



KUMBA IRON ORE LIMITED

SISHEN MINE SEAT REPORT 2014

Delivering on our promises with pride

INTRODUCTION TO THE REPORT

A WORD BY THE GENERAL MANAGER

“Going forward, it won’t always be smooth sailing, but I want to emphasise that we are absolutely committed to working towards a sustainable future for the people of the JTG district.”
- Johan van Schalkwyk,
General manager:
Sishen mine



This report explains Sishen mine's socio-economic impact for the years 2012 to 2014. It furthermore provides an outline of the social management measures we have planned for the next three years, ending 2017. We have prepared this report for all our stakeholders who are affected by and interested in our activities. It is my sincere wish that the information contained in these pages will lead to Sishen mine and its stakeholders benefiting from enhanced levels of understanding, greater levels of commitment and closer collaboration.

The concept of mutual benefit is of great importance to us. As such, we share the belief of our parent company, Anglo American, in strong partnerships – with government, communities and businesses. We also subscribe to the pursuit of Zero Harm, and the philosophy of respect for our stakeholders. Based on these principles we continue to work with stakeholders in making a lasting positive contribution to the communities associated with our operation.

Sishen mine is the flagship operation of Kumba Iron Ore and one of the world's largest single-pit, open-cast iron ore mines. We are proud that we are responsible for the bulk of Kumba's iron ore production. We are equally honoured to be associated with the John Taolo Gaetsewe (JTG) district, and strive to co-exist harmoniously with its communities.

Leadership changes

A number of leadership changes occurred during the reporting period. Norman Mbazima took over as chief executive officer of Kumba during the latter part of 2012, while my appointment as general manager of Sishen mine occurred in August 2013.

Using lessons of the past to shape the future

While I do not wish to dwell on the past, it is necessary to recognise that pit constraints and the unprotected strike towards the end of 2012 adversely affected our production. The cumulative effect was that we began 2013 with the realisation that we will not achieve our ambition of producing 41Mtpa.

Our response was purposeful and decisive. We were compelled to look inward, take stock and refine our plans – a positive state of affairs as we will, going forward, reap the rewards of this period of regrouping and recovery.

A concerted effort to execute our strategy

Overcoming hurdles and putting production back on track will not happen by itself. It requires commitment and a willingness to go the extra mile, not occasionally but as a matter of course. We have set ourselves the goal of mining 37Mt of product and 272Mt of waste by 2016, and we plan to do this in a safe manner.

The Sishen leadership and I are cognisant of just how vital it is for us to execute our strategy. The well-being of our stakeholders – employees, government, communities, contractors and shareholders – is inextricably linked to us achieving our objectives. While we are determined to succeed, our task is made more difficult by sharply declining commodity prices and increasing production costs, which are putting the iron ore sector under pressure.

In February 2013 iron ore prices peaked at close to \$160/tonne, and the Kumba share price rose above R600 per share.

That changed in the blink of an eye. At the time of writing this foreword, iron ore prices are about half of that peak and the Kumba share price has descended to below R300. This significantly affects our ability to create value for all our stakeholders, and means that we have to do more with less. Lower profits will, regrettably, erode the resources we have available to assist with socio-economic development.

Going forward, it won't always be smooth sailing, but I want to emphasise that we are absolutely committed to working towards a sustainable future for the people of the JTG district.

Being a good neighbour

During the 2012–2014 period reviewed in this report, we used our core business to deliver socio-economic benefits for local stakeholders. These included benefits such as skills development and local procurement. We made significant direct investments in community development programmes focusing on health, education, youth development and poverty alleviation. In keeping the principle of Zero Harm we have also instituted rigorous measures to improve our safety, health and environmental compliance.

We work closely with the Department of Mineral Resources and the provincial and local authorities, and seek their guidance, advice and support on how best to integrate our efforts into their integrated and local development planning for this region.

There is much at stake and we are determined to get it right. We need to ensure the diversification of this local economy, creating jobs for non-mining people and sustaining towns and villages after the decline of the mining sector.

Governing our socio-economic performance

The Anglo American Social Way governs how all the business units must incorporate social management into the overall management of mining operations.

The policy makes it clear that the board holds general managers accountable for the socio-economic performance of the various mining operations. This includes the activities that contractors undertake on our behalf.

In light of this clear-cut policy directive, I expect our line managers and supervisors to provide effective leadership in managing social issues. It is furthermore the responsibility of every employee to be vigilant, and to avoid actions that can adversely impact social issues.

A final thought

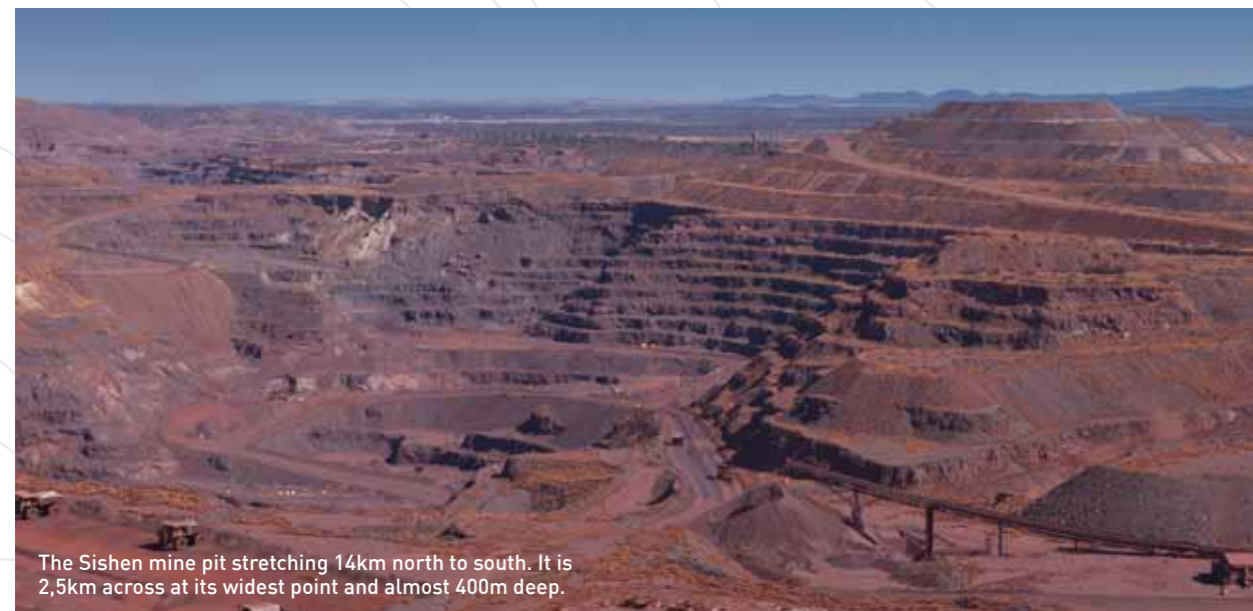
Sishen mine recognises that our future, the livelihoods of our employees and our continued access to resources are dependent on the goodwill, trust and consent of our stakeholders, particularly our local stakeholders. We recognise that we will not win the required trust unless we behave in a manner that exemplifies responsibility, accountability and transparency. In addition, we must go about our business in a consultative manner.

The Socio-Economic Assessment contained in this report demonstrates our responsible conduct and inclusive approach.

Lastly, I must mention that some stakeholder concerns contained in the report may not have a direct bearing on the mine. Even so, we accept that the perceptions of these stakeholders represent their reality, and must therefore not only be acknowledged but addressed. We will do so to the best of our ability.

Working together and sharing the load, we are part of a community relying on each other to build a better life for all.

JOHAN VAN SCHALKWYK
General manager: Sishen mine



The Sishen mine pit stretching 14km north to south. It is 2,5km across at its widest point and almost 400m deep.

QUESTIONS AND ANSWERS ON THIS REPORT

Q What is the purpose of the Socio-Economic Assessment?

A The Socio-Economic Assessment helps the mine gain a detailed understanding of the positive and negative impacts it has on the local area in which it operates. It also reports on the mine's socio-economic performance over the previous three years, in this case 2012–2014.

Sishen mine wants to make a positive contribution to the communities associated with our operations. Moreover, we want such a contribution to have a lasting effect. When it comes to the perceptions, expectations and concerns of our stakeholders, we cannot make assumptions. We have to build real insight.

We have therefore conducted a thorough assessment of the way our operations impact our stakeholders, and have sought to gain a deep understanding of both the positive and the negative; the good and the bad of what people think about Sishen mine.

The purpose of the Socio-Economic Assessment is therefore to:

1. understand the key social and economic issues and impacts that we must manage
2. use the information to guide our thinking and planning in terms of developing initiatives that are aligned to stakeholder needs
3. use the information to build structured dialogue between the mine and its stakeholders.

Q What are the benefits of conducting a Socio-Economic Assessment?

A There are many benefits, such as:

- an improved understanding of Sishen mine, its current socio-economic performance and its plans to improve its performance in the next three years
- valuable insight into stakeholder issues, needs and expectations, as well as the positive and negative impacts associated with mining
- an appraisal of community development initiatives to identify areas where improvements can be made
- a better understanding of how the mine can develop social and human capital through its core business activities.

Mutual understanding is probably the most important benefit. Beneficial, trustworthy relationships are built on the foundation of mutual understanding. Just as we need to grasp the concerns of our stakeholders, our stakeholders must gain insight into the nature and complexities of our business. When we can see the current reality from each other's perspective we can move forward, find common ground and collaborate to respond to challenges and boost development.



Iron ore samples. Iron ores are rocks and minerals from which metallic iron can be economically extracted. The ores are usually rich in iron oxides and vary in color from dark grey, bright yellow, deep purple, to rusty red.

Q How can an assessment like this manage the mine's socio-economic impact?

A This report outlines the findings of the Socio-Economic Assessment. It allows us to:

- take stock of what we have achieved
- determine whether we have honoured our commitments to uphold all the pillars of the Mining Charter
- consider if our business strategy and actions reflect our desire to make a more meaningful contribution to society.

While this is a vital document, it is only a single link in a much longer chain. When it comes to managing the socio-economic impact of the mine, we believe that "action speaks louder than words".

For this reason the Socio-Economic Assessment Report contains a Social Management Plan (SMP). This section of the report is critical as it outlines the management measures we have already put in place, and those we will still put in place, to address the issues and impacts which the assessment has identified.

So, when it comes to impacts such as local employment and procurement, housing and education, we know what must be done, when it must be done and who must do it.

Q Apart from the Social Management Plan in this report, what else can be done to manage the socio-economic impact of the mine?

A We have a formal grievance procedure in place. This procedure benefits both stakeholders and the mine. Stakeholders have the comfort of knowing that their voices will be heard and their grievances attended to. For the mine, the procedure serves as another valuable channel to gauge how our operations impact on communities. It also allows us to listen to grievances, evaluate these fairly and respectfully, and take corrective action where necessary.

Lastly, we take great care to make our contractors aware of their socio-economic impacts. We realise that contractors are an extension of the mine and that their behaviour impacts on our image and reputation. We therefore do our utmost to work closely with them to ensure they do what is right, and to manage the impact of their actions.



South Western area of the pit where massive calcrete waste stripping is taking place in order to expose the targeted iron ore body below.

Q What is the difference between the Anglo Social Way and SEAT?

A The Anglo Social Way is a policy document. It governs how all the companies in the Anglo American group must manage their socio-economic performance. The Socio-Economic Assessment Toolbox or SEAT, on the other hand, is a collection of tools that explain how the policy must be implemented.

The SEAT requires the mine to undertake a Socio-Economic Assessment every three years. It outlines how it should be done, including the necessity of involving stakeholders and giving them feedback. The assessment results are published in the Socio-Economic Assessment Report you are now reading.

The SEAT also requires the mine to report on its plans to improve its socio-economic performance in the next three years, in other words 2015–2017. This is the SMP and is contained in the latter part of the Socio-Economic Assessment Report.

Q Who conducted the Socio-Economic Assessment?

A The Sishen mine leadership team gave the responsibility for managing the Socio-Economic Assessment to a SEAT implementation team. This team consisted of managers and subject matter experts representing a number of different divisions and departments at the mine. The implementation team was responsible for making information available and ensuring the assessment happened according to an agreed project plan.

The implementation team commissioned the services of an independent service provider, G3 Business Solutions, to facilitate the assessment process. G3 Business Solutions led the consultation with teams at the mine (such as human resources and operational supply chain), as well as with local stakeholders (such as municipalities, communities and interest groups). They also analysed the information provided by both the mine and stakeholders, and worked with the Sishen mine leadership team to produce this report.

Q Who were the members of the SEAT implementation team?

A As mentioned in the previous answer, the members of the implementation team represented various areas of the business. Here is a full list of the team members.

SEAT implementation team

SEAT champion	Rina Botha, acting manager: sustainable development*
Members of the implementation team	
Transformation and compliance	Faith Mazabane
Human resources (HR)	Kobus Meyer
Housing	Jimmy Walker
Mining	Itumeleng Lute
Safety, health and environment (SHE)	Nadia Williams
Operational supply chain	Alida Munro
Socio-economic development (SED)	Rina Botha
Staying-in-business (SIB) projects	Louise Marx
Planning and development	Francois Hattingh
Project manager for Dingleton resettlement project	Willie Human
* Humbulani Tshikalange was appointed on 1 December 2014 as the new manager: sustainable development, and will in future champion the process.	

Q How was the Socio-Economic Assessment done?

A The assessment was done with quality in mind, through open and transparent consultations and engagement. Far from taking a haphazard approach, we conducted the assessment in a planned and structured manner. The process began with what is known as “desk research”; in other words a thorough review of all data, information and documentation relating to the mine and the local area. Such documents were either available in the public domain, or at Sishen mine. The core documents and information resources are listed in the table below.

Core documents consulted during the assessment

Type of document	Reference
Policy, planning and evaluation, SA Government	2011 Growth and Development Strategy, Northern Cape Province
	2011 Spatial Development Framework, Northern Cape Province
	2011 Local Economic Development Strategy, Northern Cape Province
	2012 Spatial Development Framework, John Taolo Gaetsewe District Municipality
	2013 Integrated Development Plan (IDP) Full Review, John Taolo Gaetsewe District Municipality
	Integrated Development Plan (IDP) First Review 2013–14, Gamagara Local Municipality
	Funding Plan for Infrastructure Development and Capacity Building at the Gamagara Municipality, Report 1 April 2014
	Integrated Development Plan (IDP) 2012–13, Joe Morolong Local Municipality
	Integrated Development (IDP) 2012–13, Ga-Segonyana Local Municipality
	General report on the audit outcomes of local government, MFMA 2012–13 on JTG District Municipality and the three local municipalities
Sishen mine management plans, reports and minutes of meetings	Minutes of Dingleton Steercom meetings
	2014 Stakeholder Engagement Programme for Department of Mineral Resources (DMR)
	2014 Stakeholder Engagement Programme for Communities, Provincial and Local Government
	Analysis of complaints received through the Complaints and Grievance Procedure
	Minutes of Sishen Agriculture Engagement Sessions
	Environment Complaint Register
	Dingleton Complaint Register
	2014 Sishen Mine Social Management Plan (SMP)
	Bulk services agreement between Sishen mine and the Gamagara Local Municipality, 28 January 2010
	2013 and 2014 Sishen mine Water Action Plans
	Minutes of Sishen Leadership Team (SLT) and Unions Forum Meetings, 2013 and 2014
	Anglo American South Africa/Development Bank of Southern Africa (DBSA), 9 April 2014, Capacity Building and Support Programme Progress Report
	Transformation and Compliance Monthly Reports to the SLT
Stakeholder feedback, Sishen mine	Social and Labour Plan (SLP) 2012–2018 (unapproved)
	2012 and 2013 SLP Annual Progress Reports to DMR
	Kumba's 2013 suite of reports for the financial year ended 31 December 2013, that is <ul style="list-style-type: none"> • Sustainable Development Report • Integrated Report • Annual Financial Statements
	Kumba's Interim Results for the six months ended 30 June 2014
	<i>Boswa Ba Rona</i> , issue 3 2013
	<i>The Resettlement News</i> (all 2014 editions)

Type of document	Reference
Research reports	Stats SA Census, 2011 Municipal Fact Sheet
	Stats SA Census, 2011 Municipal Report
	Stats SA Census, 2011 App by Roambi: Statistical release; My ward, my councillor, my village, my suburb
	Kumba Iron Ore Communication Audit, 2013
	2014 Crime Stats SA: http://www.crimestatssa.com/provinceselect.php
	District Hospital Performance Assessment Northern Cape Province, 2008–2010, Health Systems Trust
	2011–12 District Health Barometer published by the Health Systems Trust
	Gamagara Mining Corridor Study, September 2013, Northern Cape Province, for the Department of Economic Development and Tourism, conducted by SMEC South Africa
	The Sishen mine Socio-Economic Assessment in Gamagara, 2011
	2009 Kgalagadi District LED and SMME Research Project developed for Kumba Iron Ore by the Underpressure Agency
2012 and 2013 National Senior Certificate (NSC) School Performance Report and 2013 NSC Subject Performance Report	

A series of workshops with role players at the mine followed to gain a clear picture of the mine's operations, the social and economic benefits it has delivered, and its interventions in response to challenges and negative impacts.

Impacts and issues had to be verified by the mine's stakeholders. To help us gain the deepest possible understanding of stakeholder views, expectations and perceptions, we made use of a number of engagement platforms. We arranged formal meetings, conducted focus groups, organised round-table discussions and interviewed individuals. This allowed us to gain further insight into key impacts and issues.

A complete list of stakeholders who were consulted during this phase of the assessment is provided below.

Stakeholder consultation as part of the Socio-Economic Assessment

Date	Format	Stakeholder(s)
16 September 2014	In-depth interview	Councillor Dineo Moyo, Mayor Gamagara Local Municipality
20 August 2014	Round-table discussions: Gamagara Local Municipality	Mr Clement Itumeleng, Municipal Manager
		Mr Herbert Motlonye, Chief LED Officer
		Councillor Patricia Selonyane, Ward Councillor for Ward 5 (Sesheng and Mapoteng)
		Mr Hendrey Horniet, Senior IDP Officer
		Mr Lategan Botha, Civil Engineer
		Mr Kagiso Ositang, Technical Manager
18 September 2014	In-depth interview	Councillor OC Mogodi, Chairperson Finance, Corporate and Planning Committee
		John Taolo Gaetsewe District Municipality
16 September 2014	Focus group discussion: business development	Local business owners Localised suppliers Beneficiaries of the Small Business Hubs in Kathu and Kuruman
16 September 2014	Focus group discussion: education and skills development	Northern Cape Department of Education (circuit managers) School principals Educators

Date	Format	Stakeholder(s)
17 September 2014	Focus group discussion: local employment	Trade union representatives
17 September 2014	Focus group discussion: community safety, health and welfare	Joe Morolong disability cluster Dingleton Community Health workers The new LoveLife Trust South African Police Service (SAPS) UGM Wellness Clinic personnel Cancer Association of South Africa (CANSA)

Q What is the best way to use the Socio-Economic Assessment Report?

A Every effort has been made to keep this report as reader-friendly as possible. For the convenience of readers who may be unfamiliar with some of the terminology and acronyms used, a glossary is available at the back of the report.

Please note that this report follows the convention of writing out in full every abbreviation or acronym when it is used for the first time in a section. After the first reference, we use the abbreviation or acronym.

It may be that you are only interested in certain sections of the report. The table below provides guidance on which parts of content you are likely to find in each section of the report.

Q How is the report structured?

A We used a pre-defined structure to prepare the report, which consists of a number of clearly defined sections.

- Section 1:** Overview of Sishen mine
- Section 2:** Socio-economic benefit delivery and stakeholder engagement
- Section 3:** Profile of the local area
- Section 4:** Key issues and impacts
- Section 5:** Social Management Plan
- Section 6:** Next steps

Where to find what in the report

If you want to know more about	Go to section
<ul style="list-style-type: none"> • Basic information on Sishen mine (such as production, the leadership team and financial performance) • Location of the operation • Future developments planned • Existing closure plans • Other mines in the vicinity 	Section 1 (page 3)
<ul style="list-style-type: none"> • How people residing in the JTG district benefit from Sishen mine's activities (eg local employment, skills development, local procurement) • The mine's community development initiatives, ie what the mine does to improve health, education, infrastructure, youth development and enterprise development • Dividends paid to local stakeholders • The mine's approach to stakeholder engagement 	Section 2 (page 17)
<ul style="list-style-type: none"> • How Sishen mine defines its local area or zone of influence • A demographic profile (numbers, age and gender) of people living in the local area • The socio-political factors that impact both the mine and the local area • A description of the economic reality • The general health of local area stakeholders • Education and skills levels of local area stakeholders • Local communities' access to water and energy, and the quality of infrastructure and services • The approach the mine follows towards stakeholder engagement 	Section 3 (page 65)
<ul style="list-style-type: none"> • Positive and negative impacts associated with the mine • Issues important to stakeholders that relate to these impacts • An assessment of the current response to these issues and impacts • Calculation of the risk inherent in each impact • High-level appraisal of the mine's socio-economic benefit delivery initiatives 	Section 4 (page 91)
<ul style="list-style-type: none"> • The mine's plans to respond to key issues and impacts in the period 2015–2017 • Monitoring measures implemented by the mine to manage social and economic impacts 	Section 5 (page 123)
<ul style="list-style-type: none"> • What will happen once the report is published 	Section 6 (page 149)

CONTENTS

• INTRODUCTION TO THE REPORT	30	Direct social investment in communities	82	Utilities, infrastructure and services
• A WORD BY THE GENERAL MANAGER	30	Total investment	82	Increased pressure on municipal service delivery
• QUESTIONS AND ANSWERS ON THIS REPORT	31	Municipal infrastructure development	82	Housing
	35	Education	83	Water
03 SECTION 1: Overview of Sishen mine	40	Health	84	Electricity
04 Company details and basic information	46	Poverty alleviation	84	Sanitation
04 Ownership	50	Youth development	87	Roads and transport
05 Description of the mining operation	51	Donations and new projects	88	Community safety and security
05 Location of Sishen mine	52	Local empowerment through ownership	87	Development priorities
05 A brief history	52	Economic participation by employees and communities	91	SECTION 4: Key impacts and issues
05 Going to market	52	Community development trusts	92	Introduction
05 Other Kumba operations nearby	52	Envision	93	Impacts analysed
06 Sishen Leadership Team	53	Stakeholder engagement	116	Assessing the significance of impacts
06 Safety and production performance	53	Framework for stakeholder engagement	118	Appropriateness of existing socio-economic benefit delivery initiatives
06 Safety record	54	Stakeholders identified and analysed		
06 Production output	58	Engagement practices	123	SECTION 5: Social management plan
06 Revenue and unit cost	62	Complaints and Grievance Procedure	124	Introduction
07 Sishen mine as employer			125	Management and monitoring measures
08 Mining developments	65	SECTION 3: Profile of the local area	149	SECTION 6: Next steps
08 Operational imperatives	66	Introduction		
06 Future capital investments and expansion plans	66	Geographical context		
09 Dingleton resettlement	66	Sishen mine's zone of influence		
10 Existing mine closure plans	68	Demographics		
10 Life of Mine	68	Population		
10 Legislative requirements	69	Gender, race and age		
10 Preliminary Mine Closure Plan	72	Socio-political and governance context		
11 Licensing and compliance	72	Policies, plans and frameworks		
12 Environmental compliance	73	Municipal capacity and performance		
12 Safety compliance	73	Civil unrest in the district		
13 Legal matters	75	Economy, livelihoods and labour force		
13 Northern Cape mining environment	76	Income, employment and grant dependency		
14 Other large-scale economic activity in the district	77	Education		
	79	Health		
17 SECTION 2: Socio-economic benefit delivery and stakeholder engagement	79	TB and HIV/AIDS		
18 Introduction	80	Child and maternal health		
18 Sishen mine Social and Labour Plan	80	Infrastructure and facilities		
19 Local benefits of having a mine	81	Increased access to healthcare services		
20 Benefits of mining activities				
20 Local employment				
22 Skills development				
25 Housing for employees				
27 Local procurement				
29 Royalties and taxes				

SECTION 1: OVERVIEW OF SISHEN MINE



104 haul trucks ranging in size from 250 to 400 ton are employed at Sishen mine. Pictured here a hauling truck driving along the ramp at the South Western pit.

COMPANY DETAILS AND BASIC INFORMATION

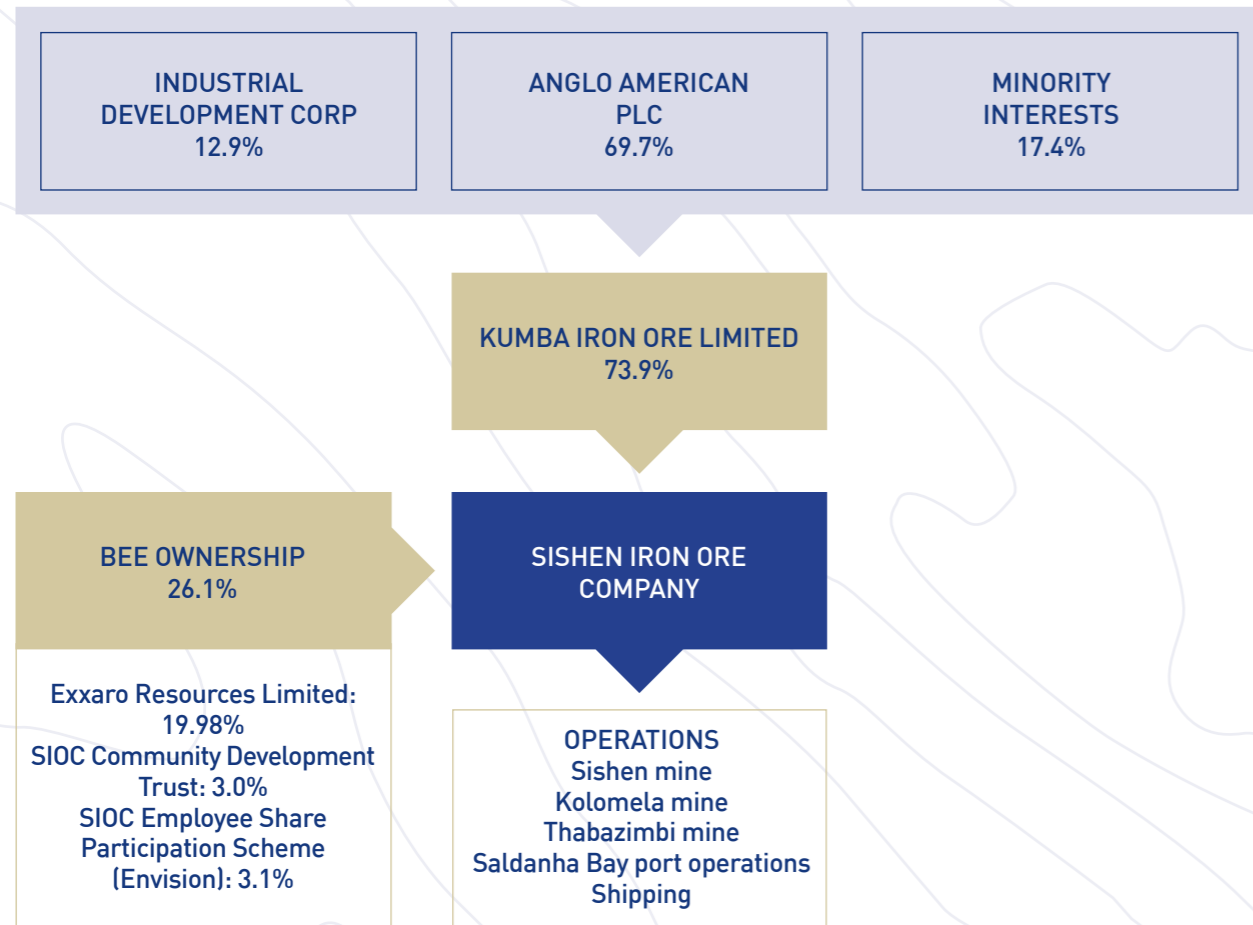
OWNERSHIP

Kumba Iron Ore (Kumba) was formed in November 2006 and operates three open-cast mines in South Africa.

Kumba is fully empowered in terms of the Mining Charter requirement of 26% BEE ownership. At its listing in 2006, 19.98% of the equity in the operating company, the Sishen Iron Ore Company (SIOC), was transferred to Exxaro, 3.1% to the Envision Trust and 3% to the SIOC Community Development Trust (SIOC-cdt).

The diagram below depicts the ownership structure and shows that Anglo American is the majority shareholder (69.7% equity) in Kumba.

Figure 1: Ownership structure



Iron ore is the raw material used to make pig iron, which is one of the main raw materials to make steel. 98% of mined iron ore is used to make steel.

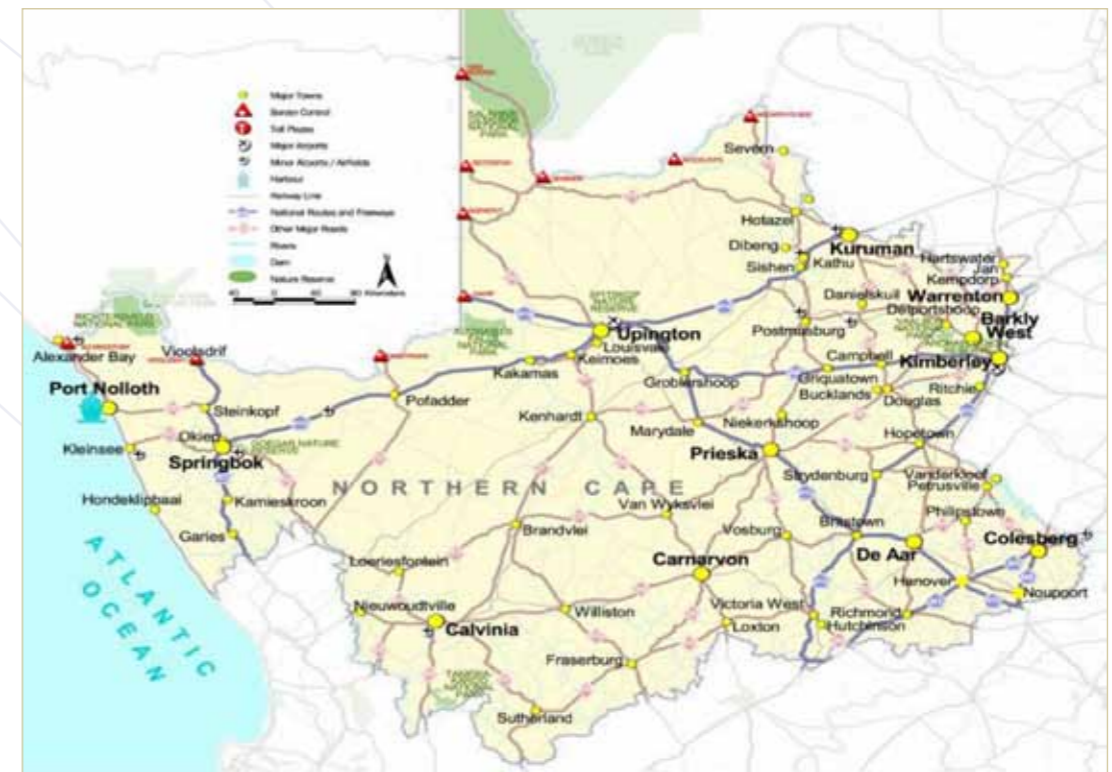
DESCRIPTION OF THE MINING OPERATION

Sishen mine is Kumba's flagship operation. The mine obtains its iron ore from mining the valuable iron ore bodies within its mining lease area. Mining is done by open pit (open-cast) methods. The mine operates a single pit that stretches 14km north to south. It is 2,5km across at its widest point and almost 400m deep, making it one of the seven largest open-cast mines in the world. The pit can broadly be divided into a north, central and south pit area. Waste dumps are located on the east and west sides of the pit.

The mine operates 24 hours a day, seven days a week. In 2010, the mine produced a record 41million tonnes of iron ore. The mine beneficiates its ore to sell niche products domestically, and at a premium to international markets. Iron ore mined is transported to the beneficiation plant where it is crushed, screened and beneficiated. The mine uses dense-medium separation (DMS) and jigging technologies to achieve this. Sishen mine is the only haematite ore producer in the world to fully beneficiate* its product.

**Beneficiation is the processing of ore for the purposes of regulating the physical properties of the finished product, removing impurities and improving the product quality.*

Figure 2: Map of the Northern Cape Province



GOING TO MARKET

Sishen mine is serviced by a dedicated iron ore rail link, the Sishen/Kolomela-Saldanha Iron Ore Export Channel (IOEC), which transports iron ore to Saldanha Bay where it is shipped to export markets. Iron ore is also transported to domestic customers via domestic rail infrastructure. The rail and port operations are owned and operated by the state-owned entity, Transnet.

LOCATION OF SISHEN MINE

The mine is situated close to the town of Kathu in the Northern Cape Province, 289km by road from Kimberley.

Kathu means "under the trees", and the town was established because of the former Iscor's iron ore mining activity. The town is 50km southwest of Kuruman and 221km east of Upington on the N14.

Hotazel is 63km to the north and Postmasburg 80km to the south of Sishen mine.

A BRIEF HISTORY

Mining operations at Sishen mine commenced in 1947, primarily providing iron ore for consumption at domestic steel mills. The completion of the 861km Sishen-Saldanha railway line in 1976 enabled increased production through the export of iron ore.

OTHER KUMBA OPERATIONS NEARBY

Kolomela mine is close to Postmasburg. The mine produces direct shipping iron ore. Consisting of seven open pits, the mine started commercial production in December 2011.

SISHEN LEADERSHIP TEAM (SLT)



JOHAN VAN SCHALKWYK
General manager (GM)



PRETORIUS BEZUIDENHOUT
Mine manager



FAITH MAZABANE
Manager: transformation and compliance



HANSIE ESTERHUIZEN
Manager: safety, health, environment and quality (SHEQ)



SUSAN BEZUIDENHOUT
Manager: human resources (HR)



MAKWE NKWANA
Manager: business improvement



PRAJAY MAHARAJ
Manager: finance and administration



RETIEF LOUW
Manager: projects



HUMBULANI TSHIKALANGE
Manager: sustainable development



ERNEST STONESTREET
Manager: engineering



CHRISTO LE GRANGE
Manager: plant

SAFETY AND PRODUCTION PERFORMANCE

SAFETY RECORD	2012	2013	2014 (OCTOBER)
Fatalities	2	0	1
LTI*	9	20	11
LTIFR**	0.10	0.21	0.14

*Lost-time injury (LTI) means an incident that results in permanent disability or time lost from work of one day/shift or more.

**Lost-time injury frequency rates (LTIFR) are the number of lost-time injuries within a given accounting period relative to the total number of hours worked during the same period.

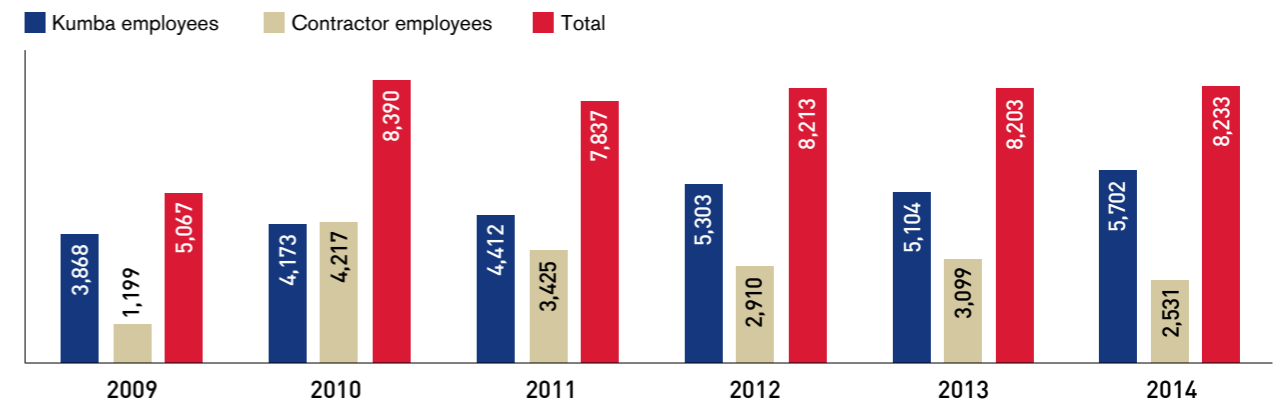
PRODUCTION OUTPUT (TONNAGE PRODUCED)	2012	2013	2014 (JUNE)
Final product	33.7Mt	30.9Mt	17Mt
Expit waste	133.5Mt	167.8Mt	86.9Mt

REVENUE AND UNIT COST	2012	2013	2014 (JUNE)
Revenue	R33,001 million	R36,685 million	R18,744 million
Unit cost per tonne final product produced	R257	R325	R319,7

SISHEN MINE AS EMPLOYER

With the exception of government, Sishen mine is the Northern Cape's largest employer. The mine's workforce increased from 5,067 in 2009 to 8,233 in 2014. During the reporting period (2012–2014), the Kumba permanent workforce grew by 399 employees.

Graph 1: Number of employees working at Sishen mine



Sishen mine paid the following on wages and human resource development over the three-year period:

INVESTMENT IN HUMAN RESOURCES	2012	2013	2014 (NOVEMBER)
Total wages paid	R2,7 billion	R3,0 billion	R2,3 billion
Training and skills development	R224 million	R277 million	R139 million

Labour relations dynamics in the mining sector changed markedly during the 2012–2014 period. The most notable developments were the evolution of the Association of Mineworkers and Construction Union (AMCU) into the largest trade union on the platinum mines, and the strong focus on the socio-economic conditions of communities in close proximity to mines.

AMCU has successfully recruited among employees at iron ore and manganese mines in the Northern Cape Province, applying for recognition at Sishen mine in 2014. At the time of its application, the union represented 5.2% of employees. Four unions now have a right to organise at Sishen mine, namely AMCU, the Building Allied Mining and Construction Workers' Union (BAMCU), National Union of Mineworkers (NUM) and Solidarity. By 30 November 2014, they represented the following proportion of employees: NUM (55.5%), Solidarity (18.75%), AMCU (10%) and BAMCU (7%).

Following wage negotiations which started on 5 June 2014, Kumba on 31 July 2014 announced that it had signed a three-year wage agreement for bargaining category employees. The agreement was reached with NUM and Solidarity, the two recognised unions with bargaining rights. The agreement, effective from 1 July 2014 until 30 June 2017, provides for increases of between 8.5% and 10% in the first two years, and between 7.5% and 9% in the third year.

In the first year of the agreement, the lowest basic monthly salary will increase from R5,795 to R6,833. The housing allowance will grow from R1,365 to R1,900 a month, while the monthly production bonus will move from R1,274 to R1,503. The shift allowance will also increase from R546 to R709 a month.

Sishen mine's commitment to being an employer of choice is evident from its numerous human resource development programmes, its transformation and employment equity performance, the ongoing construction of housing for employees, and efforts to make Kathu an attractive town.

In addition, Envision, the share ownership scheme for permanent employees below management level, paid out R29,9 million in March 2013 and R57.3 million in August 2013, which translated to a cash payment of approximately R19,111 per participating Sishen employee after tax. In March 2014 Sishen mine employees received a further dividend of R57.9 million, and R46.6 million in August 2014.

The next section of the report will provide more information on a number of the key performance areas that deliver socio-economic benefits to the people of the John Taolo Gaetsewe (JTG) district.

Komatsu 960 and 860E haul trucks in the pit.



MINING DEVELOPMENTS

OPERATIONAL IMPERATIVES

To succeed, Sishen mine has to produce 37Mt by the end of 2016.

To this end the mine has developed a focused production recovery and optimisation plan. The recovery plan addresses pit constraints in the short term. The longer term operational optimisation plan will enable, among other things, the redesign of waste mining push-backs to rotate mining direction in some areas and to optimise smaller push-backs.

The efforts to restore the mine to full capacity are proceeding well. By the end of 2014, Sishen mine plans to have a full production rate of 35Mt, which will increase to 36Mt in 2015, and a stable production of 37Mt by 2016 and going forward.

Key initiatives in pursuit of production targets include:

- increases in productivity through improved scheduling of work and better fleet management, including the development and implementation of a five-year fleet plan
- implementation of the Business Process Framework
- the successful relocation of Dingleton to facilitate the expansion of the mine to the west
- construction of two new waste dumps
- execution of waste mining capacity ramp-up as planned.

FUTURE CAPITAL INVESTMENTS AND EXPANSION PLANS

Sishen mine continues to invest in the development and expansion of its operation to ensure its future sustainability.

In 2013, R4,802 billion capital was invested in the operation, of which R1,061 billion was spent on Staying-in-business (SIB) capital, R2,918 billion on ramp-up SIB capital and R0,823 billion on deferred waste stripping.

In 2014, R5,261 billion capital was invested in the operation, of which R1,282 billion was spent on SIB capital, R3,011 billion on ramp-up SIB capital and R0,967 billion on deferred waste stripping.

For the next three years, Sishen mine will invest capital in the operation as follows:

- 2015: R3,316 billion
- 2016: R 2,998 billion
- 2017: R 3,804 billion

Part of this is Sishen mine's investment in a number of SIB projects to ramp up production to the target of 37Mt by 2016.

One such SIB project is the relocation of Dingleton – a R4,2 billion investment. Other projects include an upgrade of social infrastructure in the Gamagara area to ensure the area can satisfy mine requirements for appointing and retaining key skills as part of the production ramp-up.

The initial focus will be on upgrading water management infrastructure and enhancing air quality management. Thereafter, the focus will shift to new or enhanced community facilities such as schools, clinics and hospitals.

DINGLETON RESETTLEMENT

The second phase of the Western Expansion project to provide access to almost 300Mt of run-of-mine ore involves the relocation of Dingleton residents to Kathu.

Around 500 new homes are being built in a new suburb in Kathu over a four to six-year period. The resettlement goes beyond the provision of new homes. The suburb will have new infrastructure in the form of well-constructed and maintained roads, well-lit streets, boundary fences, parks, a new water and sanitation system and a new electricity supply.

This is a complex and multi-faceted project that requires Sishen mine to manage it in the most meticulous manner possible. In this regard the mine is guided by a number of standards, the most important being the Anglo Social Way. In addition, the mine adheres to Kumba's commitments in the Social and Labour Plan (SLP) which, in turn, is aligned with the local and district government's Integrated Development Plan (IDP) and Local Economic Development (LED) strategy.

Anglo's Social Way states that "resettlements should lead to a demonstrable improvement in the livelihoods of affected households". In line with this requirement, the mine is focusing on a number of critical issues, such as ensuring that:

- as many Dingleton residents as possible benefit from development and livelihood restoration initiatives
- women, the elderly and youth, as the most vulnerable groups, benefit from these initiatives
- Dingleton residents and/or contractors have the requisite skills, training and experience to –
 - be employed or sub-contracted by the primary contractor that will develop the resettlement site; and
 - establish enterprises that are likely to succeed over the long term.
- Dingleton residents are not employed only as unskilled labour.

It is encouraging that the vast majority of Dingleton residents have indicated their support for the resettlement, and appreciate that the move will be beneficial to the community. Benefits that appeal to the community include an increase in property value, newer and more modern infrastructure, better facilities and easier access to social services, and enhanced employment opportunities. It is furthermore appealing that the geographical position of Kathu, in relation to the surrounding mines, will result in the resettlement site being considerably less affected by dust from mining activities. Kumba has committed to paying the difference in property taxes and rates for 20 years with a five-year phase-out period, as well as all capital gains tax that private property owners might incur as a result of the resettlement.

By the end of 2014, construction at the host site in Kathu was proceeding well. The southern side of the new host site suburb, known as Kathu Phase 4, will be completed by the end of 2015. The northern end is scheduled for completion in 2016. A census was also done to plan for the logistics during the resettlement project.

While construction continues, other projects are running in parallel. Such projects include:

- The Renters Info Desk that –
 - assists community members who need rental accommodation to find affordable alternatives in Olifantshoek, Kathu, Deben, Sesheng or Mapoteng; and
 - provides home-owners in Dingleton with an opportunity to register available rental stock including houses, garages and outside rooms.
- Group Five, the primary contractor appointed to build the new homes for the Dingleton community, providing construction-related training to Dingleton community members. A training and recruitment centre opened in May 2014, offering training in basic construction skills. Individuals who are declared competent will be certified and their names placed in a pool that can be considered for employment if the opportunity arises
- National Qualifications Framework (NQF) accredited training offered through the Tshipi Training Centre
- Professional business training and support offered by South African Valued Education (SAVE).



An aerial view of the Kathu host site shows the first phase of development is progressing well.



The before-and-after-housing solutions that characterise the relocation of Dingleton households.

EXISTING MINE CLOSURE PLANS

LIFE OF MINE

Based on available iron ore, as well as the technology and cost-to-mine profitability, Sishen's Life of Mine (LoM) was calculated at 19 years in 2013 with a production design capacity of 37Mtpa. Available information therefore points to the likelihood that the mine will close down in 2032. LoM calculations are restated frequently but underline the basic truth that no mineral resource is infinite and that mine closure planning should be an ongoing mining concern.

LEGISLATIVE REQUIREMENTS

Mine closure in South Africa is legislated through the Minerals and Petroleum Resources Development Act No 28 of 2002 (MPRDA) and its associated regulations. The following sections of the MPRDA are of particular relevance:

- principles for mine closure outlined in Section 56
- closure risk assessment as outlined in Section 60
- minimum requirements for the contents of a closure plan as outlined in Section 62.

In addition, the commitments as contained in the approved Environmental Management Plan (EMP) of a mine, and revisions of this plan, are relevant and legally binding. These regulations aim to ensure that mining operations consider ways of reinstating a functional end land use that can make a positive contribution towards the future biophysical and societal demands of people living in proximity to a disturbed environment.

PRELIMINARY MINE CLOSURE PLAN

In 2009, Sishen mine developed a Preliminary Mine Closure Plan in adherence to legislation, and in line with its own policy framework (Anglo American's Mine Closure Planning Toolbox - SEAT Tool 4E).

The Preliminary Mine Closure Plan covers the physical closure components (for example managing infrastructure such as the pit, processing plant, workshops and offices, as well as sewage-handling infrastructure and waste disposal facilities), the biophysical (for example rehabilitation of the environment for productive land use) and social components (for example the impact that closure will have on people's livelihoods).

During the planning process, the vision or end goal for mine closure was articulated as: *"To return the local area (ie the zone of influence) back to a safe, stable, non-polluting, healthy environment with predominately grazing potential and the potential for small-scale socio-economic initiatives"*.



Andre Nortje (plant metallurgist) and James Sepushi (maintenance operator) discussing plant maintenance at the primary crusher at Sishen mine.

The Preliminary Mine Closure Plan contains a number of physical, environmental and socio-economic closure objectives. Of particular importance are the social closure objectives, which include:

- engaging stakeholders and taking their views into account during closure planning
- redeploying and reskilling permanent employees to minimise job losses
- stimulating the local economy by implementing viable projects that will enable some of the employees to be redeployed in non-mining related sectors
- offering rehabilitation work, as well as other work related to closure, to former employees in the interest of job continuation after closure
- selling all mine-owned houses to individuals
- working towards general satisfaction among all employees through redeployment, reskilling and making alternative employment opportunities available.

The existing Preliminary Mine Closure Plan (with an accuracy of between -25% and +35%) paves the way for the next phase of mine closure planning – the Draft Closure Plan, which should be developed when the LoM is between 10 and 15 years.

This is followed by a Detailed Closure Plan that will be co-developed with relevant stakeholders in the last 10 years of Sishen mine's operations. In the last phase, five years before closure, the mine and its stakeholders will agree on a Final Closure Plan.

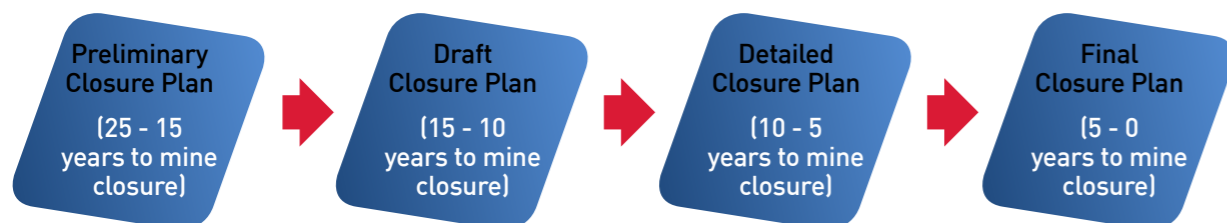
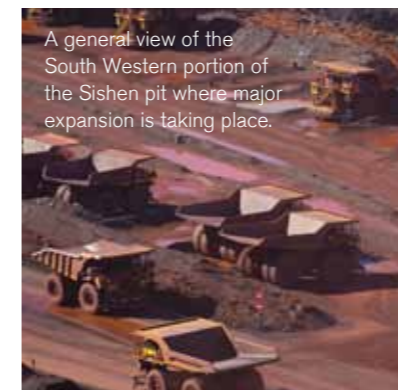


Figure 3: Classification of Anglo American Mine Closure Plans according to the number of years prior to final closure

LICENSING AND COMPLIANCE

Most prominent mining legislation	<ul style="list-style-type: none"> • The principal legislation that governs a mining operation is the MPRDA • Environmental legislation includes the: <ul style="list-style-type: none"> - National Environmental Management Act (No 107 of 1998) - National Water Act (No 36 of 1998) - Air Quality Act (No 39 of 2004) - Waste Act (No 59 of 2008) • The Mine Health and Safety Act (No 29 of 1996) is the primary health and safety legislation • The Occupational Health and Safety Act (No 85 of 1993) provides for the health and safety of people at work. The act was amended by the Mine Health and Safety Amendment Act (No 7 of 2008) which came into effect on 30 May 2009.
Regulatory developments and pending changes in legislation	<ul style="list-style-type: none"> • During 2012 and 2013 Kumba, through Anglo American and the Chamber of Mines of South Africa, took part in the industry participation process on amendments to the MPRDA. The Amendment Bill was approved by Parliament in March 2014. • A second critical issue for resolution, following initial consideration during 2013, is the review of the Mining Charter. This was first published in 2004 and revised in 2010, and its current lifespan expired at the end of 2014. The Department of Mineral Resources (DMR) has commissioned a survey on companies' compliance with the Charter. This is likely to provide a foundation for negotiations between government, industry and organised labour on what lies ahead.
Current right for the mine lease area	Sishen Converted Mining Right, NC 30/5/1/2/2/259 MR (106 MRC), effective from 11 November 2009
Mining right developments	<ul style="list-style-type: none"> • Since the right was granted in 2009, a number of applications have been lodged for amendments to it. This was due to the need to incorporate additional areas into the mining area, for example: <ul style="list-style-type: none"> - land on which a portion of the Sishen-Saldanha railway had been situated - areas where Sishen mine holds prospecting rights that are due for conversion to mining rights (see below) - the mining area associated with the disputed 21.4% mining right (covered in more detail later in the section). • Based on the fragmented nature of the mining right and its associated licences and permits, it was decided to pursue a consolidated mining right for all Sishen mine's exploration and mining areas in the Sishen Mine Complex mining right. This would simplify compliance and reporting. • A section 22 application for the Sishen Mine Complex mining right was submitted to the DMR in 2011 (NC 30/5/12/2/296 MR), and supplemented by a Section 102 application in 2014. These applications are under consideration by the DMR.
Prospecting rights	<p>Exploration is focused on the search for brownfield deposits close to or on the existing lease area and which can leverage off the company's infrastructure associated with current operations. On-mine exploration and resource definition drilling is conducted to increase confidence in the geological models, which are updated every year in support of the LoM and long-term planning process, as well as the annually published Ore Reserves and Mineral Resources Statement.</p> <p>Sishen mine currently has the following prospecting rights:</p> <ul style="list-style-type: none"> • Dingleton (renewal approved early in 2014 and awaiting execution) • Gamagara 541 (renewal approved, and executed) • Sishen 543 (renewal approved, but the Section 93 directive issued in 2011 is still in place) • Parsons 564 (renewal approved, but the Section 93 directive issued in 2011 is still in place).



A general view of the South Western portion of the Sishen pit where major expansion is taking place.



As part of the South Western Expansion project at Sishen, a railway line has had to be moved to allow for the widening of the pit. The rail line footprint has had to be widened and bridges have had to be constructed to allow for this.



Lesego Mase (foreground) and Alfred Douf on the slope of the waste rock dump at area G60 in Sishen. Grass is planted on the slopes to bind the soil.

ENVIRONMENTAL COMPLIANCE

Sishen mine's environmental performance is guided by its approved EMP and Environmental Management System (EMS) as an ISO 14001 certified company. The operation is committed to managing its environmental impacts in compliance with regulatory requirements and, where possible, even beyond compliance.

There is regular interaction between the mine and the various regulators to discuss and report on environmental compliance. Over and above environmental performance inspections and audits conducted by the DMR, the Department of Environmental Affairs and the Department of Water and Sanitation, Sishen mine also conducts regular internal audits to monitor its environmental performance and environmental management systems.

Due to changes in mining plans (as updated annually) and the discovery of ore formations, Sishen mine has had to adapt its approach to backfilling and rehabilitation. To this end the mine applied for an amended EMP in relation to three waste dumps on the mining area: Protea Waste Rock, G80 Waste Dump and Western Waste Rock Dump/Stockpiles. In addition, the mine applied for further amendments to the EMP. This was done to account for changes in the mining area such as the inclusion of railway properties and the disputed 21.4% mining right. Some of these amendments to the EMP have been granted, and others are still under consideration by the DMR.

The application for a consolidated mining right, the Sishen Mine Complex mining right (as outlined earlier), necessitated an application for a new and consolidated EMP for the Sishen Mine Complex. The application was submitted with the Sishen Mine Complex mining right application in 2014. The mine is awaiting approval.

SAFETY COMPLIANCE

The DMR regulates mine safety through its Mine, Health and Safety Inspectorate (MHSI). The MHSI expects full compliance with all safety regulations from all mines in South Africa and has the power to conduct unannounced inspections. Safety incidents have punitive consequences whereby mining operations are stopped (Section 54 or 55 safety/health stoppages), resulting in production losses. Sishen mine is committed to Zero Harm to its employees. Health and safety regulations have become entrenched in the way business is conducted at the operation. Numerous sensitising campaigns and training initiatives have been introduced to promote the health and safety of employees.

At all times, Sishen mine gives its full cooperation to the MHSI when safety or occupational health risks are identified and must be rectified. The safety, health and environment (SHE) team at the mine works hard to improve follow-through on MHSI recommendations to ensure a safe work environment for employees.



Bennie van Wyk is a Cat 793D haul truck operator and Norman Setsinaise is a haul and load safety officer. They are busy performing a shift safety inspection on one of the Caterpillar 793D haul trucks.

LEGAL MATTERS

Kumba endeavours to avoid litigation and legal disputes. However, should these arise it is the company's policy to resolve such disputes in a timely and efficient manner that results in the best long-term outcomes for Kumba and its stakeholders. During the 2012–2014 period, the following legal matters were resolved:

- conclusion of a supply agreement with ArcelorMittal SA (AMCA), settling all disputes and providing security of supply and favourable pricing relative to the Export Parity Prices of iron ore for the domestic market
- the Constitutional Court rules on the 21.4% Sishen mining right dispute. In 2014, SIOC re-applied to be granted this right. Active engagement with the DMR continues. More information is provided below.

