project

Loss of agricultural land and production is likely to be the main possible local negative economic impact that must be investigated. This may in turn lead to job losses and decreased revenue for local agricultural suppliers. Resettlement is likely and this may have economic implications. There also likely to be local economic benefit due to the proposed project as well in the form of increased business opportunities that require businesses to be in close proximity to the site.

Preliminary Impact Specification

Based on the site visit and initial investigations the following list of impacts is likely to apply:

Baseline Dimension	Impact	Pos/Neg	Construction	Operations	Closure
Local Employment	Creation of Employment Opportunities	Positive	X	X	
Local Employment	Loss of Employment Opportunities in Agriculture	Negative	X		
Property Values	Increase in surrounding property values due an expectation of mine buyout	Positive	X	X	
Property Values	Decrease in property values of the site as productive agricultural land	Positive			X
GGP	Increase in Economic Output/production due to Project Activities	Positive	X	X	
GGP	Loss of Productive Agricultural Assets	Negative	X		
GGP	Loss of Agricultural Production	Negative	X	X	X
Local Incomes	Hassle Costs Associated with Relocation	Negative	X		
Local Incomes	Increased costs of clean water availability (if water quality impacts have been identified in water related studies)	Negative		X	X

Plan of Study for the Impact Assessment Phase

The anticipated activities for the impact assessment phase are as follows:

- Source final business case documentation from the client
- Source information on current mine supplier profile and employment
- Model regional economic impacts on production/output and employment
- Contact landowners, tenants and workers
- Source property value information, assets, local employment and production information
- Determine localised impacts
- Compose impact assessment report including Environmental Management Plan items derived from the economic assessment

References

Delmas Local Municipality (2009). *Integrated Development Plan 2008-2009*

Department of Economic Development and Planning, Mpumalanga Provincial Government (2008). *Mpumalanga Economic Profile*.

Department of Cooperative Governance and Traditional Affairs (2005). *Mpumalanga Province Project Consolidate*.

Nkangala District Municipality (Undated). *Economic Profile of the Nkangala District Municipality*.

Available online at: <http://www.nkangaladm.org.za/>

WWF (2011). *Coal and Water Futures in South Africa: A case for conserving headwaters in the Ekangala grasslands*.