Sishen mining right dispute

Before the proclamation of the MPRDA, SIOC held a mining right under previous legislation which entitled it to 78.6% of Sishen mine. AMCA held an old order mining right to the remaining 21.4%. The new act gave holders of old order rights five years to convert these into new order rights. SIOC met the deadline of 30 April 2009 but AMCA failed to do so. As a result, SIOC applied for the new order mining rights in respect of the 21.4% stake which AMCA did not convert. At the same time, Imperial Crown Trading (ICT) lodged an application for a prospecting right over the 21.4% which had not been converted.

The DMR rejected SIOC's application and granted the prospecting rights to ICT, a decision which SIOC challenged in the North Gauteng High Court. The Court ruling set aside the DMR's granting of a prospecting right at the mine to ICT, and held that SIOC became the exclusive holder of the Sishen mining right when the DMR converted SIOC's old order mining rights.

Both the DMR and ICT appealed the ruling. This appeal was dismissed by the Supreme Court of Appeal (SCA) on 28 March 2013. The SCA ruled that SIOC became the sole holder of the mining right to iron ore in respect of Sishen mine. Both ICT and the DMR lodged applications for leave to appeal against the SCA to the Constitutional Court. This hearing was held on 3 September 2013.

On 12 December 2013, the Constitutional Court granted the DMR's appeal in part against the SCA judgment, and ruled that:

- SIOC, when it lodged its application for conversion of its old order right, converted only the right it held at that time, being 78.6%
- AMCA failed to convert its older order rights
- the 21.4% undivided right remained available for allocation by the DMR
- only SIOC can apply for and be granted the residual 21.4% undivided share of the Sishen mining right.

In compliance with this order, SIOC submitted a further application to be granted this mining right in 2014. The findings made by the Constitutional Court are favourable to both SIOC and the DMR, and provide clarity on (1) SIOC's mining rights and (2) government's role in the awarding of mining rights.

NORTHERN CAPE MINING ENVIRONMENT

The Northern Cape is endowed with a rich base of mineral deposits and mining is the biggest contributor to gross domestic product, at 30%. Large mines producing iron, manganese and base metals, as well as three large cement and limestone producers, complement the 60-odd diamond mines and 29 small producers of assorted industrial minerals.

The Gamagara Mining Corridor, an area that stretches from Danielskuil and Postmasburg in the south to Hotazel and Joe Morolong in the north, has three different mining areas:

1. The Danielskuil mine field where limestone and diamonds are mined at the PPC Lime, Idwala Lime and Petra Finsch Diamonds mines
2. Iron ore and manganese are mined in a 50km-wide band from south of Postmasburg in a northerly direction through Kathu to an area north of Black Rock. These minerals are mined in numerous locations in two distinct areas, namely:
 - the Postmasburg Manganese Field which can be divided into two areas:
 - the northern tip around and just south of Kathu that hosts mostly iron ore mines. The Sishen, Khumani and Diro mines are located in this area
 - the rest of the field where both iron ore and manganese are mined. Mines in this area include Kolomela, Beeshoek, Sedibeng, Lomoteng, Soliter, Bishop Manganese and Glario.
 - the Kalahari Manganese Field (KMF) where a multitude of mines are in operation. These are: Nchawaning, Gloria, Mamatwan, Wessels, United Manganese of Kalahari, Kalagadi Manganese, Kudumane, Tsipi Borwa and Amari (not yet operational).
3. The Avontuur manganese deposit, approximately 30km north of the KMF where the Gravenhage Manganese mine is in operation. Black Rock and Hotazel are the nearest urban areas to the mine, which is about 40km north of Black Rock.

It is predicted that mining in the Gamagara Corridor will continue to boom for the next 20 to 25 years after which some of the smaller and/or older mines may scale down and eventually close down. The KMF will not be scaled down as long as there is a demand for manganese.

OTHER LARGE-SCALE ECONOMIC ACTIVITY IN THE DISTRICT

The economy has an imbalance skewed towards primary industry (ie mining and agriculture) and tertiary industry (retail, services and government) with a weak secondary industry (manufacturing and construction).

The challenge lies in encouraging some of the other sectors to diversify and grow substantially in importance to create alternative economic opportunities for the people of the area.

Agriculture

Apart from mining, a number of economic sectors have been earmarked as priority sectors to propel local economic development. Agriculture and agro-processing is the second most important economic sector. Although water scarcity and climatic conditions limit the type of products that can be produced, cattle, sheep, goat and game farming allow for economic opportunities such as meat processing, leather tanning, commercial game hunting and eco-tourism.

Manufacturing

Manufacturing does not seem to be a very important contributor to the economic sector of the Northern Cape Province. Together, mining and agriculture account for 60% of industrial gross value added (GVA) and only 4.5% of the value of goods and services produced in the province comes from manufacturing. Constraints such as small markets, inadequate access to capital, failure of the mining and agricultural sectors to interface with the manufacturing sector, and logistical costs, have played a large part in this situation.

The scale of mining developments in the JTG district since 2010 poses opportunities for large maintenance and limited manufacturing of mining equipment. Some manufacturing and maintenance companies have already established themselves in Kathu and Kuruman. The ideal is for manufacturing to be diversified to the extent that downscaling in the mining sector will not compromise manufacturing.

Tourism

While none of the individual local municipalities has enough tourist attractions to become a major tourism area on its own, a combination of historical sites, wildlife, game farming, conservation and hunting makes it possible for the area, classified as the Green Kalahari, to attract a significant number of visitors each year. The N14 runs through the district and connects Gauteng to major tourist destinations such as the Kgalagadi Transfrontier Park and nature reserves in Botswana.

The Kathu solar photovoltaic (PV) park has been described as one of the largest solar projects worldwide.



Energy

With an abundance of natural sunshine and wide open spaces, the Northern Cape has become a destination of choice for developing renewable energy. The Kathu solar photovoltaic (PV) park has been described as one of the largest solar projects worldwide. In addition to providing employment opportunities and skills development, it is hoped that the power plant will stimulate improved infrastructure and a secure power supply.

Retail, services and government

Kuruman has a strong base in government services, reflected in the fact that Ga-Segonyana Local Municipality generates 60.6% of the JTG District Municipality's community, social and personal services.

Other priority sectors include finance and business services, as well as community, social and other personal services.



The area, classified as the Green Kalahari, attracts a significant number of visitors each year.

Floris Ellis (foreman at the HME Assembly Yard) and Boitumelo Ruitser (safety officer) stand next to one of the Komatsu 960E haul trucks on which the Collision Avoidance System has been implemented.



A full-page background image showing a worker in a blue uniform and hard hat walking on a narrow metal walkway at a mining plant. The walkway is elevated and surrounded by complex industrial machinery, including large rollers and conveyor belts. The lighting is bright, casting shadows on the metal surfaces.

SECTION 2: SOCIO-ECONOMIC BENEFIT DELIVERY AND STAKEHOLDER ENGAGEMENT

Diedre van Wyk is a Plant Operator
working at the Jig Plant at Sishen mine.

INTRODUCTION

In discussing socio-economic benefits to the local area, one must start by recognising the role that the South African government has played in developing legislation to achieve socio-economic transformation through mining.

Government has enacted the Mineral and Petroleum Resources Development Act No 28 of 2002 (MPRDA) with the objective of facilitating meaningful participation of Historically Disadvantaged South Africans (HDSAs) in the mining and minerals industry. In particular, section 100(2)(a) of the MPRDA provides for the development of the Mining Charter as an instrument to effect transformation, with very specific targets against which progress is regularly reviewed.

The Mining Charter requires mines to transform themselves by providing integrated socio-economic development for communities by cooperating in the formulation of integrated development plans for mining communities with special emphasis on development of infrastructure.

The Mining Charter directs how the mining industry implements ownership, procurement, employment equity (EE), beneficiation, human resource development, mine community development, housing and improved living conditions.

The MPRDA requires mining operations to submit a Social and Labour Plan (SLP) every five years for approval by the Department of Mineral Resources (DMR). In its SLP, the mine outlines its implementation programmes to achieve targets set out in the Mining Charter for:

- Human resource development (HRD)
- Local economic development (LED)
- Procurement progression for HDSA companies, and
- Managing downscaling and retrenchment.

SISHEN MINE SOCIAL AND LABOUR PLAN

Sishen mine does not treat the SLP process as a paper exercise to retain its mining licence, but rather as an essential tool to align its planning efforts with those of the local and provincial authorities.

Specifically, the mine aligns its plans with the integrated development plans (IDPs) of Gamagara as host municipality, Joe Morolong and Ga-Segonyana as labour-sending areas, and John Taolo Gaetsewe as district municipality in the context of broader regional and provincial development frameworks and sub-sector plans for health, education, roads and transport, etc.

After extensive consultation with stakeholders, Sishen mine submitted its 2012–2016 SLP to the DMR regional office. It stated the value of its direct investment in infrastructure and community development projects for each of the three local municipalities, without itemising specific projects. The reasoning was that an annual identification process is more effective than conducting upfront scoping of projects that will only be implemented two to five years after submitting the SLP. This approach corresponded with local municipalities' need for a degree of flexibility in their own development planning efforts following the 2011 Local Elections. Sishen mine thus made a commitment to the value of R30 million per year per local municipality, and outlined the agreed engagement process to be followed annually for project identification and approval.

The agreed process in the SLP stipulated that Sishen mine will engage with municipal authorities during the first quarter of each year to agree on projects for implementation the next year. The DMR attends the core meeting with each municipality to ensure alignment between itself and local government in relation to the identified projects.

In September 2013, the DMR regional office informed Sishen mine that it could not approve the 2012–2016 SLP without itemised community development and infrastructure projects. DMR also indicated that they would only recognise infrastructure projects and that other projects already implemented fell outside the SLP. The department recommended that a new Sishen mine SLP, with itemised projects and a focus on infrastructure development only, be considered for the period 2014–2018.

The municipalities in the JTG district were not in favour of changing the SLP period, as this would mean losing the alignment of the SLP with the integrated development plan timeframe and period of office of local political leaders. The mine and local municipalities agreed on specific projects (primarily bulk infrastructure) for 2014–2015. However, the issue of the timeframe of the current SLP remains unresolved, and the latest SLP for 2012–2018 has not yet been submitted.

Despite this delay in its SLP process, Sishen mine honoured the targets originally set for 2012–2016 and implemented each of the programmes outlined for 2012, 2013 and 2014. At the end of 2012 and 2013, the mine reported to the DMR on progress against the targets set in its SLP. The 2014 progress report is currently under development.



Africa Menyani is an excavator operator on one of the large ore loaders at Sishen mine.

LOCAL BENEFITS OF HAVING A MINE

Stakeholders often ask what socio-economic benefits flow from having a mine in the vicinity of communities. This is an important question, especially in an area like the JTG district that hosts one of the largest open-cast mines in the world.

To answer this question thoroughly, one needs to reflect on each of the components that make up socio-economic benefit delivery. Benefits can be divided into three groups:

- **The first group consists of benefits flowing from mining itself – such as local employment, housing for employees, local procurement, the payment of taxes and royalties, and skills development.** If managed responsibly, this group of benefits causes a ripple effect. It goes wider than individuals working at, and companies working for, the mine. It stimulates the local economy and produces growth in other sectors such as retail, transport and manufacturing.
- **A second group of benefits is derived from the mine's direct investment in community development in its local area – often reported as SLP and/or Corporate Social Investment (CSI) projects.** The mine uses a percentage of its net operating profit after tax to make these investments in the community. If a mine is profitable, and it manages this direct community investment with a long-term view, aligned to government's priorities for development and focused on measurable impact, direct community investment creates numerous benefits. These include infrastructure development, improved education, poverty alleviation and better access to healthcare.

- **A third group of benefits results from economic participation by employees and communities in a mine.** The Mining Charter encourages this broad-based empowerment, which means dividends declared to shareholders flow to employees and communities. Depending on the nature of the share incentive scheme, such dividends are usually paid to employees as individuals, and to communities in a trust. The trust as an independent structure, managed by the elected community representatives, then invests this money in community projects. If a mine is profitable, and the employees and community development trusts that benefit from dividend pay-outs invest this money responsibly, this economic participation holds benefit not only for current employees and communities, but for generations to come.

This section of the report reviews Sishen mine's performance over the period 2012–2014 in driving specific benefits from each of these groups. It touches on strengths and weaknesses and, by transparently reporting all financial values, enables readers to judge the mine's performance for themselves.

Also included in the report is an overview of how Sishen mine engages its local stakeholders and who they are. Stakeholder engagement forms an essential and integral part of the mine's socio-economic performance.

BENEFITS OF MINING ACTIVITIES

LOCAL EMPLOYMENT

Direct employment

Sishen mine is the largest private sector employer in the Northern Cape. Direct employment offered by the mine stood at 8,233 positions at the end of 2014. This included 5,702 employees on Kumba's payroll and 2,531 contractor employees permanently based on-site.

Table 1: Employment figures for the period 2009–2014

Year	Kumba employees	Contractor employees	Total
2009	3,868	1,199	5,067
2010	4,173	4,217	8,390
2011	4,412	3,425	7,837
2012	5,303	2,910	8,213
2013	5,104	3,099	8,203
2014	5,702	2,531	8,233

Around 80% of Sishen mine's permanent employees are local; in other words they are recruited from the host or labour-sending municipalities in the JTG district. Some of these employees are from far-off areas in the rural Joe Morolong Local Municipality and have to relocate to Kathu, Sesheng or Mapoteng when taking up positions at the mine. Local employment from the district does not always mean that employees work close to home.

The local employment figure of 80% corresponds roughly with the mine's employment equity performance. According to this, 95% of unskilled and semi-skilled employees are HDSAs and the percentage HDSAs in management has increased from 46% to 56% in the past three years.

As a responsible mine, it is critical to align the supply of skilled and qualified individuals and the capabilities of the current workforce with the mine's current and future skills requirements. This is particularly true for projects in the pipeline and future contracts to be awarded.

Table 2: HDSAs in management, and women employed

	2012		2013		2014 (end November)	
	Target	Actual	Target	Actual	Target	Actual
HDSAs in management	43.25%	46.1%	43.49%	52.72%	56%	56%
Women employed	13.68%	14.90%	14.05%	15.19%	14.84%	16%

Sishen mine is fully committed to adhering to the requirements of the MPRDA and Employment Equity Act (EEA). The mine has exceeded targets over the reporting period, and has committed to plans in its SLP to further increase its HDSA and black representation in management. However, the ability of the mine to achieve set targets depends on:

- the willingness of professionally qualified and suitably experienced HDSA candidates (who are in high demand nationally) to settle permanently in Kathu
- the career paths of professionally qualified employees who often rotate to other mines in the group or head office and do not necessarily return
- the retention of young, home-grown HDSA professionals in Kathu; this remains an enormous challenge.

There are two ways to deal with skills shortages. One is to use human resource attraction mechanisms and the other is training and development. The development of the current workforce depends on the implementation of individual development plans as the mine has already completed its skills audits, affirmative action measures and talent identification and classification processes, to enable fast tracking, training and mentoring.

Indirect employment

In addition to direct employment, Sishen mine offers indirect employment to 5,613 employees working at the operation's suppliers or sub-contractors (outsourced services and construction companies) whose employment is attributable to business generated by Sishen mine.

Employment is also created in the JTG district by CSI activities, including small business development:

- In 2012, 109 temporary and 406 permanent jobs were created
- In 2013, 157 temporary and 432 permanent jobs were created
- In 2014, 32 temporary and 228 permanent jobs were created.

Temporary jobs were mainly created as a result of municipal infrastructure development projects, and the majority of permanent jobs through small business development (see table on the next page for details).

Table 3: Jobs created through CSI activities

Year	Focus area	Temporary	Permanent
2012	In total 109 temporary and 406 permanent jobs were created in 2012.		
Project details	Municipal infrastructure development	109	1
	Education		3
	Youth Graduate Programme		0
	Kuruman Field Band		6
	UGM Wellness Clinic		26
	Batho Pele mobile health clinics		15
	FAMSA		3
	Dingleton soup kitchen		8
	Heuningpot Honey Bee Project		10
	Joe Morolong Manyeding Cultivation Project		24
Small business development		310	
2013	In total 157 temporary and 432 permanent jobs were created in 2013.		
Project details	Municipal infrastructure development	157	
	Education		11
	Youth Graduate Programme		1
	Kuruman Field Band		6
	UGM Wellness Clinic		32
	Batho Pele mobile health clinics		17
	FAMSA		3
	Dingleton soup kitchen		9
	Heuningpot Honey Bee Project		6
	Joe Morolong Manyeding Cultivation Project		24
Small business development		323	
2014	In total 32 temporary and 228 permanent jobs were created in 2014.		
Project details	Municipal infrastructure development	32	
	Education		8
	Youth Graduate Programme		17
	Kuruman Field Band		6
	UGM Wellness Clinic		35
	Batho Pele mobile health clinics		18
	FAMSA		3
	Dingleton soup kitchen		5
	Poverty alleviation – Heuningpot Honey Bee Project		5
	Joe Morolong Manyeding Cultivation Project		24
Small business development		107	

Induced employment

As a rule of thumb, one person's employment in the mining industry - whether direct or indirect - results in up to three other people benefiting economically. This is called induced employment as a result of stimulating the local economy. Mining salaries (from both direct and indirect employees) are being spent in the local economy and that leads to growth of local businesses and the employment of more people.

The induced employment effect is greater when employees' relatively high mining wages and share scheme pay-outs, and the salaries of employees working for suppliers, are spent locally. Applying a multiplier of 0.44 to Sishen mine means the mine created as many as 6,207 induced jobs in 2014.

Number of persons supported by the operation

The SEAT provides a formula to determine the total number of persons supported by a mining operation. The circles of impact of a mining operation go beyond jobs created, to family members supported. As demonstrated below, an estimated 49,767 people in the JTG district depend on Sishen mine for their livelihoods.



Keitumetse Hynes is a female haul truck operator on the Komatsu 960E trucks. She has been trained to use the Collision Avoidance system on the vehicles.

Table 4: Equation for estimating number of dependants

Total employment at Sishen mine in 2014		Average family size	% of family income derived from Sishen mine-created jobs	Total number of people dependent upon Sishen mine for their livelihoods
TOTAL	20,313	3,5	70%	49,767
Direct	8,233			
Indirect	5,613			
CSI	260			
Induced	6,207			

SKILLS DEVELOPMENT

Low education levels and a lack of local skills counteract the socio-economic benefit that should come from mining and dilute the potential to diversify the local economy so that it does not depend solely on mining.

Sishen mine believes it is critical to develop skills which are recognised under the National Qualifications Framework (NQF) and are portable outside an employee's current employment. Similarly, it is essential for Sishen mine to equip members of the surrounding communities with the relevant skills and education to facilitate the process of raising the employability of community members.

In line with this approach, the Sishen mine Human Resource Development Policy calls for the creation of a learning culture for employees and their dependants.

Sishen mine commits an amount of at least 5% per annum of its total payroll for the human resource development of its permanent employees, contractors and community members enrolled in skills development programmes.

Significant progress has been made to ensure accelerated learning and development of HDSAs.

Tshipi Skills Training Centre is the mine's own accredited training facility, providing training for employees working on Sishen mine and other mines in the area, as well as for community members.

The following training and development interventions are offered:

- Tshipi Skills Training Centre - general artisan training and civil artisan training; safety, health, environment and quality (SHEQ) training, IT training, adult basic education and training (ABET), and management and leadership training;
- Sivos Training Centre - apprentice training (diesel, millwright, electrical, fitting and turning, plating/welding); and
- the Mining and Plant Training Centres – operator training.

Table 5: Sishen mine 2014–2016 investment in employee training

Year	Trainees	ZAR spend	Training hours per employee (on average)
2012	78	23,050,019	45 hours per week
2013	90	30,611,061	45 hours per week
2014 (November)	99	30,157,686	45 hours per week

Learnerships and portable skills training

Learnerships, such as mechanical/electrical engineering, civil engineering, ore beneficiation and surface mining, were provided to between 200 and 300 individuals per annum over the 2012–2014 period (see table below).

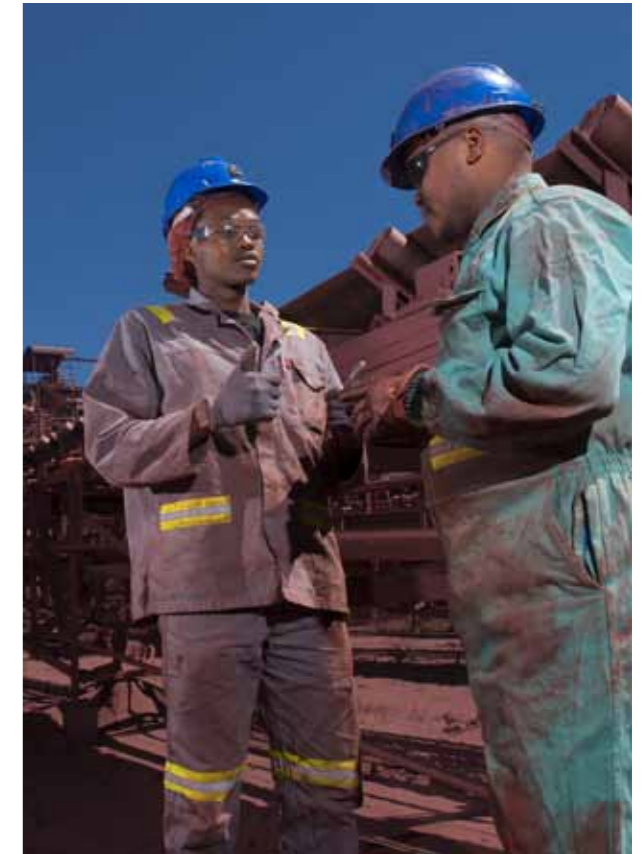
Learnerships consist of a combination of theoretical study and work-based training. An engineering learnership, for example, consists of three components:

- theoretical study at a college for further education that requires the completion of four subjects on N2 level
- an institutionalised (workshop-based) component. Learners progress from the basic to the advanced phase and then to the specialised phase
- 18 months of on-the-job training at the mine.

Successful learners are either appointed as artisans at the mine or released from all contractual obligations and encouraged to seek employment elsewhere or start their own businesses.

Learners from the community receive bursaries from the mine to enrol at the local further education and training (FET) college for N1 and N2 fundamentals. Preference is given to women.

Employees and community members are encouraged to participate in portable skills training in welding, bricklaying, carpentry and plumbing. This is part of the broader strategy to prepare for a post-mining scenario. The goal is to reduce dependency on mine employment.



Lucky Sebigi (learner) and Victor Kortman (plant operator) below the feed area of the jig plant.

Table 6: Learnerships, portable skills and community skills training 2012–2014

Year	2012			2013			2014 November		
	SLP target	Actual	Actual ZAR spend	SLP target	Actual	Actual ZAR spend	SLP target	Actual	Actual ZAR spend
Engineering	110	214	29,787,475	110	235	34,525,376	110	276	26,856,642
Mining/Plant	44	151	19,302,606	60	190	26,017,835	60	231	42,137,900
Technical learnerships	30	38	3,433,272	30	42	3,433,272	30	38	2,982,405
Portable skills for post-mining	144	163	818,723	144	183	3,535,699	144	252	2,684,022
Community skills training	60	58	730,800	60	126	1,587,600	60	80	1,044,000
Total	388	624	54,072,876	404	776	69,099,782	404	877	75,704,969

Table 7: Number of bursaries and PIT internships offered by Sishen mine 2012–2014

Year	SLP target	Number of bursaries	Actual ZAR spend	SLP target	Number of PITs	Actual ZAR spend
2012	40	69	9,174,506	40	54	31,535,303
2013	40	69	7,738,413	40	57	37,708,566
2014 (August)	40	65	7,4 million	40	51	21,432,154

Bursaries and the Professional in Training programme

To contribute to management-level skills development in core mining disciplines, Sishen mine has funded bursaries in engineering, mining, surveying, metallurgy, geology, civil engineering, human resources, finance and related functions. The focus for recruitment was the Northern Cape, specifically the district area.

After completing their studies, graduates on the Professional in Training (PIT) programme are taken through a structured internship for at least 24 months, ensuring thorough training and development in their fields of study. During this period, the young professionals are extensively mentored and coached.

At the end of August 2014 the first PIT forum was hosted at Sishen mine (for both Sishen and Kolomela PITs). Going forward, these forums will become more structured. The mines' leadership teams and other stakeholders participate, and young professionals have an opportunity to network and discuss the challenges they experience.

Youth development through internships

As part of its youth development efforts, Sishen mine makes internships available to local youths who needed work experience to complete their degrees or diplomas.

This programme is offered to qualifying interns at no cost and Sishen mine provides all resources required for the learning opportunity. In addition, the mine pays an allowance to interns for the duration of the internship.

Table 8: Internships offered by Sishen mine 2012–2014

Year	SLP target	Number of interns	Actual ZAR spend
2012	25	44	1,186,416
2013	25	90	2,426,760
2014	25	52	1,014,208

ABET

Sishen's ABET programme has been in place since 1994. Currently 95% of the mine's employees have a qualification of ABET level 2 and higher and the demand for ABET is decreasing; 36 full-time employees were on the programme in 2012, 33 in 2013 and eight in 2014. Sishen mine will continue to provide ABET to interested employees, contractors and community members, free of charge. The mine's investment in ABET over the reporting period 2012–2014 was R1,820,350.



Whilst competitive remuneration is part of Kumba's value offering, it is the complete offering that makes Kumba the best mining company to work for. The offering includes training, housing and medical benefits, and personal and professional growth prospects.



Norman Mbazima, CEO of Kumba, visits one of the housing projects in Kathu.

HOUSING FOR EMPLOYEES

Sishen mine's employee housing is based on the principle of building sustainable communities adjacent to its operation and doing away with traditional mine hostel accommodation. The mine knows that pleasant and dignified living conditions are of great importance in bringing greater stability to employees' lives. Sishen mine's spend on housing escalated from R398 million in 2012 to R630 million in 2014.

All employees receive a housing allowance to buy or rent housing. Employees are encouraged to buy and can purchase from the mine or any other private seller or developer.

A home loan subsidy for first-time home owners is made available to employees below senior management. This subsidy is over and above the housing allowance and can be used to buy any property within 80km around Kathu. The loan subsidy runs over five years and is a percentage of the actual bond payment or the calculated maximum subsidy (whichever is the lesser amount). A sliding scale is used, running from 37% in year one to 13% in year five.

Table 9: Spend on housing

Year	ZAR spend
2009	38 million
2010	44 million
2011	181 million
2012	398 million
2013	551 million
2014	630 million

Affordable housing project

Sishen mine continues with its affordable housing project, which was launched in 2003. This project aims to:

- promote home ownership and, through housing allowances and subsidies, support employees to either purchase or rent accommodation
- construct quality, affordable houses and sell these to employees at prices below market value
- facilitate accommodation solutions to attract and retain skills.

Table 10: Number of housing subsidies

Year	Number of applications approved
2008	55
2009	76
2010	31
2011	27
2012	32
2013	100
2014 (end October)	41

By the end of 2014, Sishen mine had completed phase 4C of its housing development programme, bringing the total number of properties developed to 2,188. Basic services such as electricity, water and sanitation were provided for all of these. Houses are allocated on a first come, first served basis. Employees have a year to obtain finance while they rent at market value.

Table 11: Houses constructed/stands per phase

Phase	Number of properties
1	230
2	243
3	594
4A	671
4B	35 self-built stands ¹
4C	181
Total	2,188

¹ Sold for a discounted price of R164,000 to first-time home owners prepared to build within two years.

There are also Sishen mine-owned houses and flats which are rented to employees at rental tariffs lower than market value. These houses and flats are either reserved in line with the mine's objective of retaining and attracting talent (strategic stock) or to facilitate the process of home ownership (facilitated stock). The mine will continue to provide accommodation in the form of flats to employees in the PIT-programme.

Table 12: Rental stock allocated

Year	Strategic stock	Facilitated stock	Total stock
2011	14	179	193
2012	98	415	513
2013	518	518	1,036
2014 (August)	849	5	854

Conversion of hostel accommodation

By 31 August 2012, two years ahead of schedule, all hostel blocks (a total of 18 blocks) had been converted into single unit accommodation. Each unit has a kitchen fitted with an electrical cooking facility. Employees can obtain food from the catering facility run by a contractor or purchase and prepare their own food.

The conversion of hostels resulted in a reduction of the number of employees who can be accommodated in a block area. The remainder of employees who could not be accommodated in the new single unit accommodation were accommodated in 140 semi-detached, two-bedroom family units.

In 2014, the mine developed an additional 476 two-bedroom, free-standing family houses. These houses will be offered first to the last remaining employees moved as part of the hostel conversion, after which the accommodation will be advertised to all employees.



Berty Bock is a shift foreman at Sishen mine. Pictured with his wife Marita, and children Michelle, Shaneefah and Allisandro in front of the new house in the Kathu Phase 4 development.

LOCAL PROCUREMENT

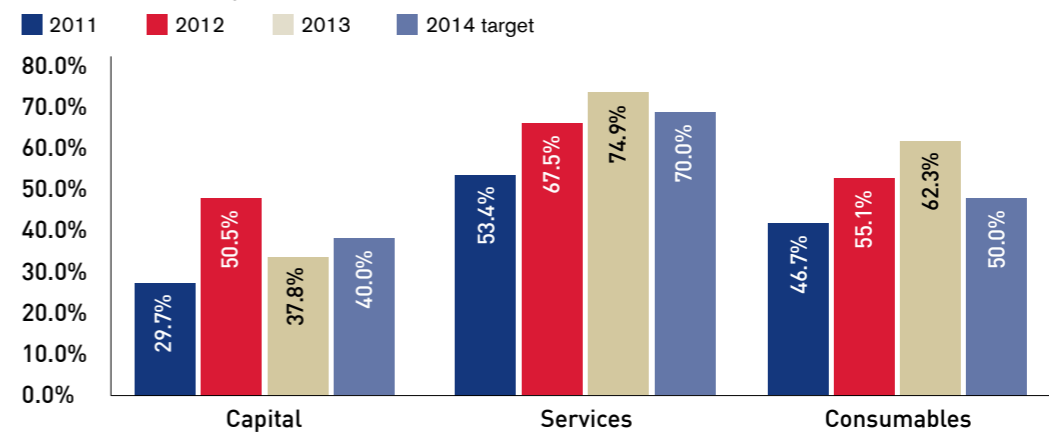
Between 2012 and 2014, Sishen mine's efforts to maximise procurement from Black Economic Empowered (BEE) and HDSA suppliers paid off. Sishen's actual BEE procurement spend in all three categories (capital, services and consumables) was well ahead of the 2013 target, and ahead of the 2014 target in two categories.

The graph below shows Sishen mine's preferential procurement progress since the inception of the revised Mining Charter in 2010. There has been a significant improvement in terms of the year-on-year performance in the services and consumables categories, where the mine exceeded the 2014 compliance target.

Table 13: Actual performance against set targets per procurement category

Procurement category	2012		2013		2014	
	BEE target	Actual	BEE target	Actual	BEE target	Actual
Capital	20%	50.5%	30%	37.8%	40%	34.2%
Consumables	25%	55.1%	40%	62.3%	50%	66.7%
Services	50%	67.5%	60%	74.9%	70%	83.4%

Graph 2: Year-on-year BEE preferential procurement performance



Between 56.8% and 62% of the money spent on procurement went to BEE suppliers and the benefit in terms of transforming the economy was R16 billion over the three-year period.

The question that automatically arises is how much of this BEE spend was in the local area? To ascertain this amount, Sishen mine took a decision to measure its procurement impact in our local communities, beyond the Mining Charter targets. To be a "localised" supplier, a company must be black owned or empowered and have an office within a 100km radius of the mine. As demonstrated in the table below, more than 20% or R6 billion was locally spent with companies within a 100km radius of the operation over the 2012–2014 period. A further R6.6 billion was spent with suppliers in the Northern Cape and the rest on national BEE suppliers.

Table 14: Realised % of total spend on BEE suppliers

Year	Target on total spend	Realised % of spend
2012	43% BEE procurement	56.8%
2013	45% BEE procurement	58.0%
2014	47% BEE procurement	62.0%

Table 15: ZAR value of BEE spend

Procurement breakdown	2012 ZAR spend	2013 ZAR spend	2014 ZAR spend
Total procurement expenditure	9,191,509,865	12,611,267,188	6,525,915,442
Total discretionary expenditure*	8,912,800,759	12,313,525,616	6,416,716,968
Total BEE spend	5,066,730,890	7,147,677,112	3,980,310,212
BEE expenditure as a % of total discretionary expenditure	56.8%	58.0%	62.0%

* Total discretionary spend excludes government (ie parastatals and municipalities), imported technology, imported materials not available locally and any other exclusion approved by the management of a business unit.

Table 16: Geographical location of BEE suppliers

Where?	Value			Percentage of total discretionary spend		
	2012 ZAR spend	2013 ZAR spend	2014 ZAR spend	2012	2013	2014
Localised	2,187,379,610	2,721,876,319	1,317,942,483	24.5%	22.1%	20.5%
NC Province	2,329,943,927	3,426,743,911	932,910,291	26.1%	27.8%	14.5%
National	549,407,352	999,056,882	1,729,457,437	6.2%	8.1%	27%
Total	5,066,730,890	7,147,677,112	3,980,310,212	56.8%	58.0%	62.0%

Working with other role players

The Northern Cape DMR, together with the Department of Economic Affairs and Tourism, has developed a Northern Cape Procurement Charter that aims at pursuing a coordinated approach towards achieving economic growth and supporting a sustainable development strategy for the Northern Cape. Sishen mine was part of the process of drafting the charter and is committed to achieving all the targets outlined in it.

Sishen mine is a participating member of the Northern Cape Mine Managers Preferential Procurement Forum. This forum aims to integrate the principles expressed in the revised Mining Charter into the procurement operations of mining companies. In this way, the participating companies are demonstrating a measurable commitment towards developing and enhancing procurement processes, policies and procedures that will increase access to business opportunities for HDSAs.

With this in mind, Sishen mine focuses on three major areas of transforming its supply chain:

- identifying high-spend strategic suppliers (on whom the mine has a high level of dependency), determining their intentions to transform in line with the revised Mining Charter and assisting them to transform
- identifying the potential to replace untransformed suppliers (without BEE compliance) of routine commodities with compliant suppliers
- securing and developing opportunities in mining construction and maintenance programmes to set up new suppliers with ownership by HDSA individuals from the regions adjacent to the Sishen mine operation (approximately 100km radius).

Supplier Development Programme

The Preferential Procurement Policy specifically promotes the development of HDSA enterprises with the intention of giving BEE businesses access to Sishen mine business opportunities. Bridging the gap between Zimele's enterprise development efforts (discussed later in this section) and integration into the Sishen mine supply chain, Kumba embarked on a Supplier Development Programme in 2014. The programme pilot involves a team of specialised mentors who will work closely with 25 local entrepreneurs to unlock their businesses' full potential in order to fast track their integration into the Sishen mine supply chain.

Kumba entered into a joint venture with Aurik Enterprise Development and Transcend Advance who will be primarily responsible for managing the supplier development portion of the programme.

Even though this is a new initiative, encouraging progress has been made. Initial stakeholder engagements have taken place, as has a workshop focused on mapping supply chain procurement demands and requirements. Shortlisting of potential entrepreneurs linked to Kumba supply chain's demand plan has also been concluded.



Development goes hand in hand with construction, often done by contractors to mining companies.



View over the Sishen Iron Ore mine Complex.

ROYALTIES AND TAXES

Table 17: Royalties and taxes paid by Sishen mine

	2012 ZAR spend	2013 ZAR spend	National	Regional	Local
Payments covered by Extractive Industries Transparency Initiative (EITI)					
Profit taxes	4,902,359,687	5,197,783,250	X		
Royalties	905,499,957	1,050,920,090	X		
Capital and goods imported (VAT I7 and I8)	3,349,455	12,089,078	X		
Property taxes	2,319,358	2,307,513			X
Vehicle excise and fuel duties	1,652,796	1,542,552		X	
Non-recovered sales, value-added or consumption taxes (VAT I1, I2 and I3)	931,981,023	1,239,511,439	X		
Non-EITI payments					
Income taxes paid on behalf of workers	251,036,458	274,103,600	X		
Social security contributions (Unemployment Insurance Fund (UIF))	7,042,604	8,454,161	X		
National skills levy:					
Sishen mine	13,289,244	15,816,006			
Employees	13,259,289	14,545,797	X		

DIRECT SOCIAL INVESTMENT IN COMMUNITIES

TOTAL INVESTMENT

The goal of Sishen mine's social investment programme is to create a positive legacy in the communities in which the mine operates. The execution of this programme depends on a number of factors: there must be commitment to the principle of sustainable development; adherence to a consultative approach; respect for and an understanding of local stakeholders – and empathy for people who have to deal with the consequences of high unemployment, lack of infrastructure and poverty. Finally, there must be a real willingness to make a meaningful impact that will outlast mining.

The Mining Charter requires mining operations to reinvest 1% of net operating profit after tax in community development. Kumba reinvested on average 1.3% of its annual net operating profit after tax on direct investment in the local areas around its mining operations. For Sishen mine this translated to an investment of R241 million in the communities of the JTG district for the 2012–2014 reporting period.

Table 18: Direct community investment 2012–2014

Focus area	Description	2012 ZAR spend	2013 ZAR spend	2014, end November ZAR spend	Total 2012–2014 ZAR spend
Municipal infrastructure	SLP and other projects to assist local municipalities with IDP implementation (ie development of roads, storm water drainage and social infrastructure such as community halls).	22,682,045	57,224,845	25,368,246	105,275,136
Education	Constructing and equipping early childhood development (ECD) centres, the provisioning of basic education support and financial assistance to tertiary students.	16,965,366	13,622,159	16,601,704	47,189,229
Health	Community health and welfare in Gamagara Local Municipality and the rural areas in JTG District Municipality enabled by competencies created to care for employees and contractors.	18,941,954	13,195,388	13,472,424	45,609,766
Poverty alleviation	Focused on small business development and local economic diversification to reduce overreliance on the mining sector.	5,271,448	7,108,924	4,618,351	16,998,723
Youth development	Development, wider than basic education, and efforts to counter the perceived economic exclusion of young adults – especially given the high number of youths in the local area.	1,365,932	2,972,641	1,054,453	5,393,026
Donations and new projects	The ability of Sishen mine to respond to community needs and deserving requests for ad hoc support. Most of these donations are smaller than R25,000, but as a responsible neighbour, the mine budgets to respond to larger scale priorities as they emerge.	9,906,568	7,246,804	3,433,744	20,587,116
Total ZAR		75,133,313	101,370,761	64,548,922	241,052,996

MUNICIPAL INFRASTRUCTURE DEVELOPMENT

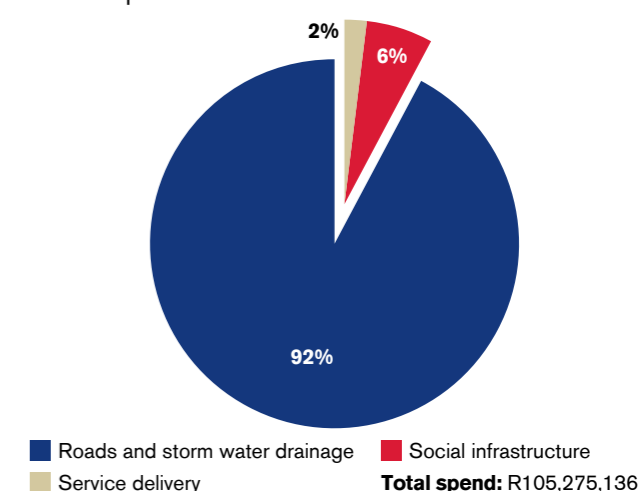
Among the more serious challenges that the local area faces is the availability of resources to develop municipal infrastructure to cater for the growth in population, as well as to maintain and manage infrastructure already in place.

In the development of its SLP, Sishen mine considered the IDPs of Gamagara Local Municipality - its host - as well as those of Joe Morolong and Ga-Segonyana, the labour-sending areas. Through intensive consultation and engagement with local authorities, projects that will create synergy between the IDP and SLP were identified, budgeted for and implemented.

In addition to projects agreed upfront in the SLP, priorities emerged over time and some projects were funded outside the SLP process – often directly from Kumba Corporate Office if budget could not be secured by the mine. As outlined in the table below, IDP/SLP projects focused on constructing and repairing roads, storm water drainage, and contributions towards service delivery and social infrastructure (eg community halls and pension pay-points).

Investment in municipal roads constituted a large portion of the total investment in municipal infrastructure. Some of the benefits associated with improved municipal road infrastructure are alleviation of poor storm water drainage, better access to schools and public amenities, enhanced small business development (as the transportation of produce and products becomes easier), safer road use, reduced vehicle maintenance for road users, and more affordable public transportation.

Graph 3: Proportionate spend on categories of municipal infrastructure 2012–2014



Graph 4: Proportionate spend per area on roads and storm water drainage 2012–2014

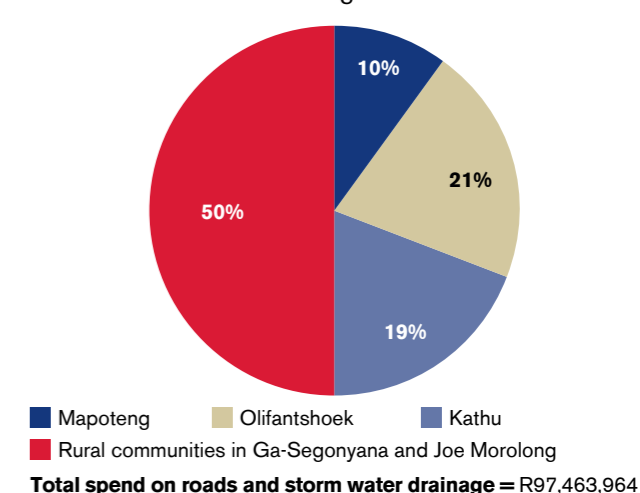


Table 19: Investment in municipal infrastructure 2012–2014

Local municipality	Project details	2012 ZAR spend	2013 ZAR spend	2014 ZAR spend
<i>If actual spend deviates from budget, the budget is reported in brackets</i>				
Ga-Segonyana	Magojaneng (ward 4): construction of community hall ¹ ; furniture was provided to create a fully functional facility	2,917,196 (3,000,000)		
Ga-Segonyana	Mapoteng (ward 5): construction of community hall ¹ ; furniture was provided to create a fully functional entity	2,898,626 (3,000,000)		
Ga-Segonyana	Gantatelang (ward 12): 2,215m of surfaced road was constructed (internal roads)	2,000,000	5,000,000	
Ga-Segonyana	Thamanche (ward 12): 2,715m of surfaced road was constructed (internal roads)	2,000,000	5,000,000	
Joe Morolong	Bendell: this was a 2011–12 project. Phase 2 was completed in 2012 and entailed the surfacing of 1km of internal road	3,100,000		
Joe Morolong	Maphiniki: this was a 2011–12 project. Phase 2 was completed in 2012 and entailed the surfacing of 1km of internal road	3,085,725 (2,970,000)		

Local municipality	Project details	2012 ZAR spend	2013 ZAR spend	2014 ZAR spend
<i>If actual spend deviates from budget, the budget is reported in brackets</i>				
Joe Morolong	Construction of 4km of access roads to Khankhudung and Camden from the N14	3,930,000	10,000,000	8,823,633 (10,000,000)
Gamagara	Mapoteng: 1,600m of asphalt-surfaced road constructed; storm water drainage improved ²	1,124,975 (10,000,000)	8,875,025	
Gamagara	Olifantshoek: 3,600m of asphalt surfaced road provided with layer works and drainage ³	0 (5,000,000)	10,000,000 (5,000,000)	10,000,000 (10,000,000)
Joe Morolong	Moshaweng: this was a three-year project for 2010–2012 to provide potable water as part of municipal service delivery	84,015 (2011 cost overrun)		
Gamagara	A waste removal truck was purchased and donated to the local municipality ⁴	1,541,508 (1,716,468)		
Gamagara	Hendrik van Eck Road, the main road to Kathu: MoU with the Local Municipality for the installation of traffic lights and construction of double lanes in both directions between the R380 and Fleming intersections ⁵		18,349,820 (17,877,919)	156,437 (0)
Ga-Segonyana	Piet Bos: 800m of surfaced road was constructed			1,521,384 (3,000,000)
Ga-Segonyana	Mokalamosesane: 1,100m of surfaced road is being constructed for access roads			4,496,965 (5,650,000)
Ga-Segonyana	Wrenchville: construction of a pensioners' pay-point ⁶			263,739 (850,000)
Ga-Segonyana	Wrenchville: upgrade of the taxi ranks ⁶			106,088 (500,000)
Total ZAR		22,682,045 (53,716,468)	57,224,845 (51,752,944)	25,368,246 (30,000,000)

¹ Apart from serving communal needs, these community halls function as pension pay-out points.

² Part of the funding for this project was provided by Kumba Corporate Office. Social instability experienced during 2012 blocked project implementation. The implementation was continued and completed in 2013.

³ Civil unrest made it impossible to spend the 2012 budget. The project was completed over 2013 and 2014.

⁴ This project was not part of the SLP, and was funded by Kumba Corporate Office.

⁵ This project was not part of the SLP. It was funded by Kumba Corporate Office and execution was managed by Sishen mine.

⁶ These are IDP priorities agreed with Ga-Segonyana to form part of Sishen mine's SLP. Both projects had to be removed from the SLP after a DMR opinion that neither of these projects qualify as priority infrastructure projects. Implementation will continue, and the funding will be obtained from CSI budgets, as these projects constitute commitments made towards consulted stakeholders.

DBSA/Kumba Capacity Building and Support Programme

Kumba and the Development Bank of Southern Africa (DBSA) entered into a partnership to collaborate on the municipal capacity building and support programme. The programme is designed to enhance the ability of local municipalities to provide basic services and combat growing poverty. Kumba has provided R16 million to kick-start the programme, which Mr Pravin Gordhan, Minister of Cooperative Governance and Traditional Affairs, officially announced on 29 September 2014. By the end of the year, Kumba had spent approximately R10 million of the R16 million committed.

The capacity-building partnership between Kumba and the DBSA employs stringent governance processes to ensure that the external service providers appointed fulfil their obligations,

and that their progress is monitored and measured. An important element of the programme is the addition of a Traditional Leadership programme to enable traditional leaders to build their knowledge of the investments made in their jurisdictions. This will assist these leaders to be more involved in processes such as IDPs and SLPs for the benefit of their communities.

It should be noted that Kumba's investment in municipal capacity building is intended to address specific gaps identified. An assessment was carried out in the three local municipalities and identified specific performance gaps and areas for improvement in the mandated functions of these municipalities. Following this process, a Status Quo report was produced.

This report enabled the development of a Capacity Enhancement Report, which listed a number of prioritised projects to address the gaps and identified improvement areas. Common gaps prevalent in all three municipalities are as follows:

- poor revenue management resulting in accelerating debt, which puts pressure on the cash flow of municipalities
- high levels of non-revenue electricity and water resulting in municipalities losing revenue that could otherwise be used for improved service delivery. Joe Morolong Local Municipality did not collect any revenue from residents, and also did not provide water and electricity to residents
- poor operations and maintenance of municipal infrastructure, which result in inadequate service delivery and expose the municipalities to various risks.

To address unique problems, specific projects pertaining to individual municipalities have also been commissioned. One such example is the protection of borehole water sources in Joe Morolong Local Municipality.

Project implementation plans for the period 2013–2015, as well as municipal service level agreements, were completed in June 2013. Activities to procure professional service providers have also commenced.

Table 20: Actual spend on capacity building and support 2013–14

Procurement breakdown	Area	2013 ZAR spend	2014 ZAR spend
Revenue Enhancement Project	Gamagara	500,000	90,000
	Ga-Segonyana	600,000	1 15,000
Investigation into causes of non-revenue water/remedial action	Gamagara	250,000	400,000
	Ga-Segonyana	400,000	600,000
Investigation into causes of non-revenue electricity/remedial action	Gamagara	40,000	20,000
	Ga-Segonyana	360,000	40,000
Sustainable Municipal Operations and Maintenance Programme	Gamagara	900,000	5,500,000
	Ga-Segonyana	1,000,000	2,300,000
	Joe Morolong	1,200,000	4,500,000
Comprehensive Infrastructure Plan (CIP) and Master Planning	Ga-Segonyana	2,360,000	2,470,000
	Joe Morolong	1,000,000	3,200,000
Protection of borehole water sources	Joe Morolong	550,000	2,250,000
Skills audit	Gamagara	140,000	350,000
Capacity building: deployment of experts	Joe Morolong	550,000	225,000
Economic profiling	Ga-Segonyana	900,000	100,000

Gamagara infrastructure and capacity

As mines in the Gamagara area are expanding at a rapid rate, all types of infrastructure in the area are coming under tremendous pressure and existing capacity cannot cope with new developments.

This includes basic services such as water and sanitation, roads, waste management and electricity. At the same time, the ever growing workforce is also putting enormous pressure on the provisioning of housing, schools, healthcare, emergency services, retail facilities and recreation.

These pressures are outstripping the capacity of the Gamagara Local Municipality IDP and budget process.

For a mine to develop further, even if this is just to stay in business, capital has to be invested. To safeguard its existing capital investment, Sishen mine invests in the capacity of infrastructure, services and systems in the Gamagara Local Municipality to enable these to expand and grow with the mine. Part of the mine's 2014 strategy is a ramp-up strategy informing infrastructure projects in Kathu.

Benefits are more likely to be felt by stakeholders in Gamagara than elsewhere in the JTG district and may include developments in town such as upgrading of bulk infrastructure services, new/more schools, more professional medical care and new recreational facilities – over and above the SLP budget and CSI projects.

Funding plan developed by PwC and Gamagara Local Municipality

At the beginning of 2012, Sishen mine requested PwC to undertake a capacity assessment of the infrastructure programme management at the Gamagara Local Municipality. PwC assessed developments planned by mines and other private sector companies in the Gamagara municipal area and, with the local municipality, calculated the growth in municipal infrastructure needed to sustain these developments. The outcome of the assessment confirmed the severe capital funding constraints at the municipality – a billion rand’s municipal infrastructure development will be needed until 2018, and the municipality has access to less than half of that through its routine budgeting processes.

In April 2014, at the Gamagara Local Municipality’s request, Sishen mine commissioned PwC to develop a funding plan to prioritise projects and identify funding to manage implementation. The funding plan was released in August 2014 to the Gamagara Local Municipality. What is undeniably clear from this funding plan is the need for seamless integration and collaboration on an unprecedented scale between all private sector companies, development agencies and the three levels of government if the Gamagara municipal infrastructure is to succeed in facilitating this growth.

Bulk service set-asides

The service level agreement for bulk services between Sishen mine and Gamagara Local Municipality was established in 2010. This agreement makes provision for the mine to contribute to bulk infrastructure development linked to the mine’s housing developments in the Gamagara municipal area. The bulk service agreement is valid for all Kumba and Kumba-related housing developments.

The mine contributes both financially and through its engineering and project management expertise. It contributes R39,687 for each stand developed as part of its housing developments. This is paid into a dedicated account managed by a Project Steering Committee consisting of mine and municipal representatives.

The agreement also governs the process of identifying and prioritising the specific bulk infrastructure to be upgraded or developed. All projects funded are agreed on by both parties, with the general manager signing on behalf of Sishen mine and the Municipal Manager on behalf of the Municipality. This includes sewer, water, electricity and storm water upgrades in Kathu and Sesheng.

Once completed, infrastructure is formally handed over to the Gamagara Local Municipality, which is responsible for maintaining the infrastructure.

Since inception the total liability of Sishen mine has amounted to R83,56 million, based on developments approved by the municipality. However a total amount of R93,6 million has been paid out for projects, with a further R10,3 million committed to projects.

Kumba liability for bulk services for developments according to municipal approvals:	R83,560,794
Kumba-funded municipal bulk service projects (up to last claim on 2 October 2014):	R93,596,079
Kumba commitments still outstanding – awaiting municipal claims:	R10,342,991

Water management in Gamagara

Managing the water value chain must take the interests of key stakeholders into account.

The mine’s environmental management plan and water-use licence allow and cater for dewatering through a number of dewatering boreholes. Water is pumped from these boreholes to Sedibeng Water (which provides water to the Gamagara Local Municipality), a number of directly impacted farmers, and to the residents of Dingleton. The mine can also supply raw groundwater directly to Kathu, where it is currently used for potable and garden water.

Waste water (grey water) from the Gamagara Local Municipality is pumped to the mine for use in mining activities and in the plant.

A new water export pipeline from the mine is under construction and should be completed in 2015. The new pipeline will be able to pump water directly into the Vaal Gamagara pipeline, or into the Sedibeng (Kathu) reservoir from where it can be boosted by Sedibeng Water into the regional Vaal Gamagara pipeline. The new pipeline will also have emergency take-offs to the softener plant and Mapoteng Reservoirs (Gamagara Municipality), and can allow water from Sedibeng Water back to the mine and municipality if required. It is also envisioned that the pipeline will tie in with a future aquifer recharge scheme at Khai Appel to minimise the surface discharge of groundwater into the environment.

Also underway is a project to return additional treated effluent (grey water) from the Kathu waste water treatment works. This efficiency project will assist in increasing the export of groundwater to Sedibeng Water.



The Bana Early Childhood Development centre in Kathu was built by Sishen mine.

EDUCATION

Education is a provincial competency and therefore Sishen mine works in close partnership with the Northern Cape Department of Education (NCDOE) in all its efforts to improve education in its zone of influence, the JTG district. At the same time the mine appreciates that its efforts have to be directly informed by local educators. School Governing Bodies (SGBs), principals, teachers, NGOs and Community Based Organisations (CBOs) concerned with education are all prioritised in the mine’s engagement efforts.

Early childhood development project

It is universally accepted that early childhood development (ECD) is a critical education phase if children are to reach their full potential. Factors such as nutrition, health, consistent loving care and opportunities to learn all play a critical role in determining cognitive and social development.

In the period 2011 to 2014, through an MoU between Kumba and the Northern Cape Department of Education, a total of 10 ECD centres were constructed in rural communities in the JTG district. These centres ensure that children, specifically HDSA children, have affordable and easy access to a facility where they are exposed to quality ECD in a safe environment. Each centre consists of two classrooms designed for 25 children each. In reality, however, the need is so vast that a classroom sometimes accommodates up to 40 children.

The mine was responsible for constructing and equipping all these centres, but the NCDOE carried the cost of two of these centres.

Apart from building and equipping the centres, Sishen mine enabled six local women to be trained as educators through the ECD Learnership Programme.



Grade R education was provided for the first time at Moholeng Primary School in 2012.

Table 21: Progress with ECD centres in the JTG district

	Achieved by the project
2012	<ul style="list-style-type: none"> Four rural ECD centres completed in Glen Red, Cassel, Batlharos and Dithakong Five double classrooms built in 2011 were equipped Grade R education provided for the first time at Glen Red, Simololang, Moholeng and Lerumo Primary Schools Eight permanent job opportunities provided
2013	<ul style="list-style-type: none"> Bankhara Bodulong: a two-classroom ECD centre constructed and equipped Grade R education provided at the Bankhara Bodulong Primary School Two permanent job opportunities provided
2014	<ul style="list-style-type: none"> Dithakong: a two-classroom ECD centre constructed and equipped Grade R education provided at the Omang Primary School Two permanent jobs created

Support for education in general

Sishen mine has a long-term commitment towards a number of educational institutions in the local area. In many instances its ongoing support to schools goes back as far as 2007.

The mine's support to schools is built around its Education Quality Improvement Programme (EQUIP), which strives to provide support based on the needs of each school. As EQUIP's name indicates, however, the mine's education investments are geared towards improving the quality of education at schools. For this reason, the emphasis of the support to schools is on contributing to improved pass rates, encouraging learners to take mathematics and science, improving learners' performance in mathematics and science, improving the learner-educator ratios (within Education Department guidelines) and decreasing school drop-out rates.

Regular engagement between Sishen mine, schools and the NCDOE keeps priorities per school on the radar, and Sishen mine responds annually to requests for support through a well-structured process. Strong governance, keeping track of money invested in education and monitoring the return on that investment inform decisions about future support.

However, it is only fair to note that the ability of Sishen mine to support schools in the local area through direct investment is put under strain by -

- the ever increasing needs in Gamagara caused by the influx of rural learners to urbanised schools in Kathu, Mapoteng and Deben
- the mine's own conscious efforts to invest in schools in rural areas in the JTG district in order to strengthen the education system for all youths
- the awareness that ECD on the one side of the education continuum, and mathematics and science education on the other, are resource-hungry priorities.

The mine's contributions to education seek to address all these challenges in one way or another.

To help alleviate the pressure on schools in Gamagara, and particularly in Kathu, Sishen mine staying-in-business (SIB) projects in 2014 donated 14 hectares of land to Curro Holdings for the construction of a school and sporting facilities. This dual-medium school, which will initially cater for learners from Grade RR to Grade 9, will open in January 2015. Similarly, SIB projects provided funding to construct four classrooms and one ablution block at Kathu Primary School, and five classrooms and an ablution block at Sishen Intermediate School.

An innovative annual project that occurred during the reporting period was the Steam Car Challenge, aimed at stimulating interest in mathematics and science. Physical science learners from local schools received steam car kits which they used to build their own steam cars and then competed against each other in a race. Another well-received annual initiative was the roadshow to JTG schools in January and February to distribute approximately 4,000 school bags to needy learners.



Learners at the Sesheng Intermediate School.

Table 22: Investment in education

Project	Project details	2012 ZAR spend	2013 ZAR spend	2014 ZAR spend
<i>If actual spend deviates from budget, the budget is reported in brackets</i>				
ECD centres in the JTG District Municipality	Ten ECD centres were constructed and equipped according to the requirements of the NCDOE	7,647,298 (7,896,922)	R6,360,735 (7,000,000)	2,896,169 (4,651,200)
ECD practitioner support JTG district	Ongoing since 2010 Formal training of ECD practitioners - NQF levels 4 and 5 in collaboration with Centurion Academy	237,777 (250,000)	236,058 (250,000)	200,000 (200,000)
Sonstraaltjie Day Care Centre in Kathu	Ad hoc funding for maintenance. Sishen mine funded the centre between 2009 and 2011	12,041 (0)		
BANA Early Childhood Development Centre in Kathu	Ongoing support since 2007 Number of children supported increased from 155 to 205 in three years	1,753,382 (1,000,000)	Funds transferred in 2012 (750,000)	150,000
Pikkie Pret Grade R facility in Kathu	Ongoing support since 2008. In 2012 funding was used to build one classroom (equipped for 30 learners) in response to increasing learner numbers. 2013 and 2014 support was used to cover monthly operational costs	1,000,000	500,000	150,000
Ya Rona Day Care in Mapoteng	Since 2009 Sishen mine has been carrying the operational cost of this facility (eg groceries, electricity, services, gas, stationery and transport)	47,099 (50,000)	170,186 (200,000)	138,413 (200,000)
Kathu Primary School	Ongoing support since 2007 Utilisation of funds: 2012 - remedial support; upgrading of a technical laboratory; intercom system and security 2013 - teachers' salaries, learning material, interactive boards, brain profiles and a computer laboratory 2014 - two remedial teachers' salaries	500,000	625,000	250,000
Kathu High School	Ongoing support since 2007 Utilisation of funds: 2012 - one technical teacher's salary 2013 - two technical educators, infrastructure for an aftercare unit; buses to provide transport for learners 2014 - salaries for two mathematics and science teachers	454,451 (500,000)	825,000	1,629,250 (1,043,250)
Dingleton Primary School	Ongoing support since 2007 Various items such as food security, transport, equipment, remedial support, stationery, PA system, equipment, technology kit, school safety	500,000	500,000	500,000

Project	Project details	2012 ZAR spend	2013 ZAR spend	2014 ZAR spend
<i>If actual spend deviates from budget, the budget is reported in brackets</i>				
Sishen Intermediate School in Mapoteng Learner numbers increased from 642 to 894 in three years	Ongoing support since 2007. Fund utilisation: 2012 – teacher salary support and visual teaching aids; the administration block and hall were also completed 2013 - a remote controlled gate, paving in front of the hall and administration block 2014 - maintenance and repairs of school buildings	500,000	500,000	500,000
Northern Cape Primary School in Olifantshoek Learner numbers increased from 1,370 in 2012 to 1,600 learners in 2014	Ongoing support since 2010. Fund utilisation ² : 2012 - development of sports ground, apparatus for playing park, restroom construction and kitchen 2013 – construction of a library 2014 – computers and visual aids	600,000	500,000	766,245 (150,000)
Rehoboth Christian School in Kathu 64 students in 2012; 93 in 2014	Ongoing support since 2007 Fund utilisation: learning material for the students and tuition material	170,000	100,000	120,000
Deben Primary School Moderate increase from 1,432 learners in 2012 to 1,551 in 2014	Ongoing support since 2007 Fund utilisation: 2012 - office equipment, sports equipment, paving and school security 2013 - purchasing of a mini-bus, maintenance of classrooms 2014 – teacher salaries	600,000	500,000	500,000
Gamagara High School in Deben Learner numbers increased from 544 to 741 over the reporting period	Ongoing support since 2007. Fund utilisation: 2012 - curriculum provisioning, school security and infrastructure 2013 – two mathematics and science teachers, purchasing an intercom system and financing an educational tour 2014 – teacher remuneration	600,000	500,000	507,404
Langberg High School in Olifantshoek Learner numbers decreased from 781 learners (2012) to 634 (2013)	Ongoing support since 2008 Fund utilisation: 2012 - learner and teacher support material, school security, office equipment, maintenance of school hostel 2013 - construction of computer laboratory and netball court	600,000	500,000	
Maikaelelo Primary School in Olifantshoek Learner numbers increased from 521 learners in 2012 to 581 in 2014	Ongoing support since 2010 Fund utilisation ³ : 2012 – school security, computers and visual aids 2013 - installation of burglar bars, tiling of classrooms and repair of water tank 2014 – roofing of hall area	600,000	500,000	186,820 (150,000)

Project	Project details	2012 ZAR spend	2013 ZAR spend	2014 ZAR spend
<i>If actual spend deviates from budget, the budget is reported in brackets</i>				
Luxor Private School in Kathu Learner numbers increased from 154 in 2012 to 202 learners in 2014	Ongoing support since 2007 Fund utilisation: 2012 – construction of wooden log cabin classrooms; learning material for learners and stationery 2013 and 2014 - learning material for learners and tuition material	250,000	100,000	120,000
Mining Qualifications Authority (MQA) students in Kathu	Ongoing support since 2011. Enabled between 30 and 50 HDSAs per annum to enrol for N2 at the FET college by paying tuition fees and a small stipend	893,318 (1,200,000)	1,205,180 (1,350,000)	1,367,678 (1,900,000)
Mpelega Pre School in Sesheng 121 learners	Due to the increasing number of children in Sesheng, this initiative was sponsored during 2014 to assist with groceries, electricity, services and gas			50,000
Wrenchville Primary School	Identified as part of Sishen mine's broader focus on rural schools - in partnership with the NCDOE. Support by means of a fully fledged computer laboratory			136,748 (150,000)
Wrenchville High School	Identified as part of Sishen mine's broader focus on rural schools - in partnership with the NCDOE. The school's stationery and equipment were funded			375,470 (500,000)
Sishen High School Bursary Project	This project makes provision for bursaries for underprivileged children			1,000,000
Kathu Primary School	The construction of four classrooms and one ablution block ⁴			2,322,296 (250,000)
Sishen Intermediate School	The construction of five classrooms and one ablution block ⁴			2,735,211 (1,000,000)
Total		16,965,366 (16,816,922)	13,622,159 (15,200,000)	16,601,704 (14,041,854)

¹ 2014 expenditure, not budgeted for, at Kathu High School was to fund R586,000 towards teacher salaries.

² An increase in learners in Northern Cape Primary School in Olifantshoek meant all classrooms were fully occupied, leaving no space for a computer laboratory. Sishen mine exceeded its budget in order to assist the school with a computer lab.

³ The actual costs of roofing the Maikaelelo Primary School exceeded the budget.

⁴ The variance between the initial budget to support Kathu Primary and Intermediate Schools and the 2014 funding of these infrastructure projects was made possible by the Sishen mine SIB projects.



Construction work at Sesheng Intermediate.



New classrooms have been built to cater for the growing learner numbers of Kathu High School.

HEALTH

Community health and welfare is a key focus area for Sishen mine. On the one hand, the mine is responding to the difficulties that rural communities experience in accessing quality medical and healthcare services; on the other hand, the mine is attempting to alleviate some of the mounting pressure on health service delivery in communities surrounding its operations. There is a strong partnership approach with the Northern Cape Department of Health and the JTG District

Municipality but some of the challenges characterising the health landscape, such as a dire shortage of healthcare professionals, are difficult to overcome.

Also important is the social welfare of communities. Sishen mine contributes to food and basic essentials for vulnerable members of neighbouring communities and supports NGOs that deal with the adverse social consequences associated with rapid urbanisation.

Table 23: Investment in community health and welfare

Project	Project details	2012 ZAR spend	2013 ZAR spend	2014 ZAR spend
<i>If actual spend deviates from budget, the budget is reported in brackets</i>				
Ulysses Gogi Modise (UGM) Wellness Clinic in Kathu 25,647 beneficiaries in 2012; 30,821 in 2013; 12,268 as at end November 2014	Commissioned in 2007 as a primary and secondary healthcare facility, in close partnership with the Northern Cape Department of Health	6,037,692 (6,133,340)	5,772,098 (6,241,429)	4,795,600 (4,815,612)
Batho Pele Mobile Health Clinics, JTG district 19,843 beneficiaries in 2012; 22,340 beneficiaries in 2013; 28,352 as at end November 2014	Established in 2011 to provide mobile primary and secondary healthcare to rural communities, in close partnership with the Northern Cape Department of Health	5,619,239 (6,346,536)	7,239,442 (8,233,769)	7,487,480 (9,331,805)
Ambulance station/ UGM Wellness Clinic	An MoU between the mine and the Northern Cape Department of Health resulted in the construction of modular buildings adjacent to UGM Wellness Clinic and an ambulance station. Newly constructed buildings were furnished	4,813,415 (5,000,000)		
Family and Marriage Society of South Africa (FAMSA) in Kathu and Kuruman 1,635 people made use of the services offered in 2012; 1,535 in 2013; 1,011 as at end November 2014	Since 2009, Sishen mine has supported this NGO, which provides counselling and social services for individuals who want help with relationship issues. FAMSA helps communities to deal with modern-day stressors and issues that threaten family life	2,000,000 (1,000,000)	Funding was paid over in 2012 (1,000,000)	1,000,000 (1,000,000)
Sesheng Distribution Centre Between 2,000 and 2,291 beneficiaries	In partnership with Manger Care Centre and Spar, Sishen mine has provided ongoing support to these 14 initiatives since 2009	61,450 (95,000)	43,056 (95,000)	21,114 (50,000)
Dingleton soup kitchen 133 beneficiaries	Since 2007 nutritious hot meals have been provided to community members five days per week. Funds provided by Sishen mine were used to purchase monthly groceries, gas and stationery	110,158 (155,000)	140,792 (142,000)	168,230 (200,000)
Call Centre Users in 2012: 534	Since 2007 Sishen mine has carried the monthly operational cost of an emergency service call centre dealing with medical emergencies and the reporting of service delivery problems. The call centre is now fully sustainable and does not require further support	300,000 (300,000)		
Total		18,941,954 (19,029,876)	13,195,388 (15,712,198)	13,472,424 (15,397,417)

Ulysses Gogi Modise Wellness Clinic

The delivery of community-related prevention, treatment, care and support services is entirely managed by a not-for-profit organisation – Ulysses Gogi Modise (UGM) Wellness Clinic – and governed by a memorandum of understanding signed with the Northern Cape Department of Health. The UGM Wellness Clinic, which opened in 2007, is located in Kathu and collaborates closely with the surrounding public health clinics. It provides healthcare services to Kumba employees, contractor employees and community members, thus relieving the pressure on public healthcare facilities. Through the services rendered by the clinic, the mine actively engages with local communities to address a range of lifestyle and other diseases, ranging from HIV/AIDS and hypertension to diabetes, TB and cancer. Individuals registered on the disease management programme are closely monitored on an ongoing basis.

The UGM Wellness Clinic runs an intensive community health education programme, using training sessions, school visits, door-to-door campaigns and industrial theatre to reach learners, farm workers, employees of local businesses and soup kitchen beneficiaries, among others.

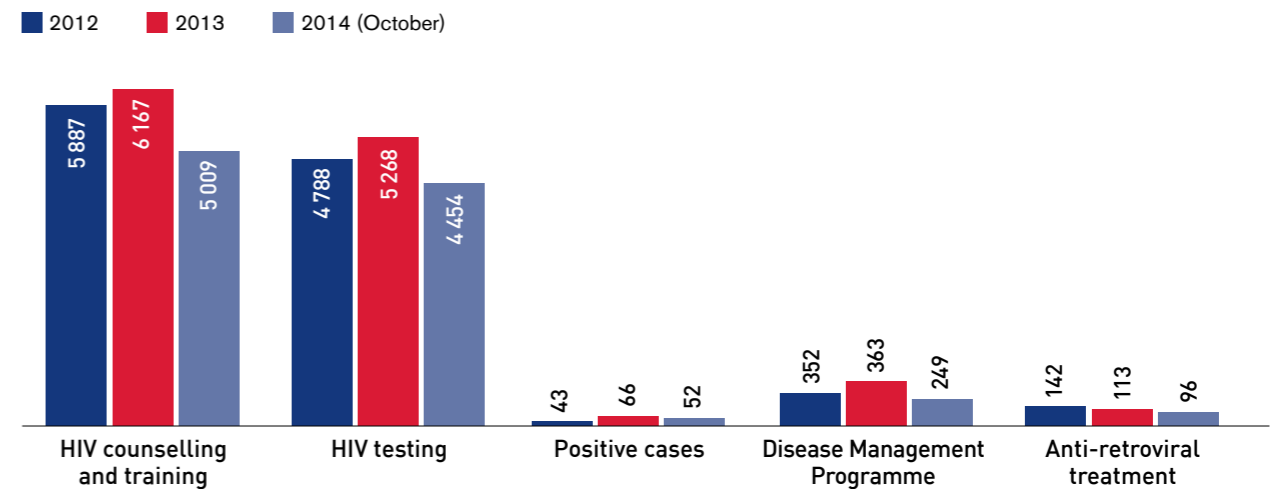
The clinic works in close partnership with the Northern Cape Department of Health, Department of Social Services and local, district and provincial AIDS councils. The main health topics addressed are HIV/AIDS, sexually transmittable diseases, foetal alcohol syndrome, tuberculosis and cancer.

The mine has invested R14 million over three years and approximately 70,000 patients have benefited from the clinic's services.

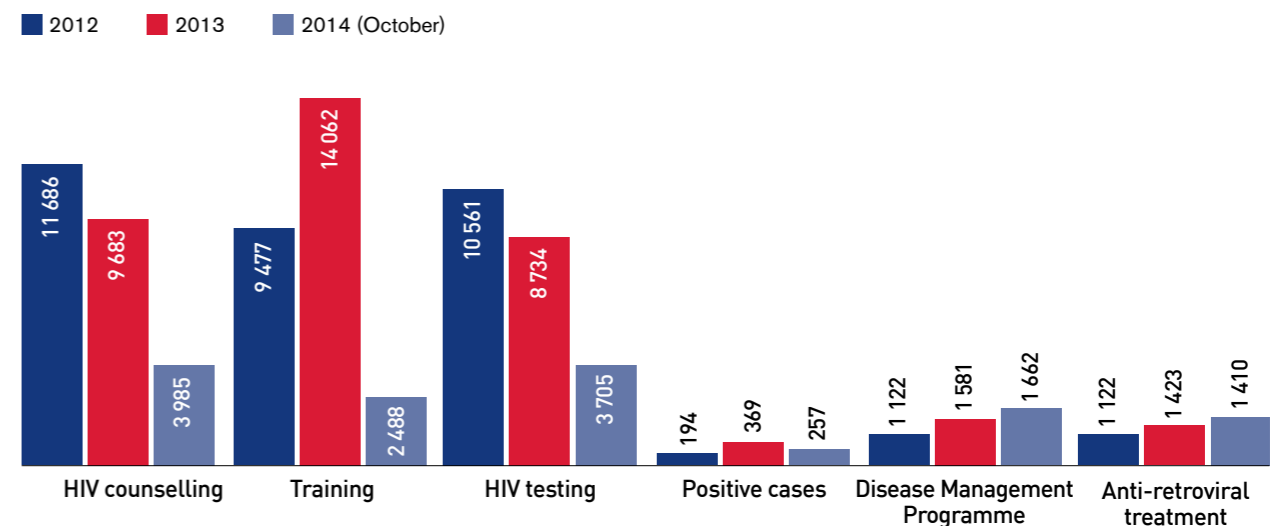
Table 24: Number of visits per year

Year	Number of visits
2012	25,647
2013	30,821
2014 October	12,268
Total	68,736

Graph 5: UGM Wellness Clinic services used - employees



Graph 6: UGM Wellness Clinic services used – contractors and community



HIV/AIDS

Sishen mine's HIV/AIDS Disease Management Programme focuses on prevention, treatment, care and support, and provides services to employees, contractors, family members and the broader community.

Within the workplace programme, prevention initiatives include health education and promotion, condom distribution, post-exposure prophylaxis (PEP) and general health risk screening, which includes voluntary counselling and testing (VCT) and screening for TB. The company started offering VCT as early as 2004 and, over the years, has enhanced access to testing services through wellness campaigns, medical surveillance and primary care services. VCT has now been entrenched as part of routine health risk screening. The mine continues to report consistently high HIV counselling and testing (HCT) participation of around 90% and the registration of disease management remains stable.

Batho Pele Health Project

Through this project the mine takes healthcare to people in rural areas. Using fully equipped mobile clinics, the mine, in conjunction with the JTG district Department of Health, helps people overcome the problems associated with infrequent and expensive transport to and from larger centres.

Mobile clinics offer a range of services, including screening for diseases, dental and ophthalmic care and surgical interventions. From 2012 to 2014, more than R20 million was spent on the Batho Pele clinics, which do screening for diseases, provide dental and ophthalmic care, dispense medication and provide general practitioner services and HCT. During the three-year period, the clinics were visited 57,500 times and built up a patient base of 18,156 unique beneficiaries.

Of the community members who benefited from this project, 67% were women. Correlating with the more rural population profile, 80% of mobile clinic patients were women, children or the elderly.



28,352 visits were recorded between January and October 2014.

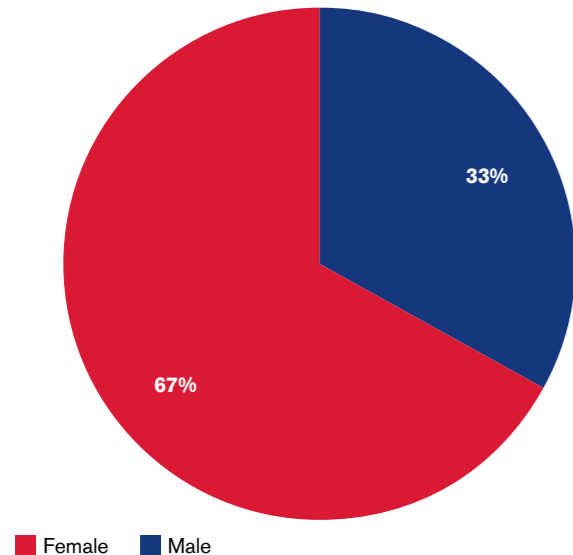


Taking basic healthcare to children in rural areas is a priority.

Table 25: Number of Batho Pele visits per year

Year	Number of visits
2012	19,843
2013	22,340
2014 (end October)	28,352
Total	70,535

Graph 7: Gender and age of Batho Pele mobile clinics users



Graph 8: Users of Batho Pele mobile clinic units

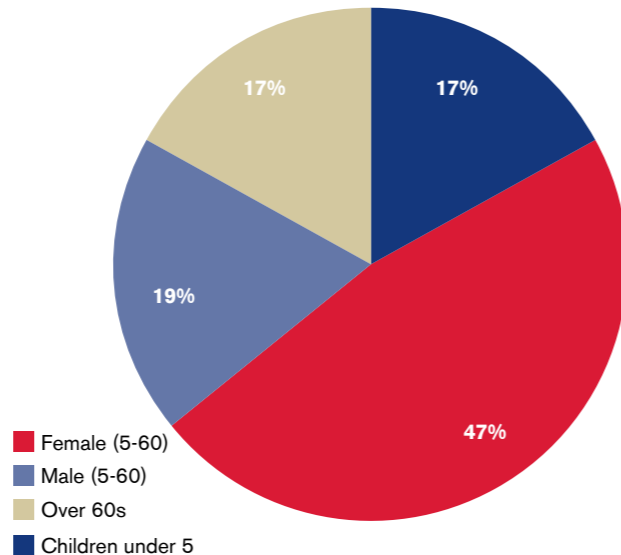


Table 26: More detailed information on the various services provided by mobile clinics

Gender classification	Dental unit	Eye-care unit	General practitioner unit	HCT unit	Mobile unit	Total visits
2012						
Female: < 5	53	30	65	7	933	1,088
Male: < 5	78	51	63	9	797	998
Female: 5 – 60	1,864	928	449	466	5,588	9,295
Male: 5 – 60	1,678	398	222	163	1,592	4,053
Female: > 60	151	372	198	62	2,113	2,896
Male: > 60	114	288	85	55	971	1,513
All patients	3,938	2,067	1,082	762	11,994	19,843
2013						
Female: < 5	51	31	354	18	1549	2,003
Male: < 5	58	43	354	8	1423	1,886
Female: 5 – 60	1,289	747	1,870	881	5,774	10,561
Male: 5 – 60	916	362	930	312	1,707	4,227
Female: > 60	169	335	493	40	1,301	2,338
Male: > 60	93	224	281	49	666	1,333
All patients	2,576	1,762	4,282	1,308	12,420	22,348
2014 (October)						
Female: < 5	34	13	281	10	931	1,269
Male: < 5	39	21	259	2	821	1,142
Female: 5 – 60	1,021	664	1,564	414	3,736	7,399
Male: 5 – 60	796	321	680	92	975	2,864
Female: > 60	72	243	432	4	914	1,665
Male: > 60	73	147	245	4	568	1,037
All patients	2,035	1,409	3,461	526	7,945	15,376



Food is prepared at the Dingleton soup kitchen.

Dingleton soup kitchen

In Dingleton, Sishen mine supports a soup kitchen run by volunteers. The soup kitchen provides nutritious hot meals five days a week to an average of between 170 (2012), 207 (2013) and 133 (2014) vulnerable community members. To qualify for soup kitchen support, community members are evaluated by professional health workers and the Northern Cape Department of Social Development. The soup kitchen also provides food parcels to community members in need of medical treatment on the day of their visit to the local clinic or provincial hospital in Kuruman.



The Dingleton soup kitchen provides nutritious hot meals five days a week.



Community members queue for a meal at the Dingleton soup kitchen.

“We cannot glibly, on full stomachs, speak about handouts to those who often go hungry.”
- Desmond Tutu

FAMSA

FAMSA consists of social and community workers and mental health professionals who provide counselling and social services to assist communities to cope with modern-day stressors. Twenty-six FAMSA affiliates function nationwide and are affiliated to the National Council.

FAMSA Upington opened its doors in May 1995 and today has branches in Springbok, Calvinia, Prieska, Postmasburg, Kathu and Kuruman.

Sishen mine has financially supported the Kathu and Kuruman branches of FAMSA since 2009. Around 4,170 community members benefited from FAMSA’s services in the 2012–2014 period.

Of these community members, the majority came from the more urbanised Kathu and Kuruman – 30% and 44% respectively. The client profile also shows community members from Mapoteng, Olifantshoek, Deben, Dingleton, Black Rock and Danielskuil using the services of FAMSA but in much smaller numbers.

The work FAMSA has done over the past three years is visible and tangible in communities but also an indication of the levels of stress, relationship strain and other social problems associated with urbanisation and high-density living conditions. Even though the percentage of abused children seeking help is low, the five (2012), seven (2013) and 10 (2014) children approaching FAMSA should not go unnoticed. Also notable is the high percentage of employment problems, predominantly among contractor employees. A last interesting observation is the increase in family conflict, often characterised by “uncontrollable children”.

Table 27: Number of FAMSA visits

Year	Number of visits
2012	1,635
2013	1,535
2014 (end November)	1,001
Total	4,171



FAMSA consists of social and community workers and mental health professionals who provide counselling and social services to community members.



Sishen mine has financially supported the Kathu and Kuruman branches of FAMSA since 2009.

Table 28: Services profile FAMSA 2012–2014

	2012 client %	2013 client %	2014 client %
Play therapy	9.3%	11.5%	11.7%
Emotional difficulties, anxiety and depression	21.7%	23.1%	13.8%
Alcohol abuse	32%	25.7%	25.7%
Family conflict and uncontrollable children	5%	3.2%	0.2%
Suicide	2.8%	4.5%	8.7%
Abused children	7.8%	7.7%	5%
Adult rape	0.3%	0.5%	1%
Divorce counselling	5.5%	2.3%	3%
Employment problems	3.5%	3.8%	13.5%
Mourning process	7.8%	11.2%	3%
Relationship problems	4.2%	6.6%	6%



Employees at the UGM Wellness Clinic actively engage on community health matters.

POVERTY ALLEVIATION

Sishen mine's poverty alleviation initiatives are mainly focused on the very successful work done through the Small Business Hubs at Kathu and Kuruman, providing financial, technical and implementation support to local small, medium and micro enterprises (SMMEs). Funding for these enterprises is accessed through the Anglo Zimele Community Fund. Irrespective of stakeholder criticism of the concept of repayable loans, and strained relationships that can result from incidents of defaulting, the numbers and testimonies of successful entrepreneurs corroborate the mine's belief that host communities are more than capable of innovating and creating value.

A number of entrepreneurial success stories emerged from the Small Business Hubs in 2014:

- DNL, a catering service provider operating two kiosks at Sishen mine, passed the R1 million-mark for monthly turnover.
- The owner of Malome Glass Work finished repaying his Zimele loan.
- The Nando's franchise, which opened in Kathu on 14 August 2014 with Zimele funding, earned over R779,000 in turnover after the first three months in operation.

The SIOC-cdt Enterprise Development Project was outsourced to Sishen mine's Small Business Hubs in 2013. This means that business development funded by the Community Development Trusts is managed in synergy with Zimele-funded enterprise development.

There has also been a deliberate effort from Sishen mine to stimulate the economy in rural areas by "planting" projects believed to have commercial potential, "cultivating" these projects through public-private partnerships, and enabling "growth" through intensive capacity-building efforts for the community members involved. Projects such as the Manyeding Cultivation Project and Heuningpot Honey Bee Project have required substantial investments but have gradually matured and are providing secure livelihoods for the individuals involved. It is essential that over time these projects decrease reliance on external parties for funding and assistance and become self-sustainable, regulated by economic principles.

Table 29: Investment in poverty alleviation

Project	Project details	2012 ZAR spend	2013 ZAR spend	2014 ZAR spend
<i>If actual spend deviates from budget, the budget is reported in brackets</i>				
Small Business Hubs in Kathu and Kuruman	Small Business Hubs are geared to creating local, sustainable businesses that generate employment and diversify the economy to reduce dependence on formal employment in the mining sector	4,164,870 (4,100,000)	4,088,162 (4,126,741)	3,473,683 (3,728,902)
Organic Compost Project in Kathu	This project ran from 2007 to 2011; the amount was paid for maintenance purposes	50,000		
Joe Morolong Manyeding Cultivation Project 159 households from Manyeding and surrounding villages	This public-private partnership has been under way since 2010 This has resulted in 24 permanent jobs, has improved food security and has stimulated the local economy through vegetable sales	503,513 (500,000)	1,257,328 (1,420,000)	500,000
Heuningpot Honey Bee Project in Deben 12 members of the cooperative in 2012, nine in 2013 and six in 2014	This public-private partnership has existed since 2009 This project has resulted in six permanent jobs and an active honey business in Gamagara	524,200 (500,000)	1,463,434 (1,398,400)	500,000
Kathu Vision Project	Project aimed at rejuvenating Kathu as a town. In 2013 the Kathu Clean Up project was implemented in collaboration with Gamagara Local Municipality. Streets were cleaned and construction rubble at development sites was removed	28,865 (300,000)	300,000	144,668 (300,000)
Total		5,271,448 (5,450,000)	7,108,924 (7,245,141)	4,618,351 (5,028,902)

Heuningpot Cooperative

The Heuningpot Beekeeping Primary Cooperative has been making honey for the past six years and is a full member of the South African Bee Industry Organisation.

The project started as a rural development initiative training 12 unemployed people from Deben to become self-employed beekeepers. Five people (four males and one female) currently run the project.

The beekeeping project has been strengthened by a significant public-private partnership:

- the National Development Agency (NDA) provided R1,032,64 in funding and this was used for equipment and supplies, among others
- the Agri-Seta provided funding for studies towards a certificate in Animal Production (NOF Level 1) and a R600 stipend for all 12 beneficiaries for a full year
- Gamagara Municipality provided a venue for the beneficiaries to attend Agri-Seta courses.

Farm maintenance is one of the challenges of this project and warrants intensive capacity-building efforts. In addition to training in organic farm management, organisations such as the NDA, ABSA Bank, the Small Enterprise Development Agency (SEDA) and Kuruman's Small Business Hub provided business management training. The farmers have acquired valuable skills and the cooperative has given them renewed purpose and a sense of accomplishment.

The hives were originally located at Droomvlei and had to be relocated when Sishen mine embarked on its West Expansion Project. The mine provided new land for this and signed a five-year lease agreement with the cooperative.

The hives were relocated at the end of July 2013. Some bees were lost in the process and the honey harvest was disrupted. However, the hives are growing again and the project is benefiting from the mine's involvement in water provisioning and access roads to the hives. Some 750kg of honey was harvested in 2013 and 531kg in 2014. The lack of infrastructure on the new site remains a challenge, however.

Over the years the mine has invested substantially in the project. The table below outlines expenditure over the five-year period. These funds have been used to purchase essentials such as hives, swarms and equipment, to pay for fuel, water and electricity, to do repairs and maintenance and to sustain certification.

Today the cooperative supplies honey to local and national markets, and has established itself as the biggest supplier in the district. Plans are in place to construct an on-site processing plant, add new swarms, formalise agreements with current clients and supply the national market through partnerships with existing suppliers in the province. There is no doubt that the project has succeeded in meeting its original objectives, which were to stimulate the local economy and help address youth unemployment.

Table 30: Sishen mine's investment in the honey bee project

2009 ZAR spend	2010 ZAR spend	2011 ZAR spend	2012 ZAR spend	2013 ZAR spend	2014 ZAR spend
713,802	349,811	500,000	542,200	1,463,434	500,000



The Heuningpot organic honey bee farm's core team - from the front are Lodewyk Steenberg (chairman), Florence Dicolanyane (SEC), Kelwot Oetker (deputy chairman), Lukas Kaalman (safety officer), Andries Staalman (worker) Kgamoitso Moremi (treasurer), Joseph Kgakotsi (bee doctor) and Abraham November (driver).



The Heuningpot Cooperative harvested 750kg of honey in 2013 and 531kg in 2014.

The Heuningpot cooperative has gradually matured to provide secure livelihoods for the individuals involved.

The Manyeding cultivation project - pictured are shareholders in the farm with Boitshoko Moacwi the chairman at the centre wearing a grey golf t-shirt.



Manyeding Cultivation Project

The project began in 2010 as an SLP food security garden commitment. Today it operates as a registered cooperative, employing 24 workers. The cooperative harvests and sells a number of products to local and national markets, including spinach, cabbage, carrots, potatoes, maize, watermelon and green beans.

The viability of the project has been fortified by public-private partnerships:

- funding provided by the Department of Agriculture, Land Reform and Rural Development was used to equip a borehole, purchase farming equipment, install an irrigation system and obtain agricultural inputs, among other things
- the NDA provided R1,153,840 for vegetable production inputs, seeds and seedlings, soil preparation and drip irrigation. An additional R200,000 was made available in 2014 for agricultural inputs and seedlings
- heavy mining machinery manufacturer, Joy Global, provided funding for a tractor
- the Department of Economic Development provided funding of R1 million for wages and personal protective equipment.

Funding from Sishen mine was used for essentials such as electrical reticulation and connection, water, fuel, asset maintenance, technical support on organic certification, vehicle maintenance and wages.

The cooperative has applied for an Environmental Impact Assessment and Water Rights, which have been approved. The project was certified organic during 2013 and all inputs are organic. A Ploughing Certificate is still outstanding. Going forward, the cooperative is looking at a three-hectare greenhouse expansion, which the Department of Agriculture, Land Reform and Rural Development will fund. This expansion will require the installation of solar energy.



Employees are busy with farming activities at the Manyeding Cultivation Project.

Table 31: Sishen mine's investment in the cultivation project

2010 ZAR spend	2011 ZAR spend	2012 ZAR spend	2013 ZAR spend	2014 ZAR spend
R3,275,052	R4,525,160	R503,513	R1,257,328	R500,000

Enterprise development through the Small Business Hubs

Anglo American established the Zimele enterprise development initiative to create and develop commercially viable and sustainable SMMEs. Its Community Fund is managed through a network of Small Business Hubs based in local communities. Sishen mine's Kuruman and Kathu Small Business Hubs form part of this network. Since June 2008, R48 million from the Community Fund has been disbursed in the form of loans to finance HDSA-owned SMMEs in Sishen mine's local area. Financing of up to R2 million can be secured for an SMME.

Financing for a business is one side of the coin; the other is support in the form of training, mentoring and ongoing coaching of entrepreneurs. All entrepreneurs have free-of-charge access to professional business development services and mentoring. In total 1,773 people participated in training during the period 2012–2014, with topics ranging from financial management and managing a start-up to marketing and HR matters and project management. Training sessions are open to the public and any interested business can attend at no cost.

To enable the required mentoring and support services, Sishen mine contracted seven business developers, a marketing specialist, a financial specialist, a manager and support staff in 2010 for a period of five years. Enhancing these services, a mentoring company, Trio Plus, has been appointed and operates from the Kuruman Small Business Hub.

The mine invests between R3,7 million and R4,1 million per year to operate the Small Business Hubs. The true yardstick for measuring the effectiveness of small business development is the establishment of successful SMMEs. To date, Sishen mine's investment has resulted in 104 new SMMEs being successfully established in the mine's local area. Their joint turnover has injected R245 million into the local economy since June 2008 and 1,209 additional jobs have been created for community members.

A considerable amount of effort typically goes into converting a business idea into a workable business plan that results in a business concept that attracts funding. This effort is often underestimated. What's more, the moderate conversion rate from aspiring entrepreneur to successful funding applicant and sustainable business owner can be frustrating for the would-be entrepreneurs themselves.



Mark Cutifani, CEO of Anglo American, visits Zimele Community Fund-supported Carol's Driving School.



Zimele provided the funds to jump start this catering company, DNL Foods who provide catering services to employees within the mine. Pictured the owners of DNL Foods Nelly and Danny Leibrandt.

Table 32: The activities of the hub facility in Kathu for the period 2102–2014

Year	Number of clients	Business plans submitted	Business funding applications approved
2012	2,738	48	25
2013	3,086	32	22
2014 (end November)	3,517	13	8

Table 33: 2008–2014: Enterprise development through the Small Business Hubs

Year	Number of entrepreneurs	Jobs created	Loans (ZAR)	Turnover (ZAR)
2008-2012	79	839	34,716,679	189,799,127
2013	22	323	9,825,641	104,758,360
2014 (end November)	8	107	7,684,036	152,024,144

YOUTH DEVELOPMENT

Mining activities in the JTG district have increased considerably over the past 10 years. Despite the presence of rich mineral deposits, however, the majority of people are young, jobless, uneducated and poor. This can be a volatile combination that could spill over into social instability and even public violence. Just as concerning is the observation that when opportunities for economic development do come to the fore, the population is not always able to seize these opportunities and use them to turn their situation around.

This means communities can only prosper if concerted efforts are made to give unemployed young adults from the JTG District Municipality an opportunity to improve their skills and employability. Sishen mine initiated its youth development programme in 2012, budgeting R3,395,770 to address the prevailing challenges and assist the youth to become part of the local economy.

The mine's approach to youth development has led to collaboration with the following stakeholders:

- National Youth Development Agency, Northern Cape
- Joe Morolong Local Municipality
- Gamagara Local Municipality
- Ga-Segonyana Local Municipality
- Gamagara Development Forum
- Local business and NGOs
- Department of Social Development
- Department of Labour
- Kurara FM radio station

Phase one of the Youth Development Programme

Following a recruitment drive, 60 young community members were selected to participate in the programme. Participants identified gaps in their skill sets that may hamper them from securing employment. Gaps that were highlighted include low self-confidence, lack of a driver's licence and poor computer literacy.

During phase one of the programme, participants were capacitated over a period of six months, starting in November 2012. The aim was to address skills gaps through the following interventions:

- Life skills training
- A course in project management
- Two entrepreneurial skills programmes
- IT enrichment
- Assistance with driver training and testing
- Networking and other interactions

A total of 57 participants completed the initial phase at the end of April 2013 and were given an opportunity to introduce themselves to an audience of potential employers at an event. This approach ensured they received maximum exposure to prospective employment opportunities and other business prospects.

Phase two of the Youth Development Programme

On 1 May 2013, 40 of these young community members began an 18-month placement programme at various sections of Sishen mine where they received on-the-job training and experience. Other participating employers included Sishen Intermediate School, FAMSA, UGM Wellness Clinic, Kalahari Country Club and Trio Plus.

Surveys conducted in 2013 showed that the participants' personal skills – such as communication, punctuality and ability to tackle challenges – have significantly improved. Their technical and career-related skills have also improved markedly following capacity building.

Table 34: Youth Development Programme participation rate

Intake into the programme – phase one	57
Placements at Sishen mine – phase two	40 (70%)
Youths offered employment during placements	17 (30%)
Own businesses started during programme	0
Resignations from programme	2 (5%)
Placements terminated	1 (2.5%)

Anglo American Kuruman Field Band

The Anglo American Kuruman Field Band was founded in 2011, using a grant from the Anglo American Chairman's Fund, which was donated to the Field Band Foundation.

This initiative was born from the realisation that children and teenagers from Kagung, Magwagwe and Ncwelengwe villages had no meaningful after-school activities. The band was officially adopted as a Sishen mine youth project in August 2012 to create opportunities to develop life skills through music and dance. With 200 enthusiastic members, the band has made a significant contribution to giving young people a sense of purpose. The band even generates an income by appearing at events such as weddings, gala dinners and sports days.



The Anglo American Kuruman Field Band was founded in 2011, using a grant from the Anglo American Chairman's Fund.

Table 35: Investment in youth development

Project	Project details	2012 ZAR spend	2013 ZAR spend	2014 (end November) ZAR spend
<i>If actual spend deviates from budget, the budget is reported in brackets</i>				
Youth Graduate Programme for youth in the JTG district – phase one	During phase one, 60 youths were capacitated over six months (November 2012 to April 2013) through basic skills interventions	1,167,090 (3,395,770)	2,143,011 (2,229,180)	
Youth Graduate Programme for youth in the JTG district – phase two	Phase two began on 1 May 2013 with the 18-month placement of 40 youths at Sishen mine		704,475 (960,000)	945,161 (960,000)
Anglo American Kuruman Field Band – JGT district	Sishen mine's funding was towards subsistence during band performances at mine events and the sponsorship of band events such as preparation for the Field Band Foundation Championships and their year-end/Christmas party.	198,842	125,155 (160,000)	109,292 (160,000)
Total		1,365,932 (3,395,770)	2,972,641 (3,349,180)	1,054,453 (1,120,000)

DONATIONS AND NEW PROJECTS

This focus area enables Sishen mine to respond appropriately to changing community needs and emerging priorities.

Since 2102, the annual budget allocated for donations has amounted to R1,5 million. In addition, approved budgets not spent in any of the other focus areas (ie municipal infrastructure, education, health, poverty alleviation and youth development) within a financial year are automatically reallocated to this focus area. This provides a mechanism to ring fence approved community investment and keep these funds available to invest in new priorities that may emerge.

This focus area for example, made it possible for Sishen mine to respond to the Mapoteng community's need for expansion of sport facilities. During 2013 Sishen mine funded the R1,227,388 development of soccer fields in Mapoteng, which had only one soccer field that was woefully inadequate for the area's fast-growing population.

After the completion of the project, the Kalahari Country Club took over the maintenance of the fields, ensuring they are kept in good condition.

Another example of the mine's responsiveness is the expansion of the Kathu Vision Project from a once-off clean-up of Kathu, Sesheng and Mapoteng to a long-term partnership with the Gamagara Local Municipality and local communities for sustainable future service delivery in this regard. The additional R1,755,460 from the donations and new projects focus area made it possible to procure equipment and establish a project management capability. It is envisaged that local municipality, contractors, communities and schools in particular will cooperate on ongoing clean-up campaigns throughout 2015 and beyond.

Donations, on the other hand, focus on smaller projects and seldom exceed R300,000. Local stakeholders submit their proposals to the sustainable development (SD) function at Sishen mine. A committee consisting of the SD and finance functions at the mine evaluates applications against set criteria in the social and community development strategy. Committee meetings are convened every two weeks to ensure that applications are reviewed promptly. Decisions are made on donation requests below R25,000. Requests exceeding R25,000 are tabled at the monthly Project Review Committee, consisting of members of the mine's leadership team.

Successful applications are paid directly to the supplier of the goods and services, and not to the requesting entity or individual. In the rare cases that funding is paid to the initiator, the mine requires proof of usage for record/audit purposes.



The Kathu Vision Project was expanded from a once-off clean-up to a long-term, sustainable partnership.

LOCAL EMPOWERMENT THROUGH OWNERSHIP

ECONOMIC PARTICIPATION BY EMPLOYEES AND COMMUNITIES

The Mining Charter, which guides the process of transformation in the mining industry, sets a target of 26% black ownership of mining assets.

Kumba is fully empowered in terms of the Charter requirement of 26% black ownership, and has been since listing in 2006. In that year, 20% of the equity in the Sishen Iron Ore Company (SIOC) was transferred to Exxaro (the largest black-owned mining company in South Africa), 3.1% to the Envision Trust and 3% to the SIOC Community Development Trust (SIOC-cdt).

Economic participation by employees and local communities in Sishen mine unlocks a unique stream of socio-economic benefits. This type of broad-based empowerment scheme means dividends declared to the shareholders of a mining company flow to employees and communities. The table below outlines the dividends paid by Kumba to employees and the investment made through community trusts in the mine's local area.

Table 36: 2012–2014 investment in communities and pay-outs to employees

	Total investment (ZAR)
JTG and Gamagara communities through community development trusts	361,6 million
Sishen employees through Envision	191,7 million

COMMUNITY DEVELOPMENT TRUSTS

Kumba Iron Ore's neighbouring community members own a part of its business – through the Sishen Iron Ore Company community development trust (SIOC-cdt) that was officially launched on 4 December 2008.

The SIOC-cdt holds its equity on behalf of the communities around Kumba's mines and distributes benefits to these communities, thereby affecting more than 300,000 people via a system of beneficiary trusts. SIOC-cdt has five beneficiary trusts, including two which focus on development in areas close to Sishen mine, namely John Taolo Gaetsewe Developmental Trust (JTGD) and Gamagara Development Trust. Since these entities operate independently, they are development partners and material stakeholders of Sishen mine.

Since the inception of SIOC-cdt, projects worth more than a billion rand have been initiated. With an emphasis on education (especially ECD), skills development and infrastructure projects, SIOC-cdt is a venture that can continue delivering benefits to the community long after Sishen mine's life has ended.

“At Kumba we are particularly proud of our contribution to the developing South African society through empowerment, which has been an integral aspect of our business since the formation of the company in 2006.”

– Fani Titi non-executive chairman of Kumba

Between 2012 and 2014, these two development trusts in the JTG district together spent more than R361,6 million on communities in the JTG district.

Table 37: 2012–2014 community projects through development trusts

	Investment in communities (ZAR)	Number of projects
JTGDT	265,5 million	36
Gamagara Development Trust	96,1 million	32

ENVISION

Envision is the share ownership scheme for permanent employees below management level. It has benefited tremendously from the increase in the value of SIOC shares, which has multiplied in seven years. Envision continues to give employees the opportunity to share in the success of the company. In terms of the scheme rules, qualifying employees are allocated units in Envision and receive dividends twice a year.

During 2013 Envision made dividend payments of R29,9 million in March and R57,3 million in August, which translated to a cash payment of approximately R19,111 per participating employee after tax. In March 2014 Envision received a further dividend of R57,9 million, and R46.6 million in August 2014 from the final SIOC dividend.

The second five-year phase of Envision commenced in November 2011 and will mature in 2016. Employees will have access to further financial training during the next few years in preparation for this pay-out.

The Envision pay-outs have a pronounced effect on the local economy and contribute to induced job creation as the money employees spend leads to new jobs in retail and other sectors.



Diedre van Wyk is a plant operator working at the Jig Plant at Sishen mine.

Proclamation of biodiversity offset area

Although the issue of biodiversity is not directly related to Sishen mine's social investment and community engagement activities, it is nevertheless relevant in this context as it potentially affects the quality of life of the community.

Sishen mine is committed to the highest standards of environmental care and strives to minimise the impact of its operations on the environment. A biodiversity action plan – devised with the mine's parent company and in collaboration with Fauna & Flora International – has been put in place, as have closure plans.

Sishen mine has a specific biodiversity challenge: ensuring the Kathu protected forest remains undisturbed and unaffected by mining. Claims that mine dewatering has affected Camel Thorn trees were investigated by the Council for Scientific and Industrial Research (CSIR). Results thus far have been inconclusive. The mine has provided approximately 2,600ha of offset land to compensate for the land affected by its mining. Fencing of the offset area was completed in 2013. The reintroduction of various animal species and the eradication of alien and invasive plant species are ongoing priorities.

STAKEHOLDER ENGAGEMENT

FRAMEWORK FOR STAKEHOLDER ENGAGEMENT

Sishen mine works hard to build relationships with key stakeholders. Three ongoing Stakeholder Engagement Programmes (SEPs) provide a framework for proactively engaging and communicating with stakeholders (ie employees, contractors, suppliers, communities, government and other stakeholders).

The three SEPs are:

- a programme for engagement of communities, local and provincial government
- a programme directing trade union and employee engagement.

- a programme for the engagement of the DMR Regional Office and other regulators such as the Northern Cape Department of Environment and Conservation.

In 2013 Kumba audited the effectiveness of its communication with employees, communities, suppliers, the media and local authorities. The survey provided reliable information about the trust, relationship satisfaction, levels of understanding, support and emerging issues in the engagement and relationship between the company and its key stakeholders. The findings of the Kumba survey, in which 2,771 Sishen mine employees and 1,577 community members in Gamagara participated, played an important part in shaping these engagement programmes.

STAKEHOLDERS IDENTIFIED AND ANALYSED

Each year, Sishen mine undertakes a stakeholder mapping and analysis exercise to outline stakeholders who are material to its operation - and not managed by Kumba Corporate Office. The table below organises Sishen mine's local stakeholder

landscape serviced by its three engagement programmes. Due to the size of the mining operation, its 'age', and the extent of its social management activities, Sishen mine's zone of influence is vast and spans a vibrant and dynamic stakeholder landscape.

Table 38: Sishen mine stakeholders

Stakeholder category: Residential communities
People residing within the local area/zone of influence in towns, townships, villages, new developments and informal settlements.
<p>Communities in the host municipality, Gamagara Local Municipality</p> <ul style="list-style-type: none"> • Kathu (Kathu Central, Kumani Houses, Smartie Town, Matlapeng and new residential developments) • Sesheng • Mapoteng (Shanty Town and Extension 1) • Deben (Deben Central, 7de laan, Soweto, Hakbosdraai, New Stand and Woonbuurt) • Dingleton (see affected parties below) • Olifantshoek (Olifantshoek Central, Welgeleë, Ditleung, Skerpdraai and Diepkloof) • Farming community
<p>High-density or fast-growing villages/towns in Ga-Segonyana</p> <ul style="list-style-type: none"> • Kuruman (ward 1) • Wrenchville (ward 1) • Bankhara Bodulong (ward 2) • Mothibistad (ward 3) • Batharos (ward 8) • Maruping (part of ward 9)
<p>Other rural villages in Ga-Segonyana</p> <ul style="list-style-type: none"> • 23 villages in wards four to seven and nine
<p>Rural villages in Joe Morolong</p> <ul style="list-style-type: none"> • More than 120 rural villages in 11 wards. • There are no large towns in the area and the villages with a population exceeding 1,000 are: <ul style="list-style-type: none"> - Ga-Morona - Bendel - Ga-Sehunelo - Deurward - Cassel - Bothithong - Glen Red - Kgangwane (incl. Maseohatse and Kampaneng) - Dithakong
Stakeholder category: Affected parties
Stakeholders affected by Sishen mine, either positively or negatively.
<p>Dingleton community</p> <ul style="list-style-type: none"> • Resettlement working group members • Dingleton North home owners • Dingleton North renters • The handful of home and business owners (the rest of Dingleton) who have not yet signed • Home and business owners (rest of Dingleton) who agreed to relocate by 2016 • Renters (rest of Dingleton)
<p>Farmers directly impacted by Sishen mining activities</p>
<p>Complainants: Community members or those who have lodged a complaint or grievance at Sishen mine, not yet resolved</p>

Stakeholder category: Affected parties

Stakeholders affected by Sishen mine, either positively or negatively.

Sishen mine employees

- 5,702 employees on the Kumba payroll. For engagement purposes employees are further segmented as
 - Sishen Leadership Team (SLT)
 - management
 - women in core mining
 - Professionals in Training
 - employees in different work environments (eg mining, plant, support services)

Trade unions

- The shop stewards, chairpersons and branch representatives of National Union of Mineworkers (NUM), Solidarity, Building Allied, Mining and Construction Workers' Union (BAMCU) and the Association of Mineworkers and Construction Union (AMCU) as recognised trade unions representing employees

Contractor employees

- 2,531 contractor employees and supervisors (based on-site)

Supplier companies

- 10 biggest contractor companies to Sishen mine
- HDSA-owned suppliers, and localised suppliers (within 100km² of Sishen mine)
- Those involved in the Supplier Development Programme
- Other suppliers

Community trainees

- In portable skills training, interns or placements from the youth development programme

Beneficiaries of health projects

- Patients and healthcare workers at UGM Wellness Clinic and Batho Pele mobile clinics
- Community members benefiting from the Sesheng Distribution Centre and the Dingleton soup kitchen
- FAMSA personnel and clients

Beneficiaries of education projects

- Educators at ECD and day care centres
- Principals, educators and School Governing Bodies - primary and secondary schools
- MQA students in Kathu

Beneficiaries of poverty alleviation projects

- Manyeding and surrounding villages
- Members of the Honey Bee cooperative in Deben

Small Business Hub clients

- Zimele loan beneficiaries
- Entrepreneurs defaulting on loan payments
- Kathu Small Business Hub clients (prospective and current local businesses)
- Kuruman Small Business Hub clients (prospective and current local businesses)

Beneficiaries of municipal infrastructure projects

- Community members using new/resurfaced roads
- Community members using social infrastructure such as pension pay-points and community halls
- Those benefiting from temporary and permanent jobs created through projects

Donation applicants

Mentoring and support services are delivered through the Small Business Hubs.



1,773 people participated in training during the period 2012–2014, with topics ranging from financial management, and managing a start-up to marketing and HR matters and project management.

Stakeholder category: Interest groups Stakeholders who, although not affected by the operation, have an interest in or influence over what the operation does
Ga-Segonyana SMME Forum
JTG District SMME Forum
Kgalagadi Youth Organisation
Kuruman Community Development Forum
Joe Morolong Road Forum
Kuruman Unemployment Community Forum
Gamagara Community Development Forum
Olifantshoek Contractor Unemployment Forum
Tsantsabane Black Business Chamber
Dingleton Contractors Forum
Job seekers (all age groups) settling in Gamagara
Local business <ul style="list-style-type: none"> Local business owners Organised business structures, ie the Northern Cape Chamber of Commerce and Industry's Kathu branch (NOCCI) and the Black Management Forum (BMF)
Commercial farmers in the JTG district <ul style="list-style-type: none"> Agricultural unions
Local/community-based media in Kathu and Kuruman
Faith Based Organisations (FBOs) and church leaders
Stakeholder category: Development partners in the local area Stakeholders acting as development agents
SIOC CDT member trusts, namely JTGDT and Gamagara Development Trust
Mining companies in the district <ul style="list-style-type: none"> Khumani Mine (Assmang) Mamatwan Mine (Samancor) operated by BHP Billiton Wessels Mine (Samancor) operated by BHP Billiton United Manganese Kalahari Mine (Renova Group) close to Hotazel Kgalagadi Manganese Mine (Acelor Mittal, Kalahari Resources) Hotazel, in construction and ramp-up phase Beeshoek, Finsch and Sedibeng Mines closest to Kolomela
Youth Development Agency, Northern Cape
National Development Agency (NDA)
DBSA
Stakeholder category: DMR Regional Office The regulator who is a national competency, but has a regional presence in Kimberley
Mineral Regulation <ul style="list-style-type: none"> Regional Manager Mine Environmental Management department Social and Labour Plan department Head of Mineral law Mine Economist
Mine Health and Safety Inspectorate

Stakeholder category: Local authorities Authorities with political jurisdiction in the local area
Gamagara Local Municipality <ul style="list-style-type: none"> Mayor and Council Municipal Manager Chief Financial Officer Head of Technical Department, technical staff, civil engineer seconded by the mine Senior IDP Officer Chief LED Officer
JTG District Municipality <ul style="list-style-type: none"> Mayor, Council Department of Health
Joe Morolong Local Municipality <ul style="list-style-type: none"> Mayor and Council Municipal Manager IDP Officer LED Superintendent
Ga-Segonyana Local Municipality <ul style="list-style-type: none"> Mayor and Council Municipal Manager IDP Officer LED Superintendent
Traditional authorities in Ga-Segonyana and Joe Morolong
Stakeholder category: Provincial Government Departments in the Northern Cape Province
Department of Education
Department of Health
Department of Social Development
Department of Finance, Economic Development and Tourism
Department of Agriculture, Land Reform and Rural Development
Department of Cooperative Governance, Human Settlements and Traditional Affairs
Department of Environment and Nature Conservation
Department of Roads and Public Works
Department of Transport, Safety and Liaison
Stakeholder category: Other Government agencies and parastatals
Water authorities <ul style="list-style-type: none"> Department of Water and Sanitation – regional office Department of Water and Sanitation Oversight Committee Tshiping Water Users Association Sedibeng Vaal Gamagara Water
Parastatals <ul style="list-style-type: none"> Eskom Transnet Freight SANRAL

ENGAGEMENT PRACTICES

A Stakeholder Engagement Programme does not only identify key stakeholders and analyse their expectations, perceptions and needs. It also sets specific objectives to be achieved through engagement varying from sharing information to consultation, collaboration and joint solution finding. Reflecting on Sishen mine's engagement in the 2012–2014 period, 80% of engagement seems to have centered on:

Topic / reason for engagement	Stakeholder
Safety as the number one priority of employee engagement	Kumba employees Contractor employees Trade unions Suppliers
Production, Sishen mine Strategic Pillars, and numerous special interventions and initiatives to execute strategy	Kumba employees Trade unions
Human resource development and transformation	Kumba employees Trade unions
Industrial relations matters, both collective issues (wage talks) and individual cases	Kumba employees Trade unions
Planning, implementation and handover of socio-economic development projects in the JTG district	Local municipalities Sub-sector departments, Northern Cape Provincial government JTG District Municipality Communities Beneficiaries
Licensing and compliance matters	DMR - regional office Department of Water Affairs Northern Cape Department of Environment and Conservation
Coordination of own efforts with that of other mines	Mining companies in the district
Matters of service delivery, bulk infrastructure maintenance and development in the host municipality	Gamagara Local Municipality
Ongoing engagement on the Dingleton relocation	Northern Cape Provincial Government Gamagara Local Municipality Dingleton residents Various other stakeholders
Issue-based engagement with the youth in response to youth dissatisfaction and protest marches (eg in August 2013)	Youth structures District and Local Mayors and Municipal Managers (political leadership)
Responding to stakeholder expectations for greater local employment and procurement	Small Business Hub clients, local business and community forums, youth structures, community members, and the local political leadership
Issue-based engagement on local procurement to implement the progressive preferential procurement policy	Current suppliers Localised suppliers Local authorities Local business owners
Receiving, investigating and resolving individual complaints	Individual complainants
Keeping engagement with environmentally concerned stakeholders constructive and open to the idea of exploring alternatives; preventing the situation from escalating or spilling over to government and media stakeholders	Impacted farmers (water and dust) and Dingleton residents (dust)

Apart from ongoing everyday engagement, Sishen mine makes use of or participates in a number of engagement platforms in a more structured, systematic fashion. The following table outlines engagement platforms and channels relevant to the external stakeholders.

Table 39: Engagement platforms categorised per main use

Mining sector coordination		
PLATFORM OR CHANNEL	PURPOSE	ROLE PLAYERS ATTENDING
Quarterly Mining Sector Sub-Committee (MSS)	Convened by the JTG District Municipality Mayor to enhance coordination between mining companies in the planning and execution of community development. The agenda is split between LED contributions and SLP projects.	<ul style="list-style-type: none"> Mines operating in the JTG district Regional DMR representatives Local municipalities JTG District Municipality Sector departments, NC Province
Quarterly Northern Cape Mine Managers Preferential Procurement Forum	This forum aims to integrate the principles expressed in the revised Mining Charter into the procurement operations of mining companies. Learnings and best practices are shared.	<ul style="list-style-type: none"> Regional DMR representatives Department of Finance, Economic Development and Tourism Mining companies
Annual CSI and SLP project coordination meeting	Sishen mine's SD department convenes this forum with neighbouring mines to discuss planned projects, as well as proposals for support (such as from schools) which Sishen mine could not grant.	<ul style="list-style-type: none"> Sishen mine Other mines operating in the JTG district
Collaboration with local authorities		
PLATFORM OR CHANNEL	PURPOSE	ROLE PLAYERS ATTENDING
Monthly Joint Management Forum with Gamagara Local Municipality	This is meant as a strategic alignment forum between the mine and municipal leadership but tends to have become operational and infrequent.	<ul style="list-style-type: none"> Gamagara Mayor and Sishen mine GM Senior representatives of both teams
Bi-weekly technical committee meetings with Gamagara Local Municipality	Discuss progress on infrastructure projects and issues around service delivery (mostly water, sanitation and electricity).	<ul style="list-style-type: none"> Representatives from the Local Municipality's Technical Services department Technical managers from Sishen mine
Bi-annual meeting with mayors in JTG district	Convened by the JTG District Municipality Mayor for Sishen mine to share progress made on SLP projects and for the local municipality mayors to share their priorities and emerging needs.	<ul style="list-style-type: none"> JTG District Municipality Local municipalities Sishen mine Other mines
Ad hoc meetings with Gamagara Local Municipality	Issue-based engagement as and when required – usually prompted by a crisis or problem in service delivery.	<ul style="list-style-type: none"> Mayor or Municipal Manager Sishen Mine GM or SD manager
Bi-annual IDP forums in each municipality	Sishen mine as development partner to the district and three local municipalities should involve itself in the IDP forums led by local authorities.	As regulated
Monthly SLP project update meeting with the LED representative forum	A forum hosted by the SD department of Sishen mine to discuss local economic development, provide progress updates and iron out implementation challenges.	LED-tasked municipal officials and the social development department at Sishen mine
Quarterly Inter-governmental Reporting meetings (IGR)	A statutory requirement for intergovernmental alignment on local government level before reporting to the province. Hosted by the JTG District Municipality; sub-sector departments (Education, Health, Social Development, etc) should participate in the discussion, but often do not attend.	<ul style="list-style-type: none"> JTG District Municipality Joe Morolong Local Municipality Gamagara Local Municipality Ga-Segonyana Local Municipality Sishen mine Sub-sector departments
Future Forum	A compulsory engagement platform for Anglo American operations to stimulate social dialogue. Productivity issues are discussed in the socio-economic context of a particular geographic area, dealing with living conditions and future mining plans.	<ul style="list-style-type: none"> Trade unions Mining operations Local municipality

Engagement of provincial authorities		
PLATFORM OR CHANNEL	PURPOSE	ROLE PLAYERS ATTENDING
Quarterly meetings with sub-sector departments (can be more frequent if required)	Engagements to form and formalise partnerships, discuss specific projects, achieve appropriate levels of collaboration and manage handovers of projects/exit strategy for Sishen mine.	<ul style="list-style-type: none"> Sishen mine Heads of department and chief directors in the provincial government departments of Health, Social Development or Education
Quarterly Provincial LED Forum	Convened by the Department of Finance, Economic Development and Tourism with the aim of enhancing LED in the province.	<ul style="list-style-type: none"> Department of Finance, Economic Development and Tourism Big business in the province

Engaging interested and affected parties on particular issues		
PLATFORM OR CHANNEL	PURPOSE	ROLE PLAYERS ATTENDING
Ad hoc meetings between mines in the district and youth representatives	Facilitated by the Mayor of JTG District Municipality, this is a platform for the youth structures to discuss their concerns over local employment and local procurement in the district.	<ul style="list-style-type: none"> Mayor of JTG District Municipality JTG SMME Forum Sishen mine SD manager Other mines
Monthly Resettlement Working Group (RWG)	Well-governed multi-stakeholder forum used over the past five years as primary vehicle for stakeholder collaboration and joint decision making on the Dingleton resettlement - mandated by the Dingleton Steering Committee.	<ul style="list-style-type: none"> Provincial Government Gamagara Local Municipality Working Group Members Sishen Resettlement Project Team
Monthly Resettlement News newsletter	A regular communication channel to share project details with community members.	<ul style="list-style-type: none"> Renters and homeowners in Dingleton. The members of the RWG
Quarterly Farmers Meeting	Established in 2011 by the former national Department of Water Affairs in response to farmer complaints.	<ul style="list-style-type: none"> Impacted farmers Other interested role players in agriculture
Annual local supplier day	The mine host this "open day" with exhibitions as an engagement opportunity to share information, create understanding and register potential local HDSA suppliers on a database.	<ul style="list-style-type: none"> Sishen mine Small business owners Entrepreneurs Community members
Quarterly agricultural engagement sessions with impacted farmers	This is a negotiation/conflict resolution and problem-finding session around the mining impacts on farmers and the mine's response to managing these impacts.	Directly impacted farmers
Dingleton Environmental Forum	Bi-monthly discussion on environmental concerns and complaints.	<ul style="list-style-type: none"> Sishen mine Dingleton RWG members Complainants
Public participation sessions per project	Consultation with stakeholders on potential impacts of mine expansion or infrastructure projects is facilitated by environmental impact specialists appointed by Sishen mine.	Potentially impacted individuals and/or organisations



Komatsu 960 and 860e haul trucks in the pit. These trucks are fitted with the collision avoidance system developed for the conditions at Sishen

Involvement of beneficiaries of projects or programmes funded by Sishen mine		
PLATFORM OR CHANNEL	PURPOSE	ROLE PLAYERS ATTENDING
Annual meetings (or more frequently if required) on EQUIP	Meetings initiated by Sishen mine and hosted by the specific school to assess needs, monitor progress and discuss future projects and/or assistance required.	<ul style="list-style-type: none"> School principals Teachers Members of the SGBs Representative of the NCDOE (voluntary) Sishen mine SD manager
Launches and handovers of CSI/SLP projects to local stakeholders as the opportunity arises	Sishen mine uses a launch function to stimulate interest and enhance broad-based support among local stakeholders. It positions a project and clarifies why it's needed, what it will achieve and how the process will be deployed. Huge investments in infrastructure usually also have a ceremonial handover (eg ECD centres, roads, the ambulance station) to the new owner/care taker, often in partnership with the relevant government department.	Sishen mine in partnership with the relevant local municipality and sub-sector provincial competency. Sometimes political leaders in the province accept such invitations.

Sponsorships offering an opportunity for stakeholder engagement		
PLATFORM OR CHANNEL	PURPOSE	ROLE PLAYERS ATTENDING
Annually in May, <i>Noord Kapenaar van die Jaar</i> - formal event in Kimberley	A <i>Volksblad</i> initiative to honour people in the Northern Cape who uplift and make a difference in the province. Kumba is the main sponsor, does the keynote address and receives two VIP tables, seating 10 guests each - one for Sishen, one for Kolomela. This is an opportunity to strengthen media relations.	<ul style="list-style-type: none"> Media representatives Nominees Provincial Government Other VIPs Main sponsors
Kumba Iron Ore Classic – Kumba as main sponsor of this national seeding event for the Cape Argus cycle race	Sishen mine has hosted this cycling event for six years, with the past two races held in Kathu. The aim of this event is to create an interactive networking opportunity aligned with the stakeholder engagement plan. This gives cyclists in the Northern Cape access to a seeding race in their own province, and gives Kumba the chance to 'own' a national event. Strong focus is placed on community cycling development. This also has economic benefits for the region.	<ul style="list-style-type: none"> Between 280 and 350 cyclists Local municipalities Gamagara communities Sishen mine
Annually in March and April, CANSA Relay For Life - Sishen is anchor sponsor	Alignment with the international drive towards cancer awareness. This integrated partnership programme between the community and private sector is aimed at raising funds for CANSA. It shows Sishen mine's commitment to community-driven initiatives. With a strong entertainment programme, more funds can be generated through the exhibition stands.	Other mines, contractors and businesses are also involved.

Other engagements		
Ad hoc community information sessions	Information sessions where Sishen mine engages Kathu community leaders to share particular information relevant to them.	<ul style="list-style-type: none"> South African Police Service (SAPS) Church leaders School principals FET College head Representatives of the local chamber of business Local media representatives Health practitioners FAMSA CANSA

COMPLAINTS AND GRIEVANCE PROCEDURE

An effective, fair and transparent mechanism for recording, handling and resolving complaints and grievances of stakeholders is an important part of Sishen mine's stakeholder engagement framework. The intention is to address stakeholder concerns using tools that are standardised across Anglo American and based on the United Nations Guiding Principles on Business and Human Rights, specifically the guiding principle on access to remedy.

Currently, Sishen mine has three complaints and grievance systems: one for environmental matters, one for complaints and enquiries from Dingleton residents, and one for complaints and questions about the Small Business Hub, SLP and CSI projects or any other socio-economic expectations, needs or concerns.

The development of these businesses (pictured below) was facilitated through the Small Business Hubs in Kathu and Kuruman, with funding by the Zimele Community Fund.

For all three systems, complaints are analysed, reported to the Sishen SLT and considered in the Socio-Economic Assessment report. The same procedure is essentially followed for all three types of complaints; however, there may be differences in the time allowed for resolving complaints, the way complaints are acknowledged and the level of feedback given to stakeholders. To streamline and simplify the process, Sishen mine is moving towards a single complaints and grievance procedure for stakeholders, regardless of the nature of the complaint or query.



Carol's Driving School.



Donna's Cleaning.



Fitness Factory.



ICAT Maintenance Team.



Maero Coaches.



BIJ Car Wash.

Farm workers at the Manyeding cultivation project are tending to a field of garlic chives.



Early childhood development (ECD) is a critical education phase if children are to reach their full potential – kids at the Bana ECD centre.

SECTION 3: PROFILE OF THE LOCAL AREA



INTRODUCTION

Gathering information to profile and understand the local area was done through stakeholder consultation as outlined in the Q&A at the beginning of this report, and by accessing existing information. Documents used include:

- Planning vehicles such as the Spatial Development Frameworks, LED Strategies and Integrated Development Plans on provincial, district and local municipal level
- The 2013 SMEC report on the Gamagara Mining Corridor Study prepared for the Department of Economic Development and Tourism, Northern Cape Province (this study was supported and funded by the SIOC-cdt)
- The 2001 and 2011 StatsSA Census findings
- The Sishen mine socio-economic assessment in Gamagara, 2011.

GEOGRAPHICAL CONTEXT

The Northern Cape is the largest province in South Africa, having a land mass of 361,830 km² and covering 30% of South Africa. The province also has the smallest population, consisting of approximately one million people. The province falls within the Arid Areas region of South Africa with low rainfall and resultant dry conditions typical of a Karoo and desert environment. For this reason population densities are low and widely distributed as agricultural activities require large areas of land for farming. The John Taolo Gaetsewe (JTG) District Municipality is the second smallest district municipality in the Northern Cape, occupying only 6% of the province (27,293 km²) and accounting for about 16% of the provincial population.

SISHEN MINE'S ZONE OF INFLUENCE

The zone of influence (also referred to as the local area) of Sishen mine is broadly defined as Gamagara Local Municipality, which hosts the mine, and the labour-sending Joe Morolong Local Municipality and Ga-Segonyana Local Municipality. Together, these three local municipalities make up the JTG District Municipality.

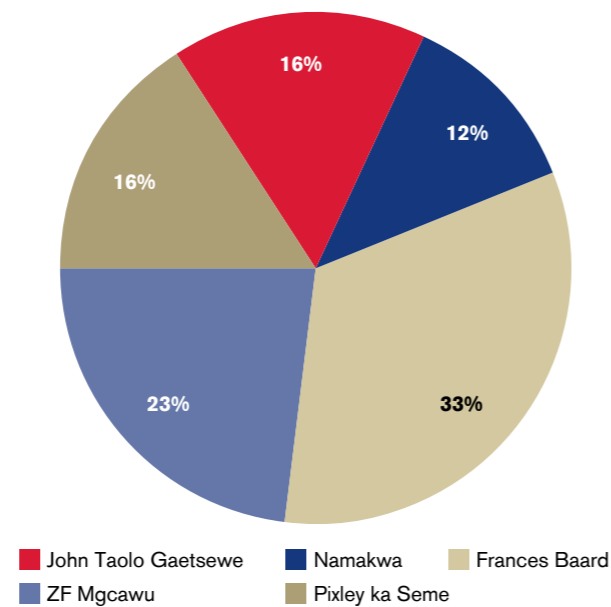
John Taolo Gaetsewe District Municipality

The JTG District Municipality is situated in the Northern Cape Province and is bordered by (1) the Siyanda and Francis Baard District Municipalities to the south and west; (2) the North West Province (Dr Ruth Segomotsi Mompati District Municipality) to the east and northeast; and (3) Botswana to the northwest.

The largest geographical area within the JTG district is the Joe Morolong Local Municipality, covering 15,813 km² of rural-transitional land. The JTG district comprises 186 towns and settlements, 80% of which are villages in the Joe Morolong Local Municipality.

Communities in Sishen mine's local area or zone of influence are very unevenly distributed. In the south, formal towns are surrounded by extensive and sparsely populated farmland; in the north, scattered small rural villages mean a greater general population density, but without meaningful urban centres.

Graph 9: Distribution of Northern Cape population by district municipality



Map 1: JTG district and its neighbours

Sishen mine's local area thus has a combination of fast-growing urbanised areas and rural areas where there is little development:

- Urbanised areas such as Kathu and Kuruman have explosive growth rates and are deemed to be centres of wealth because of the presence of mines around the towns. - **Kuruman**, with the largest urban population in the region, is currently home to most governmental functions in the local area and is recognised as the regional centre for the area. The headquarters of the Ga-Segonyana Local Municipality and John Taolo Gaetsewe District Municipality are both located here. Kuruman is known as the "Oasis of the Kalahari" and is blessed with a permanent source of water – a fountain, commonly known as The Eye.

- **Kathu** is the next biggest town, with an exponential growth rate due to mining expansion from both the iron ore and manganese mines. It is the seat of the Gamagara Local Municipality, which also includes Sesheng, Mapoteng, Deben, Olifantshoek and Dingleton. Kathu is also identified as a regional centre within the Joe Taolo Gaetsewe District Spatial Development Framework, and huge efforts are to be put into addressing the developmental problems of Kathu in the short to medium term.

- The deep rural areas are predominantly in Joe Morolong, but also in parts of Ga-Segonyana, and have less hope for strong economic growth and development. More intervention-type development will have to be implemented as these rural areas have a high burden of poverty.

“The population density varies between 21 persons/km² in Ga-Segonyana, and 16/km² in Gamagara to only four persons/km² in Joe Morolong.”
(Source: 2011 StatsSA Census)

Joe Morolong Local Municipality

The Joe Morolong Local Municipality was established when boundaries were re-demarcated to include the District Management Area (previously part of the North West Province) into the Moshaweng Local Municipality. It serves 11 wards and 154 villages in the rural hinterland with various traditional authorities. Most of the villages came into being due to forced removals in the 1960s and 1970s, or were traditional livestock herding areas with water.

Churchill is the seat of the Joe Morolong Local Municipality. Thamoyanche is a good example of an old cattle post, while Magojaneng is a large settlement that was established under the old Betterment Programmes of the Apartheid government. Due to changes in municipal boundaries, Hotazel now falls within the jurisdiction of Joe Morolong Local Municipality. Black Rock, however, is still a mining town.

Ga-Segonyana Local Municipality

Ga-Segonyana Local Municipality, the regional centre, is 9,608km². Ga-Segonyana originated as a cross-boundary municipality that straddled the boundary between the North-West and Northern Cape Provinces. It was established in 2000 through the amalgamation of Kuruman and Mothibstad Municipalities and includes sections of the Bophirima District Municipality. There are 33 residential areas divided into 13 wards, and the Municipal Council consists of 13 Ward Councillors and 12 Proportional Representative (PR) Councillors. Rural villages are administered through a traditional authority system with two senior traditional leaders. The two senior traditional leaders representing Batharo Ba-ga Motlware and Bathaping Ba-ga Jantjie respectively represent their traditional authorities in the municipal council.

Gamagara Local Municipality

The mining-dependent Gamagara Local Municipality's land size is 2,619km². Headquartered in Kathu, the area is primarily an iron ore and manganese mining area. Although Kathu was only established in the 1980s as a town to serve Sishen mine, Olifantshoek was already established in 1899, with Deben and Dingleton established in 1902 and 1950 respectively. Kathu, including Sesheng and Mapoteng, is the most prominent urban node and administrative centre; an economic powerhouse primarily sustained by the large amount of mining activity in the area.

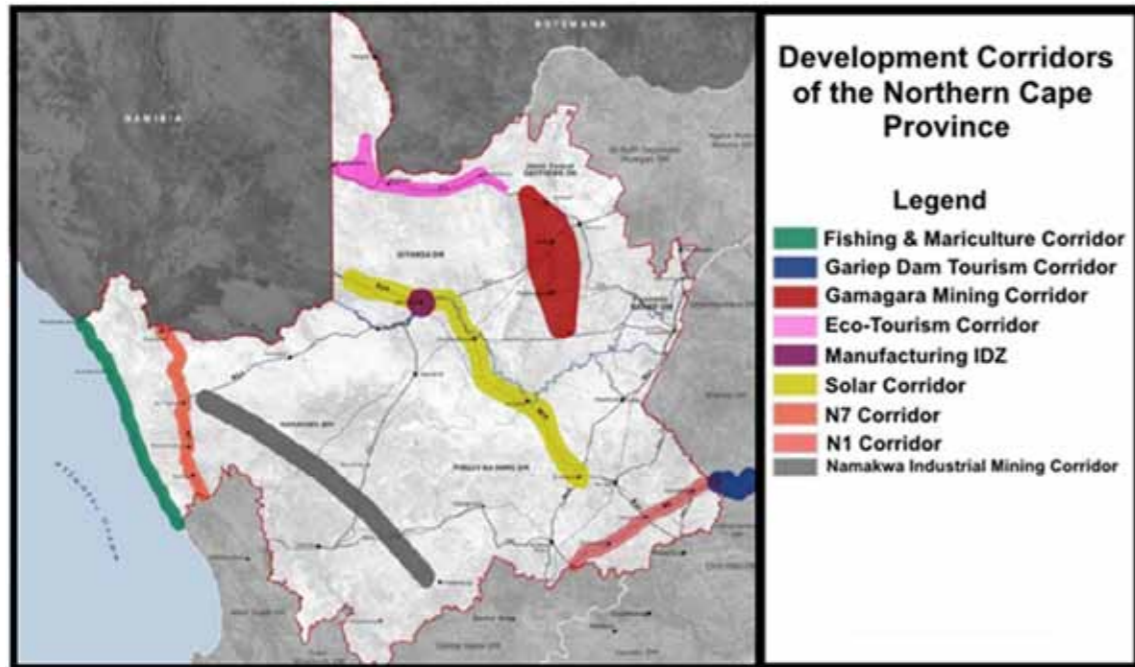
Sesheng was a mining compound that consisted mainly of hostels. In 2001, when the need for additional accommodation for mineworkers intensified, the municipality established Mapoteng as an RDP housing area with electricity, tarred roads and street lights. As explained in Section 2 of this report mining hostels were converted into family units by the mine.

Dingleton is an established town with a population of about 600 households (3,000 people), 10km to the south of the current Sishen mine operations. Kumba Iron Ore's predecessor, the State-owned Iscor, built the town to serve Sishen mine in the 1950s. Resettlement of Dingleton residents has been on the cards and under negotiation since 2008, due to Sishen mine's expansion to the west. (As explained in Section 1 the resettlement commenced during 2014.) Deben and Olifantshoek remain important urban nodes serving the agricultural communities in the area.

With the considerable growth that has already occurred, as well as the likely future growth, other land uses and services will multiply, as is indicated in the expansion plans of the Kathu Village Mall and other retail facilities that are in the pipeline. Kathu is accessible via the N14 and the R385 from Postmasburg, and the important Sishen/Kolomela-Saldanha Iron Ore Export Channel (IOEC) starts here on its way to Saldanha. The Kumba Airport outside town provides a good facility for air travel, especially for mine and chartered flights.

Gamagara Mining Corridor

The Gamagara Mining Corridor is an area much larger than the JTG District Municipality, loosely demarcated by the Provincial Spatial Development Framework (PSDF) as an area stretching from Danielskuil and Postmasburg in the south to Hotazel and Moshaweng in the north (source: JTG District Municipality SDF, 2012). The PSDF gives official recognition to the Gamagara Corridor as a mining belt across the Siyanda and JTG districts. Not only does it state that the mining wealth is to be developed but it also demands a simultaneous parallel socio-economic development to provide for the larger community after the demise of the mines in 30-50 years from now. The corridor is viewed as the combined zone of influence of mining in the region.



Map 2: Development Corridors of the Northern Cape Province

DEMOGRAPHICS

POPULATION

The most reliable population figures are contained in findings from the 2001 and 2011 Census. Whereas the Joe Morolong population contracted by -8.6% in that period, the total population of Gamagara Local Municipality and Ga-Segonyana Local Municipality expanded by 79.36% and 33% respectively. This is indicative of the growth in mining activities since 2001.

The population decline in Joe Morolong is attributed to (1) out-migration from this local municipality to Ga-Segonyana and Gamagara, notably the towns of Kuruman and Kathu, and (2) the prevalence of HIV and AIDS in the area.

According to the SMEC report calculations, projected growth of employees on mines and supporting private sector workers will increase population numbers to 118,334 for Joe Morolong, 207,678 for Gamagara and 105,051 for Ga-Segonyana by 2018. This is a total population increase between 2001 and 2018 of 125% for the JTG District Municipality as Sishen mine's local area, and 795% for the Gamagara Local Municipality as host municipality.

Based on current population densities (ie kernel densities of 5, 10 and 20km) the SMEC report estimates the following subregions will become the main areas for urban growth:

- Kuruman/Mothibistad/Baltharo/Gamoepedi/Tsineng in Ga-Segonyana Local Municipality
- Kathu, and surrounding residential areas Mapoteng, Deben and Sesheng in Gamagara Local Municipality, as well as
- Hotazel in Joe Morolong Local Municipality.

Even though development partners are well advised to consider the above population forecasts in planning efforts, the numbers certainly represent a maximum growth scenario and there may be structural reasons countering current projected growth. These may include a decrease in the demand for iron ore and manganese for a number of reasons, regulatory and labour uncertainty resulting in lower investor confidence, a deviation from the expected distribution of people to the various towns, or changes in mine housing policies (eg bussing people to work instead of building houses in town as an example).



Homeowners currently living in Dingleton North (White City) should be relocated by the end of 2014 – the rest of Dingleton will be moved by the end of 2016.

Graph 10: Historic and projected population growth

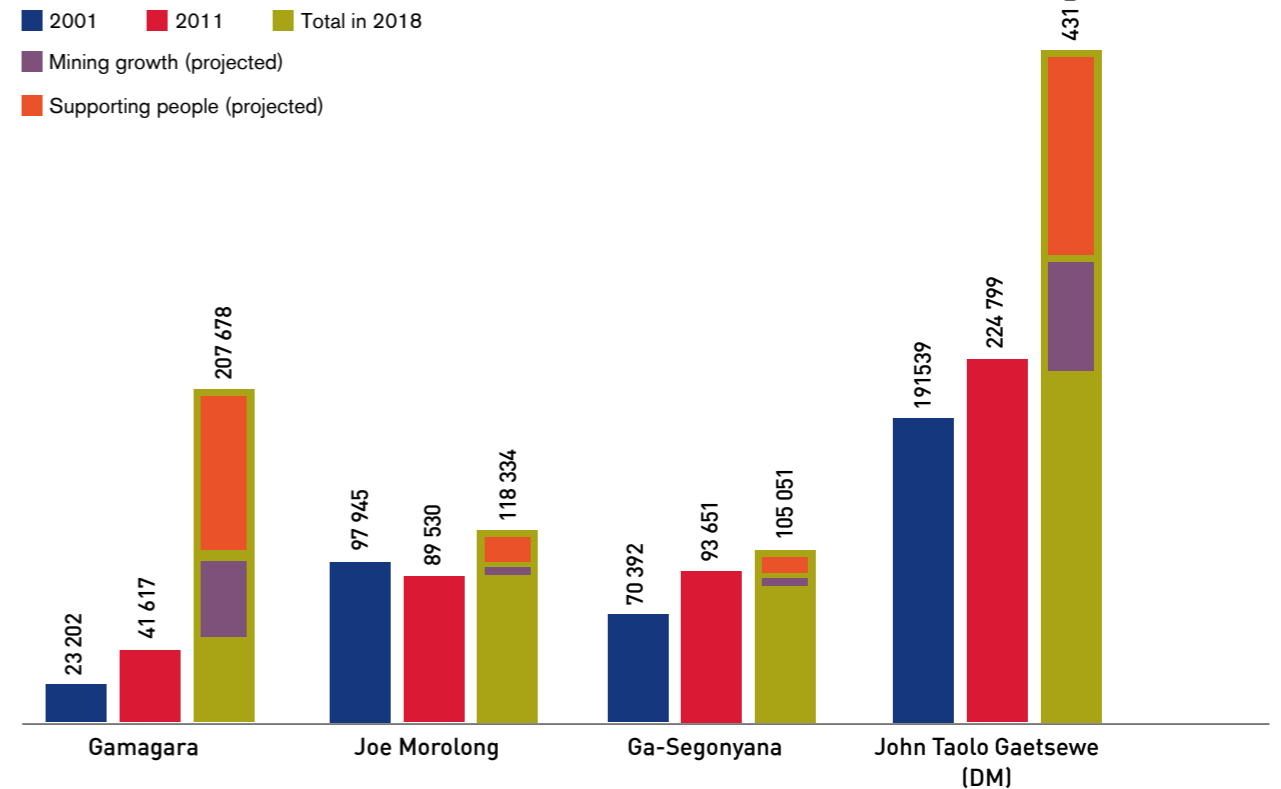


Table 40: Historic and projected population growth

Data	2001	2011	Mining growth *	Supporting people**	Total in 2018
Gamagara	23,202	41,617	41,515	124,546	207,678
Joe Morolong	97,945	89,530	1,895/3.8 = 7,201	1,895/3 = 5,685/3.8 = 21,603	118,334
Ga-Segonyana	70,392	93,651	2,850	8,550	105,051
John Taolo Gaetsewe (DM)	191,539	224,799	51,566	154,699	431,063

Source for 2001 and 2011: StatsSA Census 2001 and 2011;

Source for mining growth and supporting people: SMEC calculations 2013

*Total is equal to number of mining jobs multiplied by average household size as per Census 2011.

**Total is equal to mining jobs multiplied by three (one mining job creates three private sector jobs) multiplied by the average household size for the town.

GENDER, RACE AND AGE

Comparing the gender ratio (males per 100 females) of the three local municipalities demonstrates the influx of men into Gamagara as the host municipality, and confirms Joe Morolong's status as a labour-sending area. The gender ratio for Gamagara is 120 males per 100 females; for Joe Morolong it is 85.5 males per 100 females. Corresponding to the gender ratio, 50.7% of households in Joe Morolong are female headed.

Black people form the majority of the district's population. In Ga-Segonyana and Joe Morolong this is a large majority (79% and 96% respectively) and in Gamagara the division between races is much smaller with blacks at 42.7%, Coloureds at 32.7% and whites at 24.6%.

Table 41: Gender ratio (males per 100 females)

Data	2001	2011
Gamagara	101	120.1
Joe Morolong	89	85.5
Ga-Segonyana	89.4	92.5
John Taolo Gaetsewe (DM)	90.5	94.1

(Sources: StatsSA Census 2001; 2011 StatsSA Census)

In line with the racial profile, Setswana dominates as the home language in Ga-Segonyana (78.4%) and Joe Morolong (90.1%), whereas Gamagara residents use both Afrikaans (51.6%) and Setswana (32.3%). The fact that no other language grouping has more than 3.5% of users in any of the municipalities, confirms that people migrating into Gamagara in search of jobs are predominantly from the Northern Cape and North West Provinces, and not from South Africa's more traditional labour-sending areas such as the Eastern Cape and Lesotho.

Comparing the age distribution between the three local municipalities the 2011 Census points to the following:

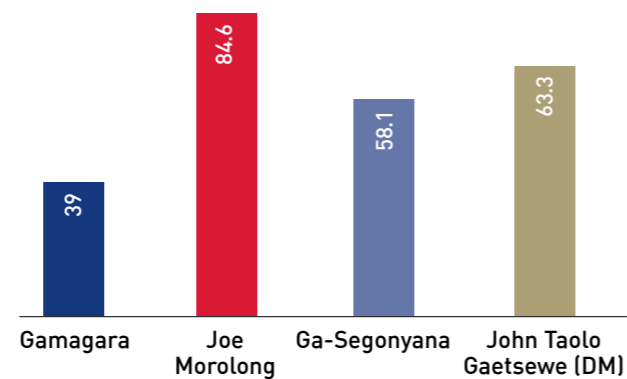
- In Gamagara both male and female numbers peak in the economically active 20–34 age group with an overrepresentation of males between 25 and 29. These represent large numbers of job seekers and employees.
- In Joe Morolong both male and female numbers peak at 0–20 years. 39,4% of the population is below 14 years of age indicating a high number of children of school-going age, with a very significant drop in men over 20 and a lesser reduction, in the number of women over 20, probably as they leave to find work or pursue training opportunities elsewhere. It is evident that men in the age group 20–50 are absent from the area – working elsewhere. Also very significant in the Joe Morolong residents' age distribution is the devastating effect that HIV/AIDS has had on the female population between 45 and 49 years of age.
- Ga-Segonyana with its mix of urbanised and rural residents has an under-20 age profile similar to Joe Morolong, but youth in the age group 20–34 seem to stay in the municipal area for longer. This may mean that they resettle

within the municipal area from rural villages to Kuruman but the trend to migrate out of the local municipal area is not as pronounced as it is for Joe Morolong.

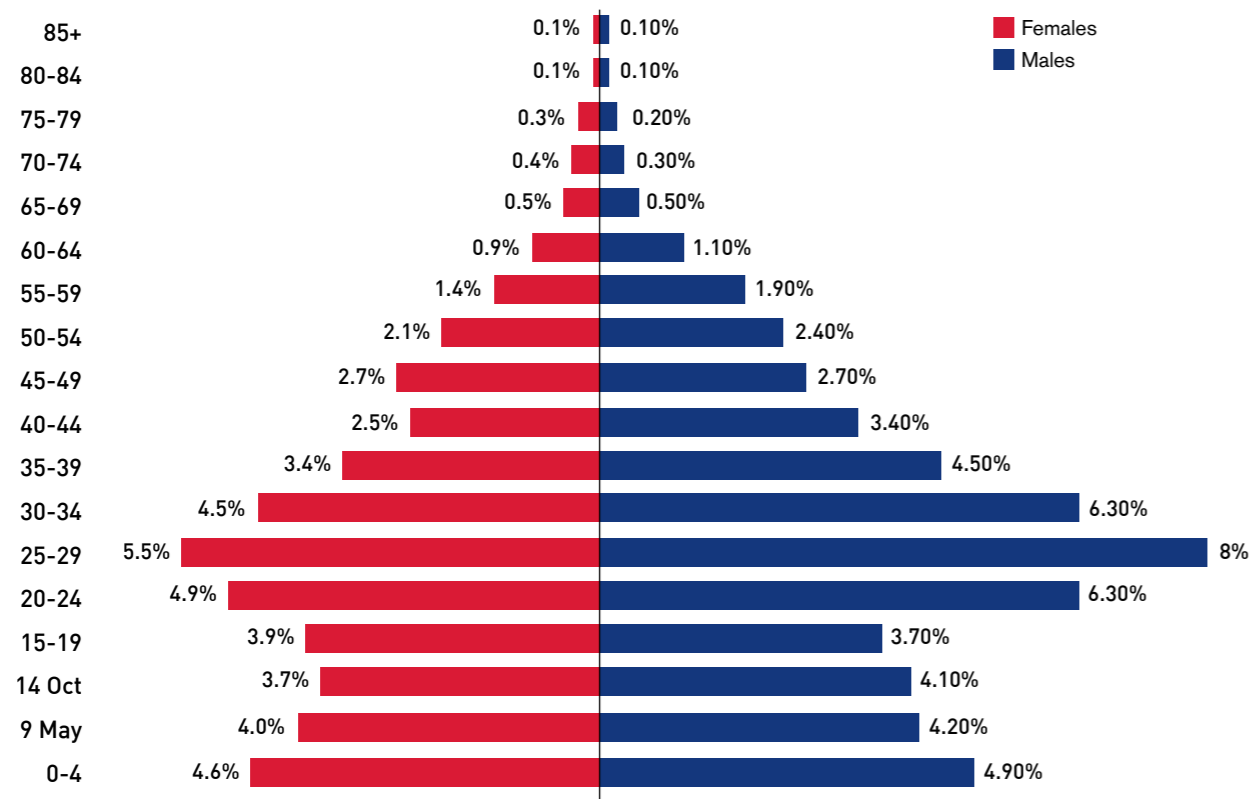
One of the major problems that local authorities are facing is how to give people in the age group 20–34 the opportunity to enter the economy. The mining industry can help alleviate this problem, but cannot create enough jobs for all the people.

In Census 2011 the age dependency ratio in Gamagara was 39. This means that for every 100 people in the working-age population, there are 39 people younger than 15, or older than 64. Gamagara's age dependency ratio of 39 is low relative to Joe Morolong's 85 dependents per 100 people in the working-age population. The corresponding number for Ga-Segonyana is 58.

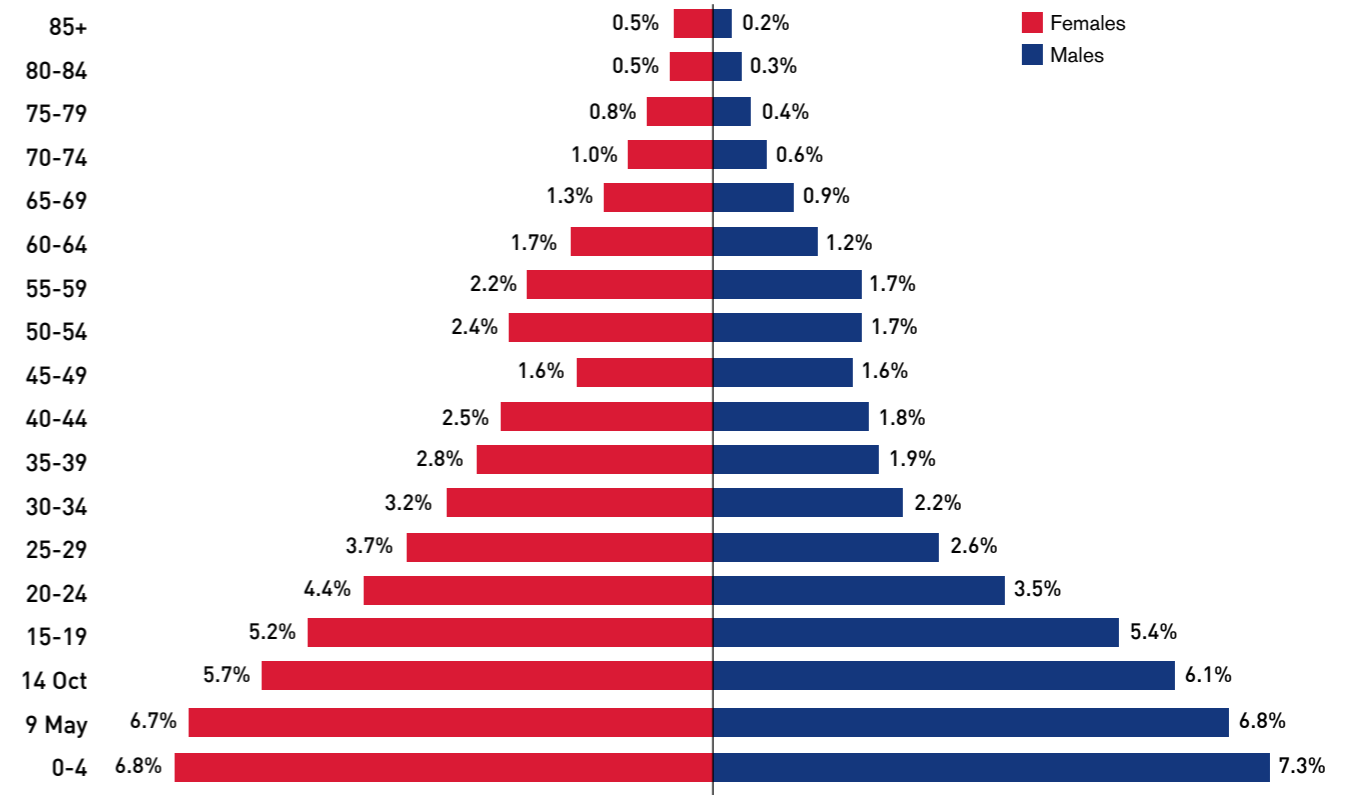
Graph 11: Age dependency ratio – 2011 comparison for local municipalities (Source: Census 2011)



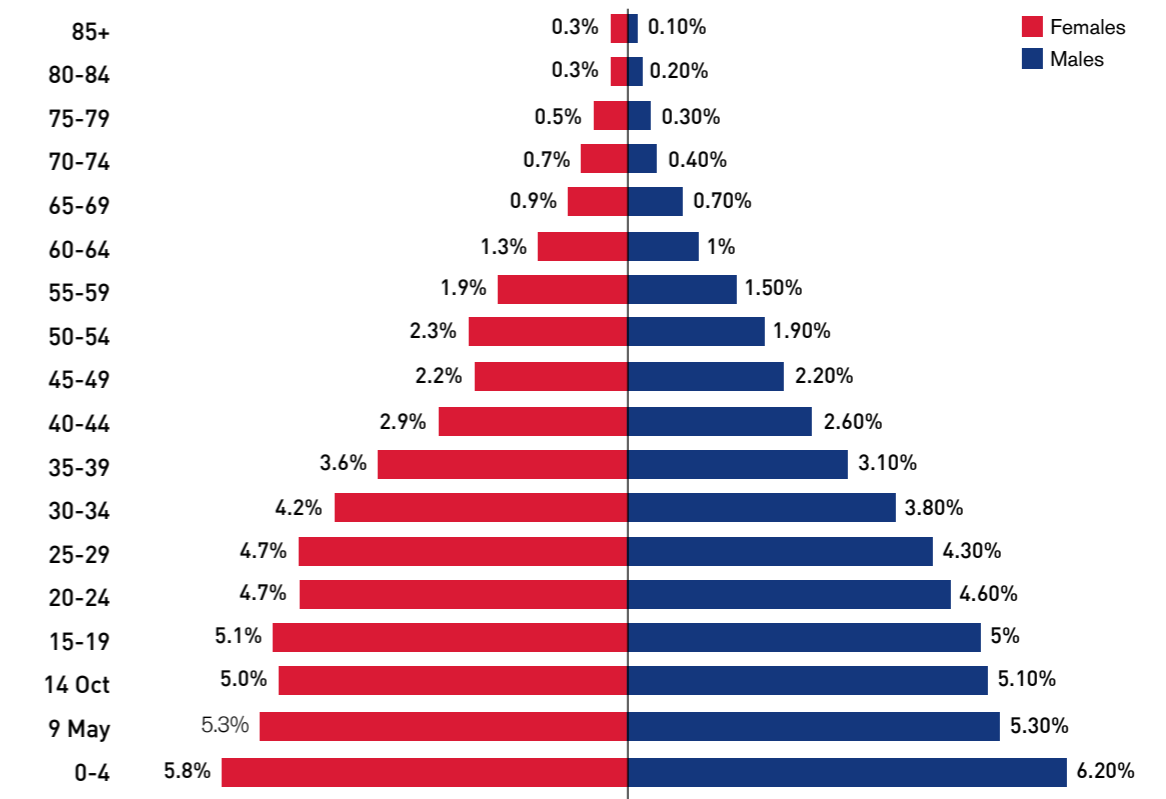
Graph 12: Gamagara age distribution for males and females



Graph 13: Joe Morolong age distribution for males and females



Graph 14: Ga-Segonyana age distribution for males and female



SOCIO-POLITICAL AND GOVERNANCE CONTEXT

POLICIES, PLANS AND FRAMEWORKS

Development planning and policy-making in South Africa has recently undergone a fundamental shift. As this affects planning nationally, provincially and locally, a description of the new planning and policy frameworks is pertinent.

On a macro level, the over-arching guideline for development is the National Development Plan: Vision 2030. The NDP, which was published in August 2012, is a plan for the country to eliminate poverty and reduce inequality by 2030. The plan's enabling milestones include increasing employment and income, broadening ownership of assets, establishing a competitive base of infrastructure, human resources and regulatory frameworks, improving the quality of education and expanding access to healthcare, among many others.

Mining features prominently in the NDP, which states that minerals and natural resources, including endowments of iron ore, are a comparative advantage for South Africa. It goes on to say, however, that domestic mining has failed to match the global growth trend in exports due to poor infrastructure and regulatory and policy frameworks that hinder investment. To benefit from growing demand for commodities, South Africa will need to improve its water, transport and energy infrastructure and provide greater clarity on its regulatory frameworks.

The plan specifically notes the poor capacity of the Sishen/Saldanha rail line for iron ore and, in the case of manganese, the Hotazel/Port Elizabeth rail line, and states that these inadequacies will have to be addressed so as to increase export volumes.

Various other important references are made to mining in the NDP. One is that since the 19th century, South Africa has exploited its mineral wealth with little regard for the environment. Hence, changes are needed to protect the natural environment while still allowing the country to benefit from its mineral deposits.

Similarly, the NDP notes that South Africa will have to invest heavily in helping the mining sector to reduce its carbon footprint. The sector will also need to improve its water efficiency.

Furthermore, the plan points out that mining companies have an explicit requirement to participate in local development, and "have the resources to do so in South Africa and the region". It says the sector could stimulate local economic development more effectively if the Mining Charter were to be aligned with these goals, and adds that "more could be done" on human resource development, local economic development and procurement.

**"The National Development Plan has to attack the blight of poverty and exclusion, and nurture economic growth at one and the same time."
– Trevor Manuel**

Other aspects of the NDP pertinent for the mining sector are the strong focus on rural development and employment, and the emphasis placed on economic diversification. The NDP recognises the current overreliance on mining, energy, chemicals and metals, and outlines a path towards greater diversification by strengthening municipal infrastructure and services, bolstering the education system and giving new and expanding firms access to capital, among other things.

The National Planning Commission is now in the process of advising government on an implementation framework for the NDP. Once available, this implementation framework will undoubtedly have ramifications for other national planning and policy frameworks such as the Medium Term Strategic Framework, the National Industrial Policy Framework and the Industrial Policy Action Plan.

This would in turn influence the provincial development frameworks, notably the Northern Cape Provincial Growth and Development Strategy 2004 to 2014, the Northern Cape Local Economic Development Framework and the Northern Cape Spatial Development Framework. The latter is still being formulated and, when completed, will serve as a framework for integrated land use planning by supporting all municipalities in preparing their integrated development plans and spatial development frameworks.

An important element of the Northern Cape Spatial Development Framework is that it gives official recognition to the Gamagara Corridor as a mining belt across the JTG and Siyanda districts. Furthermore, while requiring the development of these districts' mineral wealth, the framework calls for a parallel process of socio-economic development that will provide for the larger community after the demise of mines in 30 to 50 years.

Taken together, these provincial plans provide a reasonably comprehensive framework for development in the Northern Cape. A drawback is that some of them may be out of date.

This is noted in the SMEC study commissioned by the Northern Cape Department of Economic Development and Tourism into the Gamagara Mining Corridor, which states: "The problem with the Provincial Growth and Development Plan, as well as the Sector Plans, is that they are outdated and do not include the latest developments and strategic directives that govern some of the sectors today. In the context of rapid mining growth, new forms of flexible planning need to be introduced."

The third tier in the development planning structure is of course the district and local municipality level. This is the level most emphasised in mining legislation and the Mining Charter, and which most directly influences the local development efforts of Sishen mine. The mine actively aligns its development initiatives with the integrated development plans, spatial development frameworks and local economic development strategies of the JTG District Municipality and its three local municipalities. In this way, the mine ensures that its sizeable investments in local development reflect the needs and priorities of the local communities.

MUNICIPAL CAPACITY AND PERFORMANCE

Financial viability and management of local authorities

The annual audits that the Auditor-General of South Africa conducts into the financial statements of the JTG District Municipality and the three local municipalities provide some independent and objective insights into their financial health and management capacity.

For the two reporting periods, Financial Year (FY) 2010-11 and FY 2012-13, neither the JTG District Municipality nor the local municipalities received a 'clean audit' (referring to financially unqualified audit opinions and an absence of legal non-compliance).

The JTG District Municipality received a qualified audit opinion for both reporting periods, and Ga-Segonyana and Joe Morolong local municipalities received disclaimers throughout. Only Gamagara Local Municipality showed improvement in audit outcomes, having moved up from a disclaimer in FY 2011-12 to a qualified audit opinion in FY 2012-13.

The Auditor-General attributed this improvement to the Gamagara Local Municipality partially addressing the previous year's findings, and also noted an improvement in the municipality's financial health, based on the auditors' assessment.

On the whole, however, it is evident that a lack of capacity adversely affects the municipalities' ability to deliver as mandated. As mentioned in Section 2 of this report, a 2011 assessment showed that all three municipalities were experiencing difficulties with revenue management, debt and poorly operated or maintained infrastructure.

The Joe Morolong Local Municipality is arguably worst off in terms of institutional capacity owing to its rural and remote location and poverty-stricken population. It has an almost complete lack of own revenue and huge dependency on government grants, and its capacity to fund some key strategic initiatives is extremely limited.

Sishen mine is an integral part of the drive to build capacity in JTG District Municipality's three local municipalities. Details of the capacity-building projects undertaken in 2013-14 are shared in Section 2.

CIVIL UNREST IN THE DISTRICT

From 2012–2014 the JTG district experienced several waves of illegal protests by community members, resulting in public violence and disrupting education.

Unrest in Olifantshoek

Unrest initially broke out in May 2012 in Olifantshoek where members of the community demanded the resignation of the Mayor of the Gamagara Local Municipality. Olifantshoek has a history of being moved from municipality to municipality. In 2000 the town was demarcated to fall into the Tsantsabane Local Municipality, only to be demarcated again in 2006 to form part of the Gamagara Local Municipality. The perception especially prevalent among the youth in Olifantshoek was that Olifantshoek is "left out" of local economic and infrastructure development and does not benefit in the same way as Postmasburg and Kathu.

These protests continued for almost four months and impacted negatively on one high school and two primary schools with a total learner population of 2,583 learners.

Protests spread to Joe Morolong

The Olifantshoek protest action spread to other areas in the JTG district, specifically Joe Morolong Local Municipality. Schools around Cassel, Bothitong, Loopeng, Tsineng and Laxey were disrupted although the extent of this varied from school to school and village to village. A number of schools were closed for approximately four months. Protesters went as far as destroying infrastructure of government and business in the area. Another negative impact of the civil unrest was disruption of maintenance work on existing roads in the district as road work teams were intimidated by people from nearby villages.

The main reasons for these protests were demands for access roads, as was outlined in the Memorandum of Demand handed over to a delegation of MECs visiting the district in July 2012.

Table 42: 2012 demands for roads

Road in question	Community demand	Assessment of situation by the Province
The MR950 starts at a junction which is located 40km east of Kuruman on the N14 to Vryburg and continues in a northerly direction towards the Northern Cape provincial border. This road provides access to Ganyesa in the North West Province.	The total length of 135km must be upgraded as only the first 5km has been tarred.	This road has been given priority status for upgrading to a tar/sealed road. The North West Province initiated the first phase of the project, from the N14 to Colston (5km), prior to 2004. The first 30km of the road was reportedly designed by the North West Provincial Department of Roads.
The MR975 links Laxey in the west with Glenred and Cassel in the east of the JTG district. The road from Laxey to Ditsipeng is 70km long. It joins the Churchill Bendell Road where the DR3450 links Ditsipeng to Glenred 15km later.	The total distance of the route (146km) must be upgraded.	The road alignment runs next to the Moshaweng River and is not suitable for upgrading. The required storm water structures on this route would contribute to disproportionately high construction costs. This route has not previously been earmarked for upgrading and no designs of the applicable roads are available. There are also no traffic counts for this route to determine the volume of transport it carries.

At the time when the memorandum was received, the estimated cost for roads upgrading in the region stood at R1.6 billion, compelling the Northern Cape Department of Roads and Public Works to engage various stakeholders to obtain the necessary funds for the upgrading of roads mentioned in the community's memorandum of grievances. These stakeholders were the national Department of Public Works, national Department of Transport, mining houses, Provincial Treasury, National Treasury, JTG District Municipality and Joe Morolong Local Municipality.

A stakeholders' forum comprising government departments, traditional leadership, the Kuruman Road Forum, Public Protector and local government institutions was set up. The construction of roads was phased in. For phase one, two routes in the area were earmarked for upgrading, namely Samsokolo to Laxey (27km) and Heiso to Dithakong (30km). The environmental impact assessment and the design of these roads were completed by July 2014.

Road closure in Kuruman

The JTG SMME Forum in Kuruman is a youth organisation that aims to explore economic benefits for the youth of Kuruman and the rest of the district, whether through business opportunities or employment at the various mines in the district. The organisation from time to time invited Sishen mine to its regular meetings to discuss local procurement and business opportunities for the youth. However, after the strike at Sishen mine in 2012, the organisation became more militant, and started to mobilise the youth for protests and marches to demand more economic benefits from mining. The organisation's stance towards mining in general and Sishen mine in particular changed, possibly as Sishen mine employees who were dismissed after a brief strike in October 2012 became involved in the organisation.

In February 2014 the JTG SMME Forum staged a protest in Kuruman, blocking the main road through town, stopping mining trucks and forcing them to offload their cargo.

Business owners in Kuruman were warned about the planned protest beforehand, with calls for businesses to close for the period of the protest, or be at risk of looting. This tactic proved effective as it enhanced the economic impact of the protest (ie town came to a complete standstill), while cultivating sympathy for the cause from local businesses. The three-day mass action demonstrated the ability to mobilise towards more savvy and well thought through public protest – strengthening the JTG SMME Forum's public profile.

School boycott in Joe Morolong

The second wave of school-related protests in the reporting period (2012–2014) erupted on 5 June 2014 in Joe Morolong Local Municipality and continued until 22 September 2014. Some 16,000 learners were prevented from attending school for more than three months over the tarring of the same roads in question in 2012. This time the school boycott by local residents led to the closure of 54 schools in more than five villages. Of the learners who were affected, 496 were matriculants (Grade 12s).

What sparked off the local residents' school boycott was the construction of a stretch of road that goes past the home of the local municipality's speaker. Angry residents saw this 800m stretch of road as evidence that local municipal councillors were looking after themselves first without caring about the welfare of the residents who helped put them in power. A community leader was quoted in mainstream media as saying: "The budget for that road could have been used to upgrade the roads we have been complaining about, which would have benefited a lot of people." The Kuruman Road Forum, which was spearheading the protest, demanded that a 130km stretch of road be tarred immediately. To gain the attention of the authorities, the protesters barred learners and staff from going to school. During the protests, the administration building of the Ditshipeng Primary School was set alight and the principal and teachers were threatened.

The impact of this unrest on education has been devastating: all the affected Grade R to 11 learners have to repeat their grades in 2015 – meaning that a year of schooling was in vain. Alternative plans were made for Grade 12 learners through the intervention of the national Department of Basic Education. Although matriculants were deregistered, an arrangement was made for them to attend a special intervention (a district-based camp) to prepare for supplementary exams in 2015.

On 8 September 2014 Transport Minister Dipuo Peters announced that construction on the tar road would commence.

ECONOMY, LIVELIHOODS AND LABOUR FORCE

The economy of the JTG District Municipality is based on mining (68% of provincial GVA), followed by community, social and personal services at 12%. Agriculture and manufacturing, which are strong growth sectors and job creators, play a very insignificant role in the local economy of the district, at 1% and 1.4% respectively (JTG District Municipality 2011: 68).

The strong reliance on mining makes the district's economy undiversified and vulnerable. The towns of Kathu and Kuruman are growing rapidly due to new mining activities, while many of the villages in Joe Morolong have no economic base to build from and also very little expectation of any new developments or investments. Most services and transport are tied to the mining sector.

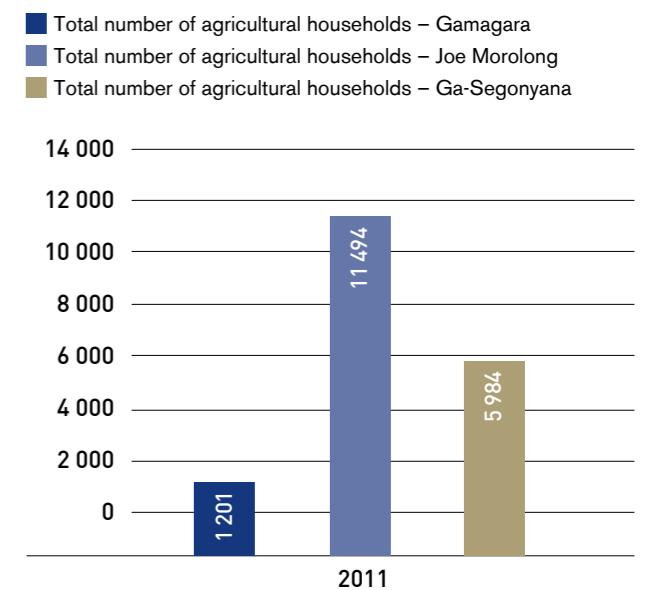
Retail activity has increased significantly in the past three years in Kathu, as it essentially feeds off population size and available disposable income. Retail and financial services will grow further in Kuruman and Kathu as the population and job opportunities grow, but will remain locally orientated for a long time to come as Kimberley and Upington are too strong to be challenged in the near future as regional service centres.

The number of households involved in agriculture contracted between 2001 and 2011. A total of 48% of all households in Joe Morolong depend on agriculture – often subsistence farming – for an income. The percentages of households involved in agriculture for Ga-Segonyana and Gamagara are 22.3% and 11.1% respectively, and tend to include commercial farms. Cattle and game farming is the mainstay of the agricultural sector.

Diversification of the local economy will be focused on agriculture, agro-processing, tourism and manufacturing. Kuruman has a strong base in government services, reflected in the fact that Ga-Segonyana Local Municipality generates 60.6% of JTG District Municipality's GVA for community, social and personal services GVA. In contrast, Kathu's local economy is totally dominated by the mining sector: 71.4% of GVA in the district comes from mines in Gamagara Local Municipality.

In the JTG district area, some 416 beneficiaries have benefited from land reform schemes covering almost 28,000 ha. In many cases, the economic potential of land is inadequate as a source for economic livelihoods and this will have to be addressed in any future consideration of infrastructure investment and development. As a result, the development priorities should be maximisation of LED opportunities, promoting integration and linkages with the surrounding economy and providing appropriate levels of service.

Graph 15: Total number of agricultural households in each municipality (Source: 2011 StatsSA Census)



The challenge lies in getting some of the other sectors to diversify and to grow substantially in importance and service delivery to create alternative economic opportunities for the people of the area.

INCOME, EMPLOYMENT AND GRANT DEPENDENCY

Poverty is widespread throughout the JTG district, and is especially problematic in the rural areas. An estimated 38% of households in Joe Morolong and 30% in Ga-Segonyana earn less than R9,600 per household per month. The corresponding figure for Gamagara is 15.9%.

A total of 91,618 (40.8%) people of the district's population have no recordable income. In terms of the spatial distribution of those earning no income in the district, 40.85% are resident in the Joe Morolong Local Municipality, 44.59% in Ga-Segonyana Local Municipality and 14.55% in Gamagara Local Municipality.

Unemployment remains a serious problem in the district area, with 30% of economically active people unemployed. This is high and puts extreme pressure on the municipalities operating in the district. The result of such high levels of unemployment is that communities cannot pay for basic services and that severe pressure is placed on municipal resources due to the demands of delivering services to a poverty-stricken population.

The youth unemployment rates in the Joe Morolong and Ga-Segonyana Local Municipalities are significantly higher than the national average of 24.1%, and a major concern.

Table 43: Unemployment rate – JTG district

Local municipality	Unemployment rate	Youth unemployment rate
Joe Morolong	38.6%	49.5%
Ga-Segonyana	33.7%	43.2%
Gamagara	17.7%	22.4%

A comparison between the 2001 and 2011 Census indicates that unemployment came down by 10% over the 10-year period in each of the local municipalities. Even in the absence of concrete data, there is enough evidence that this trend further continued between 2012 and 2014. Nevertheless, unemployment continues to be very high. Joe Morolong Local Municipality is, not surprisingly, the area with the highest frequency of people in the district receiving old age pensions, disability grants and child support grants.

More on livelihoods in Gamagara Local Municipality as host

Gamagara is the only municipality where relatively few people earn low incomes and also has the highest percentage of people in the upper income brackets. Sishen mine is the main employer within the Gamagara municipal area and the source of livelihood for a significant portion of the local population. The 2011 Socio-Economic Assessment conducted by Sishen mine reported that the mine directly or indirectly employs 36% of the overall employed Gamagara population, and 73% of employed individuals in Kathu.



Map 3: Sesheng and Mapoteng



Map 4: Olifantshoek

Mining salaries earned in Gamagara give this local municipal area a handsome income profile, which also results in an influx of job seekers. Young people especially migrate into areas in Mapoteng and Sesheng, where they settle informally - in shanties or shacks in backyards - to be close to the mine. This results in stark discrepancies in the socio-economic status of communities. Mapoteng Area 1 (known as Shanty Town) is a poor area with high unemployment and many socio-economic problems. Some 46% of residents fall in the age group 19–34, making this a young and male-dominated community. As many as 32% of households live on less than R1,000 per month and more than half (56%) make do with less than R3,000 per month.

Established as far back as 1899, Olifantshoek is the centre of a livestock farming area. Residents of Olifantshoek depend on farming-related income, SMME-related income, and to a lesser extent employment in the public sector, adjacent mines or commercial farms. Whereas Olifantshoek Central is well off, residents of Welgeleë, Dittloung, Diepkloof and Skerpdraai are poor. The majority of households earn less than R2,000 per month. The monthly minimum wage for farm and domestic workers seem to be the only source of income for a number of households. Olifantshoek has the highest grant dependency in Gamagara, 29%.



Map 5: Overview of mining operations in the area

EDUCATION

Between the 2001 and 2011 Census, there was a definite improvement in the education profile of the JTG district: the percentage of adults with no schooling declined from 25.5% to 14.6%. However, basic education levels remain inferior to the average for the Northern Cape Province, and the figures of 22.8% of adults in Joe Morolong with no schooling and only 13.4% with a matric qualification are unacceptable by any standards.

The education profile of the JTG District Municipality reflects the high levels of poverty and deprivation in especially the Joe Morolong Local Municipality, as well as the socio-economic differences among the three local municipalities. As distances of up to 30km from the closest school hinder access to education in deep rural areas, the Northern Cape Department of Education provides transport for learners who live more than 3.5 km from the nearest school. There are 63 bus routes covering 4,965 learners and bringing the annual amount spent on learner transport to R27.5 million.

There are 175 public schools, staffed with 2,203 educators catering for 66,844 learners, in the JTG district. The total public spend on education for the district in 2012 was R44,420 million.

The quality of education offered at schools, especially in the Joe Morolong Local Municipality with its large rural population, is an area of concern resulting in a migration of learners from the large number of rural schools to the few, better-resourced schools in urbanised areas. In Deben, Kathu, Kuruman and Mothibstad, admission and accommodation of new learners - many from rural areas - is a huge challenge. Kathu Primary school for example, enrolled 1,600 learners in 2014 and by September there were 100 learners remaining on its waiting list. This trend negatively impacts the teacher: learner ratio. While schools in Kathu are increasingly overcrowded, rural schools are experiencing decreasing numbers of learners and the Northern Cape Department of Education is closing down some of the schools in rural areas due to low numbers of learners. Table 46 on the next page shows the exponential growth in learner numbers at Kathu schools.

Table 44: Basic education profile 2011 (Source: Census 2011)

Area	% Population aged 20+		
	No schooling	Matric	Higher education
Joe Morolong Local municipality	22.8%	13.6%	4.1%
Ga-Segonyana Local municipality	9.7%	24%	9.5%
Gamagara Local municipality	10.5%	27.8%	11.3%
JTG District municipality	14.6%	21.1%	7.9%
Northern Cape Province	11.3%	22.9%	7.2%

Table 45: Number of schools – JTG district (Source: JTG District Municipality 2011/12 SDF Review)

Local municipality	Primary schools	Middle schools	Secondary schools	Further education
Joe Morolong	132	3	27	0
Ga-Segonyana	22	1	22	4
Gamagara	6	0	3	1

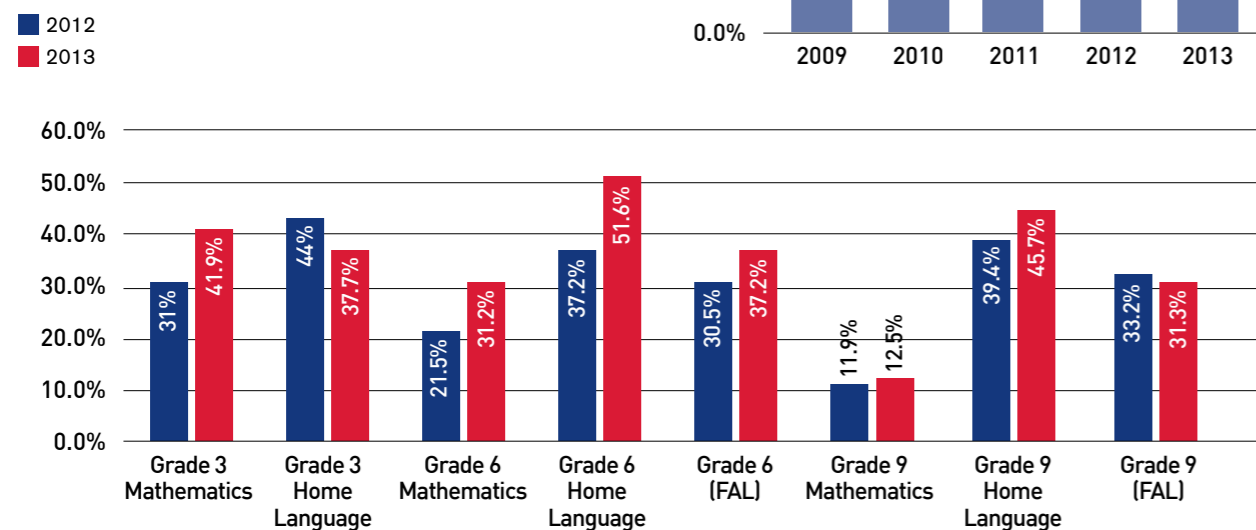
Table 46: Learner numbers in schools in Kathu and surrounds (2012–2014)

Educational institutions in and around Kathu	2012	2013	2014	% growth
BANA Early Childhood Development Centre	155	185	205	32%
Pikkie Pret – Grade R	146	146	180	23%
Kathu Primary School	1,112	1,255	1,603	44%
Kathu High School	874	908	980	12%
Sishen Intermediate School (Mapoteng)	642	750	894	39%
Rehoboth School	64	93	108	69%
Luxor School	154	161	202	31%
Gamagara High School	544	741	741	36%

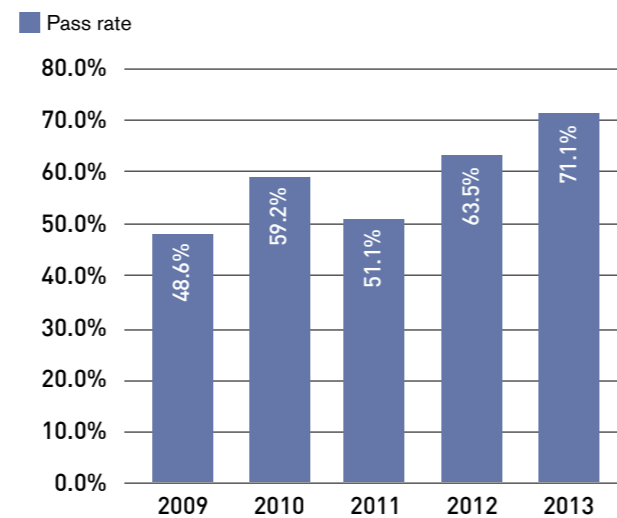
Available data shows a promising trend in so far as the matric pass rate in the district is concerned. In the class of 2013, out of 2,022 successful grade 12 learners, 890 passed Mathematics and 753 Physical Science.

Between 2012 and 2013 there was a year-on-year increase in the national assessment with the exception of Grade 3 Home Language and Grade 9 First Additional Language (FAL). Given the migration from rural to town schools and the tremendous pressure on schools in Kuruman and Kathu, educators in the district question whether the improvement in the quality of education can be sustained.

Graph 17: JTG District Municipality annual national assessment - average marks (Source: ANA 2013 Report)



Graph 16: National senior certificate pass rate – JTG District Municipality (Source: NSC School Performance Report 2012, 2013; Report on the National Senior Certificate Examination 2011 - Technical Report)



Community education by a health worker of the UGM Wellness Clinic.

HEALTH

As in the rest of South Africa, tuberculosis (TB) and HIV/AIDS are serious health concerns in the Northern Cape, including the JTG District Municipality. In addition, the district is grappling with a number of other health problems that affect child and maternal health in particular and are symptomatic of constraints such as geographical remoteness from facilities, the low-income status of many households and the inadequacy of some healthcare services. There is a high level of reliance on public health facilities as less than 13% of the district's population has medical aid cover.

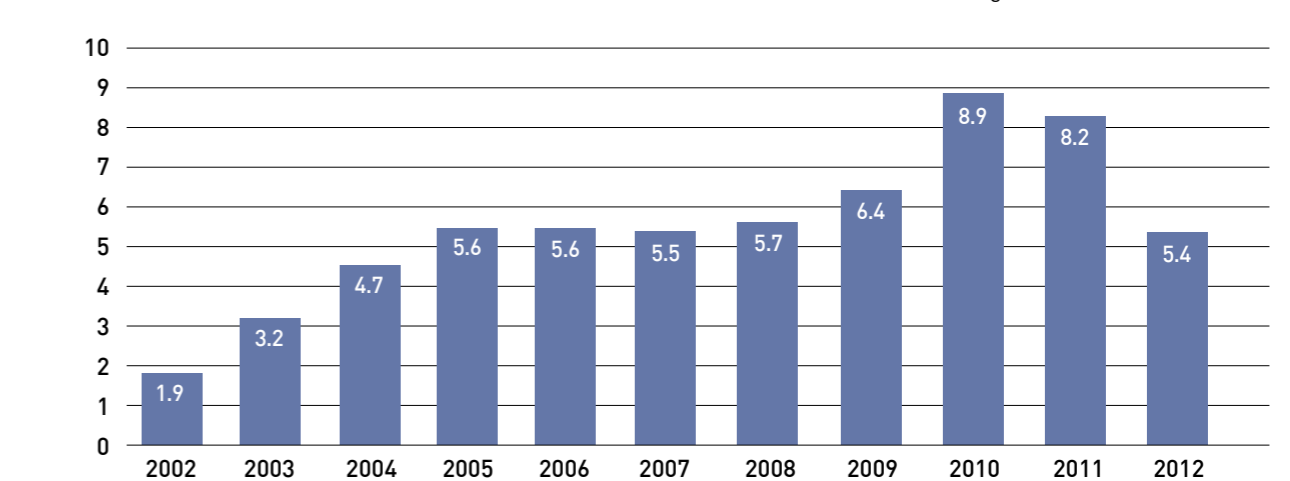
A further problem is the quality and integrity of healthcare data available, sometimes making it difficult to accurately monitor health trends.

TB AND HIV/AIDS

The incidence of TB in the district is high. According to the Northern Cape District Health Barometer for 2012–13. The TB incidence was 370.2 per 100,000 of the population, the highest in the province and well above the national incidence of 235.7.

Furthermore, both the TB treatment rate and the cure rate in the district were lower than the norm. At 72%, the treatment rate in 2011–12 was only slightly below the national rate of 75.4% but the cure rate, 55.1%, was the lowest in the province and well below the national rate of 74.5%. In the case of HIV/AIDS management, cause for concern is the sharp decrease in the male condom distribution rate. The national average in 2012 was 22.1 condoms per male 15 years and older, but the figure for the JTG district was only 5.4 condoms per male.

Graph 18: Male condom distribution coverage (Source: District Health Barometer 2012/13)



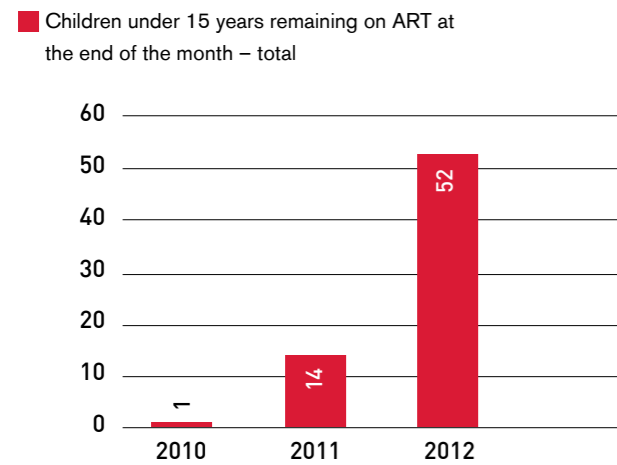
Some progress has been made in expanding the diagnosis and treatment of HIV/AIDS in mothers-to-be and infants. This can be attributed to the improvement in access to clinics and mobile clinics, as discussed later in this section, and on better management of medical supplies.

Early infant HIV diagnosis coverage in the district increased from 57.2% in 2011–12 to 72.7% in 2012–13, which is in line with the national rate of 73.9%.

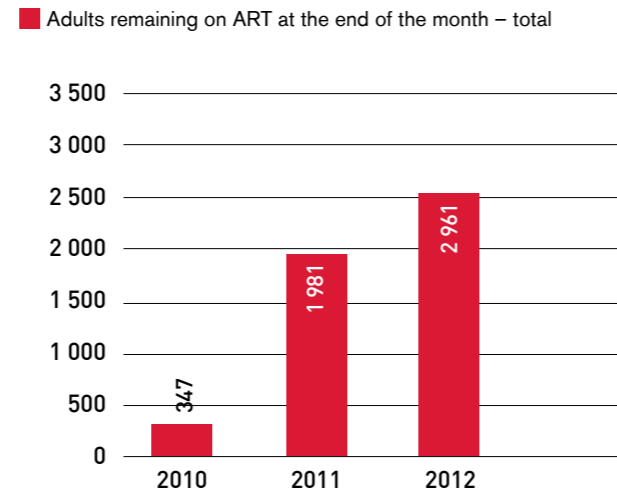
Similarly, the rate of antenatal client-initiated anti-retroviral treatment (ART) went up from 50.6% to 84.3% over the same period.

There has also been a considerable increase in the number of adults and children under 15 remaining on ART.

Graph 20: Children under 15 years remaining on ART at end of the month – total (Source: District Health Barometer 2012/13)



Graph 19: Adults remaining on ART at the end of the month – total (Source: District Health Barometer 2012/13)



A school visit by the UGM Wellness Clinic.

CHILD AND MATERNAL HEALTH

In certain aspects of maternal and child health, the JTG district is much worse off than other districts in the Northern Cape, and in some cases has the highest illness prevalence rates in South Africa. The incidence of pneumonia is a case in point: it increased from 98.6 cases per 1,000 children in 2011–12 to 106.9 in 2012–13. This was the second highest rate in the province and well above the national average of 66.8 cases of pneumonia per 1,000 children. The fatality rate from pneumonia among children under five was 9.5% in 2012–13, which was almost three times higher than the national rate.

In 2011–12, the maternal mortality in facility ratio was 260.5 per 1,000 live births, which was the highest in the Northern Cape Province and almost double the national rate of 132.9 deaths per 1,000 live births. The stillbirth in facility rate was also the highest in the province for the same period, at 28.4 per 1,000 births. The inpatient early neonatal death increased from 5.0 per 1,000 live births in 2011–12 to 8.2 in 2012–13. (It must be said, however, that there have been wide variations in this rate over the past 10 years, indicating that the data may be problematic and making it difficult to pinpoint trends accurately.)

On the other hand, the JTG district has recorded a reduction in diarrhoea deaths among children under five, from 13.2% in 2011–12 to 2.1% in 2012–13. This was despite an increase in the incidence of diarrhoea with dehydration, from 8.2 episodes per 1,000 children to 12.6 over the same period.

There has also been a significant decrease in child under five deaths from acute malnutrition, from almost 20% in 2009–10 to 7.0% in 2011–12.

Immunisation coverage under one year is good. In fact, it stood at 117.1% in 2012–13, which could be due to poor data or an underestimation of the under-one population.

INFRASTRUCTURE AND FACILITIES

Altogether, there are approximately 40 clinics, 20 mobile clinics and three hospitals in the JTG District Municipality. Healthcare and provision of facilities are challenging in isolated and sparsely populated areas, such as the more rural parts of Ga-Segonyana and Joe Morolong.

Access to adequate healthcare facilities is cause for concern among stakeholders. This emerged during focus group discussions that Sishen mine held in September 2014 as part of its socio-economic impact assessment.

Stakeholders participating in the focus groups expressed concern about the shortage of ambulances, notably in Joe Morolong Local Municipality, to respond to accidents and emergencies. However, they commented favourably on the positive impact of Sishen mine's emergency response and assistance with South African Police Service road blocks.

Other challenges raised during the focus groups were the shortage of medical professionals and overcrowding in Gamagara and Kuruman Hospital.

The plight of people with disabilities was highlighted, with stakeholders saying this vulnerable group was not being catered for. Waiting periods of six or seven months were often experienced when items such as wheelchairs, crutches and prosthetic limbs had to be brought in from Kimberley.

INCREASED ACCESS TO HEALTHCARE SERVICES

To increase accessibility and improve the quality of healthcare service delivery, the Department of Health commissioned three new clinics in 2012 in the Ga-

Segonyana and Joe Morolong areas. These are Deurham clinic, Kagung clinic and Heuningvlei clinic.

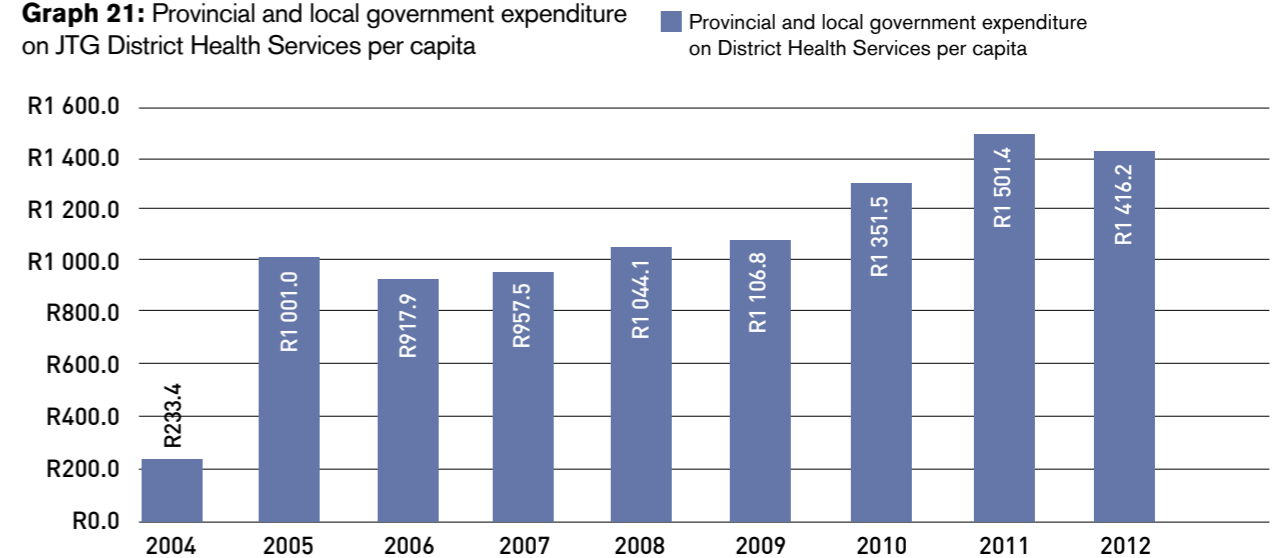
In the same year the department entered into a partnership with the JTG Developmental Trust for the procurement of medical equipment to the value of over R30 million for hospitals, community health centres and clinics. In addition a number of clinics in Kagisho, Camden, Tsineng, Bendel, Loopeng, Gadiboe and Olifantshoek were refurbished at a total project cost of approximately R10 million.

At the handing over of the new clinic in Deurham on 8 April 2014, the JTG Developmental Trust presented a cheque for R11,831,773 to the Department of Health for the roll-out of health-related projects in 2014.

These projects include the popular Re a Fola Health Promotion, which was launched in 2012 and extended to Gamagara Local Municipality in 2013, as well as the conversion and renovation of the under-utilised administration block at Tshwaragano Hospital in Batlharos to a fully functional, fully equipped nursing training facility. The nursing facility will be able to accommodate more than 60 nurses and act as a satellite of the Hendrietta Stockdale Centre in Kimberley.

A new clinic for Bankara Bodhulong and a new hospital for Kuruman, which would allow for a higher level of care and reduction of referrals to Kimberley, are in the planning stages.

Graph 21: Provincial and local government expenditure on JTG District Health Services per capita



Health spend per person

Ga-Segonyana and Gamagara Local Municipalities indicated that they made budgetary provision for the municipal health services function in each financial year. The Joe Morolong Local Municipality noted that it had not budgeted for the municipal health services in any of the financial periods under review and that it made use of the Northern Cape Department of Health as service provider.

UTILITIES, INFRASTRUCTURE AND SERVICES

INCREASED PRESSURE ON MUNICIPAL SERVICE DELIVERY

South Africa has one of the most progressive legislative and policy frameworks for basic services in the world, including a constitutional right of access to sufficient water, a right to basic sanitation, a Free Basic Water (FBW) policy and a Free Basic Sanitation (FBSan) policy at the national level.

According to the 2005 Department of Local Government (DPLG) Guidelines for the implementation of the National Indigent Policy by municipalities, the term 'indigent' means 'lacking the necessities of life'. The indigent policy is designed to allow municipalities to target the delivery of essential services to citizens who experience a lower quality of life. These services include:

- Free Basic Water: a minimum of six kilolitres of water per household per month within a 200m radius of the household
- Free Basic Energy: 50 kWh of electricity per household per month
- Sanitation: ventilated improved pit latrine (VIP) or toilet connected to a septic tank or to water-borne sewerage
- Waste: collection and disposal of refuse
- Health: access to clinics and voluntary testing and counselling.

While progress has been made towards eradicating service delivery backlogs in the JTG district, at municipal level and in the poorest areas, service delivery remains a major challenge. The lack of sufficient services such as potable water and sanitation is starting to cause major problems for the district. In the past three years, existing mines were increasing production levels, while numerous new mines were being commissioned at the same time.

As people moved closer to economic activities, tremendous pressure was being placed on existing service capacities for all bulk supply services, access roads and town development. The overwhelming demand for housing, schools, healthcare and other urban amenities caused budgetary and capacity concerns for existing towns such as Kathu and Kuruman. Unplanned backlogs put immeasurable strain on municipal planning, provision of bulk services and reticulation. This situation has a particularly adverse effect on municipal infrastructure for bulk supply, which is in need of a serious upgrade in the form of a new sewerage plant, substation or reservoir.

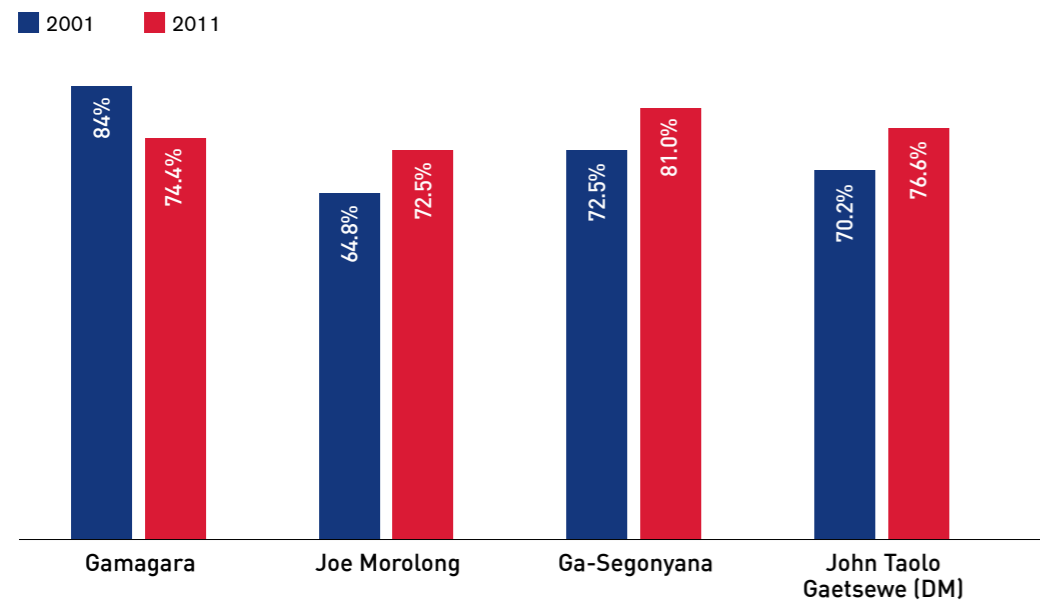
HOUSING

The housing need in urbanised areas remains high. The effects of the "resource curse thesis" are certainly evident in Kathu, where the mining boom is creating a rapid demand for labour and skills (thus driving up wages), leading to distortions in the property market.

The reported increase in the percentage of informal settlements in the JTG district from 5,1 to 7,6% of the population is concerning, but the situation in Kathu has definitely worsened since Census 2011 data was collected. The housing backlog in Ga-Segonyana Local Municipality's IDP is reported as 4,460 RDP houses. Implementing strategies to address the housing backlogs takes time and requires seamless collaboration between local municipalities, the provincial Department of Housing, private developers and the mining companies.

From the graph below it is evident that access to housing has declined between 2001 and 2011 in Gamagara Local Municipality.

Graph 22: Access to housing (Sources: StatsSA Census 2001; 2011 StatsSA Census)



WATER

The JTG district falls in the Lower Vaal Water Management Area. The most important catchment area in the district is the Korannaberg Mountains, from which the majority of the streams in the district spring and from where they drain into the Kuruman River system. However, it is essentially an area with very little surface water and no rivers with permanent water flows. Thus water for mining, industrial and residential use comes from the following sources:

- Groundwater in the form of boreholes and water being pumped from mining operations in order to keep them dry (dewatering) is being utilised throughout the area.
- The Kuruman Eye is a natural source of water, providing crystal-clear water for the surrounding community.
- The bulk of potable water is supplied through the Vaal-Gamagara pipeline (which originates in Delpportshoop, some 300km away). The Vaal-Gamagara Government Water Supply Scheme was completed in 1968 to deliver water from the Vaal River to a range of users in the whole area from Postmasburg/Beeshoek to Black Rock. This scheme's purification works purifies 13,27 million m³/a water that is delivered via pumps, 11 reservoirs and 370km of pipes to users in its service area. Various planning studies have been completed for the future upgrading of the scheme to deliver more water to existing customers and increase the area of service.



The right to water is a shared competency of national, provincial and local government.

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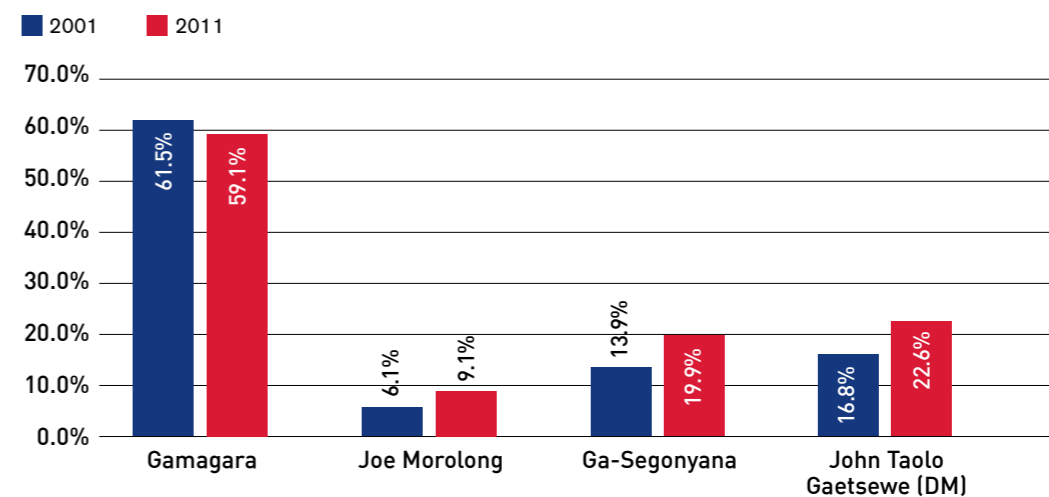
- National government, through the Department of Water and Sanitation, is responsible for setting national policy frameworks and standards for the delivery of water services. The National Water Act 36 of 1998 (NWA) creates a comprehensive legal framework for the management of water resources in South Africa.
- Provincial government must monitor and support local government, which is responsible for the delivery of water and sanitation services. Cooperative Governance and Traditional Affairs (CoGTA) is responsible for the development of policy and legislation regarding provinces and for monitoring the implementation of the Local Government Municipal Systems Act, 2000 (No 32 of 2000) and the White Paper on Local Government (1998).

- At the end of the day it is local municipalities that enable the delivery of water to the people living in their jurisdictions.

If access to piped water inside dwellings is used as an indicator, Census findings seem to suggest that the situation improved slightly from 2001 to 2011 in Ga-Segonyana and Joe Morolong - however from a very low base.

According to the Ga-Segonyana IDP, about 61% of households have access to "a basic level of water" within a 200m radius of the household. In Gamagara the reduced access to piped water inside dwellings is attributable to the growth in population and informal settlements.

Graph 23: Access to piped water inside dwelling (Sources: StatsSA Census 2001; 2011 StatsSA Census)



ELECTRICITY

Comparing Census 2001 and 2011, the growth in access to electricity as a primary source of energy in the district has been remarkable. Access to electricity as a source of energy for perhaps its most vital need, lighting, grew to 87% for the district. Considering the realities of the Joe Morolong Local Municipality as a rural area faced with vast distances, huge service delivery backlogs and an almost total dependency on grants and subsidies, the progress made is nothing short of excellent.

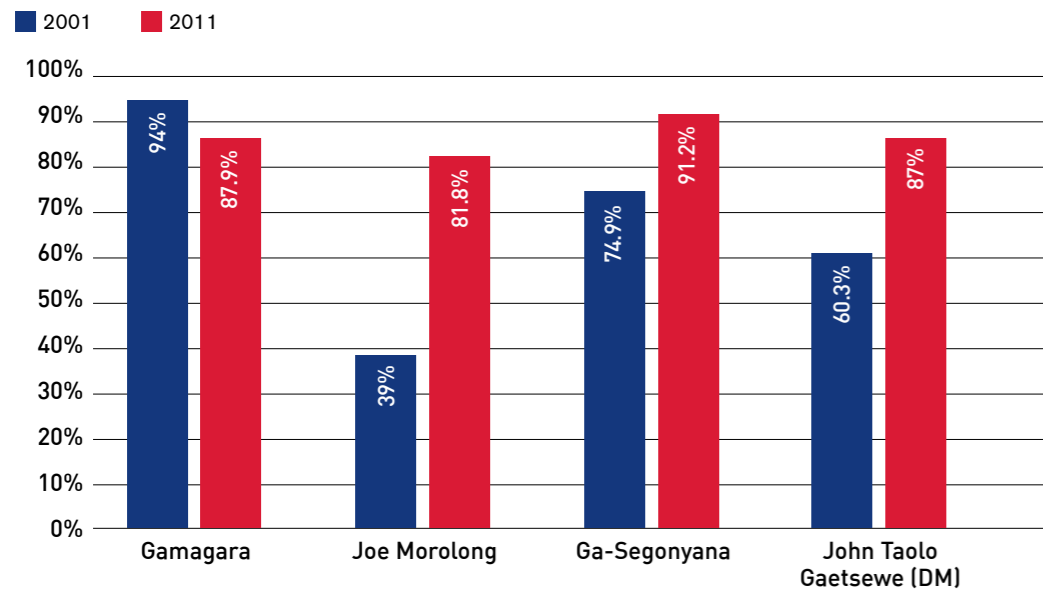
The decline in access to electricity in Gamagara results from the growth in the number of informal settlements.

Even though the majority of households have access to electricity, Ga-Segonyana and Gamagara have insufficient bulk electricity. Electricity is drawn from a long way away, and major additional bulk supplies of electricity are required for future expansions.

This is in the context of Eskom's difficulties in generating enough electricity to deal effectively with current demand in South Africa.

Housing and commercial development in Kuruman is severely stifled due to a lack of capacity in the electrical supply network. The supply from Eskom's Moffat substation to the Ga-Segonyana Municipality is currently provided at 11kV by means of two 10MVA feeders, providing a firm supply of 10MVA. The notified maximum demand with Eskom is currently 11.9MVA and the maximum demand has already reached 13.2MVA. It is estimated that an increase in supply capacity to the municipality will have a funding requirement of R239 million and hand-over may only be in 2022 - effectively putting a moratorium on further development in Kuruman.

Graph 24: Access to electricity for lighting (Sources: StatsSA Census 2001; 2011 StatsSA Census)



SANITATION

Information from Census 2011 shows that just over 26% of households in the district have access to sanitation via a flush toilet, while the IDP of Ga-Segonyana Local Municipality states that just over 70% of its households have access to sanitation of an acceptable RDP level.

Of particular concern are Ga-Segonyana and Joe Morolong, where over 10% of households do not have access to any form of sanitation and large numbers of households are still using pit latrines.

According to the South African Institution of Civil Engineering (SAICE) and the CSIR, although statistics reveal improvements in sanitation access, users are often not receiving the full benefit because of high failure rates. There are two main reasons for this. Firstly, most sanitation facilities are not compliant with appropriate technical design standards, meaning they are built in a manner susceptible to quick failure and extreme maintenance difficulties.

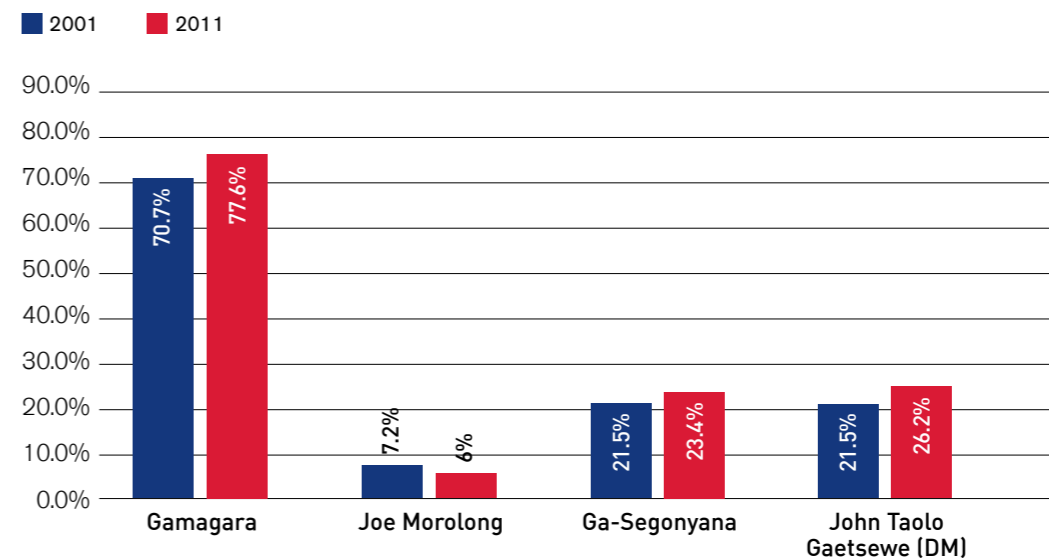
Secondly, there is a consistent lack of communication with users on why and how to use these facilities, compounding maintenance problems.

The challenge of the latter was raised during a round-table discussion held with Gamagara municipal officials as part of Sishen mine's latest socio-economic assessment. During the discussion, the municipal officials said that misconceptions among residents about the use of flush toilets were a huge problem in Mapoteng, where large numbers of people settle informally in the hope of finding work. Being unfamiliar with flush toilets, some people treat the toilets as dustbins and use them to dispose of household waste. As a result, sewerage pumps then become clogged and sewage starts overflowing. The fact that much of the population is transient makes it difficult to educate people effectively about appropriate use.

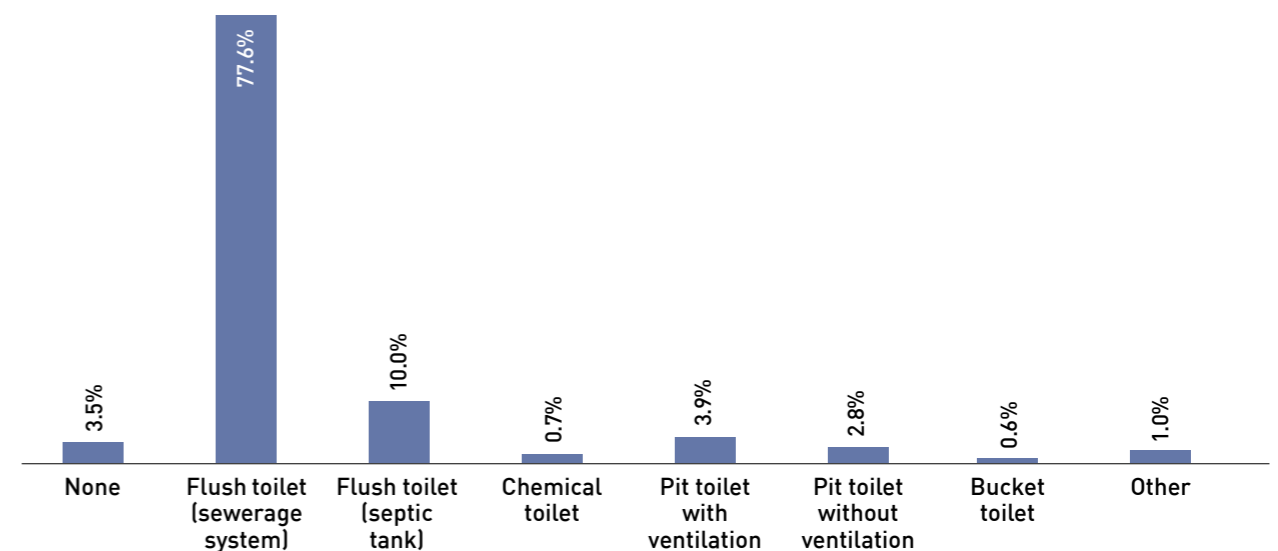
Overcrowding is another challenge for effective sanitation in Mapoteng. The number of dwellers per erf far exceeds the current capacity to deliver service. Technically, the sanitation system, consisting of four pumps in Mapoteng and six pumping stations in Kathu, can accommodate five people per household. In reality, up to 20 people may reside on each erf or plot, by far exceeding the calculated capacity of the infrastructure. This explains the recurring problems being experienced with bulk services and the provisioning of internal services to attend to the problems.

“While great strides have been made in basic sanitation provision in South Africa, the infrastructure is in bad condition.... Given the role of sanitation in preventing disease transmission and providing dignity to all, this is a serious health risk and critical problem.” (Source: SAICE and CSIR, 2011, Infrastructural Report Card for South Africa)

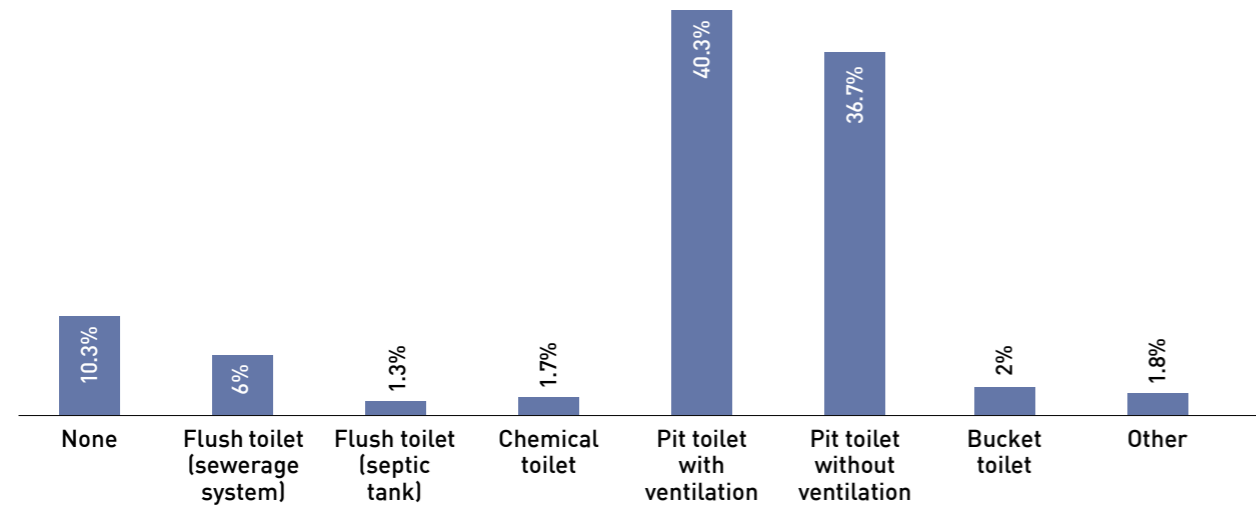
Graph 25: Access to sanitation (Sources: StatsSA Census 2001; 2011 StatsSA Census)



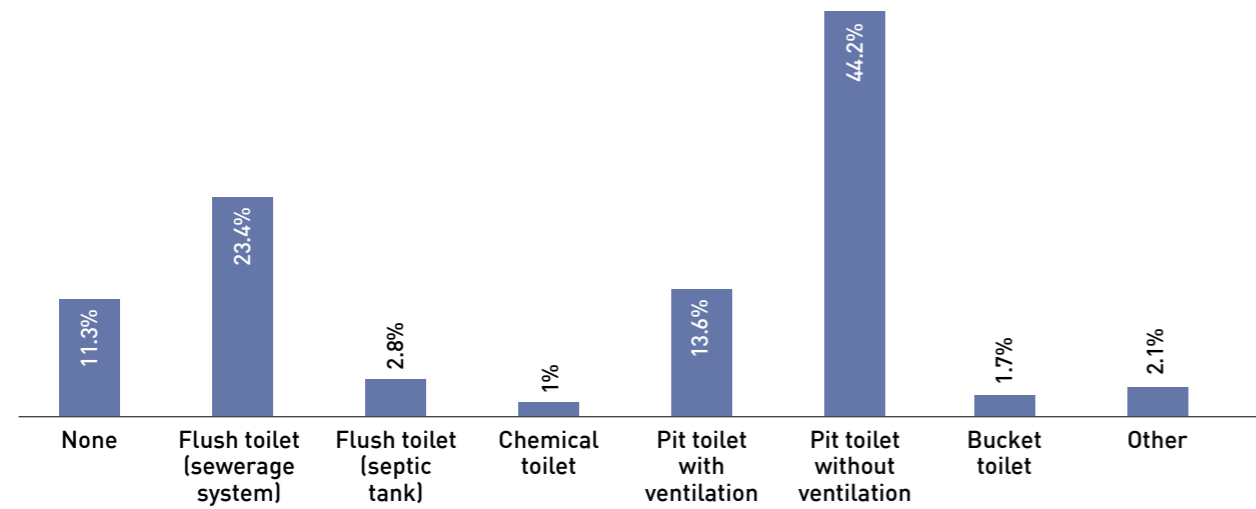
Graph 26: Sanitation methods used – Gamagara 2011 (Sources: 2011 StatsSA Census)



Graph 27: Sanitation methods used - Joe Morolong 2011 (Sources: 2011 StatsSA Census)



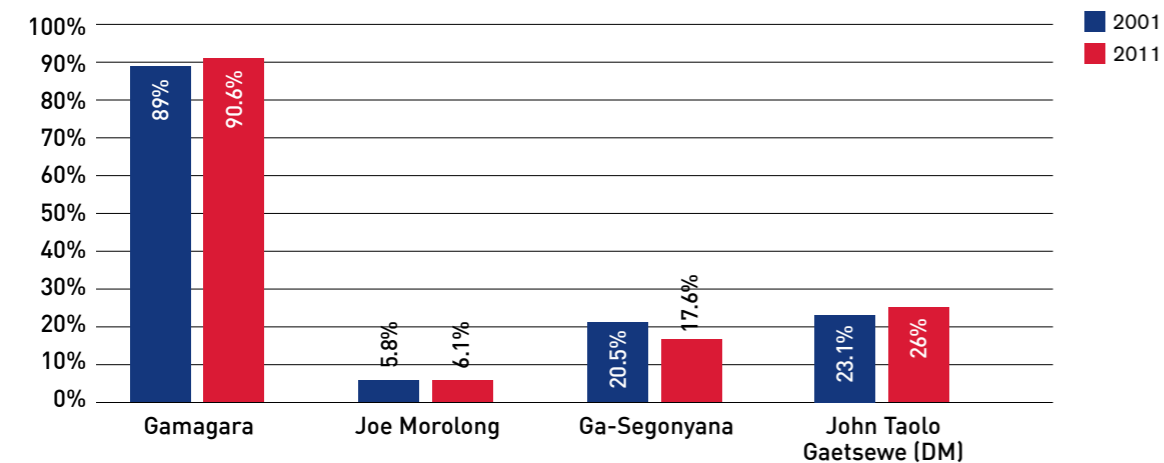
Graph 28: Sanitation methods used – Ga-Segonyana 2011 (Sources: 2011 StatsSA Census)



REFUSE REMOVAL

Refuse removal in the JTG district area has not shown any real improvement in the past three years, nor in the 10 years between 2001 and 2011. It is certainly not on the level required by national and provincial planning.

Graph 24: Access to electricity for lighting (Sources: StatsSA Census 2001; 2011 StatsSA Census)



ROADS AND TRANSPORT

The N14 is currently the only SANRAL road in Sishen mine's local area and it cuts across the Gamagara Mining Corridor roughly from west to east, linking the area with Upington in the west and ultimately Gauteng in the east. Inside the corridor, it links Olifantshoek with Kathu and Kuruman. Various sections of this road were recently reconstructed and upgraded.

The most important provincial roads are the R31, which links Hotazel, Kuruman, Danielskuil and ultimately Kimberley, and the R380 from Black Rock to Hotazel, Kathu and Postmasburg. These two roads are the important north-south road links.

In July 2011 the Northern Cape Department of Roads and Public Works took over the roads function from the five district municipalities in the province. In doing so, it inherited the backlog in the construction of proper access roads between the SANRAL and provincial road corridors, and the large number of villages.

Due to the poor condition of roads that connect the rural and urban areas, a lack of services provision by the bus and freight transport companies is a huge problem. This results in inferior transport opportunities for people and no transport for livestock and other products to markets, which again results in a huge loss of money when selling products within the local communities (Integrated Transport Plan, 2006). Dissatisfaction with roads has been a cause for public protests and civil unrest in the past three years.

Some of the larger mining houses have upgraded a number of roads in partnership with the provincial roads department. The mining houses take on this responsibility when their labour is sourced from villages in a particular area. Mines are obviously responsible for the road networks on their properties, especially to accommodate mining operational traffic. Access roads from the mines to the provincial road network are also the responsibility of mining operations.

Local municipalities are responsible for the road networks within towns. The upgrading and maintenance of these networks is being addressed in the various Integrated Development Plans. All the municipalities within the area of jurisdiction of the JTG District Municipality have reported that they performed the municipal roads function in each of the assessment periods under review. The function is performed within the Technical Services (Basic Services and Infrastructure) Department of local municipalities. Only two of the officials managing the municipal roads function at the respective municipalities within the district municipality are in possession of a national diploma in civil engineering.

Table 47: Road network in the JTG District Municipality (km) (Source: Integrated Transport Plan, JTG DM)

Road type	Surfaced roads (km)	% of total	Unsurfaced (km)	% of total	Total length (km)	Percentage
National roads	125	1.9%	0	0	125	1.9%
Main roads	30	0.5%	237	3.7%	267	4.2%
Secondary roads	61	0.9%	974	15.3%	1035	16.3%
Arterial	104	1.6%	117	1.8%	221	3.5%
Minor roads (access and streets)	21	0.3%	3,501 + 1,162	73.6%	4,683	74%
Total	340	5.4%	5,991	94.6%	6,331	100%



Newly developed Heritage Mall in Kathu.



The new Checkers mall is currently under construction in Kathu.

COMMUNITY SAFETY AND SECURITY

There are 11 police stations/precincts in the JTG District Municipality, four of which are located in the Gamagara Local Municipality, three in the Ga-Segonyana Local Municipality and four in the Joe Morolong Local Municipality. According to the statistics received from eight of the police stations, "Assault with intent to inflict grievous bodily harm" and "Common assault", are the most common crimes in all three local municipalities in the district. The highest concentrations are in Kuruman (Ga-Segonyana Local Municipality) and Kathu (Gamagara Local Municipality).

Serious crimes, such as "Murder" and "Attempted murder" are most prominent in Kuruman and Olifantshoek, although the levels are low in comparison to the national figures. There has been a sharp increase in "Robbery with aggravating circumstances" in Kathu and Kuruman, and to a lesser extent in Deben. Similar sharp increases can be observed in "Burglaries at residential premises", particularly in Kathu and Olifantshoek. However, "Burglaries at non-residential premises" have shown a definite declining trend in most of the eight areas.

"Sexual crimes" are most common in Kuruman, Kathu, Olifantshoek and Tsineng. However, three of these precincts, Kuruman, Olifantshoek and Tsineng, showed moderate decreases in the number of sexual crimes reported between 2013 and 2014, while there was a slight increase in the number of sexual crimes reported in Kathu.

Drug-related crime is significantly down in Kuruman and Olifantshoek but has increased sharply in Kathu.

Malicious damage to property" is very prevalent in Kuruman, in comparison to other areas (eg 118 cases were reported in Kuruman in 2014 in comparison to the 54 reported at the next most affected precinct, Kathu). "Theft out of or from motor vehicles" is more prominent in the more urbanised areas in the JTG District Municipality, with 294 instances of this type of theft reported in Kuruman in 2014 and 54 cases reported in Kathu.



Policing in Gamagara is a challenge given the number of illegal structures put up by tenants to whom home-owners sub-let space.

DEVELOPMENT PRIORITIES

Seamless integration of efforts by development partners is essential. Rural development must be deliberately stimulated and urban development must be orderly, able to outlast mining activities and be in accordance with all legislative and planning procedures.

One of the biggest development challenges in areas such as Gamagara is to diversify the local economy to such an extent that spending large amounts of capital on needed bulk and internal reticulation services will be justifiable in the long term, even when mines have scaled down significantly or have closed down.

Intergovernmental relationships deserve attention as the roles and responsibilities between the district and local municipalities are not always clear. Clarity is also needed on the synergies between local government and the provincial competencies such as health, education, roads and transport.

In a nutshell planning has to be better aligned. Development is governed by all three levels of government, as legislation and policy frameworks are biased towards vertical alignment between national, provincial and municipal development.

It is therefore important to take note of all three levels of legislation and policy frameworks in order to ensure solid and successful projects that will subscribe to national goals and objectives. Coordination between the municipalities and the mining houses on their contributions to growth through the Social and Labour Plans is of the utmost importance and will play an even bigger role in the immediate future of the district.

The JTG Council has formulated the following development priorities for the district:

- Water and sanitation
- Roads and transport
- Local economic development (LED)
- Land development and reform
- Integrated human settlements
- Sustainable development-orientated municipalities (referring to financial viability and management, institutional management and development, good governance and public participation and anti-corruption)
- Environmental management, climate change and municipal health
- Disaster management
- HIV/AIDS and TB

(Source: JTG District Municipality IDP, 2012–2017)

The table below provides the documented development intent of each of the three local municipalities.

Table 48: Integrated development intent per municipality (Source: JTG 2011/12 revised SDF and IDPs of respective local municipalities)

Documented intent to deal with integrated development	
Gamagara	<p>According to the 2013–14 review of the Gamagara Local Municipality's Integrated Development Plan (IDP), the overall mission of the municipality is "to provide universal, sustainable services to the community in order to attain a safe and healthy environment, as well as socio-economic development by exploiting economic benefits and strengthening stakeholder relationships. Ten priorities were set for the 2013–14 period, based on consultation with communities in Deben, Sesheng, Mopoteng, Olifantshoek, Dingleton and Kathu.</p> <p>These priorities were:</p> <ol style="list-style-type: none"> 1. Provision of basic services, including waste management 2. Upgrading and maintenance of infrastructure 3. Human settlements and land development 4. Local economic development and job creation 5. Transversal groups and youth development 6. Recreation, sport, arts and culture 7. Community safety 8. Good governance 9. Skills development 10. Administrative and financial viability <p>In its IDP, Gamagara Local Municipality notes that the "single largest factor" that has guided the development of the Gamagara area is the Sishen iron ore mine, which it says provides jobs to thousands of people and was the reason for the establishment of Kathu.</p>
Ga-Segonyana	<p>Key performance areas for the 2012–2016 IDP cycle</p> <ol style="list-style-type: none"> 1. Municipal Transformation and Organisational Development 2. Basic Service Delivery <ul style="list-style-type: none"> • Water: all rural residential areas, with the exception of in-fills, have at least RDP level of water • Sanitation: 70% of currently existing residents have access to sanitation in line with national and provincial standards by 2014 • Roads and transport: Sufficient road network and transport services to all residents in Ga-Segonyana by 2012 • Refuse management: ensure that systems are put in place to render sufficient refuse removal services to create a clean and healthy environment for all residential areas in Ga-Segonyana. (conduct a study to determine which level of service for which village) • Electricity <ul style="list-style-type: none"> To ensure 100% access to electricity for all communities in Ward 1-3. To facilitate provision of electricity for Ward 4-13. To ensure free 50kWh (units) electricity per month to indigent households. To ensure continuous upgrading and maintenance of current networks for Ward 1-3. 3. Local Economic Development <ul style="list-style-type: none"> • Land development: ensure integrated human settlement in line with approved Spatial Development framework • Housing: RDP housing development and ensuring that 100% of housing allocations received from national by 2012 is spent. 4. Municipal Financial Viability and Management <ul style="list-style-type: none"> • Financial viability by enhancing the income base, reducing outstanding debts and ensuring an unqualified audit report by 2014 • Implement supply chain management (SCM) system 100% by 2014. • 100% compliance to GRAP • Effective management and monitoring of the budget 5. Good Governance and Public Participation
Joe Morolong	<p>According to this IDP, the following are identified as priority realities, dynamics and issues in the municipality:</p> <ol style="list-style-type: none"> (1) the rural nature of the municipality, characterised by vast distances and a lack of resources to adequately sponsor public participation; (2) the need to prioritise the most fundamental and pressing needs of the community, who are faced with major survival challenges, including access to clean, potable water within a reasonable distance from homes, acceptable standards of sanitation facilities and shelter; (3) the need to promote the interest of special interest groups, such as women, the youth and persons with disabilities; (4) the need to fast-track the growth of the local economy, and, simultaneously, create employment opportunities; and (5) the need to transform the Municipal Administration into an efficient vehicle for delivery.

SECTION 4: KEY IMPACTS AND ISSUES

A drum reclaimer on one of the Sishen Mine's blending beds.

INTRODUCTION

This section outlines the assessment and prioritisation of issues and impacts raised by both internal and external stakeholders. As indicated in the introduction to the report, thorough consultation both with role players at the mine and external stakeholders was used in combination with available documentation to formulate socio-economic impacts and issues.

The Social Economic Assessment Toolbox (SEAT) distinguishes issues from impacts: issues raised by stakeholders are only recognised as “impacts” once the link between an issue and Sishen mine has been verified or substantiated with facts and figures. The operation is directly or indirectly responsible for impacts. Issues include stakeholder perceptions of impacts (not yet verified), socio-economic needs and concerns, trends and developments. Issues are as significant as impacts, as they influence the relationship between, and the shared future of, the operation and its stakeholders. There are usually a number of issues associated with each impact depending on the stakeholders consulted. Issues are varied and nuanced and relate to the world view and basic needs or mandate of a stakeholder group.

Key impacts and issues discussed in this section feed directly into the Sishen mine Social Management Plan (SMP). Analysing issues and impacts is done with the singular purpose of responding through meaningful measures to mitigate negative impacts, enhance positive impacts and manage issues as far as they are within the sphere of influence or span of control of the mine.

For each of the prioritised impacts, the following will be discussed:

- facts and figures
- root causes
- stakeholders affected
- secondary impacts
- associated issues
- effectiveness of existing management measures
- the inherent risk or opportunity in the impact and/or associated issues.

The significance of impacts and associated issues is subsequently assessed using either a risk or opportunity assessment. Once the significance of an issue or impact has been assessed and understood, appropriate management action can be formulated and included in the SMP. Opportunities and risks flowing from the Socio-Economic Assessment are considered alongside other discipline risks, using the Anglo American Integrated Risk Management (IRM) matrix followed in the assessment of risks and opportunities in this section.



Susan Seipotlane (electrician) with James Sepushi (maintenance operator).

IMPACTS ANALYSED

IMPACT 1: THE INDUCED EFFECT OF LOCAL EMPLOYMENT (+)

Facts and figures	Root causes	Secondary impacts
<ul style="list-style-type: none"> • The mine’s workforce significantly increased between 2009 (5,067) and 2014 (8,233). An estimated 80% of the 8,233 direct employment opportunities are local. • Total wages paid by Sishen mine in 2013 came to R3 billion, a large part of which is absorbed in the local economy (the November figure for 2014 was R2,3 billion). • In addition to direct employment Sishen mine offers indirect employment to 5,613 employees working in the local area for suppliers of outsourced services and construction companies. • In 2014, the mine created 228 permanent jobs in the district through its SLP/CSI projects. • Mining salaries (from both direct and indirect employees) are being spent in the local economy and that leads to growth of local businesses and the employment of more people. Employment by Sishen mine has created as many as 6,207 induced jobs. • Given direct, indirect and induced jobs created, based on an average household size of 3.5, the total number of people supported by Sishen mine is 49,767. 	<ul style="list-style-type: none"> • This positive impact is caused by Sishen mine’s policy of giving preference to job applicants from the JTD district (provided that they are the best candidates for a position, and suitably qualified) and if a suitable candidate cannot be found from the district, to give preference to someone from elsewhere in the province. • At the same time, the mine ramp-up to produce 37Mt by the end of 2016 also led to a degree of expansion. • The pay-outs of the Envision share scheme amplified the induced effect on the local economy as these pay-outs directly contribute to more disposable income. 	<ul style="list-style-type: none"> • Kathu and surrounds are growing rapidly. • Retail activity has increased significantly in the past three years in Kathu. • Unemployment in the JTG district came down by 10% between 2001 and 2010 – mainly due to expansion in mining activities. Unemployment in Gamagara (17.7%) is significantly lower than in the Northern Cape Province (28.1%) or other local municipalities, namely Ga-Segonyana (33.7%) and Joe Morolong (38.6%), in the district. • Poverty rates are lower in Gamagara. It is the only municipality in the district where relatively few people earn low incomes and it also has the highest percentage of people in the upper income brackets. • Adult literacy levels improved through the mine’s adult basic education and training (ABET) programme, with 95% of the mine’s employees having a qualification of ABET level 2 and higher. • Employment means further skills development – employees at the mine have access to ongoing training and development, which continually enhances the local skills base.
Stakeholders affected		
<ul style="list-style-type: none"> • Employees working on Sishen mine • The families of Sishen mine employees • Trade unions • Communities in the host area, Gamagara Local Municipality • Communities in Joe Morolong and Ga-Segonyana • Contractors and suppliers • Developers in Gamagara • Department of Economic Affairs and Tourism in the Northern Cape Provincial Government • JTG District Municipality • Gamagara Local Municipality • Joe Morolong and Ga-Segonyana Local Municipalities • Department of Labour – regional office • Department of Mineral Resources – regional office • Local business • Development partners 		
Associated issues		
<p>Non-compliance of contractors to Kumba’s local employment policy</p> <p>The fact that around a third of employees working on-site are contractor employees is a grave concern to specifically local authorities and trade unions. Contractor companies allegedly do not follow the same local employment policy as Kumba and as such constrain the cumulative positive effect that new jobs should have. Exceptions for scarce artisans and other mining skills are understood, but the view is that contractors are hiring unskilled labourers from elsewhere.</p>		
<p>Definition of “local”</p> <p>Stakeholders are concerned that Sishen mine reports on appointments from the Northern Cape as “local employment” even though the mine acknowledges its zone of influence is the JTG district. The expectation is that the mine, and its contractors, should be able to report on employees recruited from the JTG District Municipality according to a refined and agreed definition, similarly to the reporting that supply chain does for local procurement.</p>		
<p>Positive ripple effect of local employment only visible in Kathu and surrounds</p> <p>Although Sishen mine draws labour from all three municipal areas, the induced effect of local employment is far more visible in the Gamagara municipal area, especially in areas closest to the mine, than in the rest of the district. Poverty is high in the rest of the district, which is also part of the mine’s zone of influence.</p>		
Effectiveness of existing management measures		
<p>The local employment policy of Sishen mine is effective but should be more efficiently extended to all contractors, and compliance should be monitored. A dedicated sustainable development initiative is part of the Dingleton resettlement and seeks to maximise the local employment efforts of contractors on the project.</p>		
<p>It is not clear to stakeholders how Sishen mine, as part of its ramp-up strategy, proactively aligns the supply of skilled and qualified individuals in its neighbouring communities with future skill requirements for projects in the pipeline and contracts to be awarded in 2015–2017.</p>		
Inherent risks or opportunities		
<p>The opportunity to amplify the impact of local employment is countered by right sizing due to economic pressure (with reference to Kumb@80).</p>		

IMPACT 2: FAST-TRACKED LOCAL BUSINESS DEVELOPMENT (+)

Facts and figures	Root causes	Secondary impacts
<ul style="list-style-type: none"> Sishen mine's BEE procurement is performing very well against the Mining Charter targets for consumables and services, and was slightly below target for capital expenditure in 2014. The mine actively participates in regional and provincial forums aiming to enhance localised procurement in the region. In 2014, 62% of the money spent on procurement went to BEE suppliers. Sishen mine set and exceeded its own internal target for localised procurement (that is black-owned business within a 100km² radius of the mine). More than 20% or R6 billion was localised spend over the 2012–2014 period. A further R6,6 billion was spent with suppliers in the Northern Cape and the rest on national BEE suppliers. There are now, according to local business owners, more visible opportunities opening up for black/HDSA-owned businesses and this is improving year on year. Successful HDSA entrepreneurs believe the mine has achieved its objectives with the empowerment of black-owned businesses and has demonstrated its confidence in the ability of black entrepreneurs. "We are grateful that the mine believed in us as people from a disadvantaged background". The return on the R4 million annual investment of Sishen mine in the Small Business Hubs was 109 new SMMEs being successfully established in the mine's local area. Their joint turnover has injected R447 million into the local economy since June 2008 and 1,269 additional jobs have been created for community members. An agreement was reached with SIOC Community Development Trust to provide mentoring for small businesses who receive support from the various community trusts in the areas where Kumba operates. Bridging the gap between the Small Business Hubs' enterprise development efforts and integration into the Sishen mine supply chain, Kumba embarked on a Supplier Development Programme in 2014. The pilot programme involves a team of specialised mentors who will work closely with 25 local entrepreneurs to unlock their businesses' full potential in order to fast-track their integration into the Sishen mine supply chain. 	<p>This positive impact is caused by adherence to Kumba's Preferential Procurement Policy and the implementation of a detailed Procurement Progression Plan, which includes mechanisms such as encouraging large suppliers or contractors to localise their commercial activities, and facilitating transformation in Kumba's supplier base. The impact is amplified by the partnership between the supply chain and sustainable development departments in identifying and nurturing potential localised suppliers for the mine. Three other factors that converge in fast-tracked business development are -</p> <ul style="list-style-type: none"> the ongoing registration of local businesses on the Sishen mine procurement database to ensure connectivity between the supply chain department and prospective local suppliers the enterprise development programme through the Small Business Hubs in Kathu and Kuruman financing made possible through the Zimele Community Fund (eg a new Nando's franchise that opened on 14 August in Kathu). 	<ul style="list-style-type: none"> More competitive HDSA-owned businesses. Sishen mine is viewed as leading in local procurement practice, followed by BHP Billiton and Assmang. Opening up of the previously closed Kathu economy. Financing available through the Small Business Hubs stimulated the franchise drive in Kathu (aided by new shopping complex developments). The local economy has benefited and is starting to show signs of diversification.
Stakeholders affected		
<ul style="list-style-type: none"> Localised suppliers (within 100km² of Sishen mine) Supplier companies Local business Zimele beneficiaries Northern Cape Department of Economic Development and Tourism Department of Mineral Resources (DMR) (The Deputy Minister conducted a series of workshops on local procurement in the Northern Cape.) Northern Cape Mine Managers Association Community and business forums <ul style="list-style-type: none"> - Ga-Segonyana SMME Forum - JTG District SMME Forum - Kuruman Community Development Forum - Joe Morolong Road Forum - Gamagara Community Development Forum - Olifantshoek Contractor Unemployment Forum - Tsantsabane Black Business Chamber - Dingleton Contractors Forum) Kurara FM radio 		
Associated issues		
<p>Escalated property prices pose a challenge to local business The cost of renting or acquiring business and residential properties in Kathu is a challenge for business owners since the property market is becoming extremely expensive and there is a lack of serviced land, especially industrial plots.</p> <p>Higher crime rate contributes to cost pressures Higher levels of crime in the past three years have considerably increased the cost of running a local business.</p>		

Associated issues (continued)
<p>Quality and safety standards are perceived barriers in acquiring and retaining contracts Local businesses are convinced that Sishen mine maintains exceptionally high quality and safety standards. According to some this is especially true when it comes to procurement associated with core mining products and services: the closer to core mining, the higher the entry barriers. It is apparently difficult to register on the mine's database when delivering a product or service used in core mining as the standards set result in an unaffordable financial burden for smaller business. According to others, local businesses have difficulty competing with companies from Gauteng, regardless of procurement category. A number of entrepreneurs who have contracts with Sishen mine are experiencing various challenges due to a lack of economies of scale or cash flow constraints.</p>
<p>The inability to capitalise on opportunities for economic inclusion leads to unreasonable demands and social unrest The period 2012–2014 was characterised by the mushrooming of community and business forums rallying around the cry for economic inclusion. Unreasonable demands result from the gap between expectations of short-term financial benefit and local procurement opportunities realised. Mobilisation efforts have spilled over from Postmasburg to the Olifantshoek and Mapoteng communities and will no doubt lead to a reevaluation of Sishen mine's local procurement in the context of the inequality and poverty in the district.</p>
<p>Not all stakeholders support the concept of repayable Zimele loans There is stakeholder criticism of the concept of Zimele's repayable loans – which is believed to be a commercial arrangement rather than a supporting mechanism. The criticism is not unique to the local area. A number of strained relationships, resulting from incidents of defaulting – some by politically well-connected black businesses – have fuelled the sentiment that local businesses could be assisted in less "commercial" ways.</p>
Effectiveness of existing management measures
<p>The combined solution of progressive local procurement practices and the active support available through Sishen mine's Small Business Hubs is a catalyst for the development of HDSA-owned businesses in the local area. Since 2010 Sishen mine has made a concerted effort in both of these and this has started to pay off in the past three years. These efforts could be further strengthened through seamless collaboration among mines in the local area. The Dingleton Project has been planned with a strong focus on the empowerment of Dingleton business and will start showing tangible results in the near future. The Supplier Development Programme and implementation of the planned Supplier Park in Kathu are pipeline projects that should give this positive impact further momentum.</p>
Inherent risks or opportunities
<p>Economic pressures on Sishen mine have a braking effect on local business development.</p>



Construction work as part of the Dingleton resettlement was well planned to provide local procurement opportunities to community members.

IMPACT 3: CONTRACTORS' HIRING PRACTICES, LACK OF HOUSING SOLUTIONS AND POOR DEMOBILISATION CAUSE A SERIES OF SOCIO-ECONOMIC PROBLEMS (-)

Facts and figures	Root causes	Secondary impacts
<ul style="list-style-type: none"> The notion that contractor companies do not implement Sishen mine's local employment policy encourages the in-migration of job hopefuls from outside the district. In cases where contractors recruit or bring in employees from outside the area, it increases pressure on local service delivery (water, electricity and sanitation). Municipal and social infrastructure cannot cope with the influx. Sishen mine's housing project is for Kumba employees only. However, around a third of employees working on Sishen mine are contractor employees and if their employers do not make arrangements for accommodation, they rent structures such as garages or Wendy houses, mostly in backyards. Job hopefuls without an income settle everywhere and informal structures are mushrooming. Contractor camps, if not managed well, cause many social problems. Stakeholders mentioned Shelela Camp during focus group sessions as an example of the prostitution, alcohol and drug abuse that typically occur when single men with money have few recreational options. According to educators, teenage girls have relationships with mine contractor employees as a means to access money. This results in increased alcohol abuse, prostitution, teenage pregnancies and a higher drop-out rate from secondary schools. Stakeholders' biggest concern is that contractor employees stay behind after contract expiry and add to the number of unemployed in need of social support. There is a lack of proper, formal demobilisation programmes. Contractor companies do not contribute to the UGM Wellness Clinic but their employees use the primary and secondary healthcare services offered – straining capacity. Contractor companies add to the increases in learner numbers at local schools, but except for a few, are unwilling to contribute to local schools. In addition, contracts awarded by mining companies create a level of unpredictability and cause fluctuations in the number of applications for admission to schools – resulting in administrative pressure. 	<p>The cause of this negative impact is that contractors do not adhere to the Anglo Social Way in managing their socio-economic impacts. The large-scale appointment of contractors and the number of contractor employees in the local area exacerbate the negative impacts associated with mining. The mine's attempts to deal with the problem are hamstrung by a lack of reliable data on the socio-economic impact of contractors and its inability to monitor contractor companies' adherence to social standards set in Kumba policy.</p>	<ul style="list-style-type: none"> The influx of people hoping to secure work from contractors increases levels of unemployment. The lack of proper accommodation leads to overcrowding of areas such as Mapoteng (up to nine shanties on one erf) according to SAPS and the Gamagara council. Overcrowding puts tremendous stress on basic service delivery, causes social problems, leads to health concerns and compromises effective policing. This in turn aggravates crime.
	Stakeholders affected	
	<ul style="list-style-type: none"> The 10 contractors with the biggest socio-economic impact on the local area Contractor employees working on the mine or in the local area All other contractors with socio-economic impacts Other supplier companies Job seekers (all age groups) settling in Gamagara Trade unions Communities in the host area, Gamagara Local Municipality (especially Mapoteng, Dingleton and Sesheng) Gamagara Local Municipality Personnel at the UGM Wellness Clinic Educators, learners and parents at Gamagara schools Community and youth forums <ul style="list-style-type: none"> - Kgalagadi Youth Organisation - Joe Morolong Road Forum - Olifantshoek Contractor Unemployment Forum - Dingleton Youth Forum JTG District Municipality DMR Northern Cape Department of Social Development Northern Cape Department of Health Northern Cape Department of Education 	
	Associated issues	
	<p>Concern about the mine's willingness to absorb the cost of appointing more responsible contractors</p> <p>There is concern about the socio-economic impacts that may result from contracts in the next three years. A number of projects are being executed to ramp up Sishen mine's production but the mine will be under severe cost pressure. Stakeholders fear that the mine will be reluctant to enhance its contractors' socio-economic performance, as this will cost too much.</p>	

Associated issues (continued)
<p>Local contractors are not "by definition" socially responsible</p> <p>Stakeholders are concerned that the mine assumes that awarding a contract to a local company automatically results in more socio-economically responsible behaviour. The trade union representatives stated that this is not true and that Sishen mine has to manage and monitor all contractors with socio-economic impacts. Several examples were cited of local, HDSA-owned contracts leading to poor socio-economic performance.</p>
<p>Contractor companies' treatment of their employees causes concern</p> <p>Contractors' treatment of their employees impacts negatively on living (socio-economic) conditions and community health. According to trade unions, some contractors violate the basic minimum conditions of employment (exploit people). In representing employees they deal with cases of racial and gender abuse, late and inaccurate payments, violations of basic employment conditions, unsafe working practices and unfair production demands. FAMSAs and the UGM Wellness Clinic have found that the vast majority of employment-related health issues (stress, depression, anxiety) they treat are among employees working for Sishen mine contractors.</p>
<p>The boom-bust effect that 2014–2017 ramp-up contracts may have on the local economy</p> <p>According to local business owners, there will be a bust impact on the booming local economy should a number of large contracts come to an end in 2017 and contractor employees are laid off.</p>
Effectiveness of existing management measures
<p>In addressing the accommodation shortages, Sishen mine provides a contractors' camp with 924 beds for contractor companies to use at a rate of R140 ppp/d. In addition to this, contractors awarded projects on staying-in-business (SIB) capital are allowed to include accommodation cost in their tender amounts and invoices, in order to provide acceptable accommodation to their staff. In terms of on-site safety, health and environmental compliance, Sishen mine offers the same training and applies the same rigorous standards as it does for Kumba employees. Sishen mine expects contractor companies to comply with the Labour Relations Act's regulated basic conditions of employment and other related legislation governing these conditions. In awarding contracts, preference is given to companies that can demonstrate that their conduct is socially responsible. However, there is no shared, standardised and simple methodology for Sishen mine to manage its contractors' socio-economic impact on the local area. A lack of resources and functional coordination (between projects, HR, sustainable development and supply chain) compromise the mine's monitoring of its contractors' socio-economic impacts.</p>
Inherent risks or opportunities
<p>The negative socio-economic impacts by contractor companies invalidate Sishen mine's consciously planned delivery of socio-economic benefits.</p>



Group 5 contractor camp adjacent to the construction site in Kathu being prepared for Dingleton's resettlement.

IMPACT 4: HIGH CONCENTRATION OF UNEMPLOYED YOUTH IN GAMAGARA (-)

Facts and figures	Root causes	Secondary impacts
<ul style="list-style-type: none"> In Gamagara both male and female numbers peak in the 20–34 age group, with an overrepresentation of males between 25 and 29, particularly in Mapoteng and Sesheng. Young people settle informally - in shanties or shacks in backyards – to be close to the mines. This results in stark discrepancies in the socio-economic status of communities. Irrespective of Gamagara's higher income levels relative to the rest of the district, Mapoteng Area 1 (known as Shanty Town) is a poor area with high unemployment and many socio-economic problems. 46% of residents fall in the age group 19–34, making this a young and male-dominated community. This overconcentration of youths results from immigration from among others, the Joe Morolong municipal area where there has been a very significant decrease in men over 20. They leave to find work at the mines. Employment by a mine is considered by far the best way to achieve economic inclusion, particularly when compared to alternatives such as working for a farmworker's salary or doing subsistence farming. As such, Sishen mine, the biggest employer, is believed to be the reason for the high concentration of unemployed youth in Gamagara. Many are not permanently in Gamagara, but move in and out, making the youth population transient and difficult to cater for from the municipality's point of view. The mine cannot meet the demand among these young people for economic inclusion. The Gamagara youth unemployment rate is 22%, which is higher than the 17% unemployment rate for Gamagara overall. A large percentage of youths in the area do not qualify for positions at a mine as they either have not completed secondary school, or lack the minimum marks or relevant subjects for mine-specific training. A major challenge that the Gamagara local municipality faces is how to give the youth (18–34 year-olds) the opportunity to enter the economy or to further develop their skills. In the 2012–2014 period, a number of youth organisations emerged to explore (or demand) economic benefits for the youth in the JTG district, whether through local procurement or employment. These structures are effective in mobilising support among young people who have become more confrontational in their approach, staging protests and marches, and disrupting business, education and mining activity. Several stakeholders mentioned a shortage of post-matric training opportunities as a root cause of the youth problem. Mining-specific training is inaccessible to a large proportion of young people and there are apparently not enough alternatives. Educators share the opinion that there are a number of young people who achieved reasonable matric results but are unable to further their studies due to lack of financial support to study at the new university in Kimberley. In addition, non-mining related training (courses in marketing, sales or fashion design) often do not translate into employment and cost parents a lot of money. In all stakeholder consultation, levels of awareness of Sishen mine's youth development efforts were low. Stakeholders are not sure what the mine does but believe it should do more. 	<ul style="list-style-type: none"> Aspirations to work for Sishen mine or obtain a contract at Sishen mine attract youth to Gamagara. Poor-quality education and low skills levels prevent economic inclusion. The youth development efforts of the mine are a drop in the ocean and are viewed as inadequate. There is a lack of viable alternatives for youth development. Political rhetoric in the run-up to the 2014 Elections encouraged youth mobilisation against mines. <p style="text-align: center;">Stakeholders affected</p> <ul style="list-style-type: none"> Unemployed youth in the JTG District Municipality Community and youth forums <ul style="list-style-type: none"> Gamagara Development Forum Kgalagadi Youth Organisation Joe Morolong Road Forum Olifantshoek Contractor Unemployment Forum Dingleton Youth Forum Communities in the host area, Gamagara Local Municipality High-density or fast-growing villages/towns in Ga-Segonyana Rural villages in Joe Morolong and Ga-Segonyana Educators at secondary schools Local business Kurara FM radio FBOs and church leaders Youth Development Agency Northern Cape Gamagara Local Municipality JTG District Municipality SAPS Northern Cape Department of Social Development Department of Labour – regional office 	<ul style="list-style-type: none"> The influx puts pressure on Gamagara's municipal infrastructure. Social instability results from the frustration of the youth, who have time and energy to mobilise. There is impatience with the Small Business Hubs and the rigour applied in financing a new business or awarding a contract. The perceived inaccessibility of core mining-related training has the positive secondary impact of more learners taking mathematics and science as subjects to enable mining-related careers.

Associated issues
<p>A lack of data on the youth skills base There is a lack of reliable data on the skills of youth living in Kathu and surrounds. It is difficult for the private sector and government to tackle the challenge of youth development in the absence of insights about the prevailing educational levels among unemployed community members aged 18–34.</p>
<p>High rate of unemployed youths counters the perceived scale of Sishen mine's local employment Irrespective of the positive impact of mining's job creation on Gamagara Local Municipality's unemployment rate, this positive impact is overshadowed by the high number of young job seekers who keep on coming into the Gamagara area, and the alarming rate of unemployment (especially youth unemployment) in the rest of the district. That causes stakeholders to feel the mine should do more.</p>
<p>Low appetite among the youth for enterprise development processes supported by the mine As far as the Small Business Hubs are concerned, a considerable amount of effort typically goes into converting a business idea into a workable business plan that results in a business concept that attracts funding. This effort is often underestimated. Young would-be entrepreneurs are frustrated with the moderate conversion rate from aspirational entrepreneur, to successful funding applicant, to business owner qualifying for a tender from the mine.</p>
Effectiveness of existing management measures
<p>The bursaries and Professional in Training (PIT) programmes seem to be effective but are primarily geared to supplying higher levels of technical and managerial skills that the mine requires. With an annual intake of 50 Northern Cape learners, the impact on young community members in Gamagara is negligible. The 18-month internships offered as part of the youth development programme accommodated 40 young community members. It was meant as an industry and local business initiative, but in the end it was only Sishen mine and its direct associates who offered phase two placements to interns.</p>
Inherent risks or opportunities
<p>Ongoing socio-political instability disrupting mining activity.</p>



Johannes Tau and Boalemang Manankong are plant operators working on the UHDSM plant.

IMPACT 5: TRANSFORMATION AND THE ADVANCEMENT OF HDSA EMPLOYEES (+)

Facts and figures	Root causes	Secondary impacts
<ul style="list-style-type: none"> Sishen mine fully subscribes to the principles of the Mining Charter and has consistently exceeded Mining Charter targets for increasing HDSA and black representation in management and women employed in core mining. In 2014 the mine reached 56% representation of HDSAs in management and 16% women in core mining. One of the prerequisites for achieving Sishen mine's strategic purpose of 37Mtpa by 2016 is a strong human resources pipeline to enable ramp-up. There are three ways to align the supply of skilled and qualified HDSA individuals with the mine's ongoing and future requirements. <ol style="list-style-type: none"> One way is to use human resource attraction mechanisms to recruit HDSA skills. The willingness of professionally qualified and suitably experienced HDSA candidates (who are in high demand nationally) to settle permanently in Kathu is not always great, however. The second is training and development of the current workforce. To enable fast tracking, training and mentoring of HDSAs in the workforce, the mine has already completed its skills audits, affirmative action measures and talent identification and classification processes. Even so, the success of any individual's development depends on the implementation of his/her individual development plan, with a critical dependency on the direct manager or supervisor. The third way is to locally grow the skills of young community members with talent and the right basic education. Sishen mine funds bursaries in engineering, mining, surveying, metallurgy, geology, civil engineering and related functions. After graduation, young PITs are taken through a structured internship for at least 24 months. The intake of PITs is approximately 50 per annum. The retention of young, home-grown HDSA professionals in Kathu also remains a challenge. 	<p>This positive impact is the result of Sishen mine's commitment to Mining Charter targets and its responsiveness to pressure from regulators to fact track HDSA and black representation. In addition the mine's expansion meant skills gaps had to be filled, which offered opportunities for the advancement of HDSA candidates.</p> <p>Stakeholders affected</p> <ul style="list-style-type: none"> Sishen mine employees First-line supervisors Trade unions HDSA employees and especially PITs Community-based youth and employment forums <ul style="list-style-type: none"> JTG District SMME Forum Kgalagadi Youth Organisation Unemployed youth in the JTG District Municipality Gamagara Local Municipality JTG District Municipality DMR regional office, Mineral Regulation The Department of Labour – regional office Northern Cape Department of Economic Affairs and Tourism 	<ul style="list-style-type: none"> The mine, through its transformation and the advancement of HDSA employees, has played a big role in transforming Kathu from a traditional (white) mining town to an integrated society. According to stakeholders, it is now more conducive for people from a disadvantaged background to live in Kathu.
Associated issues		
<p>Stakeholder perceptions that the intention to develop careers for HDSA candidates does not necessarily translate into practice</p> <p>The perception that selection for recruitment and promotions is not always fair, and that the intention to develop careers for HDSA candidates does not necessarily translate into practice, featured strongly in stakeholder consultation. To some stakeholders it feels as if the same demographic group remains likely to benefit from the discretionary decisions made by a small, dominant coalition on the mine. The composition of the senior leadership team (SLT) seems to reinforce this concern. Stakeholders referred to examples of:</p> <ul style="list-style-type: none"> job profiles being designed or changed to fit earmarked individuals' profiles (while excluding other deserving candidates) a lack of accountability for job appointments and promotions made – poor feedback to unsuccessful candidates Individuals not selected for a position after acting in the position for up to 18 months (with no indication that performance during that time was not up to standard). <p>At the beginning of 2013, trade unions requested that they be included on the selection panel for job appointments. This request was as a direct result of general concern among their members and the number of specific cases/disputes. Even though the mine was able to explain that this would not be a viable solution, the request underlines these concerns.</p>		

Associated issues (continued)
<p>Concern that employees coming through the ranks do not receive the development support they need</p> <p>The ramp-up programme, the associated need to fill certain critical vacancies, and an escalation in learnerships led to the perception among trade union members with a long tenure at Sishen mine, that the mine brings in young people from outside and "places them directly on the trucks" (as machine operators). This type of fast tracking was different from the typical career development path that employees, who have been working at the mine for a very long time, are used to. It caused scepticism as to the willingness of the mine to work with and provide opportunities for current employees ("from within the workforce").</p>
<p>A trust gap between frontline supervisors and employees</p> <p>The 2013 Communication Audit found that certain groups of employees perceived that they are treated unfairly in the workplace. In explaining why they feel they are not treated fairly at Sishen mine, employees referred to racism in the workplace, unfair recruitment and promotion, unfair remuneration (management receives bonuses, employees not), unfair or inconsistent application of policies, and a lack of engagement, respect and caring in how frontline supervisors treat employees. The feeling on the ground – or rather in the pit – does not correspond with the reality of a transformed, progressive South African company. Another perceived shortcoming is the role played by the direct manager or supervisor in career development. Due to perceived pressure from above, frontline management is seen as focusing on production and safety, and abdicating responsibility for resolving other "softer" employee issues, which creates the trust deficit in the employee-employer relationship.</p>
<p>Afrikaans - "or not?"</p> <p>Language remains a bone of contention in discussions about transformation. The 2011 Community Survey found Afrikaans to be the dominant language in Gamagara followed by Setswana. With the advancement of HDSAs, there is a very specific expectation for Afrikaans as the dominant language in the workplace to give way to English. This seems to be a problem for the 68% of Gamagara households who indicated in the 2013 Communication Audit that they mainly use Afrikaans and/or Setswana and seldom English.</p>
Effectiveness of existing management measures
<p>Human resource development is, from a business and strategic point of view, the primary focus of Sishen mine's learning and development efforts as articulated in the SLP. This entails a number of interventions aimed at the development of individuals, teams and the mining operation as a whole. Some of the existing management measures already in place to further accelerate transformation are:</p> <p>Fast-track programme: The implementation of an extensive fast-track programme for employees with potential to develop into first line managers. 175 high-potential frontline employees were identified in 2008 and developed over a period of two years, resulting in an 86% promotion rate among all participants on the programme by 2012. During 2013 a further 143 employees were fast tracked with a 73% promotion rate by 2014. For 2014, 114 high-potential employees (86% HDSA) were given the opportunity to enrol for this programme.</p> <p>Supervisory Development Programme: Aware of the fact that supervisors often do not enable the learning and development needed, Sishen mine designed and commissioned its First Line Supervisory Development Programme in 2014. The programme comprises onboarding, induction and intensive training in leadership and management of subordinates, including a coaching phase. 257 supervisors will be scheduled to participate in this programme by December 2015.</p> <p>Bursaries and PITs: Every year Sishen mine funds between 65 and 70 bursaries for study in core mining-related subject areas and after graduating these young professionals are taken through a structured internship for at least 24 months.</p> <p>To counteract the perception of unfairness in promotion and recruitment practices, all selection interviews within Kumba Iron Ore are competency based and conducted via interview panels to rule out personal favouritism and/or preferences. Anglo American is in the process of globally implementing the principles of levels of work ensuring standardised role profiles. These will be used to optimise recruitment and development practices going forward. Having been awarded Top Employers South Africa certification, Kumba is inundated with huge numbers of applications when positions are advertised. The company has therefore adopted the principle of giving feedback to unsuccessful candidates on request only. This principle is communicated on all advertisements.</p> <p>The mine commissioned the University of Pretoria to do in-depth research into the reasons for the 2012 unprotected strike. To strengthen employee relations and rebuild trust, relationships, engagement and communication, key learnings from this research were converted into a number of action plans. 80% of all the actions have been addressed and monthly departmental indabas are held to engage all employees in dialogue. First Line Supervisory Forums have been implemented on a quarterly basis to provide feedback on strategic issues, engage in dialogue around production and safety issues, and recognise outstanding performance. Quarterly motivational talks to all employees have been implemented on management forums and training shifts, re-energising the workforce. Cross-operational and departmental sport events were held to build relationships and team spirit.</p> <p>The mine is ready to positively influence employee development. Resistance to new processes and practices is likely, however, and may negatively affect the rate of implementation. It is foreseeable that using consequence management to deal with non-compliance may exacerbate resistance but that ongoing, consistent and effective change management and change communication will change behaviour.</p>
Inherent risks or opportunities
<p>Unsuccessful implementation of human resource development due to internal resistance and ineffective change management results in the perception of regulators that Sishen mine is unable to truly transform.</p>

IMPACT 6: STRENGTHENING THE CAPACITY OF BASIC EDUCATION INSTITUTIONS (+)

Facts and figures	Root causes	Secondary impacts
<ul style="list-style-type: none"> Since 2009, some significant improvements have been recorded in education levels in the JTG district. The matric (grade 12) pass rate increased from 48,9% in 2009 to 71,1% in 2013, and more matric learners are passing mathematics and science. Learners in grades 3, 6 and 9 are also achieving better results in mathematics, according to the national assessment report for 2013. These signs of progress go hand in hand with strongly positive perceptions among some Sishen mine stakeholders as to the quality of education in specifically Gamagara, which is experiencing an influx of learners from rural areas. Sishen mine's contribution to the improvement of education was acknowledged in the 2011 Community Survey: 64% of community members saw an improvement in the quality of education and believed the mine had contributed to this improvement. Similarly, during focus group discussions with educators in 2014, the participants praised Sishen mine's support to schools and indicated their schools would be adversely affected if this support were to fall away. The mine's employees also believe that it is making a significant contribution to improving education around its operations, and that it inspires young people to do well in mathematics and science. This is according to the findings of the 2013 Communication Audit at Sishen mine. In the same audit, participating community members agreed that Sishen mine inspires young people to perform in mathematics and science. In the reporting period specifically, the mine invested R47.2 million in 24 education projects that benefited more than 10,600 learners from pre-school age through to grade 12 across the district. These investments covered all three levels of basic education: early childhood development (ECD), primary school education and secondary school education. The nature of investments varied according to the needs of the learners and educators concerned. They ranged from constructing, upgrading and equipping classrooms and other learning facilities to funding teachers' salaries, improving school security, paying for repairs and maintenance, providing computers and teaching aids, developing sport facilities and assisting with learner transport and food security. Sishen mine has made a conscious decision to distribute its support for education across both rural and urbanised areas in the JTG district. Rural investments include building and equipping 10 ECD centres since 2011 and adding a number of schools in Joe Morolong Local Municipality and Ga-Segonyane Local Municipality to the Education Quality Improvement Programme (EQUIP). 	<ul style="list-style-type: none"> Sishen mine engages regularly with schools and the Northern Cape Department of Education to ensure the mine's support for education in the district is aligned with priorities on the ground. The needs of tertiary education institutions also inform the mine's investments in basic education. Sishen mine education investments are subject to robust governance practices, and returns on investment are continually monitored. Educators taking part in Sishen mine focus groups stated that the mine practises good governance in managing funding to schools, and always provides reasons when a funding request is declined. 	<ul style="list-style-type: none"> Schools in Gamagara Local Municipality are becoming increasingly overcrowded due to the influx of learners from schools in rural areas. By contrast, learner numbers at schools in rural areas, particularly Joe Morolong Local Municipality, are decreasing. The Northern Cape Education Department has closed some schools due to the low numbers of learners.
	Stakeholders affected	
	<ul style="list-style-type: none"> Northern Cape Department of Education Northern Cape Department of Social Development Educators at ECD and day care centres Educators and school governing bodies (SGBs) - primary and secondary schools MOA students in Kathu NGOs involved in education CBOs involved in education Local authorities Mining companies 	

Associated issues
<p>Low levels of support to rural schools result in poor education</p> <p>Educators in the JTG district and circuit managers of the Northern Cape Department of Education have expressed concern about the resources allocated, and the facilities and equipment available to schools in rural areas. Mining companies are inclined to contribute to schools that employees' children attend and by its own admission, the Department of Education has difficulty in appropriately allocating resources to far-off, remote areas and is dealing with infrastructure backlogs. Attracting competent teachers in subjects such as mathematics and science is a challenge; often basic service delivery by municipalities (eg sanitation, water and electricity) is sub-standard and the 2012 and 2014 waves of civil unrest further weakened rural education. The result is a level of education perceived not to be on par with the education offered in for instance schools in Kathu and immediate surrounds. Poor education directly impacts drop-out rates and the ability of the youth in the district to enter into the mainstream of economic activity, and is the biggest inhibitor of economic inclusion. Interventions are required to improve education in the rural areas of the Joe Morolong and Ga-Segonyane Local Municipalities where schools are in great need of assistance.</p>
<p>A parenting problem</p> <p>Educators are concerned about parents' lack of involvement in their children's education. A large portion of parents – often those who have not completed schooling themselves – believe once they find a school, and the child has been admitted, they have fulfilled their responsibility as parents. Thereafter it's left to the school to handle the children's education. The lack of a partnership between educators and parents makes it difficult to deal with discipline and absenteeism, curb drop-out rates and counter social ills resulting from a lack of constructive recreation. It also contributes directly to the tendency of learners to become involved in incidents of civil unrest.</p>
<p>Teaching resources are under pressure at Gamagara schools; learner-to-teacher ratios are high and increasing</p> <p>The quality of education in Gamagara schools will be compromised if the increasing number of learners results in an unsustainable learner-to-teacher ratio. The migration of learners from the large number of rural schools to the few, better-resourced schools in urbanised areas, especially in the Gamagara Local Municipality, is a huge challenge. Kathu Primary school in Gamagara, for example, enrolled 1,600 learners in 2014 and by September 100 learners were still on its waiting list. This trend negatively affects the learner-to-teacher ratio and could potentially be a brake on the advances made in educational levels in the district. Schools are unable to obtain a greater teacher allocation from the Department of Education as addressing basic needs in rural parts of the district has precedence. Therefore, schools rely heavily on support from mines such as Sishen mine to fund additional educators. Facilities and equipment are also under pressure and have to expand. The Department of Education and school management are looking to the mine for calculations on the scale of expansion needed in the next three to five years, as well as support to enable this expansion.</p>
Effectiveness of existing management measures
<p>Contributions to education are needs driven, based on solid research and ongoing engagement, and well governed and monitored to assess impact on the quality of education offered by each school. The strategy adopted in 2011 to focus on the education pipeline was successfully executed through a huge investment in ECD facilities. The mine has a difficult balancing act between Gamagara schools and other schools in the district but understands and appreciates the unique needs of both, and tailors its support accordingly. The reliance on Sishen mine is high. The mine has also reached out to other mining companies in the Gamagara Corridor to coordinate and align efforts but has had limited results to date.</p>
Inherent risks or opportunities
<p>The quality of education in rural areas does not improve and the quality of education in Gamagara buckles under the pressure of growing learner numbers.</p>



Learner numbers in Kathu High School increased from 874 to 980 from 2012 to 2014.



Children at the Glen Red Early Childhood Development Centre, one of the first four rural ECD centres completed in 2012.

IMPACT 7: INCREASING ACCESS TO PRIMARY AND SECONDARY HEALTH CARE AND SOCIAL SERVICES SUPPORT (+)

Facts and figures	Root causes	Secondary impacts
<ul style="list-style-type: none"> While the JTG district continues to face many serious healthcare challenges, some important successes were achieved in the health status of the people of the JTG district from 2012–2014. This included consistently high infant immunisation coverage, improvements in HIV/AIDS treatment and diagnosis coverage for pregnant mothers and infants, and an increase in the number of adults and children receiving anti-retroviral treatment (ART). This progress corresponds with the partnership between Sishen mine and the Northern Cape Department of Health to improve access to clinics and mobile clinics, especially in rural areas where people have to travel long distances to healthcare facilities. From 2012–2014, the mine invested over R20 million in Batho Pele mobile clinics that take healthcare services to people in rural areas. During that period, Batho Pele mobile clinics were visited 70,535 times and built a patient base of 18,156 unique beneficiaries (patients). Over the same three-year period, Sishen mine invested more than R16 million on service provision at the UGM Wellness Clinic in Kathu. In that time, the clinic assisted 68,736 people with a range of conditions, including HIV/AIDS, TB and cancer. Over and above the UGM clinic and mobile clinics, in the reporting period the mine invested R4.8 million in constructing and furnishing an ambulance station adjacent to the UGM Wellness Clinic, R3 million in counselling services from the Family and Marriage Society of South Africa (FAMSA) and R844,800 on social support projects such as the Dingleton soup kitchen and the Sesheng Distribution Centre. The mine is applauded for its emergency response to accidents and incidents in and around Kathu. According to the SAPS, the mine has become a partner to the SAPS and delivers a direct community service in this regard. 	<p>This positive impact is the result of Sishen mine's significant investment, its strong partnership with the Northern Cape Department of Health and the JTG District Municipality, and its focused efforts. Other contributing factors are -</p> <ul style="list-style-type: none"> the mine's effective partnerships with NGOs in the healthcare and social services arena the mine's willingness and capability to swiftly respond to accidents and incidents. 	<ul style="list-style-type: none"> Through the services rendered by the UGM Wellness Clinic, the mine actively engages with local communities to address a range of lifestyle and other diseases. Because of capacity constraints in public healthcare and social services, there is a growing need for protection of more/other vulnerable groups such as the elderly, abused and disabled.
	Stakeholders affected	
	<ul style="list-style-type: none"> Communities in the host area, Gamagara Local Municipality High-density or fast-growing villages/towns in Ga-Segonyana Rural villages in Joe Morolong and Ga-Segonyana Sishen mine employees Contractor employees Patients and healthcare workers at UGM Wellness Clinic and Batho Pele mobile clinics Community members benefiting from the Sesheng Distribution Centre and the Dingleton soup kitchen FAMSA personnel and clients AIDS Councils (NC province, JTG district, and local municipalities) 	

Associated issues

Low awareness among community members of the mine's contribution to health

Community members have low levels of awareness of the holistic way in which Sishen mine contributes to community health. More than a quarter of community respondents in the 2013 Communication Audit disagreed that the mine contributes to the quality of healthcare of communities. The same percentage disagreed that Sishen mine does more than other mines in the region to improve healthcare.

Inadequacy of provincial hospital and need for physicians and specialist skills

In all, the JTG district now has approximately 40 clinics, 20 mobile clinics and three hospitals. The need for more capacity in public hospitals and a provincial hospital for Gamagara was clearly articulated in the SEAT consultation. Currently state patients have to be hospitalised in Kuruman or if specialist equipment or skills are needed, Kimberley. According to stakeholders there is an urgent need for medical professionals in Kathu. The shortage of beds at the Kuruman public hospital, the facility's inability to serve all the people in the area and the lack of specialised medical treatment were tabled as material concerns.

Associated issues (continued)

Social ills associated with Sishen mine

Between 20% and 30% of respondents in the 2011 Community Survey blamed the mine for prostitution and HIV/AIDS infections, and 35% and 28% respectively saw no connection. According to stakeholders in the SEAT focus groups this may have changed in the last three years as increases in the Gamagara population, directly associated with growing mining activities, put greater social pressure on communities. Community members observe the shortage of accommodation, the mushrooming of informal structures, increases in crime, the visible signs of alcohol abuse, child neglect and prostitution and related problems previously unknown to the area, and at this stage blame contractor companies for these so-called social ills. That said, in each of the focus group discussions and interviews, the request to Sishen mine was to manage the socio-economic impacts of its contractors as this remains the mine's responsibility.

Emergency services

Concern was expressed about the poor response of the province to emergencies (incidents and accidents). The SAPS reports that there are often no ambulances available and that patients are transported in police vehicles to Kuruman hospital; this is especially the case with road accidents. An agreement between the mine and the Northern Cape Department of Health resulted in the construction of an ambulance station in 2012. This facility is functional but mainly used as a dispatch outlet for the existing ambulance services of the Emergency Medical Services (EMS), Department of Health, Kimberley.

Another need in this regard is the lack of places of safety or shelters for victims of alleged abuse, rape and assault associated with domestic violence.

Effectiveness of existing management measures

Sishen mine's efforts to enable greater access to primary and secondary health benefited the vulnerable and disadvantaged groups in the district and have long-term sustainable benefits as they strengthen the capacity of the district. That said, health interventions such as Sishen mine's procurement of ambulances for the Northern Cape province are strongly criticised by local authorities as they were allegedly not consulted in these investment decisions, either by the mine or the province.

Inherent risks or opportunities

The Northern Cape Department of Health, funded by the JTG Developmental Trust, focuses efforts to improve primary and secondary health on a new hospital in Kuruman, as well as upgrades of Tshwaragano Hospital in Batharos and clinics in the rural parts of the district, leaving Sishen mine to deal with the mounting pressure on health and community welfare services in Gamagara.



A UGM Wellness Clinic outreach to a school in Gamagara.

IMPACT 8: PRESSURE ON GAMAGARA MUNICIPAL INFRASTRUCTURE (-)

Facts and figures	Root causes	Secondary impacts
<ul style="list-style-type: none"> Projected growth of employees on mines and supporting private sector workers as calculated before the August 2014 drop in iron ore prices would have increased the Gamagara population from 41,617 in 2011 to an estimated 207,678 in 2018. This is a total population increase of 399% (SMEC report). Even given the changed economic reality, part of this growth has already been realised in the last three years. As mining in Gamagara expanded at a rapid rate from 2010, all types of infrastructure came under tremendous pressure and existing capacity could not cope with new developments. This includes basic services such as water and sanitation, roads, waste management and electricity. At the same time, the ever growing population put enormous pressure on housing, schools, healthcare, emergency services and other public amenities such as recreational facilities. These pressures outstripped the capacity of the Gamagara Local Municipality IDP and budget process, and resulted in severe capital funding constraints at the municipality – a billion rand's municipal infrastructure development will be needed until 2018, and the municipality has access to less than half of that through its routine budgeting processes and the SLP support from mines. Kathu is the closest town to Sishen mine and this proximity results in a high level of interdependency and co-reliance. Sishen mine invests heavily in the town because there is a lot at stake for the mine – a well-maintained and serviced town with good healthcare and schools will attract and retain skills. Sishen mine acknowledges that the growing population in and around Kathu, as well as pressure on services and infrastructure, is an impact directly associated with the growing mining industry. The mine is involved in a number of initiatives to build the capacity of local authorities and to contribute to bulk services and social infrastructure. Aspects where the local municipality depends on Sishen mine include maintenance of high-voltage electricity and water provisioning. To this effect the mine seconded a civil engineer to the local municipality to build capacity. Kathu and surrounds have also benefited from the mine's contribution to the development of sanitation (sewerage) and electricity. 	<ul style="list-style-type: none"> Pressure on Gamagara's municipal infrastructure results from the growth in direct and indirect employment by Sishen mine. Support sectors are attracted to the mining-led economic development. However, as Kathu remains the central point in the Gamagara Corridor and, apart from Kuruman, offers the only alternative accommodation for mine employees, mining development to the north of Kathu (mainly manganese) contributes significantly to the pressure. The Gamagara municipal infrastructure has capacity to serve up to 50,000 people but expanding this to accommodate 100,000 (50% of what was forecast) would warrant drastic intervention and capital expenditure. 	<ul style="list-style-type: none"> A benefit for Gamagara as host municipality is the economic base generated through employment by the mine. If people are working, they earn salaries and can pay for services, which provides a base for the sustainability of Gamagara Local Municipality. Municipal officers acknowledge and appreciate that tax and services payable by Sishen mine employees are deducted directly from mine employees' salaries as this assists the local municipality with revenue collection. As pressure on infrastructure and service delivery increases, community members are becoming increasingly dissatisfied with basic service delivery. In the 2011 Community Survey, among eight possible impacts of mining on the local area, Gamagara residents associated Sishen mine's presence directly with the scarcity of affordable housing, overcrowding in terms of sub-letting, and pressure on health, education facilities and municipal services. Comparison of the 2001 and 2011 Census findings shows that access to housing, piped water inside dwellings and electricity for lighting has diminished in Gamagara – a direct result of pressure caused by proliferating informal housing arrangements.
Stakeholders affected		
<ul style="list-style-type: none"> Residents of Mapoteng, Dingleton and Sesheng Gamagara Local Municipality Sishen mine employees Contractor employees Residents in Kathu, Deben and Olifantshoek Residents in new developments Developers Local business /private interests Other mines DBSA and other development partners such as the Northern Cape Economic Development, Trade and Investment Promotion Agency (NCEDA) Northern Cape Department of Economic Development and Tourism Northern Cape Department of Cooperative Governance, Human Settlements and Traditional Affairs National Government (CoGTA, National Treasury) 		
Associated issues		
<p>Social infrastructure ramp-up</p> <p>For a mine to develop further, even if it is just to stay in business, capital has to be invested. A significant amount of capital would be required and it would take considerable time to generate a return on that capital. In safeguarding its committed capital investment over the next two to three years, Sishen mine is prepared to invest in the capacity of infrastructure, services and systems in the Gamagara Local Municipality to enable these to expand and grow with the mine. Part of the mine's 2014 strategy is a ramp-up strategy informing infrastructure projects in Kathu. According to the Gamagara Local Municipality it is essential that the municipality is part and parcel of early engagement on these projects.</p>		

Associated issues (continued)
<p>The controversial bulk service agreement</p> <p>The bulk service agreement in place since 2010 causes strain in the relationship between Sishen mine and Gamagara Local Municipality. As is the case with other developers in town, Sishen mine sets aside an agreed bulk services levy (currently R39,687) for each stand it develops. Instead of paying these levies over to the municipality as stands are delivered, the bulk service agreement makes provision for these funds to accumulate so that lump sum investments can be made when the municipality has a large infrastructural need (eg construction of a new sewerage plant). The levies are paid into a dedicated account managed by a joint steering committee.</p> <p>However, the municipality does not perceive that any benefit is gained from the agreement. Even though the municipality is entitled to the income from these levies, the money never flows as revenue and only by joint decision (between the municipality and the mine) can funds be utilised. In its view the local municipality forfeits both the income and the management control. According to the local municipality, current practice contradicts the spirit of the 2010 agreement, which was that the mine would be prepared to invest heavily in bulk service infrastructure and later recover the cost through bulk service levies.</p> <p>Resentment set in as the local municipality read between the lines that the mine is not comfortable about releasing the money to the local municipality as it does not trust the municipality to manage the money and would prefer to keep control over the implementation of projects.</p> <p>In 2014 the Gamagara Local Municipality informed Sishen mine that it wanted to withdraw from the bulk services agreement as per a Municipal Council resolution. The mine declined their withdrawal on the basis that the contract is legally binding. A joint task team was formed and a renegotiation of the bulk service agreement is on the cards.</p>
<p>Low relationship capital in technical interfaces</p> <p>The relationship between Sishen mine and Gamagara Local Municipality has been taking a lot of strain. Viewed from the local authority's perspective, Sishen mine oversteps its boundaries by interfering in the day-to-day management of the municipality in a condescending and authoritarian way as if the town of Kathu belongs to the mine. From the municipality's side the need was expressed for more regular scheduled engagements between the leadership of the mine and local municipality to enable alignment between the organisations on a more strategic level, and to build a robust relationship. Without a shared vision and agreed objectives, it will be impossible to address the challenges lying ahead in the next three years.</p>
<p>The equal split in contribution to local municipalities is questioned</p> <p>The Gamagara Local Municipality is concerned that Sishen mine's contribution to the Mining Charter-mandated local economic development in its SLP for the next five years will be split equally between the three local municipalities. After intensive engagements with the JTG District Municipality, as well as the three local municipalities, the agreement reached was to split Sishen mine's annual SLP budget of R30 million by allocating R10 million to each local municipality. But this, according to the Gamagara local municipality, does not consider the mine's disproportionate impact on its host.</p> <p>Balancing the needs of impoverished rural areas with the dire need to grow the capacity of Gamagara's infrastructure to sustain mining expansion will remain problematic and the mine's response given tougher economic times lying ahead will have to be well considered.</p>
<p>Housing shortages</p> <p>A commonly shared sentiment among local stakeholders is that Sishen mine does not do anything to alleviate the pressure on housing. The mine is merely acting as a developer to provide housing for its own employees – which is admired and recognised, but does not make it any easier for the person in the street to secure affordable accommodation.</p>
Effectiveness of existing management measures
<p>Through its SLP and additional special projects, Sishen mine spent R50 million on Gamagara's municipal infrastructure in the 2012–2014 period. Mapoteng, Olifantshoek and Kathu benefited from roads and storm water drainage, and a waste removal truck was donated to assist with ongoing problems with refuse removal. These investments were in direct response to specific needs that Gamagara residents articulated in the 2011 Community Survey and that the local municipality confirmed in its IDP.</p> <p>In addition the mine commissioned two interventions by independent professionals to work with Gamagara Local Municipality to enhance its revenue collection, funding model, municipal operations and maintenance programme, and to assess the skills base of municipal officials. Gamagara Local Municipality showed improvement in its audit outcomes and continues to provide basic services of a much higher standard than the average local municipality in the Northern Cape. The local authority is acutely aware of the need to double the size of its bulk services infrastructure and is committed to working with stakeholders to capitalise on the opportunity this presents.</p> <p>Since 2010 the mine has implemented several upgrades and developments to the local municipal sewerage system and electricity supply through projects worth R93 million, funded through the bulk services agreement. The nature of the agreement will have to be revised to (1) remove tensions (2) accelerate the pace of bulk services infrastructure development without (3) losing the tangible impact of large-scale upgrades and development projects.</p> <p>The magnitude of collaboration required warrants a serious investment in relationships and engagement to move to a shared vision for Gamagara's development despite weakening economic conditions, cost pressures and insufficient funds.</p> <p>The mine's contribution to health and education has been outlined in the respective sections on these topics.</p>
Inherent risks or opportunities
<p>The Gamagara local municipal infrastructure is unable to expand bulk services infrastructure to meet demand, putting an effective moratorium on mining development in the local area.</p>

IMPACT 9: A VULNERABLE, MINING-DEPENDENT ECONOMY (-)

Facts and figures	Root causes	Secondary impacts
<ul style="list-style-type: none"> The latest available data indicates that the economy of the JTG District Municipality is based on mining (68% of provincial GVA), followed by community, social and personal services at 12%. The latter includes public administration, education services and health and social work. Agriculture and manufacturing, which are strong growth sectors and job creators, play a very insignificant role in the local economy of the district, at 1% and 1.4% respectively. The strong reliance on mining makes the district's economy undiversified and vulnerable. Although Kathu and Kuruman have developed rapidly due to increased mining activity, the majority of the villages in Joe Morolong have no economic base to build from and very little expectation of any new development or investment. The Kathu economy is more diversified now than 10 years ago. A greater variety of employment and business opportunities exist due to the constant effort put into local procurement and enterprise development. Still, the local economy remains 90% mining-dependent. Local business owners explained the high reliance on the mine during consultation: "Even if you are not supplying directly to the mine, should the mine be affected negatively by for example commodity prices, local business bleeds with the mine. The whole Kathu economy links back to Sishen mine." Ultimately the success of mining contributes to this mining-dependent economy. The massive investment needed to develop large-scale bulk services and municipal reticulation infrastructure discussed in a previous impact can only be justified if alternative sectors provide sufficient new non-mining related opportunities through deliberate local economic development. Local Economic Development (LED) strategies suggest that diversification will come from agriculture, agro-processing, tourism and manufacturing. From a national perspective there is strong emphasis on mineral beneficiation and industrial development for diversification. What is desperately lacking is a shared developmental model. Sishen mine has made a deliberate effort to stimulate the economy in rural areas by "planting" projects believed to have commercial potential, "cultivating" these projects through public-private partnerships, and enabling "growth" through intensive capacity-building efforts for the community members involved. Projects such as the Manyeding Cultivation Project and Heuningpot Honey Bee Project have required substantial investments and have gradually matured to provide secure livelihoods for the individuals involved. The projects are by no means self-sustainable yet and, on the whole, there is no evidence that the agricultural sector has been stimulated to grow. 	<p>Agriculture and manufacturing as alternative sectors perform poorly in the district due to:</p> <ul style="list-style-type: none"> poor road and transport infrastructure and vast distances to markets a lack of strategic focus and clarity among government role players on the strategy to diversify the economy a lack of impact and economies of scale in endeavours by the mining sector. 	<ul style="list-style-type: none"> Local economic growth in Kathu and surrounds may be stalled as Kumba tightens its belt in response to the collapse in iron ore prices as global supply increases and steel-demand growth slows. Inevitably the pressure seems to be on manufacturing as the district is losing farmers and farming skills at an alarming rate. Being a conventional farmer – be it a commercial, subsistence or emerging/developing black farmer – is tough. Lack of subsidies and extension support, rising input costs, dependence on external factors such as the oil price over which the farmer has no control, looming water scarcity, degradation of land, very little market predictability and increasing competition from imports are key reasons why people who have been farming in the area for generations have ceased to do so in the last 10 years.
Stakeholders affected		
<ul style="list-style-type: none"> High-density or fast-growing towns in Ga-Segonyana Other rural villages in Ga-Segonyana and in Joe Morolong Development partners in the local area (SIOC-cdt member trusts, mining companies in the district, and development agencies) Beneficiaries of the Manyeding Cultivation and Heuningpot Honey Bee Projects JTG District Municipality Joe Morolong Local Municipality Ga-Segonyana Local Municipality Gamagara Local Municipality Traditional authorities in Ga-Segonyana and Joe Morolong Northern Cape Department of Economic Development and Tourism Northern Cape Tourism Authority (NCTA) Northern Cape Department of Cooperative Governance, Human Settlements and Traditional Affairs National Government (CoGTA, National Treasury) 		

Associated issues
<p>The involvement of the local municipality as implementation partner is reactive</p> <p>A concern of the Gamagara Local Municipality, which goes wider than LED projects but was mentioned in this context, is that private sector companies, whether solar parks or mining companies, are focused on perceived needs for local development as articulated by their respective regulators. Local authorities are often cut out of the planning process. After the planning is finalised, the local municipality gets pulled in. National departments (eg DMR, Department of Energy and Department of Water Affairs) are not necessarily aligned with the local development agenda of a specific area, yet often they direct private sector companies in this regard.</p>
<p>Lack of support from the Gamagara Local Municipality on poverty alleviation projects</p> <p>According to the Gamagara Local Municipality, Sishen mine's SLP alignment with the IDP is good, but the mine has failed to sufficiently engage the local municipality before commissioning its LED projects. The municipality's opinion is that there should be a deeper level of collaboration on the identification of projects, especially on projects outside the scope of the SLP.</p>
<p>Differentiation between the roles of the district and local municipalities</p> <p>The differentiation between local and district municipalities' roles and responsibilities for local economic development is not clear. There are grey areas even in legislation. According to local municipalities, the role of the district municipality is not clear to them, or to the mines. During the reporting period, the mayor of the JTG District Municipality played an instrumental part in the Sishen mine SLP discussions and the district hosts several forums for coordination and alignment. Yet this is relatively new and different and, according to some, based on personal style and preference.</p>
Effectiveness of existing management measures
<p>Sishen mine's attempts to deliberately stimulate non-mining related local economic development are significant in investment and effort. The two projects discussed followed a participatory approach, harnessed existing community resources and skills, and achieved ownership by the local stakeholders involved. They illustrate the value of public-private partnerships and a long-term approach to implementation, monitoring, evaluation and corrective action to ensure continual improvement. These projects have been running for five and six years respectively and have been successful in poverty alleviation but have shown no signs of a wider impact and no indication that the agricultural sector has benefited from the investment.</p> <p>The sectors in the JTG district that do develop still tend to be dependent on mining activity. They include construction; wholesale, retail, catering and accommodation; finance, real estate and business services. It is hoped that the Supplier Park to be constructed in combination with the recently established Kathu Solar Park will give momentum to the development of the industrial sector. Industrial development will however be concentrated in Kathu and Kuruman and is likely to cater for mining unless development partners and government intervene to ensure sector diversification.</p>
Inherent risks or opportunities
<p>Should diversification not materialise in a substantial way, the "ghost town syndrome" will become inevitable in Kathu once Sishen mine starts scaling down, and Kumba's legacy will be compromised.</p>



Large numbers of people who have been farming in the district area – whether as conventional or subsistence farmers – have ceased to do so in the last 10 years due to challenges to agriculture.



Manyeding Cultivation Project began in 2010 as an SLP food security garden commitment - today it operates as a registered cooperative, employing 24 workers.

IMPACT 10: ENVIRONMENTAL IMPACT ON FARMERS (WATER, LOSS OF GRAZING LAND, DUST AND BLASTING) (-)

Facts and figures	Root causes	Secondary impacts																												
<ul style="list-style-type: none"> In 2011 only 11.11% of households (1,204) in Gamagara were involved in agriculture according to the Census findings. Farmers in close proximity to Sishen mine are affected by dust, blasting, loss of grazing land, dewatering and alleged water quality issues. <p>Water and loss of grazing land</p> <ul style="list-style-type: none"> Since 2000 Sishen mine has been actively engaging impacted farmers and commissioning studies to determine the nature and the exact area of impact, mostly in response to complaints from neighbouring farmers and requests from the Department of Water and Sanitation. A myriad of geohydrological, hydrological, geological and ecological studies have been conducted since 2000. Where impact was proven, the mine entered into contracts with directly impacted farmers to compensate them for the negative impact on farming activities. At this stage there are 11 farmers who are impacted directly, and who have compensation contracts with Sishen mine. Compensation to directly impacted farmers varies from farm to farm, but the key components are the following: <ul style="list-style-type: none"> - A grazing subsidy based on vegetation loss in the Gamagara River linked to mining activities. The grazing subsidy is currently under review, as farmers are of the opinion that the amount paid is insufficient. - Water for household use – 25 litres per person per day. The mine has installed water filters at impacted farms to filter the water they receive for household use. - Drinking water for animals – 100 litres per day, times the grazing capacity of the farm (calculated for the whole farm and not only the impacted area around the Gamagara River). - Access to water from the Vaal-Gamagara pipeline, via pipeline networks to farm dams. - Sinking of extra boreholes, upgrading of existing boreholes, equipping boreholes with pumps (this was in some instances also done for farmers who farm outside the impacted area). Despite Sishen mine's mitigating measures, some of the directly affected farmers are not satisfied with the compensation they are receiving. They do not always agree that the basis for compensation (ie impact facts and figures) is fair and transparent. <p>Dust</p> <ul style="list-style-type: none"> Dust fallout is measured at 23 different spots around Sishen mine, including six dust buckets on five farms. In 2013 the average dust fallout levels on four of the five farms were below the maximum allowable limit of 600mg/m²/day, and significantly lower than in 2012. However, dust fallout levels increased on two farms, and remain above the maximum allowable limit on one farm (see table below). 	<ul style="list-style-type: none"> Sishen mine's (legal) dewatering activities impact ground water levels, as well as the surface flow of the Gamagara River in a 'buffer zone' area adjacent to mining property. Dust impact is mostly caused by blasting at the mine. The blasting technique used caused excessive air blast levels and has since been changed. <p>Stakeholders affected</p> <ul style="list-style-type: none"> Impacted farmers (11 farmers with compensation contracts) Farmers negotiating to sell their farms to Kumba (three farms) Farmers claiming to be directly affected Farmers linked to the Kalahari-East pipeline The wider farming community in the district Agricultural unions Department of Water and Sanitation – regional office External water experts conducting water studies in the area Sedibeng Water 	<ul style="list-style-type: none"> The concern that water 'flows over' to other stakeholders. The 2011 Community Survey indicated that 58% of community members believed Sishen mine has had some negative impact on water quality and availability. Although these concerns are much greater among farmers, it highlights the importance of also informing other stakeholders of the facts around Sishen mine's impact on water, and associated mitigation measures. Over time, the relationship between Sishen mine and directly impacted farmers has deteriorated and became characterised by low trust, commitment and satisfaction levels. 																												
																														
<p>Table 49: Dust fallout levels</p> <table border="1"> <thead> <tr> <th>Area</th> <th>2012</th> <th>2013</th> <th>Maximum limit</th> </tr> </thead> <tbody> <tr> <td>Lyleveld Farm SB6</td> <td>349</td> <td>472</td> <td>600mg/m²/day</td> </tr> <tr> <td>Lyleveld Farm SB26</td> <td>734</td> <td>531</td> <td>600mg/m²/day</td> </tr> <tr> <td>Wincanton Farm SB15</td> <td>572</td> <td>713</td> <td>600mg/m²/day</td> </tr> <tr> <td>Tamaga Farm SB29</td> <td>1288</td> <td>226</td> <td>600mg/m²/day</td> </tr> <tr> <td>Fritz Farm SB30</td> <td>1350</td> <td>558</td> <td>600mg/m²/day</td> </tr> <tr> <td>Tannie Kalp Farm SB31</td> <td>1140</td> <td>517</td> <td>600mg/m²/day</td> </tr> </tbody> </table>	Area	2012	2013	Maximum limit	Lyleveld Farm SB6	349	472	600mg/m ² /day	Lyleveld Farm SB26	734	531	600mg/m ² /day	Wincanton Farm SB15	572	713	600mg/m ² /day	Tamaga Farm SB29	1288	226	600mg/m ² /day	Fritz Farm SB30	1350	558	600mg/m ² /day	Tannie Kalp Farm SB31	1140	517	600mg/m ² /day		
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Tannie Kalp Farm SB31	1140	517	600mg/m ² /day																											

Facts and figures (continued)		
<p>Blasting</p> <ul style="list-style-type: none"> Sishen mine maintains a minimum of 1,000m between blasting areas at the mine and residential areas, including farms. The regulated minimum distance is 500m. The mine monitors the impact of blasting on an ongoing basis by means of vibration and acoustic measurement at five seismograph stations around the mine, one of which is on a farm (station 2 – residence of Mr Andre van Zyl). There are no formalised limits for ground vibration and air blast in South Africa. Maximum limits set by the US Bureau of Mines (USBM) are therefore commonly applied in South Africa, and also by Sishen mine. In February 2014, two blasting events exceeded USBM maximum recommended air blast levels on the seismographs at station 2. One of these blasts also exceeded the USBM limit for ground vibration at station 2. Three farmers lodged complaints with the mine about these blasting incidents. The complaints have been assessed and feedback was provided. 		
<p>Associated issues</p>		
<p>Concerns about dewatering in other areas</p> <p>Water is a contentious issue and the single biggest concern of farming households when they consider their future in this arid part of the country. In addition to the directly impacted farmers, there are also a number of other farmers who believe they are negatively impacted by the mine's dewatering; however, independent environmental studies conducted by various experts have to date not validated these claims. Farmers around Deben for example link their experience of a falling water table and shortages of municipal water to the mine's dewatering. The fact that the mine has significant influence with the authorities over water provisioning provides fertile ground for rumours and speculation (eg allegations that Sishen mine is pumping water from Deben's water source). Generally speaking, however, farmers acknowledge the mine's efforts to manage its impact on water quality and availability. They appreciate the fact that the mine regularly performs water tests on the boreholes on farms, and recognise the level of intervention to guarantee water for households and drinking water for animals.</p>		
<p>Trust deficit</p> <p>Sishen mine engages farmers on issues around environmental impact (mostly dewatering) through two forums established for this purpose:</p> <ul style="list-style-type: none"> quarterly agricultural engagement sessions with impacted farmers quarterly farmers' meetings, initiated by the Department of Water and Sanitation in response to farmer complaints to the Ministers of DMR, Environment, and Water Affairs in 2011. <p>In addition, the mine has appointed employees and several consultants to liaise with the farmers on a day-to-day basis. There is an unfortunate trust gap in this relationship. The perception that Sishen mine employees and consultants are contractually bound to non-disclosure of all the facts creates the impression that the mine has something to hide. For their part, the directly impacted farmers have appointed a representative to liaise with the mine on their behalf.</p>		
<p>A never-ending chain of studies</p> <ul style="list-style-type: none"> There have been numerous disputes about the impacted area and nature of impact since the first studies were commissioned in 2000. Almost every set of study findings has resulted in the commissioning of further or repeat studies due to farmers disputing the results, or flaws discovered in previous studies, or inconclusive results on certain study areas. In order to resolve the disputes, the mine has on more than one occasion agreed to appoint experts recommended by the farmers to conduct further studies. In the 2012–2014 period, Prof Danie Vermeulen from Free State University conducted a critical review of the various geohydrological studies commissioned by Sishen mine to date and shared the results with farmers at a meeting on 25 July 2013. His findings mostly confirmed the findings of the Sishen mine studies, but did indicate a possible wider impact on the northwestern corner of the area that the mine had defined as being directly impacted. Prof Vermeulen also found that the decline in water levels of specific boreholes cannot be attributed to the mine, and gave an alternative explanation for their decline. A number of gaps were identified regarding elements not studied before, or not explored sufficiently. The Department of Water and Sanitation decided that an expert team of five members, including Prof Vermeulen, should be appointed to conduct further studies on the abovementioned areas, and also to review all water-related data and study results available since 1970. So far there has been no further progress reported by the department on the matter. 		
<p>Effectiveness of existing management measures</p>		
<p>Sishen mine's levels of monitoring and measurement of its environmental impact are high. Interventions to compensate impacted farmers are ethical, fair and thorough, and the mine works closely with the relevant environmental and water authorities. In part it seems that the poor relationship with farmers has its roots in how the mine dealt with the 'softer issues' in the past. It is not clear how the relationship with directly impacted farmers influences the wider farming community.</p>		
<p>Inherent risks or opportunities</p>		
<p>Drawn out legal battles about impacts on farmers could ensue and cause reputational damage if this impact is not adequately addressed.</p>		

IMPACT 11: INTEGRATED WATER MANAGEMENT AND ENHANCED WATER SECURITY (+)

Facts and figures	Root causes	Secondary impacts
<ul style="list-style-type: none"> Sishen mine optimises water management to supply groundwater to its local area. The mine's environmental management plan and water-use licences cater for and allow for dewatering through dewatering boreholes linked to specific pits. At the beginning of 2014, Sishen mine had 23 dewatering boreholes associated with the following pits at the mine: GR35, GR80, Dagbreek and Vliegveld. The mine's water abstraction rates fall well within its licence conditions set by the Department of Water and Sanitation. Water is pumped from these boreholes into a pipeline to Sedibeng Water (which provides water to the Gamagara Local Municipality), a number of directly impacted farmers and to the residents of Dingleton. The mine also supplies raw groundwater directly to the town of Kathu, where it is currently used for potable and garden water. Sishen mine's iron-ore processing plant receives a component of recycled treated effluent water from Gamagara Local Municipality wastewater-treatment plant for reuse. This has reduced the need for clean borehole water for processing. Sishen mine has specific objectives for minimising water losses in the closed-loop water system and ensuring optimal efficiencies in order to supply more water to Sedibeng. Rainwater captured at the lowest points inside the pit is for example used for dust suppression. Sishen mine seconded a civil engineer to the Gamagara Local Municipality and funds his salary as a full-time employee to assist the municipality with its water management responsibilities. A new water export pipeline from Sishen mine is under construction and is planned to be completed in 2015. The new pipeline will be able to pump into the Sedibeng (Kathu) reservoir from where it can be boosted by Sedibeng Water into the regional Vaal-Gamagara pipeline. The new pipeline will also have emergency take-offs to the softener plant and Mapoteng Reservoirs (Gamagara Local Municipality), and can allow water from Sedibeng Water back to the mine and municipality if required. It is also planned that the pipeline will tie in with a future aquifer recharge scheme at Khai Appel to minimise the surface discharge of groundwater into the environment. In addition to the groundwater export project, Sishen mine is undertaking several water efficiency projects. It is expected that the project to return additional treated effluent (grey water) from the Kathu wastewater treatment works will assist in increasing the export of groundwater to Sedibeng Water. 	<ul style="list-style-type: none"> The mine's dewatering generates excess water that can be used to strengthen water supply. The area is arid and water supply is limited. The bulk of potable water is supplied through the Vaal-Gamagara pipeline (which originates in Delpportshoop, some 300km away). The Vaal-Gamagara Government Water Supply Scheme delivers water from the Vaal River to a range of users in the whole area from Postmasburg/Beeshoek to Black Rock. Sishen mine has advanced solutions to offer for the improvement of water management in the area. 	<ul style="list-style-type: none"> Stakeholder relationships become strained when water security and water quality appear to be under threat. This makes ongoing collaboration with role players in water management essential. Managing the water value chain can be challenging at times as the capacity and interests of the key stakeholders – impacted farmers, Gamagara Local Municipality and Sedibeng Water – have to be taken into account in how the mine approaches its role in the value chain.
Stakeholders affected		
<ul style="list-style-type: none"> Gamagara Local Municipality Residential communities in Gamagara Impacted farmers (11 farmers with compensation contracts) Sedibeng Water, the bulk water supplier in the Northern Cape and operator of the Vaal-Gamagara Water Scheme Members of the Water Users Association Vaal-Gamagara Water Scheme Department of Water Affairs - regional office Department of Water Affairs oversight committee DMR - regional office 		

Associated issues
<p>Perception that tariffs for water are too high, given that the mine supplies it for free</p> <p>Stakeholders are dissatisfied with the fact that Sishen mine provides water to Sedibeng Water, which then sells the water to the Gamagara Local Municipality, which resells it to the end user. There is a perception that water tariffs would be much more reasonable without Sedibeng Water as an agent in the water value chain.</p>
<p>Variability in water supply</p> <p>The fluctuation in water volumes delivered by the mine has been a concern to Sedibeng Water. During times of water scarcity, the mine supplies less water and in times of water surplus, more water is discharged, necessitating a degree of flexibility.</p>
Effectiveness of existing management measures
<p>In adherence with Anglo American policy, Sishen mine annually develops its Water Action Plan (WAP) and ensures that all other standards are met. There is ongoing monitoring and reporting on water use and supply, water savings progress, re-use of water and water efficiency. The mine participates in the catchment water users' association forum. It also has ongoing engagement with impacted farmers, and conducts technical and operational meetings with Gamagara Local Municipality and Sedibeng Water. But more could be done to raise broad-based stakeholder awareness and understanding of water management.</p>
Inherent risks or opportunities
<p>The opportunity for greater efficiencies in the management of water as a scarce resource is a strong value proposition offered by the mine to the area.</p>



The Manyeding cultivation project is a fully certified organic farm. The farm, which has a good underground water source, received funding to install irrigation equipment. The dam and pumping system are critical infrastructure. Pictured are Greg Sturmer and Heinrich Schultz (both Organimark Consultants) with community members Esther Moseki and Thomas Teteme.

IMPACT 12: IMPACT ON DINGLETON AND THE RELATIONSHIP WITH DINGLETON RESIDENTS (-)

Facts and figures	Root causes	Secondary impacts
<ul style="list-style-type: none"> Engagement on the resettlement of Dingleton residents has been ongoing since 2008 and the actual relocation commenced in 2014 after five years of intensive planning. Dingleton North (White City) was vacated by 12 December 2014 and the rest of Dingleton will be moved at the end of 2016. All home owners in Dingleton North indicated that they will sign before the end of November; all renters have found alternative accommodation. Even though demolishing will not start straight away, the area will be fenced off and access will be security controlled to prevent illegal occupation over the festive period. Dingleton is not a homogenous population. It is an established town with a population of about 600 households (3,000 people) established in the late 1970s as a relocation town for Coloured residents after the resettlement of Iscor mine workers to Kathu. In many demographic respects, Dingleton can be compared to Sesheng and Mapoteng: people reside in the town because of the presence of one or more large employers close by. <ul style="list-style-type: none"> There are 309 home owners in Dingleton, which means half of the households own the property in which they reside. Many residents are renting rooms in houses or structures in backyards. The area known as RDP housing (or Dingleton South) was delivered by government in the 1990s but has since been augmented by informal settlers migrating into the community in the hope of finding employment. This area is in a state of flux and it appears as if rental numbers peaked in 2011 and 2012 when the Sishen expansion project was at peak labour demand. About a third of the community is living below the breadline. In White City (Dingleton North) and the RDP housing (Dingleton South), 32% and 36% of households respectively live on less than R2,000 per month (2011 Community Survey). Between four and five out of every 10 individuals in White City and the RDP housing are actively looking for work. The Dingleton community expressed low relationship satisfaction with Sishen mine in the 2013 Communication Audit. Dingleton consistently gave the lowest ratings of all stakeholder groups on every dimension evaluated. Kumba is not viewed as a partner of choice, trust levels are low and disaffection is high among those who feel information is not filtering through to them. Post-relocation, Dingleton home owners will be in a considerably better socio-economic position, but the high number of renters is also directly impacted. The Renters Info Desk opened on 1 June 2014 to help Dingleton North renters find alternative accommodation in Kathu and surrounds. Sishen mine differentiated its 2014 engagement between the holders of a different stake in the Dingleton relocation: (1) renters (2) home owners who have signed (3) home owners who have not signed. Dingleton residents are negatively impacted by blasting and dust caused by nearby mining activity. Those who have signed relocation agreements requested to be moved as soon as possible, given the dire living conditions in Dingleton. Blasting as part of the western expansion of Sishen mine has not yet commenced, and as soon as that happens in January 2015 blasting and dust impacts on Dingleton residents will escalate significantly, underlining the urgency of the relocation project. 	<ul style="list-style-type: none"> Dingleton is too close to current mining activities. The relocation process is lengthy. Home owners are a small percentage of the total population. Home owners will be in a better position post-relocation but there are less viable alternatives for renters. 	<ul style="list-style-type: none"> It becomes increasingly difficult for Sishen mine to mitigate its environmental impact on Dingleton residents. Since talks about the relocation commenced in 2008, very little municipal investment has gone into infrastructure maintenance and development in Dingleton. As a result, in the 2011 Community Survey, 75% of the residents rated road maintenance as very poor and raised concerns about water and sanitation.
	<p style="text-align: center;">Stakeholders affected</p> <ul style="list-style-type: none"> Dingleton Resettlement Working Group Renters Dingleton North Renters – rest of Dingleton Business and home owners who have signed Business and home owners who have not yet signed Local churches Gamagara Local Municipality Department of Public Works, Northern Cape Province Appointed contractors and suppliers Kathu residents adjacent to the Group Five contractors camp and the new housing development 	

Associated issues
<p>The need to demonstrate long-term sustainability</p> <p>The Northern Cape Province takes a keen interest in Dingleton's resettlement and wants Sishen mine to demonstrate the effectiveness of measures put in place to ensure sustainable development of relocated households in the long term. Apart from local procurement and local employment during the relocation efforts, specific interventions will be needed to enable and upskill residents of Dingleton to take advantage of improved economic opportunities and enhance their income levels in order to sustain a Kathu lifestyle.</p>
<p>Renters</p> <p>Renters have the perception of being left worse off, and believe that they will be left without accommodation. This could lead to social unrest, the need to evacuate renters, reputational risk to Kumba and delays to the project. All the Dingleton North renters were successful in finding alternative accommodation but it is essential that the Renters Strategy is fully implemented to support the remaining residents who do not own properties and will not be relocated as home owners in Dingleton.</p>
<p>Despite a variety of concessions and individualised agreements, there are home owners who want more</p> <p>Over time a variety of concessions were made on an individual and collective basis. Home owners for example disagreed with the first version of the stand size variance compensation (that is the per square metre rate offered as compensation for differences in Dingleton and Kathu plot sizes) and the inconvenience allowance payable. Some wanted the graves of their loved ones to be relocated to Kathu. Ongoing negotiations led to agreements on revisions and individualised solutions. Only a handful of home owners (fewer than 10%) are still insisting on a significant cash payment based on the conviction that "royalties are due to them". In terms of the final exchange agreements and sign-off by private home and business owners, the 10% who have not signed remain a challenge.</p>
<p>Local content demands</p> <p>Ongoing discussions resulted in a number of resolutions to ensure Dingleton residents benefit from all resettlement-related employment and procurement opportunities. There are however two concerns in this regard: (1) the ability and willingness of Dingleton community members to take up opportunities offered to them within the fixed project timelines and (2) growing pressure from nearby communities who also want to share in these opportunities for local procurement and employment (eg Olifantshoek Contractors Unemployment Forum).</p>
<p>The valuation of municipal infrastructure</p> <p>The Gamagara Local Municipality expressed concern about the valuation of municipal infrastructure and even though it signed off on the values there will be further discussion on the willingness of Sishen mine to "relocate" these structures to other parts of the municipal area where they are needed.</p>
<p>Proactive communication about environmental impact to the local authority</p> <p>The mayor requested during an interview in the 2013 Communication Audit that the local municipality be proactively informed of all planned mining activities such as blasts with a potential environmental impact on Dingleton residents. Ongoing communication, notifications, alerts and explanations of the mine's environmental impact on residents remaining in Dingleton in 2015 and 2016 are essential. Sishen mine conducts a bi-monthly Dingleton Environmental Forum to discuss environmental concerns, suggestions and complaints. This forum discussion is chaired by the Sishen environmental manager, facilitated by independent consultants, and attended by members of the Resettlement Working Group (RWG) and complainants.</p>
<p style="text-align: center;">Effectiveness of existing management measures</p>
<p>From an environmental impact perspective, Sishen mine has done well to contain dust. Investment in various dust suppression technologies has been causing a steady improvement in air quality. In Dingleton North, there has been a 17% year-on-year reduction in dust levels since 2012, while the year-on-year improvement in Dingleton South is 36%. Apart from dust fallout levels, Sishen mine also measures PM 10 levels around its operations. PM 10 refers to "particulate matter concentrations, which are fine suspended particulates of less than 10 microns in diameter, that are capable of penetrating deep into the respiratory tract and cause significant health damage". PM 10 therefore refers to dust and other emissions combined. The PM 10 level in Dingleton was 7% lower in 2013 than in 2012. Sishen mine investigates all complaints about damage to property due to blasting on a case-by-case basis, and in instances where the vibration levels and air blast dB from blasting are too high, the mine's policy is to repair the damage or compensate complainants for the damage caused. There were several blasting fumes complaints from November 2013 onwards. The mine has established a bi-monthly meeting that consists of the Resettlement Working Group and four additional members of the committee. Environmental concerns are discussed at these meetings. Further to this, Sishen mine has also appointed an Air Quality Specialist to conduct blasting fume monitoring. The DMR was also involved and requested reports on measurements and progress. Stakeholder engagement on the relocation project was inclusive and handled with the utmost care and sensitivity, following international standards and implementing the Anglo American policy framework. There was a strong focus on ways to increase procurement and employment opportunities for Dingleton residents during the relocation and efforts to conduct portable skills training to enable community members to make the most of such opportunities. This demonstrated that engagement is more than a comply-mark-move on exercise for the company.</p>
<p>By providing Dingleton home owners with professional and legal representation, Sishen mine ensured a fair and equitable opportunity for every home owner to consider and reconsider the relocation conditions in the interest of the household. The company made numerous concessions to accommodate home owners' special requests. Reaching agreement with 86% of Dingleton home owners and securing the approval of the boards of Kumba and Anglo American plc in December 2013 was a milestone reached after five years of hard work. However, the strong focus on home owner agreements caused Dingleton renters to feel marginalised and neglected. Following the low ratings received from Dingleton community members in the 2013 Communication Audit, Kumba developed a number of action steps and interventions such as the bi-weekly renters' roadshow, workshops and the renters' desk to address negative sentiments and assist renters in practical ways. The renters' census was completed by the end of February 2014.</p>
<p style="text-align: center;">Inherent risks or opportunities</p>
<p>Involuntary evacuation or eviction of any renters or home owners.</p>



Dingleton home owners are engaged on floor plans of the houses to be built in Kathu as part of the relocation. Every detail of the relocation is pre-planned and well communicated – posters are often used for communication.

ASSESSING THE SIGNIFICANCE OF IMPACTS

The significance of impacts and the issues embedded in impacts can be assessed using either a risk or opportunity assessment. The table below uses the Anglo American Integrated Risk Management (IRM) methodology to provide this assessment.

The risk rating is a combination of the consequence and likelihood of a risk. The consequence of a risk usually refers to how severe the outcomes or effects on the operation will be: insignificant, minor, moderate, high or major? Likelihood relates to the certainty of a particular risk occurring. The IRM methodology divides likelihood into five rankings, with "rare" (eg not likely in over 30 years) as the most unlikely to occur and "almost certain" (eg within one year) as the highest likelihood.

Risk ratings are grouped into four possible risk levels:

- If a risk rating is between 21 and 25, the risk is considered HIGH. It means a high risk exists that management's objectives may not be achieved and Sishen mine must immediately develop a strategy to mitigate the risk.
- If a risk rating is between 13 and 20, there is a SIGNIFICANT risk that management's objectives may not be achieved and Sishen mine should as soon as possible develop a strategy to mitigate the risk.
- If a risk rating is between six and 12, there is a MODERATE risk that management's objectives may not be achieved and the mine should deal with the risk as part of its normal management process.
- If a risk rating is between one and five, a LOW risk exists that management's objectives may not be achieved and the risk should be monitored.

Table 50: Risk assessment of Sishen mine

Impact	Risk or opportunity assessment	Consequence	Likelihood	Risk rating	Risk level
Impact 1: The induced effect of local employment (+)	The opportunity to amplify the impact of local employment is countered by right sizing due to economic pressure (with reference to Kumb@80).	Moderate	Almost certain >90%	20	Significant
Impact 2: Fast-tracked local business development (+)	Economic pressures on Sishen mine have a braking effect on local business development.	Moderate	Likely 30% - 90%	17	Significant
Impact 3: Contractors' hiring practices, lack of housing solutions and poor demobilisation cause a series of socio-economic problems (-)	The negative socio-economic impacts by contractor companies invalidate Sishen mine's consciously planned delivery of socio-economic benefits.	High	Likely 30% - 90%	21	High

Impact	Risk or opportunity assessment	Consequence	Likelihood	Risk rating	Risk level
Impact 4: High concentration of unemployed youth in Gamagara (-)	Ongoing socio-political instability disrupting mining activity.	Major	Possible 10% - 30%	22	High
Impact 5: Transformation and the advancement of HDSA employees (+)	Unsuccessful implementation of human resource development due to internal resistance and unsuccessful change management results in the perception of regulators that Sishen mine is unable to truly transform.	High	Unlikely 3% - 10%	14	Significant
Impact 6: Strengthening the capacity of basic education institutions (+)	The quality of education in rural areas does not improve and the quality of education in Gamagara buckles under the pressure of growing learner numbers.	Moderate	Possible 10% - 30%	13	Significant
Impact 7: Increasing access to primary and secondary healthcare and social services support (+)	The Northern Cape Department of Health, funded by the JTG Developmental Trust, focuses efforts to improve primary and secondary health on a new hospital in Kuruman, as well as on upgrades of Tshwaragano Hospital in Batlharos and clinics in the rural parts of the district, leaving Sishen mine to deal with the mounting pressure on health and community welfare services in Gamagara.	Moderate	Likely 30% - 90%	17	Significant
Impact 8: Pressure on Gamagara municipal infrastructure (-)	The Gamagara local municipal infrastructure is unable to expand bulk services infrastructure to meet demand, putting an effective moratorium on mining development in the local area.	Major	Likely 30% - 90%	24	High
Impact 9: A vulnerable, mining-dependent economy (-)	Should diversification not materialise in a substantial way, the "ghost town syndrome" will become inevitable in Kathu once Sishen mine starts scaling down, and Kumba's legacy will be compromised.	High	Unlikely 3% - 10%	14	Significant
Impact 10: Environmental impact on farmers (water, loss of grazing land, dust and blasting) (-)	Drawn out legal battles about impacts on farmers could ensue and cause reputational damage if this impact is not adequately addressed.	High	Unlikely 3% - 10%	14	Significant
Impact 11: Integrated water management and enhanced water security (+)	The opportunity for greater efficiencies in the management of water as a scarce resource is a strong value proposition offered by the mine to the area.	Moderate	Likely 30% - 90%	17	Significant
Impact 12: Impact on Dingleton and the relationship with Dingleton residents (-)	Involuntary evacuation or eviction of any renters or home owners.	Major	Possible 10% - 30%	22	High

APPROPRIATENESS OF EXISTING SOCIO-ECONOMIC BENEFIT DELIVERY INITIATIVES

In the light of the impacts discussed, together with the needs, concerns and expectations that stakeholders have raised, the question is whether the socio-economic benefits delivered to the local area are appropriate. Will the benefits discussed in Section 2 result in long-term sustainable development for the local area and which are the areas of improvements to consider?

The table below is split up into the three components of socio-economic benefit delivery; it reminds the reader briefly about the specific benefits and then reflects on the appropriateness of Sishen mine's existing socio-economic benefit delivery initiatives.

Table 51: Benefits assessed in the context of impacts and issues

Managing Sishen mine responsibly results in the following socio-economic benefits for the people in the JTG district -	Local employment	Sishen mine's local employment policy pays off as demonstrated by ripple effects on the local economy, but should be extended to contractors. Data on "localised" labour should be captured and reported for Kumba and contractor employees.
	Skills development	<p>The company's planned human resource development efforts will further grow the collective skills base of people in the local area and are of high quality. Bursaries, the PIT programme and the placement of interns are well-executed, appropriate initiatives. The focus on portable skills training is important, but the take-up of community members should be enhanced.</p> <p>More should be done to assess the skills of young adults (the youth) seeking employment in Kathu and surrounds. This information should be shared with contractor companies, the local authorities, other mines and other prospective employers. Sishen mine has clarity on the skills required for its ramp-up, but could facilitate the articulation of skills required by the mine, its contractors, other mines and emerging industries to relevant local stakeholders (eg trade unions, learners, teachers, local authorities). For greater effect, more partnerships and possibilities for leveraging external resources should be considered - making skills development work not only for direct and indirect employees and a few community members but in a broader local context.</p>
	Housing for employees	The mine's contribution to affordable housing and home ownership for its own employees is laudable. More should be done to secure housing solutions for contractor employees. Investigation of the extension of strategic stock to retain and attract social services skills (health practitioners, educators, law enforcement agents) critical for a well-functioning Gamagara may be warranted.
	Local procurement	Sishen mine's local procurement is partnership driven, aligned with government priorities, appropriately linked to mining requirements and poised to further advance HDSA suppliers. The Supplier Development Programme is essential to fast track the integration into the mine's supply chain of start-ups supported by Zimele/Small Business Hubs and other deserving local businesses. It could deal with the perception of unreasonable barriers to the supply of core mining services. Even though the mine's engagement of local business and localised suppliers is generally good, engagement of the plethora of community, business, youth and employment forums will have to be intensified significantly in the next three years.
	Royalties and taxes paid to government	The only type of tax directly payable to local government is property taxes. The fact that the mine directly deducts from employees' salaries the tax and services payable by its employees to Gamagara Local Municipality assists the local municipality with revenue collection and provides a degree of revenue certainty.

Direct investment through SLP or CSI projects results in benefits in each of these focus areas -	Municipal infrastructure and capacity	<p>The mine invested in municipal infrastructure through its SLP projects, which were projects identified in the three municipal IDPs and thus relevant and needed for development. More than 90% spent on municipal infrastructure was for roads and storm water drainage - a key need articulated in the 2011 Community Survey and a root cause of community unrest. Local municipalities value the methodology used for the implementation of municipal infrastructure projects, which enabled the municipalities to fulfil their mandate by owning projects and managing their implementation - while Sishen mine exercised financial control and made payments.</p> <p>The 2014 decision to split the SLP committed budget from Sishen mine into equal contributions to each of the three municipalities is unprecedented as mines usually weigh their contribution in terms of impact, which is significantly higher on the host than on labour-sending areas. At the same time, it underlines the mine's recognition of its responsibility towards labour-sending areas and its appreciation of the dire need for socio-economic development in impoverished rural communities.</p> <p>Over and above its SLP spend, the mine funded the Hendrik van Eck road project in Kathu in the interest of road safety and procured a waste removal truck to assist Gamagara with refuse removal. In Ga-Segonyana, the mine responded to community needs as expressed in the IDP by upgrading the taxi rank in Wrenchville and by constructing a pensioners' pay-out point in Mokalamosesane.</p> <p>The three local municipalities will benefit from the municipal capacity development partnership between Anglo American and the Development Bank of Southern Africa (DBSA). Aligned with the objectives of the National Development Plan, the programme helps municipalities to collect revenue, plan infrastructure and operational management, improve communication and upskill municipal staff.</p> <p>Lessening the pressure of rapid population growth on Gamagara's bulk services infrastructure and reticulation services, Sishen mine funded the partnership between the Gamagara Local Municipality and PwC to develop a viable plan to obtain the capital needed to invest in infrastructure development. The mine also used the bulk services levies due to the local municipality (for its employee housing developments) to fund municipal infrastructure projects worth R93 million. The shortfall in available capital to stretch Gamagara's infrastructure to sustain mining growth is sizeable, however. Much deeper engagement and joint problem solving will be required from all relevant parties.</p>
	Education, community health and welfare	<p>One of the Anglo American tests for the appropriateness of direct community investment is whether vulnerable groups benefit. In the case of Sishen mine, the emphasis is indeed on benefiting vulnerable people, as follows:</p> <ul style="list-style-type: none"> • children benefit from the development of 10 ECD centres in the JTG district • learners are the target group for tailor-made support to 22 schools • rural women, children and the elderly benefit from the mobile clinics • the support to FAMSA assists those impacted by stress and social ills • the sick and poor benefit from the ongoing support to the Sesheng Distribution Centre and the Dingleton soup kitchen. <p>There are more or other vulnerable parts of society to consider: in focus group discussions, the Joe Morolong Disability Cluster highlighted the plight of the disabled and appealed for support and the SAPS strongly motivated for assistance with a shelter for victims of crime, rape and child neglect.</p> <p>Apart from infrastructure projects that have a properly structured hand-over process to government who owns and manages these facilities (ie health clinics, ECD centres and school buildings), most of the mine's ongoing support for education, health and community welfare is desperately needed on a month-to-month basis. The reliance of organisations currently supported on the mine is high. Sishen mine cannot cease the payment of educators' salaries, or discontinue its support to NGOs without dire consequences for the vulnerable in society. It will become increasingly difficult to balance the pressure to take responsibility for more rural schools with the economic reality of less profit and therefore fewer resources available for direct community investment.</p>

Direct investment through SLP or CSI projects results in benefits in each of these focus areas - (continued)	Poverty alleviation	<p>The investment made in the Small Business Hubs has a solid return in cultivating self-reliant start-up companies creating jobs, repaying their loans and contributing to the local economy. Hands-on support and ongoing coaching and mentoring stimulate entrepreneurial ability to grow. It is not the silver bullet many local stakeholders desire, but rather the type of support that safeguards and advances the viability of a new business.</p> <p>In the rural areas where a lack of favourable economic conditions demands more intervention-type development, Sishen mine supports two projects to alleviate the high burden of poverty. Both projects illustrate how the mine uses public-private partnerships and external resources to expand support and investment. The projects are long-term investments and have gradually matured to provide secure livelihoods for the individuals involved, but are by no means self-sustainable yet.</p>
	Youth development	<p>The approximately R5 million in CSI funding invested in youth development over the 2012–2014 period was in addition to bursaries, learnerships, ABET and portable skills training available to the community as part of the human development strategies at Sishen mine. It was in direct response to the significant socio-economic challenge presented by the high concentration of unemployed youth seemingly unable to gain access to mainstream economic activity, with the associated threat of destabilisation of the local area. 40 young adults benefited - 17 of them secured permanent employment. Given the magnitude of the challenge, this is a drop in the ocean. The programme's impact was smaller than anticipated as collaboration by other private sector interests did not materialise as intended. Despite the broad consultation to gain support from peers it was only Sishen mine that stayed the course. Learnings from the programme illustrate three important facts regarding a response to the youth development challenge. These are that impact depends on (1) a concerted effort to mature the collaboration between mines, industries and larger-scale business (2) seamless functional integration between SD and HR teams (3) joint public-private problem solving.</p>
	Donations/response to emerging needs	<p>Responsiveness to emerging needs and requests for support is very important for the sake of a sense of connection between the mine and local communities. Sishen mine rigorously applies the Kumba Social Investment Donations and Sponsorship Policy, and stakeholders are satisfied with the integrity of the mine's process for considering applications for donations. Feedback is swift and thorough, and governance related to successful applications is good. The only concern raised was an apparent lack of clarity as to when to apply directly to the mine and when to apply to community trusts for donations and sponsorship. Isolated incidents where the mine referred stakeholder requests for support to the community trusts caused this lack of clarity.</p>
Broad-based ownership results in two groups of new shareholders -	Employees, Envision share scheme	<p>This is a powerful and direct means of ensuring that the people responsible for mine production and safety derive benefit from this. The Envision share scheme is in every respect an embodiment of the Mining Charter intent with broad-based empowerment. It is not without its challenges, though. Despite intensive training and sensitisation, not everybody was prudent in the management of pay-outs. Kathu is probably the town in the Northern Cape with the highest concentration of vehicles per capita. For many employees the difference between dividends and bonuses remains fuzzy. In tougher economic times when profit margins are low, intensive communication will be required. At the end of the day, employees are shareholders and take co-responsibility for the future of the mine.</p>
	Communities, community development trusts	<p>The community development trusts were created to enable community members to share in the prosperity of a mine. Governance problems in both the JTG Community Trust and the Gamagara Community Trust during 2012 and 2013 cast a shadow over the effectiveness of these vehicles as catalysts for large-scale community development. Sishen mine respects the independence of the community trusts and fulfils its role as a member of the respective boards without further interference. Most of these problems have since been sorted out and an impressive series of high-impact projects have been commissioned or implemented in 2014.</p>



The South Western area of the pit at Sishen mine where calcrete waste stripping is taking place in order to expose the targeted iron ore body below.

A visit to the Western Pit area
at Sishen Iron Ore Mine

SECTION 5: SOCIAL MANAGEMENT PLAN



INTRODUCTION

Challenging times lie ahead for the iron ore mining industry in South Africa and worldwide. These challenges will not only affect Sishen mine directly but also our ability to invest in socio-economic development in the local area.

For the past five years, the iron ore mining industry has benefited from strong commodity prices, fuelled mainly by the surge in growth of economies in the East, especially China. That favourable pricing cycle ended abruptly in quarter 2, 2014 when iron ore prices plunged by 44%.

The main reasons for this price reversal are the slowdown in economic growth in China, sharply curbing its appetite for steel, and a simultaneous influx of low-cost steel into the market from Australia and Brazil. The result is an ore glut that has forced prices down to below \$80 a tonne – a five-year low – with prices expected to fall further as demand continues to recede.

Compounding the situation is that the current low price of iron ore is not a short-term trend that will quickly correct itself. Globally, analysts are forecasting that it could take five to seven years for ore prices to recover.

Plummeting prices have adversely affected the ore industry's revenues – but that is only one side of the coin. The other is the ongoing escalation of mining input costs, particularly in South Africa.

Over and above sharp increases in energy and labour costs, mature mines such as Sishen have higher strip ratios and literally have to dig deeper to reach ore deposits. Deeper ore means more waste has to be mined and processed to arrive at a saleable product, further adding to cost pressures.

Lower revenues and higher costs translate to smaller profits and will negatively impact dividends, taxes, royalties and socio-economic spend.

This means Kumba is in for a prolonged period of belt-tightening that might have a negative impact on employment, capital and procurement spend.

As far as Sishen mine's spending on socio-economic development is concerned, the effect will be felt on two fronts: lower profits mean less money for SLP and CSI projects in general; lower profits also mean lower dividends (or even no dividends at all). As a result, the development trusts that depend on dividend payments will feel the pinch too.

In view of these tough conditions, Kumba has embarked on a project to look at different options to enable the company to remain profitable and sustainable. The company will keep stakeholders informed of planning in this regard.

But irrespective of close scrutiny of all budgets, Sishen mine acknowledges the impacts its operations have and the concerns and expectations of stakeholders in this regard. This Sishen mine Social Management Plan (SMP) contains the operation's management measures to be implemented over the next three years in order to address these impacts and issues.



During the reporting period the fleet of ore trucks at Sishen mine was expanded by some 40% to cater for the massive overburden removal required in the South Western Pit expansion area.

MANAGEMENT AND MONITORING MEASURES

IMPACT 1: THE INDUCED EFFECT OF LOCAL EMPLOYMENT (+)

Brief description of the impact	Induced employment is the multiplier effect of direct and indirect employment on the local economy. When salary earners spend their salaries and share-scheme pay-outs in the local economy, it stimulates the growth of local businesses, creating induced jobs. Based on a multiplier of 0.44, Sishen mine has created an estimated 6,207 induced jobs.
Subject matter expert/s	Rina Botha
Most important engagement platforms/communication mechanisms	<ul style="list-style-type: none"> Local media Kumba and Sishen mine electronic and print publications (eg Boswa Ba Rona, SEAT report) Town hall meetings in the community Meetings with community-based forums (eg JTG District SMME Forum, Kgalagadi Youth Organisation, Kuruman Community Development Forum, Joe Morolong Road Forum, Kuruman Unemployment Community Forum, Gamagara Community Development Forum, Olifantshoek Contractor Unemployment Forum, Tsantsabane Black Business Chamber, Dingleton Contractors Forum) Meetings with the political leadership of municipalities

MANAGEMENT RESPONSE – initiatives / interventions	External stakeholders - implementation	Timelines / frequency	KPIs used for monitoring and evaluation	Performance target	Monitoring and evaluation	Responsible team
Implementation of the contractor social management procedure	Contractors	Effective January 2015	As agreed, depending on the specific socio-economic impact	Existing contractors: as agreed New contractors: stipulated upfront in the contract	Quarterly reports from contractor companies	Supply chain SIB projects
Refine Sishen mine's employee data to enable local area reporting		March 2016	Ability to report on localised employment	Implementation Q2, 2016	Project plan	Human resources
Leverage Dingleton resettlement project to create opportunities for local employment	Contractors	2015–2017	Number of jobs created for Dingleton employees	300 individuals to receive temporary employment for the duration of the project	Reporting to the Dingleton Resettlement Working Group	Dingleton project
Continue to create part-time and/or full-time jobs through SLP and CSI project implementation	Local municipalities	2015–2017	Number of full-time jobs Number of part-time jobs	110 100	Reporting on jobs created through investment in municipal infrastructure development, education, poverty alleviation and small business development	Sustainable development
Communicate the mine's reality to community members in a face-to-face context	Local municipalities	Annually – March 2015	Number of community members reached Level of interactivity	Gamagara roadshow with four public meetings Ga-Segonyana roadshow with three public meetings Joe Morolong roadshow with three public meetings	Reporting per session Analysis of all questions asked	Community engagement and development (CED)
Wide distribution of information about vacancies at Sishen mine, as well as minimum requirements for employment	Local municipalities Local NGOs Local media	Ad hoc	% localised employees	70% localised employees (from JTG district)	Employee records	Human resources

IMPACT 2: FAST-TRACKED LOCAL BUSINESS DEVELOPMENT (+)

Brief description of the impact	Sishen mine stimulates the development of local HDSA enterprises with the intention of giving them access to business opportunities at the mine. To optimise the development of sustainable local businesses, Sishen mine applies Kumba's Preferential Procurement policy, implements a detailed Procurement Progression Plan, supports the enterprise development programme at the Small Business Hubs at Kathu and Kuruman, and unlocks funding through the Zimele Community Fund. The mine also registers local businesses on its supplier data base and has implemented a Supplier Development Programme to fast track the integration of small enterprises into the supply chain.
Subject matter expert/s	Alida Munro Rina Botha
Most important engagement platforms/communication mechanisms	<ul style="list-style-type: none"> Annual local supplier day Kumba and Sishen mine electronic and print publications (eg Boswa Ba Rona, SEAT report) Town hall meetings in the community Northern Cape Mine Managers Preferential Procurement Forum (NCMMPPF). DMR regional office and the Northern Cape Department of Economic Development and Tourism are also represented on this forum Meetings with local business forums (eg JTG District SMME Forum, Gamagara Community Development Forum, Olifantshoek Contractor Unemployment Forum, Tsantsabane Black Business Chamber, Dingleton Contractors Forum) Kumba meetings with emerging local interest and pressure groups

MANAGEMENT RESPONSE – initiatives / interventions	External stakeholders - implementation	Timelines / frequency	KPIs used for monitoring and evaluation	Performance target	Monitoring and evaluation	Responsible team
Ongoing updates of HDSA-owned local supplier information on the vendor database	Innoven	Ongoing	Number of HDSA-owned local suppliers on vendor database	Grow vendor database 10% annually	Report by vendor	Supply chain
Achieve own targets set for localised spending in addition to meeting Mining Charter requirements		Ongoing	% localised procurement	16% localised procurement as per the Mining Charter	Tracking of procurement spend	Supply chain
Contract owners to collaborate with BEE non-compliant suppliers to encourage transformation		Ongoing	% BEE compliance suppliers	Increase the % year-on-year	Tracking of supplier BEE status	Supply chain
Manage Sishen mine-wide compliance with the Preferential Procurement policy		Ongoing	% localised procurement % BEE compliant suppliers	16% localised procurement as per the Mining Charter	Procurement reports	Supply chain Sustainable development
Focused workshops with identified localised suppliers to assist with training on how to compile a safety file aligned with the mine's safety requirements	Contractors Trainers	Ongoing	Number of contractors trained	NA	Feedback from trainers and contractors	Sustainable development
Implement the Supplier Development Programme	Aurik Enterprise Development and Transcend Advance	Ongoing	Business growth (various indicators agreed) in pilot companies	Significant growth within two years	Audit on pilot companies	Kumba supply chain Governance and corporate affairs, corporate office

MANAGEMENT RESPONSE – initiatives / interventions	External stakeholders - implementation	Timelines / frequency	KPIs used for monitoring and evaluation	Performance target	Monitoring and evaluation	Responsible team
Leverage Dingleton resettlement project to create opportunities for local Dingleton businesses	Contractors	2015–2017	Number of local contracts	36 contracts	Reporting to the Dingleton Resettlement Working Group	Dingleton project
Small Business Hubs support (JTG District Business Development Centre) for local HDSA businesses	Trioplus	Ongoing	Number of successful loan applicants Number of new businesses surviving the first year Number of employment opportunities Revenue generated	Year-on-year improvement over the 2015–2017 period	Quarterly reporting by CED	Sustainable development Staff at the Small Business Hubs in Kathu and Kuruman
Engage local business and manage effective communication to enable regular information sharing on local procurement	Northern Cape Chamber of Commerce (NOCCI) Black Management Forum (BMF) Localised suppliers Local business owners (potential suppliers)	Supplier open day Ongoing communication	Attendance of supplier days Establishment of a supplier forum Swift response and comprehensive feedback on all questions, concerns and queries	Annually Four supplier forum meetings per year Three days or less to respond to any procurement-related query	Attendance register at supplier days and supplier forum meetings Complaints and grievance reporting	Supply chain Sustainable development
Collaborate with business and industry, as well as government role players, in the Northern Cape to increase local procurement in the region	Northern Cape Department of Economic Development and Tourism DMR Other mining companies in the Northern Cape	Ongoing	Participation in relevant forums Status of online supplier database	Active participation in the NCMMPPF and Northern Cape Mine Managers Association	Minutes of meetings/record of decisions shared internally Spot checks on supplier database	Supply chain
Facilitate the development of the Supplier Park and stimulate investor interest in the concept	Gamagara Local Municipality Industrial Development Corporation (IDC) Other funders Anchor tenants	September 2015	Provide available land; agreement with the local municipality to service the land Secured funding Secured anchor tenants	To be confirmed/determined	To be confirmed/determined	Anglo American Kumba supply chain and corporate affairs corporate office

IMPACT 3: CONTRACTORS' HIRING PRACTICES, LACK OF HOUSING SOLUTIONS AND POOR DEMOBILISATION CAUSE A SERIES OF SOCIO-ECONOMIC PROBLEMS (-)

Brief description of the impact	An influx of job hopefuls from outside the JTG district is attributed to contractor companies not implementing Sishen mine's local employment policy. This increases competition for available jobs, burdens the already strained local service delivery infrastructure and leads to overcrowding at schools and healthcare facilities. Contractors' hiring practices have also been implicated in housing shortages and the mushrooming of informal structures, as contractors often do not make efficient provision for their own staff housing. Further, contractor camps have been associated with an increase in social ills such as alcohol abuse, prostitution and teenage pregnancies, as well as crime. A major concern for local communities is that contractor employees stay behind when their contracts end. In the absence of effective demobilisation strategies, these people join the ranks of the unemployed in need of social support.
Subject matter expert/s	Alida Munro Rina Botha Louise Marx
Most important engagement platforms/communication mechanisms	<ul style="list-style-type: none"> Meetings with community-based forums (eg JTG District SMME Forum, Kgalagadi Youth Organisation, Kuruman Community Development Forum, Joe Morolong Road Forum, Kuruman Unemployment Community Forum, Gamagara Community Development Forum, Olifantshoek Contractor Unemployment Forum, Tsantsabane Black Business Chamber, Dingleton Contractors Forum) Contractors forums (current contractors) Leadership one-on-one sessions with top 10 contractors (current contractors) Requests for tender and related information shared during the sourcing/procurement process Meetings with the JTG SMME Forum, Gamagara and Olifantshoek Community and Business Forums, Dingleton Youth Forum and others Future Forum

MANAGEMENT RESPONSE - initiatives / interventions	External stakeholders - implementation	Timelines / frequency	KPIs used for monitoring and evaluation	Performance target	Monitoring and evaluation	Responsible team
Implementation of the contractor social management procedure	Contractors	Effective January 2015	As agreed, depending on the specific socio-economic impact	Existing contractors: as agreed New contractors: stipulated upfront in the contract	Quarterly reports from contractor companies	Supply chain SIB projects
Workshop with top 10 existing contractors on socio-economic impacts	Top 10 existing contractor companies	April 2015	Participation by leadership of contractor companies	100% representation of decision makers	Attendance register	Finance and administration Human resources Supply chain Sustainable development
Assessment of contractor socio-economic impacts for each of the top 10 contractors	Top 10 existing contractor companies	July 2015	Completed questionnaires for all information requested	All 10 contractor companies participate	Report on impacts	Sustainable development
Contractor training on Anglo American Social Way and SEAT	20 biggest contractors at the mine	August 2015	Participation at the appropriate level and function in companies	16-20 companies	Invitations to specific people Monitoring of attendance Dipstick survey at end of training	Anglo American social management Sustainable development
Manage Sishen mine-wide compliance with the contractor social management procedure		Ongoing	Percentage of new contracts	100% of contracts with socio-economic impacts on local area	Procurement reports	Supply chain

IMPACT 4: HIGH CONCENTRATION OF UNEMPLOYED YOUTH IN GAMAGARA (-)

Brief description of the impact	Young people seeking work at Sishen mine are flocking to Gamagara in large numbers. Unfortunately, relatively few of these job seekers have the qualifications or skills set to find employment. This has pushed the youth unemployment rate in Gamagara to 22%, which is significantly higher than the 17% unemployment rate for Gamagara overall. Widespread youth unemployment threatens social stability in the area through protests, marches and the disruption of businesses, and there has been a noticeable increase in youth mobilisation. Adding to the plight of unskilled and unemployed youths is the lack of opportunities to improve their skills and qualifications.
Subject matter expert/s	Rina Botha
Most important engagement platforms/communication mechanisms	<ul style="list-style-type: none"> Ad hoc meetings between the mines in the district and youth representatives Meetings with youth-based forums (eg JTG District SMME Forum, Kgalagadi Youth Organisation, Olifantshoek Contractor Unemployment Forum, Tsantsabane Black Business Chamber, Dingleton Youth Forum) Mining Subsector Forum Informal contact with youth leaders Meetings with and presentations to school principals and SGBs Local media Kumba and Sishen mine electronic and print publications (eg Boswa Ba Rona, SEAT report) Town hall meetings in the community

MANAGEMENT RESPONSE - initiatives / interventions	External stakeholders - implementation	Timelines / frequency	KPIs used for monitoring and evaluation	Performance target	Monitoring and evaluation	Responsible team
Make internships available to local community members who need work experience to complete their degrees/diplomas		2015-2018	Number of internships	25 in 2015 25 in 2016 25 in 2017	Annual reporting to DMR	Human resources
Learnership, portable skills and community skills training plan		2015-2018	Core mining learnerships Portable skills training for employees and contractors Community members trained in portable skills	60 per year 144 per year 60 per year	Annual reporting to DMR	Human resources
Investigate the possibility of allowing access to mine training programmes such as Project Management and SAP to the youth		2016-2017	Number of JTG youth community members who participate in training	50	Training attendance registers	Human resources Sustainable development
Special skills development interventions for Dingleton community	Contractors	2015-2017	Number of community members participating in training	80 in 2015 70 in 2016 50 in 2017	Certificates on completion	Dingleton project
Kuruman Field Band		Annual	Number of band members performing at competitions	Band is fully functional and competes at local and regional competitions	Competition results	Sustainable development
Provide a database of trained youth to contractors for potential employment		2015-2017	Updated database with high integrity	60% accuracy	Feedback by users of the database	Sustainable development

MANAGEMENT RESPONSE – initiatives / interventions	External stakeholders - implementation	Timelines / frequency	KPIs used for monitoring and evaluation	Performance target	Monitoring and evaluation	Responsible team
Update the 2009 rural research to have a real-time understanding of the current youth profile	Externally appointed service provider	2015	School completion Post-schooling qualifications Drop-out rate % young entrepreneurs	All the 2009 indicators updated with a representative sample	Progress updates and research report	Sustainable development
Encourage Sishen mine contractors to initiate, become involved in or contribute to youth development programmes	Current and future contractors	2015–2018	Number of contractors with positive impact on youth development Percentage of youth affected by the programme	12 20%	Assessment of contractors impact 2017	Sustainable development
Ongoing informal engagement with youth structures	Individual members of the JTG SMME Forum and other relevant youth structures	Ongoing	Responsiveness	Timely responses to enquiries	Records of engagement and communication	Sustainable development
Investigate the possibility of assisting the Department of Education to implement ABET matric – as a mechanism to give more community members access to matric	Department of Education	July 2015–2018	ABET facility fully equipped and resourced for new course	100% ready July 2015 First intake of 25 in 2016 Second intake of 75 in 2017	Internal reporting	Sustainable development Human resources
Pilot a mentorship programme for Grade 9–12 learners as part of Sishen mine's voluntary CSI (pilot)	Sishen managers	2016–2017	Number of mentor-mentee relationships Satisfaction with value created by mentors and mentees	30 mentorships for pilot 70% satisfaction	Names and pledges of mentors Dipstick survey in November 2016	Human resources Sustainable development
Continued collaboration with the JTG District Mayor and other mines for formal engagement of youth structures	JTG SMME Forum and other youth structures JTG District Mayor Other mines	Ongoing	Mutual understanding	Improved levels of mutual understanding among role players	Informal assessment of engagement quality	Sustainable development
Wide distribution of information about vacancies at Sishen mine, as well as minimum requirements for employment	Local Municipalities Local NGOs Local media	Ad hoc	% localised employees	70% localised employees (from JTG district)	Employee records	Human resources

MANAGEMENT RESPONSE – initiatives / interventions	External stakeholders - implementation	Timelines / frequency	KPIs used for monitoring and evaluation	Performance target	Monitoring and evaluation	Responsible team
Share details of skills development, training and bursary opportunities with local schools	School principals Educators Matriculants SGBs	Once a year	Participation by local learners Awareness	80% local participation 75% awareness	Analysis of enrolment records Stakeholder consultation during Socio-Economic Assessment	Human resources Sustainable development
Investigate the viability of a JTG skills development centre for training in health, retail and hospitality	External funders Partners Contractors	2016	Alignment with FET Support from local, district and provincial authorities Agreement with a training partner Funding support to carry operational cost	Go/No go decision in terms of long-term viability	Internal review of proposal	Sustainable development



Teenagers from Kagung, Magwagwe and Ncwelengwe villages find meaningful recreation as members of the Field Band.

IMPACT 5: TRANSFORMATION AND THE ADVANCEMENT OF HDSA EMPLOYEES (+)

Brief description of the impact	By consistently exceeding the Mining Charter targets for increasing the representation of HDSAs in management and women in core mining, Sishen mine is progressing well in transforming the workforce. This progress is based on the success of initiatives to recruit HDSA skills, train and develop the current workforce and cultivate the skills of young community members with talent and the right basic education. Despite the mine's success in exceeding its targets, employees and trade unions have expressed reservations about the fairness of appointment processes and practices, the pace of transformation and the commitment of frontline supervisors to employee development.
Subject matter expert/s	Kobus Meyer
Most important engagement platforms/communication mechanisms	<ul style="list-style-type: none"> Quarterly First Line Supervisory Forums (Information sharing, dialogue, motivational speakers and recognition) Quarterly broader management forum Monthly departmental indabas Future Forum Training shifts Graduates in training steercom

MANAGEMENT RESPONSE – initiatives / interventions	External stakeholders - implementation	Timelines / frequency	KPIs used for monitoring and evaluation	Performance target	Monitoring and evaluation	Responsible team
Implement fast-track programme to develop high-potential employees for management positions in plant, engineering, and mining	Mining Qualifications Authority (MQA) Services Seta	Annual intake based on workforce planning needs	% promotions to higher positions	80% of fast-track employees promoted	Competence-based evaluations, work assignments and attendance of compulsory interventions	Human resources
Foundation of Leadership programme (FLP)	Action man consulting Terry Sheppard & Associates	2014–2016	% supervisors trained	100% by end of 2016	Work assignment Portfolio of evidence	Human resources
Financial and business simulation (board game and role play) educating employees in the mining value chain processes to understand the bigger picture and personal impact on bottom line results	Business Today SA	July 2015–2016	% trained	100%, November 2016	Attendance and reaction feedback	Human resources
Formalise the career development (CD) approach	External consultant	2014–2017	Career development approach % career development trainings held % employees who understand CD Non-BEE compliance citations	Formalised and agreed 70% 80% 0	Trade union feedback Attendance registers From feedback Industrial relations records	Human resources
Implement succession planning system (managerial level)		Ongoing	According to internal policy	100% policy compliance	Internal reporting	Human resources
Formal mentorship programme	People Dynamic Development (Pty) Ltd	2015–2018	Number of Sishen employees on the programme	20 per year	Reaction feedback through review sessions	Human resources

MANAGEMENT RESPONSE – initiatives / interventions	External stakeholders - implementation	Timelines / frequency	KPIs used for monitoring and evaluation	Performance target	Monitoring and evaluation	Responsible team
Fund bursaries and operate the Professional in Training (PIT) internships		2015–2018	Number of bursary recipients Number of PITs	40 per year 20 per year	Monthly progress reports on structured programmes	Human resources
Learnership, portable skills and community skills training plan	MQA Services Seta External forums	2015–2018	Core mining learnerships Portable skills training for employees and contractor employees Community members trained in portable skills	60 per year 144 per year 60 per year	Annual reporting to DMR	Human resources
Optimise caucus meetings		Ongoing	Standardised agenda	Effective caucus meetings	Reaction feedback Coaching feedback	Human resources
Visits of caucus meeting by heads of departments (HoDs) and organisational design (OD) facilitators		Ongoing	Visits to firstline management caucuses	Three per quarter	Completion of feedback sheet	HoDs OD facilitators
Use departmental indabas as leadership engagement opportunities		Monthly	% attendance Questions asked and answered Level of questions raised	Standardised messages, dialogue topics from all HoDs	Reaction feedback on effectiveness	HoDs OD facilitators
Use reward and recognition awards as an opportunity to practically demonstrate what is meant by a high performance culture		Ongoing	Long service awards Alpha recognition BMF meetings	Leadership showcases "right behaviour" and communication that is clear, relevant and consistent	Content analysis on leadership speeches	Sustainable development
Celebrate successes and milestones, and frequently reflect on performance against set goals in printed communication	All employees	Ongoing	Prioritised key strategic messaging around high performance	45% share of voice in internal communication portfolio	Content analysis Structured feedback	Sustainable development
Broader Management Forums (G-role and up)	Middle management	2014	Examples of new behaviour cited (standing agenda item)	15 usable examples	Record and evaluate	Sustainable development
Ensure employees are aware of and enabled to participate in portable skills development programmes to equip them for alternative livelihoods beyond mining	Trade unions	Ad hoc	Awareness Enrolment figures	50% of targeted employees are aware 90% average occupation of portable skills courses	Test awareness during caucus meetings Analysis of training enrolment records	Human resources
Intern graduation event		Once a year	Experience of event	Average rating of 80%	Event ratings by attendees	Sustainable development

IMPACT 6: STRENGTHENING THE CAPACITY OF BASIC EDUCATION INSTITUTIONS (+)

Brief description of the impact	The quality of school education in the JTG district influences the quality and availability of skills for Sishen mine and is a prerequisite for growth and diversification of the local economy. Since 2009, the JTG district has recorded improvements in matric pass rates, as well as in matric mathematics and science pass rates, among others. These improvements correspond with Sishen mine's extensive support for schools in the district, geared towards helping to improve pass rates, improving learners' performance in mathematics and science, improving learner-educator ratios and reducing school drop-out rates. Sishen mine recognises the need to contribute towards improving the quality of education in rural areas, which are experiencing an exodus of learners moving to schools in better-resourced areas.
Subject matter expert/s	Rina Botha
Most important engagement platforms/communication mechanisms	<ul style="list-style-type: none"> Quarterly meetings with the Department of Education Quarterly provincial LED Forum Meetings with and presentations to school principals and SGBs Annual school project meetings or more frequently if required Kumba and Sishen mine electronic and print publications (eg Boswa Ba Rona, SEAT report) Town hall meetings in the community

MANAGEMENT RESPONSE – initiatives / interventions	External stakeholders - implementation	Timelines / frequency	KPIs used for monitoring and evaluation	Performance target	Monitoring and evaluation	Responsible team
Education Quality Improvement Programme (EQUIP) - continue the school support programme to 18 schools in the district		2012–2016	Pass rates Learner-educator ratio Drop-out rates	Improved pass rates Learner-educator ratios within Department of Education guidelines Decreased drop-out rates	Analysis of school performance statistics	Sustainable development
Career exhibition day		Annual	Attendance	80% of targeted learners attend	Attendance records	Sustainable development Human resources
Construction of ECD centres	Department of Education	Annual	Number of ECDs completed Quality of facilities	Three ECD centres to be built per year	Feedback from ECD staff Handover to the Department of Education	Sustainable development
Project launches (eg school hall, ECD centres)	Local Government Project beneficiaries	Ad hoc	Perception of Kumba's impact on education	Key stakeholders attending believe Kumba has a positive impact on the quality of education	Stakeholder consultation during Socio-Economic Assessment	Sustainable development
Leverage the Mine Managers Forum to establish collaboration and coordination among mines in their support to local schools and other education initiatives		Ongoing	Coordinated support and impact in dealing with pressure points	Three partnerships with other mines	Minutes of meetings/records of decisions taken during such consultation	SLT
Presentations to large contractors to influence CSI contributions to align with Sishen mine's education assistance to local schools	Gamagara local schools	Annually	Uptake by contractors	80% of contractors commit to align	SMPs from contractors	Sustainable development

MANAGEMENT RESPONSE – initiatives / interventions	External stakeholders - implementation	Timelines / frequency	KPIs used for monitoring and evaluation	Performance target	Monitoring and evaluation	Responsible team
Implementation of the contractor social management procedure	Top 10 existing contractor companies All new contractors	Effective January 2015	% local and localised contractor employees	Existing contractors: as agreed New contractors: stipulated in the contract	Quarterly reports from contractor companies	Supply chain
Test viability of solutions to secure accommodation for critical educator skills needed by schools	Dibeng Primary School Gamagara High School Sesheng Intermediate School	June 2016	Alignment with Kumba Housing Policy Support from government authorities Agreement with local schools	Go/No go decision in terms of long-term viability	Internal review of proposal	Sustainable development
Investigate the possibility of a career guidance roadshow to rural secondary schools	Department of Education Schools in rural villages	2015–2017	Number of schools reached by the intervention Quality educator support for ongoing career guidance	Pilot in 2015: seven schools in the JTG district 2016: 15 schools in district 2017: 25 schools in district	Structured feedback from schools to Sishen mine An annual report to the Department of Education	Sustainable development Human resources



Part of the mine's education programme provides HDSA children with access to a facility where they are exposed to quality early childhood development in a safe environment.

IMPACT 7: INCREASING ACCESS TO PRIMARY AND SECONDARY HEALTHCARE AND SOCIAL SERVICES SUPPORT (+)

Brief description of the impact	The JTG district faces numerous challenges in the form of HIV/AIDS, tuberculosis, lifestyle diseases, and child and maternal health that affect the quality of life of residents, the cost of healthcare provision and the growth prospects of the local economy. There is a severe shortage of healthcare and medical resources, from specialist skills to hospital beds and ambulances, and many of the district's people have to travel vast distances to access healthcare facilities, which are typically overcrowded. Working closely with the district and provincial health authorities, as well as NGOs, Sishen mine has made a substantial investment in mobile clinics that take services to people in rural areas, in the UGM Wellness Clinic in Kathu, and in health and social welfare projects such as the construction of an ambulance station, counselling services from FAMSA and the Dingleton soup kitchen.
Subject matter expert/s	Rina Botha
Most important engagement platforms/communication mechanisms	<ul style="list-style-type: none"> Quarterly meetings with the Department of Health Regular meetings with the UGM Wellness Clinic and FAMSA Annually in March and April, CANSA Relay for Life, with Sishen mine as the anchor sponsor Project and ad hoc meetings with representatives of the Department of Health (provincial department and officials responsible for the district) Local media Kumba and Sishen mine electronic and print publications (eg Boswa Ba Rona, SEAT report) Town hall meetings in the community Training sessions and visits to schools, local businesses and farms Regular engagement of beneficiaries of the soup kitchen

MANAGEMENT RESPONSE – initiatives / interventions	External stakeholders - implementation	Timelines / frequency	KPIs used for monitoring and evaluation	Performance target	Monitoring and evaluation	Responsible team
Dingleton soup kitchen	Northern Cape Department of Social Development Dingleton Community Health Workers Project board of directors and management	Ongoing	Number of beneficiaries Beneficiary perceptions	Average of 170 chronically ill patients	Monthly visits and reports	Sustainable development
UGM Wellness Clinic	Northern Cape Department of Health	Ongoing	Number of beneficiaries	Average of 1,893 patients per month	Beneficiary records Monthly Reports	Sustainable development
Batho Pele mobile health clinics	Joe Morolong Local Municipality	Ongoing	Number of beneficiaries	Average of 2,000 patients per month	Beneficiary records Monthly reports	Sustainable development
Test viability of solutions to secure accommodation for critical health professionals	Department of Health	June 2016	Alignment with Kumba Housing Policy Support from government authorities Agreement with health service providers	Go/No go decision in terms of long-term viability	Internal review of proposal	Sustainable development Human resources
Sesheng distribution centre	Local business partners	Ongoing	Donations from local businesses Number of beneficiaries		Donation records Beneficiary records	Sustainable development

MANAGEMENT RESPONSE – initiatives / interventions	External stakeholders - implementation	Timelines / frequency	KPIs used for monitoring and evaluation	Performance target	Monitoring and evaluation	Responsible team
Implementation of the contractor social management procedure	Top 10 existing contractor companies All new contractors	Effective January 2015	% local and localised contractor employees	Existing contractors: as agreed New contractors: stipulated in the contract	Quarterly reports from contractor companies	Supply chain
Develop and agree on a focused project to assist the South African Police Service (SAPS) in combating increased levels of crime (eg installing CCTV cameras)	SAPS	Agreement reached by March 2015	Proposal compiled	Proposal includes detailed project plan and costing	Internal review	Sustainable development
Community health education programme – create awareness and educate on HIV, STIs, foetal alcohol syndrome (FAS), cancer and TB	Northern Cape Department of Health AIDS Councils (for the province, district and local municipalities) Department of Social Development	Ongoing	Training sessions conducted Door-to-door campaign for local business School visits Farm visits Sensitisation of beneficiaries of the Dingleton soup kitchen	Average of 1,525 community members reached per month	Monthly reports and beneficiary records	Sustainable development



The Dingleton soup kitchen provides meals five days a week.



Sishen mine has since 2007 extended the employee healthcare capabilities of the UGM Wellness Clinic's to surrounding communities.



Dental and ophthalmic care is provided in a Batho Pele mobile unit.

IMPACT 8: PRESSURE ON GAMAGARA MUNICIPAL INFRASTRUCTURE (-)

Brief description of the impact	Massive growth in the population of Gamagara and the expansion of mining activities since 2010 has placed huge strain on municipal infrastructure for the delivery of water, electricity, sanitation, roads and waste management, as well as on housing, healthcare, emergency services, schools and recreational facilities. Demand for services far outstrips capacity and available funding; the Gamagara Local Municipality has access to less than half of the R1 billion needed through to 2018 for infrastructure development. Sishen mine acknowledges that the population growth and pressure on services and infrastructure is associated with the growing mining industry. Hence, the mine contributes to bulk services and infrastructure, and is involved in initiatives to build the delivery capacity of local authorities. An area of mutual concern for Sishen mine and the local municipality is their strained relationship over the bulk services agreement that has been in place since 2010.
Subject matter expert/s	Prajay Maharaj Rina Botha Francois Hattingh Louise Marx Jimmy Walker
Most important engagement platforms/communication mechanisms	<ul style="list-style-type: none"> • Municipal IDP Forum and Municipal LED Forum • LED Provincial Forum • Monthly Joint Management Forum between Sishen mine and Gamagara Local Municipality • Bi-weekly technical committee meetings: Sishen mine and Gamagara Local Municipality • Quarterly meetings with Oversight Committee of Department of Water and Sanitation (DWS) and Sedibeng Water • Tshping Water Users Association Forum meetings • Futures Forum

MANAGEMENT RESPONSE - initiatives / interventions	External stakeholders - implementation	Timelines / frequency	KPIs used for monitoring and evaluation	Performance target	Monitoring and evaluation	Responsible team
Implement the Municipal Capacity Building and Support (MCBS) Programme	DBSA Technical Support Unit	2015-2017	Support from national and provincial government Ownership by local municipal authorities Effectiveness and efficiency of financial management in local municipalities	Per municipality agreed in project plan	Evaluate progress against the MCBS Programme monitoring plan	Anglo American Kumba corporate affairs, corporate office
Continued collaboration with Gamagara Local Municipality and other mines towards a common vision and shared objectives for town development	Gamagara Local Municipality Other mines	Ongoing	Effectiveness of meetings Mutual understanding and relationship satisfaction	Agreement on a common vision and shared objectives for development	Minutes of meetings Structured and regular feedback from all parties	Finance and administration SLT Planning and development SIB projects
Resolve the bulk service agreement issue; task team to investigate other alternatives to the 2010 bulk services agreement	Gamagara Local Municipality	June 2015	Increased interaction with the local municipality Proper alignment of all parties	Mutual satisfaction and positive outcomes for development	Revised or new agreement reached	Finance and administration SLT Human resources

MANAGEMENT RESPONSE - initiatives / interventions	External stakeholders - implementation	Timelines / frequency	KPIs used for monitoring and evaluation	Performance target	Monitoring and evaluation	Responsible team
Eskom Kathu west substation (bulk services agreement)	Gamagara Local Municipality	December 2015	Project progress Quality of construction	Construction completed on standard, on time and on budget	Engineering inspection and progress reports	Engineering Human resources
Kathu Clean-up Projects in partnership with Gamagara Local Municipality	Gamagara Local Municipality Kathu, Mapoteng and Sesheng communities Large contractors	Ongoing	Partnership with the Gamagara Local Municipality Agreement on roles and responsibilities for future Project management capacity in the local municipality to keep these towns clean	A clean and attractive Sesheng, Mapoteng and Kathu	Regular feedback from the municipality and schools	Sustainable development
Continuous engagement with community forums		Ongoing	Effectiveness of engagement (frequency and quality) Relationship health	Regular solicitation of formal and informal feedback from leaders and opinion formers in these forums	Quarterly corporate affairs report	Sustainable development



The increased number of informal structures in Mapoteng puts pressure on municipal infrastructure.

IMPACT 9: A VULNERABLE, MINING-DEPENDENT ECONOMY (-)

Brief description of the impact	The JTG district's heavy reliance on mining means that its economy is undiversified and vulnerable. Even the Kathu economy, which is more diversified than it was a decade ago, is 90% reliant on mining. This situation is partly due to the historical predominance of mining and partly to a combination of other factors such as poor road and transport infrastructure, the lack of a shared intersectoral developmental model and strategy, and difficult conditions in sectors such as agriculture. Sishen mine seeks to contribute to diversification through its involvement in public-private partnerships and community projects such as the Manyeding Cultivation Project.
Subject matter expert/s	Rina Botha
Most important engagement platforms/communication mechanisms	<ul style="list-style-type: none"> Meetings with community-based forums (eg JTG District SMME Forum, Kgalagadi Youth Organisation, Kuruman Community Development Forum, Joe Morolong Road Forum, Kuruman Unemployment Community Forum, Gamagara Community Development Forum, Olifantshoek Contractor Unemployment Forum, Tsantsabane Black Business Chamber, Dingleton Contractors Forum) Quarterly Mining Sector Sub-Committee (MSS) Quarterly Provincial LED Forum Annual CSI and SLP project coordination meeting Bi-annual IDP forums in each municipality Monthly SLP project update meeting with the LED representative forum Quarterly Inter-governmental Reporting meetings (IGR)

MANAGEMENT RESPONSE - initiatives / interventions	External stakeholders - implementation	Timelines / frequency	KPIs used for monitoring and evaluation	Performance target	Monitoring and evaluation	Responsible team
Joe Morolong Manyeding Cultivation Project	Department of Agriculture, Land Reform and Rural Development National Development Agency (NDA) Joy Global Department of Economic Development and Tourism	2015-2018	Commercial sustainability of project Food security for the community Interest in agriculture	Makes a profit Permits and licences needed obtained Enough products for the local community's use Increased number of farming cooperatives	Regular visits Project reporting	Sustainable development
Small Business Hubs support (JTG District Business Development Centre) for local HDSA businesses	Trioplus JTG District Municipality Local municipalities	2015-2018	Successful repositioning of the Hubs in a district context Number of successful loan applicants Number of new businesses surviving the first year Number of employment opportunities Revenue generated	Year-on-year improvement over the 2015-2017 period	Quarterly reporting by CED	Sustainable development Staff at the Small Business Hubs in Kuruman and Kathu
Facilitate the development of the Supplier Park and stimulate investor interest in the concept	Gamagara Local Municipality IDC Other funders Anchor tenants	September 2015	Provide available land; agreement with the local municipality to service the land Secured funding Secured anchor tenants	To be confirmed/determined	To be confirmed/determined	Anglo American Kumba supply chain and corporate affairs, corporate office

IMPACT 10: ENVIRONMENTAL IMPACT ON FARMERS (WATER, LOSS OF GRAZING LAND, DUST AND BLASTING) (-)

Brief description of the impact	Farmers in close proximity to Sishen mine are affected by dust, blasting, loss of grazing land, dewatering and alleged water quality issues. Many scientific studies on these issues have been conducted since 2000 and, where impact is proven, the mine makes contractual arrangements with the farmers concerned to compensate them. Water is the single most contentious issue, which is not surprising given the arid Northern Cape landscape. Sishen mine engages farmers around environmental impact, especially dewatering, at formal forums and through day-to-day liaison with consultants appointed for this purpose. It is unfortunate that the trust relationship between the mine and the farming community has deteriorated owing to some farmers' perceptions that the mine is more concerned about its own interests than theirs.
Subject matter expert/s	Nadia Williams
Most important engagement platforms/communication mechanisms	<ul style="list-style-type: none"> Quarterly agricultural engagement sessions (with impacted farmers) Quarterly farmers meeting (with DWS) Participation in Tshiping Water Users Association Local media One-on-one engagement by Sishen mine's farmer liaison and environmental staff members

MANAGEMENT RESPONSE - initiatives / interventions	External stakeholders - implementation	Timelines / frequency	KPIs used for monitoring and evaluation	Performance target	Monitoring and evaluation	Responsible team
Application of dust suppression technologies (Dust Boss; Dust-a-Side; water trucks with GPS facilities)	Contractors responsible for dust suppression	Daily	Dust fallout level PM 10 and PM 2.5 level and number of times level is over the maximum limit Dust appearance Community complaints	Less than 600 mg/m ² /day Less than 120 µg/m ³ Less than 65 µg/m ³ Low dust visibility 90% of complaints resolved within the maximum allowed timeframe	Dust fallout levels measured by dust fallout buckets PM 10 levels measured by PM 10 trailers and monitors Visual dust ratings as part of daily dust observations Tracking of community complaints and resolution	SHE Mining
Monitor, manage and minimise the impact of blasting on communities in close proximity of the mine	Blast Analysis Africa	Ongoing	Ground vibration limits Air blast limits Community complaints	Maximum of: 12.7 mm/s Maximum of: 134dB Compensation and repair according to policy 90% of complaints resolved within two months	Seismic and acoustic measurement Tracking of community complaints and resolution	SHE Mining
Monitoring of water quality in pipeline to farmers		Monthly	Nitrate levels Turbidity Traces of hydrocarbon	DWS standards	Automated in-line monitoring system	SHE
Monitoring of water levels and water quality in boreholes on directly affected farms		Monthly	Nitrate levels Turbidity Traces of hydrocarbon Depth of water level in borehole	DWS standards	Testing of water samples	SHE

MANAGEMENT RESPONSE – initiatives / interventions	External stakeholders - implementation	Timelines / frequency	KPIs used for monitoring and evaluation	Performance target	Monitoring and evaluation	Responsible team
Maintenance of water-related infrastructure on affected farms		As required	Condition of water infrastructure	All infrastructure in good working condition	Physical inspection	SHE
Payment of grazing subsidies, and provision of water for household and animal use – to directly impacted farmers		Ongoing	Compliance with contractual agreements	Full compliance with contractual agreements with directly impacted farmers	Financial audit Water reports Correspondence with directly impacted farmers	SHE
Implementation of the bio-diversity management and monitoring programme (2015–2017 activities)	Endemic Vision (service provider)	2015–2017	Eco-system changes Adherence to the Sishen Mine Bio-diversity Monitoring Protocol	Reliable assessment of changes and causes of changes in the eco-system around the mine	Biodiversity monitoring report Presentation of results to the mine	SHE
Work with the DWS regional office to address farmers' concerns about Sishen's impact on dewatering	Independent water experts	Quarterly meetings	Satisfaction with progress made on dewatering by all attendees	70% satisfaction with progress	Minutes of meetings Consultation with role players as part of the 2014 socio-economic assessment for Sishen mine	SHE
Integrate the complaints and grievance policy for environment with the Hub and Dingleton Project's procedures and refine, standardise and simplify processes and response patterns		2015	Awareness among stakeholders of complaints procedures to be followed Effectiveness of complaints resolution	80% awareness 80% satisfaction with resolved complaints 90% of complaints resolved within the maximum time allowed	Stakeholder consultation as part of the 2014 socio-economic survey Follow up calls to complainants Analysis of complaints register	SHE



Air blasts are monitored through seismic and acoustic measurements.

IMPACT 11: INTEGRATED WATER MANAGEMENT AND ENHANCED WATER SECURITY (+)

Brief description of the impact	Given the aridness of the Northern Cape, it stands to reason that water is considered a precious resource that must be managed with the utmost care. Sishen mine has not only reduced its use of clean borehole water for processing but also supplies raw groundwater to the town of Kathu, where it is used for potable and garden water. The mine minimises water losses in the closed-loop water system and captures rain water for use in dust suppression. To assist the Gamagara Local Municipality with its water management, Sishen mine has seconded a civil engineer to the municipality full time. A new water pipeline is being constructed from the mine to the Sedibeng reservoir to assist in securing the water supply of the area and the region. The mine's annual Water Action Plan ensures that water standards are met and that there is ongoing monitoring and reporting on water supply, use, reuse and saving.
Subject matter expert/s	Francois Hattingh Louise Marx Nadia Williams
Most important engagement platforms/communication mechanisms	<ul style="list-style-type: none"> Participation in the Tshiping Water Users Association Quarterly meetings with DWS Oversight Committee and Sedibeng Water Bi-weekly technical committee meetings: Sishen mine and Gamagara Local Municipality

MANAGEMENT RESPONSE – initiatives / interventions	External stakeholders - implementation	Timelines / frequency	KPIs used for monitoring and evaluation	Performance target	Monitoring and evaluation	Responsible team
Social infrastructure development: New DWS export pipeline and pump station	Gamagara Local Municipality Sedibeng Water	2014–2015	Surplus export to Sedibeng Water is maximised Spillage due to lack of pumping capacity at Sishen mine is minimised Emergency supply to the municipality (backup to municipal bulk water supply system for water security)	Infrastructure acquired and installed Integrated bulk water control achieved between Sishen and Sedibeng Water for regional water supply	Compliance with water-use licence and existing contracts	SHE Engineering SIB projects
Social infrastructure development: Automate water meters, Telemetry project	Sedibeng Water	Q1, 2015	Effective data management Improved water management	Equipment acquired and installed	Implementation report	SHE Engineering SIB projects
Whereas the development of the Kathu waste treatment works is the responsibility of Gamagara Local Municipality, Sishen mine will develop infrastructure to increase the volume of treated effluent that can be pumped from the Kathu waste treatment works to Sishen mine.	Gamagara Local Municipality	2015	Reduced spillage of effluent to environment Increased use of lower grade water for processing, resulting in more groundwater from Sishen for external parties (see export pipeline and pump station project)	Infrastructure completed according to specifications, on time, on budget Improved water management based on water balance projections Greatly reduced spillage of effluent	Designed, managed and implemented by Kumba Engineering inspection and progress reports	SHE Engineering SIB projects
Water link line – Kathu (bulk services agreement)	Gamagara Local Municipality	February 2015	Line specifications Budget status Project progress	Line completed according to specifications, on time, on budget	Engineering inspection and progress reports	Engineering

MANAGEMENT RESPONSE - initiatives / interventions	External stakeholders - implementation	Timelines / frequency	KPIs used for monitoring and evaluation	Performance target	Monitoring and evaluation	Responsible team
Engage with DWS Oversight Committee with regards to Sedibeng Water export matters	DWS - regional office	Quarterly	Quality and frequency of engagement	Regular meetings and constructive discussions	Minutes of meetings	SHE Kumba corporate office
Submit water balance and water quality reports to the regional office of the DWS in compliance with Sishen Mine's water-use licence	DWS - regional office	Water balance - monthly Water quality - quarterly and annually	Compliance	Full compliance with all water-related reporting requirements	Tracking of reporting to DWA	SHE
Clean storm water separation project (K1024) to separate affected and clean water as part of greater water efficiency (Subject to approval)	DWS - regional office	2014-2016	Infrastructure layout: - G80 Western canal storm water sump and pump station - Storm water recovery pipeline - Dewatering pipeline - Post-attenuation cut-off system including dam and canals	Compliance with the National Water Act, No 36 of 1998 and Regulation 704	Report on progress with infrastructure deployment Report on the separation of affected water and clean water	SHE Engineering Projects
Plant-wide storm water project - (K1287 and K1687) to reduce flood risk in plants and workshop areas - will contribute to greater water efficiency for the broader community (Subject to approval)	DWS - regional office	2014-2016	Infrastructure layout: - G80 Eastern storm water sump and recovery pipe line - Plant waste dump drainage and sumps - Jig plant, workshop and office areas drainage (ie canals and culverts) - Pollution control dams	Compliance with the National Water Act, No 36 of 1998 and Regulation 704	Report on progress with infrastructure deployment Report on the separation of affected water and clean water Report on cleaning of polluted water	SHE Engineering Projects



The effective management of dust suppression improves water efficiency.

IMPACT 12: IMPACT ON DINGLETON AND THE RELATIONSHIP WITH DINGLETON RESIDENTS (-)

Brief description of the impact	The Dingleton community is being relocated to Kathu to facilitate the expansion of Sishen mine to the west. This is being done at a cost of R4.2 billion in capex (all at Kumba's expense). This will entail building around 500 new homes and providing additional schools, sports facilities and public libraries. The relocation commenced in 2014 after five years of intensive consultation and planning. While the majority of Dingleton residents expressed support for the relocation, there is dissatisfaction among some residents, particularly those who rent accommodation and are concerned about their position after the relocation. Blasting and dust from Sishen mine's operations have affected the quality of life of residents, some of whom have requested earlier relocation. Dingleton residents expressed low relationship satisfaction with Kumba in the 2013 Communication Audit. In response, Kumba developed a number of action steps and interventions such as the bi-weekly renters' roadshow, workshops and the renters' desk to address negative sentiments and assist renters in practical ways.
Subject matter expert/s	Willie Human Nadia Williams Itumeleng Lute
Most important engagement platforms/communication mechanisms	<ul style="list-style-type: none"> Dingleton Resettlement News Dingleton Resettlement Working Group (RWG) Sishen mine SEAT report Community meetings Local media

MANAGEMENT RESPONSE - initiatives / interventions	External stakeholders - implementation	Timelines / frequency	KPIs used for monitoring and evaluation	Performance target	Monitoring and evaluation	Responsible team
Application of dust suppression technologies (Dust Boss; Dust-a-Side; water trucks with GPS facilities)	Contractors responsible for dust suppression	Daily	Dust fallout level PM 10 and PM 2.5 level and number of times level is over the maximum limit Dust appearance Community complaints	Less than 600 mg/m ² /day Less than 120 µg/m ³ Less than 65 µg/m ³ Low dust visibility 90% of complaints resolved within the maximum allowed timeframe	Dust fallout levels measured by dust fallout buckets PM 10 levels measured by PM 10 trailers and monitors Visual dust ratings as part of daily dust observations Tracking of community complaints and resolution	SHE Mining
Monitor, manage and minimise the impact of blasting on communities in close proximity of the mine	Blast Analysis Africa	Ongoing	Ground vibration limits Air blast limits Community complaints	Maximum of: 12.7 mm/s Maximum of: 134dB Compensation and repair according to policy 90% of complaints resolved within two months	Seismic and acoustic measurement Tracking of community complaints and resolution	SHE Mining
Engagement of the Dingleton residents on environmental impacts, and feedback to the mine on complaints received		Ongoing	Effective Dingleton Environmental Forums	Attended by mining, SHE and Projects of Sishen mine, complainants and the Dingleton Resettlement Working Group (RWG)	Attendance register	SHE

MANAGEMENT RESPONSE - initiatives / interventions	External stakeholders - implementation	Timelines / frequency	KPIs used for monitoring and evaluation	Performance target	Monitoring and evaluation	Responsible team
Dingleton resettlement, relocation of Dingleton North first, and later the rest of the community	Contractors Resettlement Working Group (RWG)	As agreed with Dingleton community	Resettlement progress Sentiments expressed by community leaders Sentiments expressed by community members	Resettlement completed within agreed timeline 90% satisfaction with progress and process of resettling 80% satisfaction with progress and process of resettling	Tracking of resettlement process Consultation with the RWG Consultation with community members as part of the 2014 Sishen Mine socio-economic assessment	Dingleton Project
Implementation of the long-term Renters Strategy		2015-2016	Number of renters with viable alternative means of accommodation	80%	Tracking monthly, reporting quarterly to the Dingleton Resettlement Steercom	Dingleton Project
Swift resolution of every Dingleton complaint received		2015-2016	Acknowledgement of complaints received Investigation and decision making on resolution Effective feedback	In accordance with procedure	Complaints management system	SHE Dingleton Project
Dingleton engagement regarding environmental concerns	DMR	Bi-monthly	Sentiments expressed by community members	Regular meetings and constructive discussions	Minutes of meetings	SHE Mining
Development of a sustainability plan with a long-term view on community development of relocated community members		July 2015	Long-term view	Aligned with Anglo Social Way II and new SEAT tool on long-term social performance strategy	Internal review by the Dingleton Steercom External review by the Northern Cape Province	Corporate affairs, corporate office

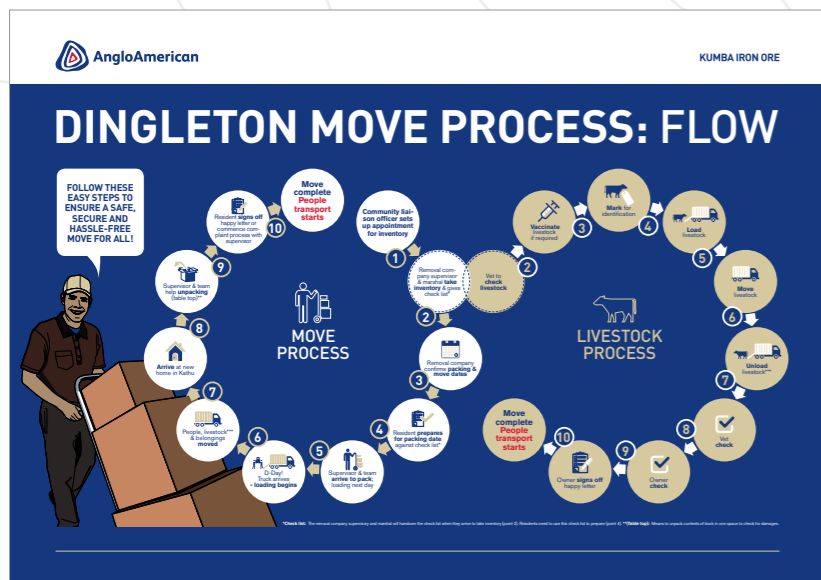
MANAGEMENT RESPONSE - initiatives / interventions	External stakeholders - implementation	Timelines / frequency	KPIs used for monitoring and evaluation	Performance target	Monitoring and evaluation	Responsible team
Integrate the complaints and grievance policy for Dingleton Project with the ones used by SHE and the Hub and standardise and simplify processes and response patterns		2015	Awareness among stakeholders of complaints procedures to be followed Effectiveness of complaints resolution	80% awareness 80% satisfaction with resolved complaints 90% of complaints resolved within the maximum time allowed	Stakeholder consultation as part of the 2014 socio-economic survey Follow up calls to complainants Analysis of complaints register	Dingleton Project
Formalise and implement a procedure, communication mechanisms (for rapid information sharing), and engagement platforms for interaction with environmentally impacted stakeholders	Environmentally impacted stakeholders Environmental authorities	2014	Status of communication and engagement procedure Effectiveness of communication mechanisms and engagement platforms	Signed off communication and engagement procedure 80% satisfaction from participating stakeholders	Meeting minutes and proof of sign-off Terms of reference of engagement platforms Records of discussions at meetings Stakeholder consultation as part of the 2014 socio-economic survey	SHE



Skills training and enterprise development expo, organised by the Dingleton Resettlement Office.



The foundation walls for the first of 49 municipal houses.



Every detail of the relocation is pre-planned and well communicated – posters are often used for communication.

SECTION 6: NEXT STEPS



Sishen mine's commitment to open communication and engagement with stakeholders does not end with the extensive consultative process that preceded the publication of this SEAT report. To complete the cycle, Sishen mine shares the findings of the 2012–2014 Socio-Economic Assessment with everyone who has contributed to it and all who have an interest in it.

This SEAT report is the first step in sharing those findings and in outlining the interventions planned in response. The second step is to invite everybody who participated in the stakeholder consultation process to participate in feedback sessions.

As with the other stages of its engagement with stakeholders, the purpose of these sessions is twofold: to give participating stakeholders the opportunity to provide their feedback on this report and to provide a continuing basis for future accountability.

In this way, Sishen mine and its stakeholders move forward with a shared understanding and ownership of the issues and impacts affecting its operations and its efforts to make a positive contribution to socio-economic development in the JTG district.

An important way to ensure that the planned feedback sessions are as productive as possible is to give everyone concerned the opportunity to prepare as thoroughly as possible. A thorough reading of this report is the most effective way to do this preparation, and for this reason, Sishen mine is using different channels to distribute the report to stakeholders and to make it available to interested parties:

- A printed copy of this report has been sent to each stakeholder representative who attended the various focus group discussions convened for the purposes of the 2014 socio-economic assessment.
- Printed copies have also been distributed to public spaces that community members frequent, such as municipal buildings, community halls, libraries and Small Business Development Hubs.
- An electronic version of the report is available on the Kumba website at www.kumba.co.za.

Sishen mine's dialogue with stakeholders is an ongoing process. This report is part of a broader engagement but will take us forward as reference point to what was done by the mine in 2012–2014, what is planned for the next three years, and what stakeholders articulated as their needs, concerns and issues.

Feedback sessions with stakeholders who participated in the Socio-Economic Assessment consultative process will be held in March and April 2015. This programme of feedback will entail:

- meeting with representatives of the JTG District Municipality, followed by meetings with representatives of the three local municipalities, namely Gamagara, Ga-Segonyana and Joe Morolong
- Reconvening the focus groups held in September 2014 with the different categories of stakeholders to discuss the report.

Stakeholders will be informed in good time about the dates, venues and times of the feedback sessions, which will be well advertised and open for any interested party to attend.

In addition, Sishen mine will share information with stakeholders through the local media, printed and electronic.

Furthermore, any stakeholder is welcome to contact the social development manager of Sishen mine as and when the need arises (please refer to the contact details on the last page of the report). The future of the business is dependent on the trust, goodwill and consent of its stakeholders, and two-way communication on stakeholders concerns and suggestions is part of securing this trust.



Panoramic view of the Sishen Iron Ore mine Complex.



An example of a high grade piece of iron ore – this piece contains approximately 68% iron.

GLOSSARY AND ABBREVIATIONS FOR THIS REPORT

GLOSSARY

Term	Meaning
Age dependency ratio	The ratio between the number of people younger than 15 or older than 64 for every 100 people of working age.
Biodiversity	The variety of life on Earth, within and between all species of plants, animals and micro-organisms.
Bulk services agreement	An agreement between a company and the local municipality, making provision for the company to contribute to bulk infrastructure development linked to its own operations.
Early childhood development (ECD)	The all-round development of children aged 0 to 9 through structured programmes of educational and social activities.
Extractive Industries Transparency Initiative (EITI)	The Extractive Industries Transparency Initiative (EITI) is a global coalition of governments, companies and civil society working together to improve openness and accountable management of revenues from natural resources. Companies implementing the EITI disclose information on tax payments, licences, contracts, production and other key elements around resource extraction.
Employment equity	Achieving equity in the workplace by promoting equal opportunity, eliminating unfair discrimination and redressing past disadvantages in employment by implementing affirmative action measures.
Environmental management plan (EMP)	A plan, based on an environmental impact assessment, in which mining rights applicants make provision for the rehabilitation or management of negative environmental impacts. The EMP must be approved by the Department of Mineral Resources.
Development corridor	A trade or industrial route connecting economically important areas and promoting infrastructure investment for further economic development.
Focus group	A focus group is a form of qualitative research in which a group of people are asked about their perceptions, opinions, beliefs and attitudes towards an entity or subject. Conducted by a trained moderator, focus group discussions are seen as an important social research tool for acquiring feedback on the impact that a mining operation has on local stakeholders.
Impacts	A direct or indirect consequence on stakeholders or the physical environment of mining operations.
Integrated Development Plan (IDP)	A five-year plan developed through a participatory approach by municipalities, in terms of chapter five of the Municipal Structures Act, 2000. The aim of an IDP is to integrate economic, sectoral, social, spatial, institutional, environmental and fiscal strategies into a single plan that supports the optimal allocation of scarce resources in a manner that provides sustainable growth, equity and the empowerment of the poor and marginalised.
Issues	Issues are defined as stakeholder perceptions of the impact of an operation, and/or the gap between stakeholders' expectations and company performance. Issues influence the relationship between a mining operation and its stakeholders.
Life of Mine (LoM)	The number of years that an operation is planning to extract and treat mineral resources; taken from the current mine plan.
Local economic development (LED) plan	Municipalities develop LEDs as part of the integrated development planning process. The aim is to alleviate poverty and create jobs by stimulating the growth of local economies.
Local procurement	Local procurement refers to the relationship between location of supplier and location of recipient of goods or services. Kumba divides it into four levels: localised, regional, provincial and national. Given South Africa's Black Economic Empowerment (BEE) legislation, BEE criteria are inclusive.
Mine closure	The period of time when the mineral resources extracting activities of a mine have ceased, and final decommissioning and land reclamation is being conducted.
Mine Closure Plan	In terms of the Mineral and Petroleum Resources Development Act, a mineral rights holder is obliged to consider, investigate, assess and communicate the effects of the environmental impact of a mining operation to the DMR. All environmental impacts must be managed and, as far as possible, the environment must be rehabilitated to its natural state or a land use conforming to acceptable principles of sustainable development. A mineral rights holder is responsible for any environmental damage, pollution or ecological degradation and the management thereof as a result of his operations until the minister has issued a closure certificate to the holder concerned. A Mine Closure Plan details how a mining rights holder complies with this obligation to enable proper rehabilitation.

Term	Meaning
Mining Charter	The Mining Charter is a legislated instrument to effect transformation in the mining industry, based on very specific targets against which progress is regularly reviewed. The founding legislation of the Mining Charter is the Mineral and Petroleum Resources Development Act 28 of 2002 (MPRDA).
Mining rights	The State is the custodian of mineral rights and as such grants exploration or mining rights to give permission to an applicant to exploit mineral resources. Owners of surface rights do not hold the mineral rights unless they apply to the State for such rights. Mineral rights are commonly granted to private parties. A mineral right is a limited real right with various related rights attaching to it.
Mineral and Petroleum Resources Development Act, No 28 of 2002 (MPRDA)	The MPRDA is the primary regulatory framework legislation for the mining industry in South Africa. Where there is a conflict between the MPRDA and the common law, the act prevails. It establishes the State as the primary custodian of all mineral resources through the minister of mineral resources and is administered through the national and regional offices of the Department of Mineral Resources.
Municipal authorities	Decision-makers, also referred to as the executive, of a district or local municipality. This includes the political leadership, municipal manager and the heads of the different departments in the municipality.
Post-Exposure Prophylaxis (PEP)	Taking anti-HIV medications as soon as possible after possible exposure to HIV.
Preferential procurement	Giving localised and BEE businesses preferential access to supply chain opportunities that arise from the presence of the mining operation.
Portable skills	A skill or competency that can be transferred from one work context to another. An example is bricklaying or welding skills used in mining or construction.
Prospecting right	Mining activities require a mining right or a mining permit and prospecting activities require a prospecting right. These rights are granted in terms of the Mineral and Petroleum Resources Development Act, 28 of 2002 (MPRDA). Loosely defined, prospecting involves searching for mineral deposits whereas mining involves the extraction of those minerals from the ground.
Provincial authorities	Decision-makers, also referred to as the executive, of a province. This includes the Office of the Premier, and the heads of the different departments such as Education, Health, Social Development and others.
Reconstruction and Development Programme (RDP)	Reconstruction and Development Programme (RDP) is a South African socio-economic policy framework implemented by the African National Congress (ANC) government of Nelson Mandela in 1994 after months of discussions, consultations and negotiations between the ANC, its Alliance partners the Congress of South African Trade Unions and the South African Communist Party, and "mass organisations in the wider civil society".
Social and Labour Plan (SLP)	A plan that each mine in South Africa must prepare as part of the obligations established by the Mineral and Petroleum Resource Development Act. In the SLP, the mining right holder commits to a human resource development programme, a local economic development (LED) programme, a procurement progression plan and processes for managing downscaling or retrenchment.
Social Management Plan (SMP)	A set of planning objectives and management measures that details an operation's planned approach to managing its social performance. This entails mitigating negative impacts, leveraging positive impacts and responding to stakeholder issues and concerns.
Socio-Economic Assessment	The process of identifying the impacts of a project or operation on the social and economic environment in which it operates. A range of indicators can be assessed, including cultural impacts, health, education, demographic effects and resettlement.
Socio-economic benefit delivery	This entails the mine's contribution to socio-economic development of mining communities. There are three groups of socio-economic benefits. The first group is benefits flowing from mining itself, such as local employment, employee housing, local procurement, the payment of taxes and skills development. The second group is derived from the mine's direct investment in community development in its local area (often reported as SLP or CSI projects). The third group of benefits results from the economic participation of employees and communities, such as through employee share incentive schemes and community development trusts.
Spatial Development Framework (SDF)	A framework for rational land-use management which every municipality is required to formulate as part of its integrated development plan (IDP).
Stakeholder	An individual or a group that may be affected by, have an interest in or can influence the operations of the company.
Stakeholder engagement	The process by which a company and its stakeholders converse and exchange information and ideas in an effort to align mutual interests, reduce risk, improve decision-making and advance the company's performance in terms of people, planet and profit.
Tonnes	Tonnes refers to metric tonnes of 1,000 kilograms. This is the standard measurement Kumba uses in reporting.

Term	Meaning
Zero Harm	The policy of eliminating workplace fatalities and making an operation injury free.
Zone of influence	The area within which direct and indirect impacts can be associated with a mining operation, often also referred to as the local area of the mine.

ABBREVIATIONS AND ACRONYMS

Term	Meaning
ABET	Adult Basic Education and Training
Agri-Seta	Agricultural Sector Education and Training Authority
AMCU	Association of Mineworkers and Construction Union
ART	Anti-retroviral treatment
BEE	Black economic empowerment
CBO	Community-based organisation
CoGTA	Cooperative Governance and Traditional Affairs
CoGHATA	Northern Cape Department of Cooperative Governance, Human Settlement and Traditional Affairs
CSI	Corporate social investment
CSIR	Council for Scientific and Industrial Research
DMR	Department of Mineral Resources
DMS	Dense-medium separation
DBSA	Development Bank of Southern Africa
ECD	Early childhood development
EITI	Extractive Industries Transparency Initiative
EMP	Environmental management plan
FAMSA	Family and Marriage Society of South Africa
FBO	Faith-based organisation
FET	Further education and training
GDP	Gross domestic product
GRAP	Generally recognised accounting practice
GVA	Gross value added
JTG district	John Taolo Gaetsewe district
JTGDT	John Taolo Gaetsewe Developmental Trust
HDSA	Historically disadvantaged South African
HRD	Human resource development
IRM	Integrated Risk Management
LED	Local economic development plan
LTI	Lost-time injury
LTIFR	Lost-time injury frequency rates
MFMA	Municipal Finance Management Act
MHSI	Mine Health and Safety Inspectorate of the DMR

Term	Meaning
MoU	Memorandum of Understanding
MQA	Mining Qualifications Authority
Mtpa	Million metric tonnes per annum
Mt	Million metric tonnes
NC	Northern Cape
NCDOE	Northern Cape Department of Education
NDA	National Development Agency
NDP	National Development Plan
NGO	Non-governmental organisation
NQF	National Qualifications Framework
NSC	National Senior Certificate
NWA	National Water Act
PIT	Professional in Training
PM	Particulate matter
Ppp/d	Per person per day
RDP	Reconstruction and Development Programme
SAICE	South African Institute of Civil Engineering
SANRAL	South African National Roads Agency Limited
SAVE	South African Valued Education
SCM	Supply chain management
SD	Social development
SDF	Spatial Development Framework
SEA	Socio Economic Assessment
SEAT	Socio Economic Assessment Toolbox
SEDA	Small Enterprise Development Agency
SHE	Safety, health and environment
SGBs	School governing bodies
SIB	Staying-in-business
SIOC	Sishen Iron Ore Company
SIOC-cdt	Sishen Iron Ore Company Community Development Trust
StatSA	Statistics South Africa
SMME	Small, medium and micro enterprises
UGM Wellness Clinic	Ulysses Gogi Modise Wellness Clinic
UIF	Unemployment Insurance Fund
USBM	United States Bureau of Mines
WAP	Water action plan
VCT	Voluntary counselling and testing
YDA	Youth Development Agency

We value your feedback

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